LEGAL COERCION AND DRUG ABUSE TREATMENT: RESEARCH FINDINGS AND SOCIAL POLICY IMPLICATIONS

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Abstract

Effective social policy strategies to reduce drug consumption in the U.S. are in short supply. Though laws regulating drug supply through interdiction and enforcement have had some effect, this approach has failed to reduce the supply of drugs significantly despite high cost outlays. Legislation directed toward reducing demand has been limited, but effective, in meeting some of the problems caused by the increasing numbers of citizens who develop personally or socially dysfunctional behaviors by their consumption of illicit drugs. A de facto merging of approaches involving both enforcement and treatment has developed, in which a significant number of admissions to treatment programs are motivated, at least in part, by coercive efforts of the criminal justice system. The most comprehensive of these efforts is exemplified by the civil commitment programs of the 1960s, including the California Civil Addict Program (CAP), the New York State Civil Commitment Program (CCP), and the Federal Narcotic Addict Rehabilitation Act (NARA). Of these, however, only the CAP provided an example of effective legislation directed toward reducing demand for narcotics by compulsive heroin users. Civil commitment as applied in the California CAP reduced daily narcotics use and associated property crime by program participants to levels three times lower than those reported by a sample of similar addicts not in the program. Social policy analysts should examine civil commitment - and other coercive strategies that are more commonly used today - to develop a comprehensive strategy for controlling and rehabilitating compulsive drug users. This chapter reviews
significant research findings and proposes a comprehensive model for the use of legal coercion techniques to reduce the demand for illegal drugs.

INTRODUCTION

Discussions about drugs and social policy designed to resolve drug abuse problems are filled with hyperbole and speculation, regardless of whether the discussion occurs within governmental agencies, in the media, or in public (Goldberg & Meyers, 1980). Philosophical positions taken by the discussants, whether from personal conviction or for public consumption, often disregard empirical data and analyses as well as theoretical interpretations. A particularly obfuscating belief maintains that legal solutions or enacted legal measures by themselves will produce significant change in the world's current drug situation. Given that the legal efforts in the United States for over 60 years have had limited social effect and that production, distribution, and consumption of illicit drugs throughout the world has actually increased, this perspective is untenable (The Drug Abuse Council, 1980). Although many solutions have been proposed, no consensus has consistently emerged as to what alternative strategies should be undertaken (Duster, 1970; Eldridge, 1962; Lindesmith, 1965; Meyers, 1980; Trebach, 1982).

One concept that has repeatedly surfaced as a strategy for reducing drug demand is to combine legal coercion with drug treatment efforts as a dual approach with both rehabilitation and social control elements. Such approaches, with different degrees of emphasis on either element, have recurred as social policy for most of the present century. Examples include the morphine maintenance clinics established by some
communities in the 1920s, the federal narcotic treatment farms situated at Fort Worth and Lexington in the 1930s, the 1960s experiments with civil commitment in California and New York and at the federal level, and the present system, commencing in the 1970s, of criminal justice system reliance on community drug treatment programs as alternatives to incarceration or as adjuncts to legal supervision.

The civil commitment programs of the 1960s were designed to provide legal coercion into inpatient treatment, which included vocational and educational development, and a strong program of aftercare with continual monitoring for drug use. As implemented, however, some of these programs fell short of their design, and many observers assumed that the civil commitment approach had failed. Even so, the principle of combining legal coercion with treatment was adapted and used in conjunction with the community treatment system that developed during the 1970s. As currently applied, legal coercion, broadly defined, is a common reason for addicts to enter treatment -- but this present-day coercion is inconsistently applied.

Histories of civil commitment programs are available from several sources (Musto, 1973; Inciardi, 1988; Maddux, 1986). This chapter will focus on the recent history and evaluation results of civil commitment programs as established in the United States and on the development and outcomes of later legal coercion efforts. Further, the principal features of successful civil commitment and other legal programs will be discussed, and a comprehensive model for the use of civil commitment and other legal system procedures to control and rehabilitate narcotics addicts will be proposed.
WHAT IS CIVIL COMMITMENT?

Civil commitment is a legal procedure that allows narcotics addicts or other drug addicts to be committed to a compulsory drug treatment program, typically involving a residential period and an aftercare period in the community. Provisions are included for helping clients with education and employment and for responding promptly to signs of readdiction, usually detected by a regular program of monitoring through urinalysis. Civil commitment is frequently used with addicts who are arrested for criminal activity; with criminal charges pending, the addict can be coerced into treatment and retained long enough to receive the benefits of a treatment program.

CIVIL COMMITMENT EXPERIENCE IN THE UNITED STATES

Three major civil commitment programs have been established in the United States in the last 30 years: the California Civil Addict Program (CAP), the New York Civil Commitment Program (CCP), and programs under the Federal Narcotic Addict Rehabilitation Act (NARA). The intent and the enabling legislation for these programs were quite similar, but their implementation and outcomes were different in many respects (McGlothlin & Anglin, in press). In general, similar procedures were mandated for all three programs: diversion during criminal adjudication from incarceration in jail or prison to a narcotics treatment facility or program. There was also provision for the involuntary commitment of addicted individuals who had not been charged with a crime. This provision, however, was used relatively infrequently in the three programs, and is not used at all today except in rare instances.
Civil Commitment

California (CAP)

The commitment procedure stipulated by the 1961 legislation establishing the CAP was straightforward: any individual who was found by medical examination to be addicted to drugs could be committed to the program. In practice, however, the majority of those committed had been arrested for property crimes or drug trafficking and were diverted from conventional criminal processing. The CAP was administered by the California Department of Corrections, which employed rehabilitation professionals as well as correctional staff. The seven-year commitment period was divided into two phases: a period of incarceration at a special minimum security facility, the California Rehabilitation Center, followed by parole -- monitored release into the community. Addicts could be reincarcerated for infractions of program and parole regulations. During both the incarceration and parole phases under the Department of Corrections' supervision, the major target of intervention was the drug-using behavior of the individuals committed to the program. Because of reasonably effective monitoring by urine testing, any return to compulsive patterns of narcotics use could be identified early in the relapse and a proper intervention effected (often including a "dry-out" incarceration).

