3 Heroin Treatment: Development, Status, Outlook

David C. Lewis and John Sessler

THE GROWTH OF heroin treatment over the last decade has been truly remarkable. There are presently an estimated two hundred and forty thousand drug treatment "slots" in the United States. Approximately 60 percent of these are for heroin users, the remainder for users of other drugs; of the heroin treatment "slots," there are approximately eighty-four thousand nationwide for methadone maintenance. Nearly 85 percent of all those treated receive drug treatment services on an outpatient basis, 8 percent are in residential programs, and the remainder are in hospital, prison, or day-care settings. Over $ .5 billion will have been spent on drug treatment and rehabilitation during 1978. Of this amount $196 million will come from the federal government's National Institute on Drug Abuse, while the remainder will come from other federal agencies as well as from state and local governments and private sources.

Heroin treatment has achieved the status of a major American industry during the 1970s. It is, however, an industry unlike any other, and its unique development, problems, and benefits are examined in the following sections of this chapter.

Early History
The first identifiable population of opiate addicts in the United States were wounded Civil War veterans who used morphine to relieve the chronic pain of war injuries. Their use of morphine, at least initially, had a legitimate medical purpose. Even if the addictive qualities of morphine had been fully recognized and appreciated at the time, addiction to it would probably have been preferable to the alternative of extreme physical pain.

By the end of the nineteenth century, morphine came to be used more widely. In addition to its continued use for the relief of chronic pain among disabled veterans, morphine was used by other groups as well, particularly middle-aged white females in rural areas. Increasingly, morphine was used to relieve not only severe or chronic pain but minor discomfort and general irritability. In fact, there came to be large-scale marketing of opiate-containing tonics which purportedly relieved a wide range of maladies. Morphine use during this period was accepted as legitimate, even when it became excessive and the individual became addicted.

As opiates became used more frequently as "medicine," concern about the potential for opiate addiction increased and "cures" were promoted. Most of these cures were in the form of patent medicines which individuals administered to themselves. However, many of the cures actually contained opiates. In fact, when heroin was introduced around 1900, it was promoted for the treatment, among other things, of morphine addiction.

Formal treatment at this time was viewed solely in a medical context. Physicians saw physical withdrawal from the addictive drug as being the entire problem. There was little appreciation of the psychological or social aspects of addiction. Although elaborate physiological explanations were propounded by physicians to explain opiate addiction, little attention was given to the
possible causes of addiction or to methods of preventing readdiction after withdrawal. While Freud and others began to address the psychological etiology of addiction, their views did not achieve wide attention or acceptance during this period.

In the early 1900s addiction to heroin and morphine was thought to be increasing, and was found to exist within urban populations. An association between addiction and crime was asserted. A new kind of drug addict—in the public's view, a less benign kind—was thought to be emerging. This change in attitude led to growing public pressure for government action to control addiction, which culminated in the passage of the Harrison Narcotic Act in 1914. The Harrison Act was a crucial watershed for national drug policy, as it set the course for government action and public attitudes for the next fifty years.

Although it was not seen as such at the time, it in effect defined addiction as primarily a law enforcement rather than a public health problem. Although initially the act seemed to promote a medical definition of addiction by making opiates available only through a physician's prescription and discontinuing sale in the open market, the ultimate authority over physician-prescribing practices was put in the hands of federal Treasury Department agents.

Abruptly cut off from previously available and inexpensive heroin and morphine supplies, opiate addicts in the tens of thousands turned to physicians for help. A Treasury Department survey in 1918, four years after the Harrison Narcotic Act took effect, showed more than seventy thousand addicts "under treatment." However, because of the narrow conceptualization of opiate addiction along purely physiological lines, "treatment" meant continuing the provision of narcotic drugs and little else.

Many physicians were reluctant to accept the increasingly unpopular task of treating addicts. Accordingly, a number of cities established morphine maintenance clinics to dispense opiates for limited periods of time as a public health measure. Between 1918 and 1920, forty-four of these drug maintenance centers were opened. While it has been stated that they were a failure and the federal government subsequently moved to close them for that reason, in fact these treatment programs were probably reasonably successful in what they set out to achieve—namely, to undercut the illegal, "black market" supply system, alleviate the burden on physicians in private practice, and generally minimize on a short term basis the dysfunction of the addict. However, what the clinics could not achieve was long-term abstinence. Although the Public Health Service and other medical authorities claimed that any withdrawal method would result in getting the addict off drugs," addicts in fact would usually resume using drugs if available soon after withdrawal. Therefore one major problem the clinics encountered was that they were unable to address the longer-term problems characteristic of narcotic addiction; in spite of the claims of many "experts," there was no medically proven treatment for narcotic addiction.