Throughout the 1960s and into the early 1970s, program results were not spectacular, but behavioral outcomes were as good as, or better than, those for other intervention attempts with narcotics addicts. To some extent, overall outcomes were better because the program could be imposed on any identified addict at any time; thus, many antisocial addicts participated who were not likely to enter conventional treatment programs. Most alternative programs attracted only certain segments of
the addict population—namely, those who were less antisocial—and then only in certain periods of their involvement with narcotics, usually later in their addiction careers. That the CAP produced equivalent outcomes with less desirable addicts speaks well of the approach.

**Evaluation of the California CAP**

Two evaluations of the California Civil Addict Program illustrate the effectiveness of civil commitment programs. The first study, conducted by McGlothlin, Anglin, and Wilson (1977), compared (a) addicts admitted to the program and subsequently released into the community under supervision with (b) addicts admitted to the program and discharged after a short time because of legal errors in the commitment procedures. Table 1 summarizes the effects of the program on multiple outcome measures. The comparison shows that, during the seven years after commitment, the program group reduced their daily narcotics use by 21.8% while the discharged group reduced their daily use by only 6.8%. Furthermore, the program group reported that their criminal activities were reduced by 18.6%, while the discharged group reported a reduction of 6.7%.

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Insert Table 1 about here

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A second evaluation by Anglin and McGlothlin (1985) focused on the program group. From this group, three subsamples were identified according to narcotics use and treatment status at the time of the interview, which was some 12 years after admission to the program: a
maturing-out sample (Winick, 1962), a subsequent treatment (methadone maintenance) sample, and a chronic street addict sample.

Figure 1 demonstrates the addiction career history of these three groups for four critical periods: the period before commitment to the CAP, the stipulated commitment period, an early post-discharge period, and a later post-discharge period in which the subsequent treatment group entered methadone maintenance (MM). The commitment period is indicated by the dashed line along the lower portion of the figure. The entry to MM is indicated by the letter "M."

Prior to commitment, the three groups were relatively similar in their levels of daily narcotics use. Admission to the CAP, however, caused a differential change in the level of daily use. The maturing-out sample, approximately 40% of the program group, steadily reduced daily narcotics consumption during the commitment period and did not resume addicted use after their discharge from commitment. However, at the time of the interview, many in this sample used narcotics occasionally.

The subsequent methadone treatment sample, approximately 30% of the program group, showed a large decrease (approximately 25%) in daily drug use during the commitment period. However, after discharge, addicted use rapidly increased, so that by three years after discharge, addicted use by this group had reached its precommitment level. Addicted use continued at that level until the group reentered long-term treatment, this time with methadone maintenance.
The chronic street addict sample, approximately 30% of the program group, showed a moderate reduction (approximately 10%) in daily narcotics use during the commitment period. However, after discharge, addicted use rose to a level exceeding that reported in the precommitment period\(^1\) and was still high in the year preceding the interview; for that year, the chronic street addicts described themselves as addicted 55% of their nonincarcerated time. Figure 2 shows a similar temporal pattern for levels of criminal activity among the three groups.

These studies have at least two important findings. First, civil commitment as implemented in the California Civil Addict Program reduced daily narcotics use and associated property crime by program participants three times as much as was achieved with similar addicts who were not in the program. Second, while the program's effects differed across three types of addicts, narcotics use and crime were suppressed to some degree in all three groups. Unfortunately, these results were not available to California corrections planners in a timely fashion, and the CAP, although still utilized, decreased in size and programming effort in the late 1970s.

\(^1\) This high rise in use corresponded to a period of high heroin availability in the United States. This period is indicated by asterisks along the lower portion of the figure.
New York (CCP)²

During the same historical period as the CAP, the 1959 Metcalf-Volker Narcotic Addict Commitment Act was enacted by New York State. The act provided funds to plan and develop facilities for the prevention and control of narcotics addiction. Under the Act, narcotics addicts arrested on criminal charges could elect to be transferred to the care of the Department of Mental Hygiene for a maximum period of 36 months while the criminal charge was held in abeyance. The intent of the Metcalf-Volker legislation was to reach arrested narcotics addicts who showed a potential for rehabilitation and whose crimes were not serious. The impact of the program proved disappointing. Many eligible addicts preferred the (generally shorter) prison sentence to the longer period of supervision under the treatment program. Furthermore, most addicts who were admitted did not complete the program. Studies reported a high rate of rearrest and abscondence. The program's chief flaw was thought to be its essentially voluntary nature, combined with the lack of adverse consequences for leaving treatment.

Given these results, new legislation was enacted in 1966 and provided that persons convicted of crimes be committed, on proof of addiction, to a compulsory program of rehabilitation and treatment. Narcotics rehabilitation centers and aftercare services providing close supervision were to be operated by the state, and a central agency was created with the power to develop, conduct, and coordinate a comprehensive anti-addiction program.

² Material in this section is summarized from Brill and Winick, in press.
The key provision of the 1966 legislation was the program of compulsory treatment. Three methods of admission were provided: (1) civil certification of nonarrested addicts, whereby an addict or someone believing a person to be an addict could petition a judge for voluntary or nonvoluntary certification to the program; (2) civil certification of arrested addicts, whereby addicts arrested for certain crimes who satisfied eligibility requirements could apply for civil certification rather than submit to the criminal charge; and (3) civil certification of convicted addicts, whereby defendants found guilty of a misdemeanor or prostitution and also found to be narcotics addicts were required to be certified to the custody of the narcotics authority. Convicted felons could also be so committed at the discretion of the judge.

A study by the New York Legislative Commission on Expenditure Review in 1971 concluded that the certification process in the civil courts was generally working as the legislature had intended. However, the percentage of arrested or convicted addicts certified over the life of the program steadily declined. The number of addicts convicted of misdemeanors who were certified for compulsory treatment was particularly small, considering that such referral was mandated by law.

The New York Civil Commitment Program was operated through a variety of centers using different treatment approaches and philosophies. The costs of maintaining these facilities were high, partly because new or revamped facilities required high capital expenditures and partly because each center was operated separately, thus preventing economies of scale. Staff costs were also high, with a staff-to-patient ratio of 1:1. The average length of patient
supervision under the program was two years and one month, of which approximately ten months were residential.

Evaluations of the New York Program

Findings from a number of studies of individual treatment centers conducted by various evaluating agencies are available and most point out the lack of a cohesive policy guiding the overall program.

A study of abscondence, defined as escape from residential facilities or as "lost to contact" during aftercare, found that the proportion of absconding clients was increased steadily during the program period; as the proportion of clients in aftercare increased, so did the proportion absconding (Babst & Diamond, 1972).

A 1970 study by the Division of Substance Abuse Services of clients who had been treated for up to three years and discharged by that agency followed the clients for three years after discharge to determine changes in drug use, criminal activity, employment patterns, and involvement in subsequent treatment. Over the three years followup period, the self-reported use of heroin and cocaine declined sharply. However, the number of subjects employed showed little variation, although the mean number of months worked increased slightly, from 8.3 months in the first year to 9.6 months in the third year. Almost half the subjects reported engaging in some kind of criminal activity during the first followup year, compared with 26% in the third year. The offense that declined the most over the three-year period was burglary.

An evaluation conducted by the New York State Commission of Investigation in 1976 reported dissatisfaction with many aspects of the CCP; their report called for a "sweeping top to bottom review" of the
program, with introduction of cost-effectiveness studies, written management procedures, better staff training, more attention to planning for release, and other improvements. Within the next three years, the civil commitment residential program was essentially abolished, even though the laws remained on the books. The residential treatment centers were thought to be too expensive and not effective enough in the fight against drug addiction. State policy in subsequent years deemphasized long-term residential programs in favor of community-oriented treatment, methadone maintenance, and short-term detoxification.

The Federal Narcotic Addiction Rehabilitation Act (NARA)\(^3\)

In response to recommendations from a 1963 Presidential Advisory Commission on Narcotic and Drug Abuse, the federal government passed the Narcotic Addiction Rehabilitation Act (NARA) in 1966. The basic purpose of NARA was to supervise and rehabilitate addicts by providing treatment and aftercare in the addicts' home communities. The NARA legislation contained four titles: Title I authorized the federal courts to impose civil commitment for treatment on any addict charged with certain non-violent federal offenses. Title II provided for addicts already convicted of a crime (and thus in the custody of the Federal Bureau of Prisons) to be committed to the custody of the Attorney General for treatment in a Bureau of Prisons facility followed by parole to outpatient aftercare in the community. Title III provided for the involuntary civil commitment of addicts not charged with a federal offense.

\(^3\) Material in this section is summarized from Lindblad and Besteman, in press.
offense. Title IV authorized funding for the establishment of aftercare services in local communities.

Implementation of NARA was divided between two major government systems representing two very different sets of treatment assumptions: Titles I and III were implemented through the public health system and Title II through the federal criminal justice system, in particular the Bureau of Prisons. Program participants under Titles I and III were to be given inpatient care for six months at the public health hospitals at Lexington, Kentucky and Fort Worth, Texas. On leaving the hospital they would be returned to their communities for aftercare, which was to be provided by the existing Community Mental Health Center network through funding provided by Title IV. The client could be declared rehabilitated and discharged only through the courts.

Between 1967 and 1973, 10,151 patients were admitted to the NARA programs. Despite an anticipated wider use, only 5% were committed under Title I, Title II resulted in 2% of admissions, and the other 93% were admitted under Title III.

The initial problems that occurred during the implementation of NARA Titles I and III were caused by a complex and unwieldy administrative structure in which every move of the addict through the system had to be accomplished through the courts; specific reports had to be filed, hearings held, and examinations made. Files on addicts with pending criminal charges or convictions had to be maintained for years. For every hearing or change of status, these addicts had to be transported to and from the courts with full precautions against escape. All of these complexities made the program an administrative nightmare.
Early Title I and III implementation efforts were also hampered by the U.S. attorneys' lack of training in applying the provisions of NARA, by lack of readiness of the inpatient and outpatient programs at the start of implementation, and by the community social service agencies' unwillingness to serve addicts and insufficient training in working with addicts.

Title II, the portion of the program administered by the federal criminal justice system, slowly but steadily increased in size. More institutions for inpatient care were added and the Bureau of Prisons, the administering agency, developed its own aftercare program. Although Title II was similar to the other Titles in most respects, it had an additional feature: The patient could not enter aftercare until he or she had been released from criminal sentence; this required recommendations by both the staff of the inpatient facility and the United States Board of Parole. Because many convicted addicts could not meet the eligibility requirements under Title II, the Bureau of Prisons began establishing "non-NARA" treatment units for a variety of drug-dependent offenders, including those dependent on drugs other than narcotics. As of 1979, 23 NARA or similar programs operated under Title II. Although the number of clients subsequently declined somewhat, the program was considered a success.

The Title I and Title III programs on the other hand grew rapidly, but were relatively short-lived. After only four years, in 1970, NARA programs under both titles began to decline. These two NARA titles were perceived as expensive, administratively cumbersome, and restrictive, and they were superseded by other federal and community drug treatment programs.
A major contribution of this perception occurred because the way NARA Titles I and III were implemented forced an uneasy cooperation between the criminal justice system and the health delivery system. The cooperation was difficult because of the lack of guidelines and because the assumptions of the criminal justice system about addicts were very different from those of the community health centers.

In addition to high costs and administrative difficulties, several more specific problems surfaced in Title I and Title III implementation:

(1) Because the need for care was far greater than the capacity of the program, attempts were made to accept only those addicts most likely to succeed. The resulting high rejection rate caused the court system to lose respect for the NARA program and to withdraw its cooperation to some extent.

(2) Addicts were not slow to develop a "racket" in which they shuffled back and forth between the treatment program and the courts until in many cases their files or the courts' witnesses would be lost and the criminal charges would be dropped.

(3) Methods of treatment used in the centers were more appropriate for some patient populations than others; many addicts found the group approach, in which they were expected to "talk about their feelings," to be worse than prison.

(4) Courts in some states declared that the NARA treatment centers could not hold patients in treatment if they wanted to leave, or keep them under non-voluntary supervision in the community, thus removing the important compulsory aspect of the civil commitment procedures.
Because of these problems, Titles I and III of NARA were underused and never served the large number of addicts for which they had been designed.

Although many factors contributed to the decline of the NARA programs, the most important was the growth of the drug abuse community treatment network. Before NARA was passed, there were no more than a few community-centered treatment agencies; by the end of 1972, there were 68 community grant programs, many supported by NARA, for the treatment of drug abuse. One exception was methadone maintenance, a treatment modality which had gained popularity during the early years of NARA, but which, under NARA regulations, could not be used. To be discharged from the program as rehabilitated, the client had to be free of addiction to drugs, including methadone. Thus, NARA patients were excluded from a form of treatment that was showing effective results for a broad spectrum of addicts.

Although NARA itself did not succeed, its emphasis on aftercare led to a thriving community treatment network that subsequently made drug abuse treatment more widely available and less expensive.

Summary of Civil Commitment Effectiveness

The general consensus of several authors is that the New York program was pretty much a failure (Inciardi, 1988). Titles I and III of the federal NARA also did not fare well upon evaluation (Lindblad & Besteman, in press). But Title II, administered by the Federal Bureau of Prisons, was more efficacious (Kitchener & Teitelbaum, in press). California's CAP was perhaps the most successful of the three efforts (McGlothlin, Anglin, & Wilson, 1977). The outcome differences for the
various civil commitment programs can, for the most part, be attributed to implementation strategy. While it is possible to develop reasonable social intervention policies that achieve good behavioral outcomes when they are properly applied, methods of implementing the policies can ensure or sabotage success.

An important reason for the lack of success of New York's program was that it was implemented through the state's welfare agency, rather than through an established agency with experience in dealing with addicts and addicted behavior. The federal NARA program had minimal results for Title I and III commitments for similar reasons. In contrast, NARA's Title II program and the California CAP were implemented through the criminal justice system, specifically the Federal Bureau of Prisons and the California Department of Corrections, and both worked reasonably well—or as well as any other type of intervention has worked for narcotics addicts.

ISSUES OF LEGAL COERCION AND CIVIL COMMITMENT

Although the California and New York civil addict programs and the federal NARA were in full operation for only about a decade, 1965-1975, their development bridged an important period in the national response to the drug abuse crisis of the post-Vietnam-war era. The transition was made in that period from mainly a criminal justice system approach for dealing with illicit drug consumers, which had predominated before 1965, to an extensive network of community drug treatment programs, which developed in the 1970s. In fact, the funds allocated to the implementation of the federal Narcotic Addict Rehabilitation Act
assisted in the development of many community drug treatment programs (Lindblad & Besteman, in press).

EFFECTS OF LEGAL COERCION INTO TREATMENT

With the rise of community-based treatment systems, the original civil commitment concepts and programs fell into disuse, to be replaced by a looser arrangement in which many individuals were referred, but not committed, to drug treatment by the courts, probation, or parole. In essence, a de facto coercive structure in court, probation, and parole referrals to drug treatment developed; this emergent arrangement was similar to compulsory treatment efforts, but was somewhat more haphazard and less coordinated. Because of this development, more recent research has not involved civil commitment per se, but instead has studied criminal justice system referrals to treatment (Anglin, Brechet, & Maddahian, 1988). The following section is based on research conducted in Southern California by the authors.

Types of Legal Coercion

To find out what types of legal coercion had substituted for the civil commitment procedures of the 1970s, subjects from two cohorts of Southern California methadone maintenance clients were asked why they had entered methadone maintenance or therapeutic community treatment programs. The two cohorts were: a cohort of 1971-73 admissions to methadone maintenance and a 1976-78 cross-section cohort of clients in methadone maintenance (Anglin & McGlothlin, 1985; Anglin et al., 1989). For each cohort the total number of treatment entries for methadone
maintenance and therapeutic communities and the self-reported reasons for entry were determined. The results are shown in Table 2.

The 296 subjects in the admission cohort produced 499 methadone maintenance entries and 40 therapeutic community entries. Forty-six percent of the methadone maintenance entries involved a legal reason that motivated entry. These legal reasons could be subdivided into pressure from police, pressure from probation or parole, pressure from the courts, and indirect pressure presupposing eventual legal problems. All of these situations represented some level of legal coercion into treatment.

Insert Table 2 about here

Among those from the admissions cohort who entered therapeutic communities—which represented a less desirable situation for the addicts because they were, in effect, restricted to a residential facility for a period of time—legal coercion was reported as the main reason for 73% of entries. Thus, the threshold level of coercion for motivating someone to enter treatment is higher for therapeutic communities than for methadone maintenance programs.

The same pattern was observed for the 331 men and 236 women in the cross-section sample. In this cohort, 36% of methadone maintenance entries for men and 21% for women resulted, in part, from legal coercion. For therapeutic community entries, 66% of those for men and 54% of those for women involved legal coercion.

Other reasons for entering treatment were more varied, and some of the classifications represented broad categories of open-ended types of
answers. The answers may have been as vague as a desire to use less heroin. As is clear from the table that, after legal reasons, the most important reasons are either an attempt to lower heroin use or a reflection of "burn-out" with the addict lifestyle.

**Outcome Effects of Legal Coercion**

To test the common belief that people entering treatment under legal coercion do not do as well as volunteer admissions, the admissions cohort was subdivided into three smaller groups: those who came in under high legal coercion, those entering under moderate legal coercion and those who reported no legal coercion and thus entered for "more voluntary reasons." High legal coercion was defined as having both active legal supervision with urine monitoring at entry and self-perceived legal coercion. Moderate legal coercion required active monitoring under legal supervision but did not require either the testing condition or the self-perception of coercion.

Differences in performance among these groups during their first methadone maintenance treatment episode were examined. Table 3 presents behavioral variables under the three levels of legal coercion. As can be seen, no significant differences were found for the period during treatment other than for percentage of time under criminal justice system supervision.

The difference with respect to supervision level is to be expected because it is an artifact of the way legal coercion groups were defined. However, in terms of criminal activities, drug involvement, and social functioning, these groups were essentially the same. The three groups cannot be distinguished in terms of these behaviors.
Since the groups cannot be differentiated other than on the level of coercion used to bring them into treatment, the findings have important social policy implications. The results provide a powerful argument for a general social policy of using legal coercion to bring into treatment as many people as possible by whatever legal means are available. After all, until addicts are exposed to an environment where intervention can occur and are retained for a sufficient period to produce and maintain positive outcomes, change cannot be expected.

The advent of AIDS, where treatment seems to act as a buffer against the probability of infection, is an added incentive for following this policy. Based on the cumulative findings presented above, civil commitment and other forms of legal coercion, when properly implemented, work, and seem to work for a majority of addicts. Such efforts should be considered for much stronger implementation, both in isolation, for addict offenders reluctant to enter community treatment programs, and in cooperation with treatment, as in the federal Treatment Alternatives to Street Crime (TASC) program (Cook, Weinman et al., 1986).

An overall conclusion from the studies previously discussed is that civil commitment and other drug treatment involving legal coercion, particularly methadone maintenance, are effective ways to reduce narcotics addiction and to minimize the adverse social effects associated with it. How an individual is exposed to treatment seems to be irrelevant. What is important is that the narcotics addict must be
brought into an environment where intervention can occur over time.

Civil commitment and other legally coercive measures are useful and proven strategies to get people into a treatment program when they will not enter voluntarily. The use of such measures, in a better coordinated and expanded fashion, could produce significant individual and social benefits. 4

4 Constitutional Issues: Although the first laws permitting involuntary treatment of opiate addicts were enacted in the nineteenth century, it was not until the California and New York civil commitment legislation in the late 1960s that enough addicts were committed under involuntary treatment laws to produce court tests of the constitutionality of such legislation.

Civil commitment represents a substantial deprivation of liberty for the individual. The constitutionality of civil commitment must be discussed in terms of society's intent. Are we committing addicts because addiction itself is a crime? Because the use of illicit drugs is a crime? To protect addicts against themselves? To restrict social damage related to addiction, such as increased non-drug crime and the "spreading" of addiction to others? How do we define "addiction" or "treatment"?

After civil commitment legislation was enacted in California and New York, the courts were called upon to decide whether involuntary treatment was constitutional. Both the California and New York courts decided that it was. These decisions were heavily influenced by statements made by the United States Supreme Court in Robinson v. California. Although the constitutionality of civil commitment was not at issue in the Robinson case, the court stated (in a dictum) that a state might establish a program of compulsory treatment for opiate addicts, either to discourage violation of its criminal laws against narcotics trafficking or to safeguard the general health or welfare of its inhabitants. Possibly because the constitutionality of civil commitment was not an issue in the case at hand, the court did not examine thoroughly the constitutional issues involved in its statement. The California and New York courts, relying on the dictum in the Robinson opinion, do not appear to have explored the issues thoroughly either.

At present, then, we have a number of legal opinions on the record saying that states may establish programs to coerce or commit addicts to treatment without their consent; however, none of these opinions provides a thorough explication of the constitutional basis for such programs. Source: Rosenthal, in press.
Important Features of Legal Coercion Models

From the accumulated experience of the three major civil commitment programs and from observing the current system of informal and somewhat uneasy partnership between the criminal justice and the treatment systems, a number of features can be identified whose presence would be necessary in any legally coercive or civil commitment approaches intended to reduce demand for narcotics. Before discussing these, however, two caveats must be considered.

The first caveat is basically a philosophical one. Opiate dependence is a chronic relapsing condition. No social intervention effort has more than modified the time course of addiction or moderated the level of addiction intensity. Lasting cures for opiate dependence do not exist for the large majority of addicts (Anglin & McGlothlin, 1985). Thus, expectations for the outcomes of legal coercion or civil commitment programs, like other treatment programs for opiate dependence, should be kept at a reasonable level.

A second caveat has to do with the danger of rigidly basing program features and implementation on any one theory. The etiology of opiate dependence is complex, and the population of opiate-dependent individuals is heterogeneous. No single personality or behavioral theory has been particularly helpful in structuring social interventions to modify addict behavior.

Two approaches, however, have been more useful than others in providing a pragmatic basis for designing appropriate interventions (Anglin & McGlothlin, 1985). The first is applied social systems analysis—that is, examining all immediate resources pertaining to the individual addict that may be brought into play to help reach an
intervention program objective. These resources include the personal resources of the addict: education, individual capabilities, and vocational skills useful for attaining and maintaining employment. Also included are social resources such as family, community support, and other social service agency assistance that can be combined with the ongoing work of the intervention program itself.

The second approach that may be useful when applied in employing legal coercion programs is a behavior modification orientation (Anglin & McGlothlin, 1985). Given the time, expense, and debatable effectiveness of counseling and various forms of psychotherapy, a reasonable and cost-effective way to operate an intervention program is to focus only on behavior—the behaviors that are expected within the program, the initial behaviors of persons committed to the program, and the long-range methods by which the initial behaviors can be changed and the desired behaviors achieved and maintained.

Design elements for programs employing legal coercion fall into two categories: administrative and program structure. The importance of the administrative aspects of such programs should not be underestimated. For example, the fact that the New York Civil Commitment Program and Titles I and III of the federal NARA program were placed in inappropriate administrative structures contributed substantially to the lack of demonstrable success of these programs (Brill & Winick, in press; Mandell, in press). Title II of NARA and the California Civil Addict Program achieved better results because they were assigned to preexisting unified administrative departments in their respective criminal justice systems. The establishment of new and separate administrative agencies or the use of welfare or other social
Service agency structures unaccustomed to dealing with an opiate-dependent population should be avoided. The most practical administrative structure is in probation and parole agencies, which have extensive experience in dealing with opiate-dependent individuals. Moreover, their existing administrative apparatus can be easily modified to meet program objectives.

Four structural program features are of greatest importance in legal coercion efforts. First, the period of legal supervision must be a lengthy one, certainly not less than five years. Opiate dependence is a chronically relapsing condition. Except in a minority of cases, several rounds of treatment, aftercare, and relapse are to be expected. The typical successful intervention attains longer periods in which the dependency is controlled and shorter periods of relapse. Because most addicts have had several years of addicted use before coming to the attention of treatment or criminal justice system authorities, it is not unreasonable to expect that several more years will be necessary to control, reduce, or eliminate their drug dependence.

Second, the program must be conducted in two phases. The first must provide a significant level of control—such as a residential stay in a controlled setting or very close monitoring in an outpatient setting—so that the addict can be detoxified from illicit drugs and assessed, and an individual program plan can be instituted. The initial period of control, especially in an inpatient setting, need not necessarily be a long one, except for individuals who need educational or vocational training. For many addicts, the personal benefits gained from educational and vocational training are important over the long
term in preventing or reducing relapse (Anglin, Brecht, Woodward & Bonett, 1986).

The second phase is community release under observation, with objective means for monitoring drug use (e.g., urine testing). If the program plan for the opiate-dependent individual includes methadone maintenance or naltrexone blocking treatment in conjunction with legal supervision, then treatment participation should be monitored in the community release phase, and the individual should be tested often and randomly for drug use. Other interventions—such as job training—that might be useful in prolonging the community aftercare phase and preventing relapse should be effected on an individual basis.

The community phase of a legal coercion program must be flexible. Some level of continued drug use is to be expected from the majority of those in community aftercare (McGlothlin, Anglin & Wilson, 1977; Anglin & McGlothlin, 1985). Authority to deal with program infractions such as occasional drug use should reside with the field agency directly responsible for supervising the addict. Intermittent drug use that does not seriously disrupt the individual's program plan, as well as other program infractions, should be dealt with on an individual basis in the context of the addict's overall adjustment. Any detected readdiction, however, would require immediate placement under strong control, either in a residential setting for detoxification or in a methadone maintenance or naltrexone blocking treatment program. Commission of property crime could also result in return to the controlled environment.

The third structural program feature is a provision for early discharge from the program for good behavior. The minimum period before
early discharge is possible cannot be too short; a minimum of two years of community supervision should be completed without relapse to addicted use and with progress in employment and in meeting other social responsibilities adequately. In this regard, the timing of release from external control resides (after a minimal time period) with the addict. Thus such an approach does not have to be perceived as unnecessarily restrictive of civil liberties.

Finally, any intervention program must undergo regular evaluation to determine its level of effectiveness and to determine whether the changing population characteristics of addicts require compensatory changes in the program. Program staff and policies must be kept current with developments in the treatment of opiate dependence so that suitable new methods can be adopted.

AN INTEGRATED DYNAMIC SYSTEM OF SOCIAL INTERVENTION FOR DRUG ABUSE

What have we learned from these findings, from parallel findings in the research literature, and from the accumulated experience of clinical researchers and practitioners in the field? We know that community treatment, particularly methadone maintenance, produces significant short-term and long-term improvements in levels of drug use and crime (Powers et al., 1988), and to a lesser degree in the improvement of employment and social functioning. We know that criminal justice supervision has similar effects, although not to the same degree, during periods of its imposition (Anglin, Deschenes, & Speckart, 1987). However, we have not been able to demonstrate long-term effects when such supervision is removed. We also know that the current interaction between legal supervision and community drug treatment is
one by which imposed supervision encourages, or even coerces, criminal offenders with drug abuse problems into community treatment.

To date, the interaction between legal supervision and community treatment, while beneficial, has often been haphazard and coincidental. Social implications, then, by our current understanding, seem to be fairly straightforward: (1) policy should be developed for the early detection of drug abuse; (2) assessment should be made at the individual level for an integrated system intervention; (3) such intervention should be made available or even imposed; and (4) individuals should be monitored for compliance.

Figure 3 presents a simplified model for an integrated dynamic system of social intervention for drug abuse. The figure delineates three aspects of the model: first, the level of addiction, moving from the global perspective of the general population to a level addressing the most recalcitrant of drug-abusing offenders; second, the intervention strategies that are reasonable to apply at each level; and third, the movement of drug-using individuals through the various levels of addiction and the points at which practical strategies can be applied to these individuals.

First the levels of addiction need explication. The most global level, of course, is that of the general population; most individuals either do not become involved with illicit drugs or do so in a limited way. Of those who ever try an illicit drug, a small proportion escalate their use to a casual or even regular level for a period of time. From this group, certain individuals escalate into habitual, dependent, or addicted use, and the proportions of those doing so vary depending on the particular drug with which they become involved.
The first problem for a rational intervention approach is detection of those using. Detection typically occurs either through social agencies or by self-disclosure. Social agencies where detection occurs include hospital emergency rooms, where a certain proportion of cases are brought in because of problems associated with drug use; criminal justice enforcement agencies, where arrestees show extremely high levels of drug use (Carver, 1986); and third parties such as employers, parents, or school officials who have reason to suspect drug abuse. Detection by self-disclosure occurs when drug use becomes a problem for an individual who discloses to a third party or seeks treatment.

Once a drug user has been identified, careful assessment should be made of the user's drug use history, current level of use, and problems existing because of the use of drugs. Such assessment should be designed to (1) allow a choice of intervention strategies that includes both community treatment, imposed if necessary, and criminal justice alternatives, and (2) provide for enough flexibility and sufficient ancillary services to achieve the highest probability of success in both short- and long-term behavior change.

The social intervention efforts proposed in the integrated dynamic system depicted in Figure 3 involve various levels of criminal justice supervision as well as various levels of community treatment intervention. On the criminal justice side, the lowest levels of intervention may involve diversion of individuals from court processing into treatment, the imposition of treatment as a condition of probation, as a condition of early release from incarceration or as an adjunct to parole after incarceration, or treatment as a condition of remaining
unincarcerated should a violation of parole or early release conditions be detected. On the community treatment side, interventions can range from simple educational approaches or outpatient counselling to methadone maintenance and other pharmacotherapies to residential treatment. The integration of these two dimensions of intervention can provide nearly any level of monitored control and intensity of treatment that may be desired for a given individual.

One concept embedded in this model needs further exposition. Involvement with drugs can be a chronic condition that requires protracted intervention to resolve. This prolongation is particularly evident in the treatment of narcotics addiction, where 10- to 30-year histories of abuse are not uncommon. The treatment outcome studies on which this model is partially based indicate that long-term investment in habilitation or rehabilitation will be necessary in many cases. Some proportion of drug users will require a number of years of treatment, or even permanent case management in treatment. In addition, for most drug-using individuals, there are periods of control in which prosocial behavior becomes established, but these periods can be interrupted by conditions that produce relapse. The model proposed here is designed to anticipate and intervene early in the relapse cycle. Under such real-world conditions, it is evident that monitoring the behavior of drug offenders is necessary, not only to sustain the prosocial gains obtained from successful interventions but also to identify potential relapse conditions early in the cycle so that additional assessments can be made for revised intervention strategies. The lines and arrows connecting the various states in the model depict the flow of constant monitoring
and dynamic intervention strategy as it applies to individuals coming through the system.

While it is always hoped that any one intervention will produce results, the model also allows for a flexible response so that if the original intervention strategy is not producing the desired results, a higher level of control with a greater intensity of treatment can be applied. For example, at the lower levels of drug involvement, simple diversion with criminal justice monitoring that includes drug testing, and/or community treatment intervention that involves education or outpatient counseling, can be required for a predetermined period of time. If, under these conditions, individuals can demonstrate for a sufficiently long period that personal control has been achieved, then these constraints can be removed. At the other extreme, for the chronically relapsing offender, intense legal supervision after a period of incarceration or inpatient treatment may be necessary, together with a high intensity of community treatment such as methadone maintenance or residential care. The individual will also need very careful monitoring for a longer prescribed period, during which the individual may demonstrate sufficient control so that constraints can be removed.

The model proposed here is similar in a number of respects to that used by the mental health delivery system in managing the chronically mentally ill. Reasonable goals are to minimize the numbers of individuals entering higher-restriction states, to minimize the more serious and costly options of long-term incarceration or residential treatment, and to maximize time in the community with behavior at an acceptable level. For many drug-abusing offenders, this process may be
accomplished in a few years; for others, long-term intervention or lifetime case management may be necessary.

With the social policies now in place, all the elements for developing the proposed system are available (see footnote 4). The criminal justice system has relied on community treatment since treatment became generally available. Community delivery of drug treatment has matured from a sparse scattering of programs developed in the late 1960s and early 1970s to a well established nationwide network. However, despite the advances of the last two decades, a number of problems will have to be resolved before the system is sufficiently efficient and effective. The first and most serious of these problems is the current level of funding of treatment programs. At present, there are long waiting lists for treatment slots in most communities. This situation can be remedied partly by an increase in funding for such slots and partly by the provision of other resources to enhance the current delivery system. Such resources would include better salaries for practitioners, better continuing education resources, and greater access to ancillary resources such as educational and vocational programming. Any increases in funding and training however, must not be temporary phenomena, but instead represent a long-term commitment to dealing with the treatment of drug abuse.

Second, no widespread outreach efforts are in place to induce drug abusers to come into treatment voluntarily. Such efforts would certainly increase the population in treatment at a lesser implementation cost—especially in terms of judicial expense—than legal coercion or civil commitment require. In this respect, studies have shown that outreach efforts, particularly since the advent of AIDS, can
successfully bring more voluntary entrants into treatment—if the intended population is reached and if treatment is accessible.

Without these two changes, increases in legal coercion or civil commitment efforts would be appropriate only for a limited number of addicts who are unlikely to enter treatment otherwise and who are sufficiently problematic in their behavior to warrant criminal justice system involvement.

The criminal justice system presents different problems. Many members of this system have not been educated to the benefits of community treatment; a substantial number may believe that community treatment is ineffectual or coddles the addict, and may sabotage the process because of these beliefs. In addition, the communication and coordination between the criminal justice system and the community treatment system must be improved. Members of these systems need to move out of their adversarial stance toward the realization that by collaborating in producing the desired behavior changes, they can significantly improve outcomes for individuals under their care and for society as a whole.

CONCLUDING COMMENTS

The overall processes related to the cessation of narcotics use, or maturing out, are probabilistic and time-related ones (Winick, 1962; Anglin et al., 1986; Brecht et al., 1987). A small but accumulating percentage of identified addicts will stop using narcotics on an addicted basis in each year after intervention. Some parameters that differentially influence that percentage can be specified, but their effect is not very large in the short term. The chronic relapsing
nature of narcotics addiction requires a long-term monitoring effort like civil commitment or other legal coercion efforts in combination with community treatment so that the percentage ceasing addicted use in any year can be maximized, and the duration of individual addiction careers—and their cost to society—can be minimized.

The integrated model, while initially proposed for heroin addicts, should be considered for intervention with abusers of other drugs—for example, alcohol and cocaine. Application of the model to abusers of other drugs, while reasonable at the construct level, should proceed carefully by including relevant research findings and planning for evaluation research in any proposed implementations.
References


FIGURE 1

PERCENT OF NONINCARCERATED TIME USING NARCOTICS DAILY; CAP INACTIVE, ACTIVE, AND METHADONE SUBSAMPLES

- INACTIVE
- ACTIVE
- METHADONE

YEARS BEFORE METHADONE ADMISSION

* * * INDICATES PERIOD OF CAP COMMITMENT
** ** INDICATES U.S. HEROIN EPIDEMIC

YEARS AFTER
FIGURE 2

PERCENT OF NONINCARCERATED TIME INVOLVED IN PROPERTY CRIME;
CAP INACTIVE, ACTIVE, AND METHADONE SUBSAMPLES

PERCENT TIME INVOLVED IN CRIME

YEARS BEFORE METHADONE ADMISSION

YEARS AFTER

----- ----- -----                 *
       *     *     * 1 2 3          *

* * * INDICATES PERIOD OF CAP COMMITMENT
* * * INDICATES U.S. HEROIN EPIDEMIC
FIGURE 3
Dynamic System of Intervention Integration

User Flow

Intervention Stages

- General Population
- Available for Assessment
- Assessment
- Suitable for Intervention
- Non-Incarcerated CJS Control Levels (Short term/Long term)
  - Drug Testing
  - CJS Monitoring
  - Civil Commitment
- Assessment of Behavioral Violation
- Incarceration
- Release

Intervention Strategies

- Social Intolerance of Use
- Proven Prevention Interventions
  - Community based
  - School based
  - Family based
  - Mental Health Services
- Detection
  - Drug testing
    - Arrestees, ER's
    - Probationers, Parolees
    - Treatment Clinics
    - Military, Employees, Students
  - Case-history/Self report
  - Third party notifications
- Disclosure
  - Treatment on demand
  - Outreach efforts
- Community Programs
  - Remedial Education
  - Vocational training
  - Mental Health Services
- Institution Treatment Programs
  - Remedial education
  - Vocational training
  - Mental Health Services

No illicit drug use
  - Occasional use
  - Heavy use
  - Involved in Drug Sales
  - Social Detection
    - Personal Disclosure
  - Voluntary
  - Coerced
  - Low
    - Education
    - Early Intervention
    - Treatment
    - Outpatient
  - Medium
    - Treatment
    - Residential
    - Methadone
  - High
    - Treatment
    - Residential
    - Methadone
    - Blockers

Violation of Conditions
  - New Offenses
  - Relapse to use
  - Short term
  - Long term
Table 1

SUMMARY OF MEAN PRECOMMITMENT AND POSTCOMMITMENT STATUS AND BEHAVIOR FOR COMPARISON (C) AND TREATMENT (T) SAMPLES

<table>
<thead>
<tr>
<th>Status or Behavior</th>
<th>Comparison</th>
<th>Treatment</th>
<th>Mean Differences Between Change Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Period I</td>
<td>Period II</td>
<td>Period III</td>
</tr>
<tr>
<td>Mean arrests per year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug arrests</td>
<td>1.06</td>
<td>0.95</td>
<td>0.67</td>
</tr>
<tr>
<td>Nondrug arrests</td>
<td>1.13</td>
<td>1.18</td>
<td>0.90</td>
</tr>
<tr>
<td>Parole violations</td>
<td>0.10</td>
<td>0.31</td>
<td>0.32</td>
</tr>
<tr>
<td>Mean % of time incarcerated</td>
<td>23.2</td>
<td>50.9</td>
<td>31.7</td>
</tr>
<tr>
<td>Mean % of nonincarcerated time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under legal supervision</td>
<td>31.7</td>
<td>52.6</td>
<td>60.0</td>
</tr>
<tr>
<td>Using narcotics daily</td>
<td>54.5</td>
<td>47.7</td>
<td>28.4</td>
</tr>
<tr>
<td>Dealing drugs (with or without profit)</td>
<td>46.9</td>
<td>38.2</td>
<td>25.1</td>
</tr>
<tr>
<td>Employed (full or part time)</td>
<td>44.8</td>
<td>48.8</td>
<td>53.0</td>
</tr>
<tr>
<td>Heavy alcohol usec</td>
<td>30.0</td>
<td>36.8</td>
<td>37.4</td>
</tr>
<tr>
<td>Criminal activities</td>
<td>49.8</td>
<td>43.1</td>
<td>30.5</td>
</tr>
<tr>
<td>Mean no. self-reported crimes/yr.b</td>
<td>66</td>
<td>77</td>
<td>52</td>
</tr>
<tr>
<td>Mean income ($00) from crime/yr.b</td>
<td>45</td>
<td>72</td>
<td>48</td>
</tr>
</tbody>
</table>

Composite score: % of time alive, not incarcerated, and not using narcotics daily in Year X

<table>
<thead>
<tr>
<th></th>
<th>Comparison</th>
<th>Treatment</th>
<th>Mean Differences Between Change Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year X</td>
<td>Year X</td>
<td></td>
</tr>
<tr>
<td>Mean X</td>
<td>35.3</td>
<td>27.9</td>
<td>45.9</td>
</tr>
</tbody>
</table>

Note: Period I = First narcotic use (M) to civil commitment (A).
Period II = A to (A + 7 years), the legislated period of commitment.
Period III = (A + 7 years) to time of interview (I).

aThe percentages in this table are the mean of individual percentages for the respective periods, not the percentage of the overall person-months.
bData on arrests, self-reported crimes, and income from crime are rates per nonincarcerated person-year.
Crime income does not include drug dealing, gambling, etc.
cHeavy alcohol use is defined as drinking at least a six-pack of beer, or a bottle of wine, or seven drinks of liquor over a six-hour period two or more times per week.
dSignificant beyond the .05 level of confidence.
eSignificant beyond the .01 level of confidence.

Source: An Evaluation of the California Civil Addict Program, NIDA, 1977.
Table 2

Major Self-Reported Reasons for Treatment Entries
For Southern California Programs

<table>
<thead>
<tr>
<th>Treatment Program</th>
<th>MM Male</th>
<th>MM Female</th>
<th>TC Male</th>
<th>TC Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Treatment Entries</td>
<td>N = 499</td>
<td>N = 40</td>
<td>N = 727</td>
<td>N = 598</td>
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<tr>
<td>Reasons:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal Reasons</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Police Pressure</td>
<td>1</td>
<td>-</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>P.O. Pressure</td>
<td>16</td>
<td>23</td>
<td>35</td>
<td>10</td>
</tr>
<tr>
<td>Court Pressure</td>
<td>6</td>
<td>35</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Indirect Legal Pressure</td>
<td>9</td>
<td>10</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>General Legal Pressure</td>
<td>14</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Other Reasons</td>
<td>54</td>
<td>27</td>
<td>64</td>
<td>79</td>
</tr>
</tbody>
</table>

Note: MM = Methadone Maintenance
TC = Therapeutic Community
P.O. = Probation or parole officer

cap\rtables.cm
C:\cap\table2
Table 3
During Treatment Behavior of MM Admissions Entering Under No, Moderate, and High Legal Coercion*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Legal Coercion Level</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>none</td>
</tr>
<tr>
<td>N</td>
<td>84</td>
</tr>
<tr>
<td>#Months MI-MD</td>
<td>30</td>
</tr>
<tr>
<td>CJS Legal Supervision</td>
<td>5</td>
</tr>
</tbody>
</table>

Criminal Activities

| Property crime                  | 15.76     | 18.40    | 18.64    | 0.19     |
| Number crimes/mo.              | 2.59      | 3.71     | 2.89     | 0.58     |
| Crime income/mo.               | 151.72    | 360.39   | 205.29   | 2.48     |
| Dealing                        | 25.93     | 23.13    | 28.48    | 0.48     |
| Dealing income/wk.             | 50.93     | 52.13    | 40.37    | 0.11     |

Drug Involvement

Narcotics use

| Daily use                      | 11.38     | 14.96    | 14.20    | 0.01     |
| Irregular use                  | 40.91     | 37.42    | 38.78    | 0.18     |
| No use                         | 47.71     | 47.61    | 47.02    | 0.01     |

Other drug use

| Heavy alcohol use              | 39.27     | 40.61    | 41.08    | 0.04     |
| Daily marijuana use            | 14.68     | 7.10     | 12.88    | 1.63     |

Social Activities

| Working                        | 56.59     | 57.67    | 54.50    | 0.15     |
| Work income/wk.                | 93.77     | 101.01   | 91.74    | 0.34     |
| Married                        | 40.89     | 42.63    | 35.31    | 0.69     |
| Common-law relationship        | 33.81     | 35.92    | 44.46    | 1.59     |

*Unless otherwise noted, all measures represent percent of nonincarcerated time in the indicated status.
** p<.001