The very existence of the clinics was diametrically opposed to what lawmakers, law enforcement officials, and many doctors saw as the solution to the problem, i.e., total abstinence. It was commonly believed that the clinics were merely another supply source for those desiring drugs for comfort or pleasure.

A 1919 survey conducted by the Revenue Bureau of the U.S. Treasury Department solicited the views of leading American physicians and scientists on the current state of narcotic addiction treatment and the wisdom of ambulatory programs." The results showed that medical opinion was mostly opposed to the ambulatory treatment of addicts. Subsequently, the Narcotic Division of the Revenue Bureau, having received formal support from the American Medical Association in its opposition to ambulatory maintenance programs, moved to close the maintenance clinics.
That decision was not as mindless as some have suggested; rather it was based on a series of specific, well-documented considerations that are understandable within the context of the attitudes and beliefs of that time. As a result, in 1919 the federal government began closing the clinics, and by 1925 the last one was gone."
The passage of the Harrison Narcotic Act and the subsequent closing of the maintenance clinics reflected both a complete usurpation by the Treasury Department of all policy-making authority over narcotic drugs and a total abdication by the medical profession of any role in shaping drug policies. Once the maintenance clinics were closed, law enforcement officials moved to consolidate their authority in this area by vigorously prosecuting any physician personally prescribing narcotic drugs for a suspected addict. Between 1914 and 1938, around twenty-five thousand were arrested, and more than five thousand actually went to jail, merely for prescribing narcotics to suspected addicts.16 No physician dared treat an acknowledged addict; a degree of trepidation was engendered that would influence the attitude of the medical profession toward narcotics for generations. Within a few short years, any possible view of opiate addiction as a disease or at least as a primarily medical matter had been eliminated. In the decade of the 1920s there was essentially no source of drug treatment in America. Yet addiction to narcotics persisted even though this truly hard-line approach was being pursued. By the early 1930s there was growing concern in the U.S. Public Health Service about the country's considerable addict population, particularly in the federal prison system. The obvious need for some kind of action led to the institution of two federal narcotic treatment facilities by the Public Health Service at Lexington, Kentucky (1935) and Fort Worth, Texas (1938).17 The underlying philosophy of the Lexington and Fort Worth programs was that the key to successful treatment was complete detoxification in prolonged isolation from the environment where addiction occurred. Thus, physical isolation from access to drugs and withdrawal under medical supervision formed the basis of their program. This approach to treatment in the Lexington and Fort Worth programs stood in marked contrast to the earlier community-based morphine maintenance clinics. The limitations of the Public Health Service hospital program were recognized early. Patients experienced severe problems in readjusting psychologically and socially upon returning home to their communities, and recidivism was high. The facilities at Lexington and Fort Worth remained the sole sources of help for opiate dependents for twenty years. While it has been easy in the light of subsequent developments to fault these programs, the clinical experience gained and the research conducted there formed the basis of opiate addiction studies upon which many subsequent advances in the field were built. A major development in the evolution of drug treatment programs came in 1952 with the opening of a treatment facility for juvenile opiate addicts at Riverside Hospital in New York City.18 Although hospital-based and in some respects similar to the Lexington and Fort Worth programs, the Riverside Hospital program was different in one important way: It was near enough to the patients' homes so that staff could help them readjust to the community and work with them after withdrawal was complete and they were no longer institutionalized. Thus the Riverside Hospital program became the first community-based program in the United States in thirty years.
Recent Program and Policy Developments
Therapeutic Communities. In 1959 a new heroin treatment concept appeared, that of the drug-free therapeutic community. The forerunner of this movement was the Synanon program in Los Angeles, California, the first organized effort by addicts themselves to solve their problems through self-help techniques. The Synanon program was premised on the belief that only a former addict could break through the shell of denial and pathological lying of the addict. The Synanon leaders prided themselves on their rejection of the traditional medical approach to addiction. Instead, they concentrated on the psychological factors contributing to readdiction, and tried to restructure the addict's character so that a return to drugs would be unimaginable. The Synanon program espoused the view that those who entered the program must from that time forward be drug-free and reliant only on the discipline and support of their peers. In some respects, Synanon resembled Alcoholics Anonymous, but was was strikingly different in its demand for total immersion into a thoroughly disciplined lifestyle involving indefinite residence in the Synanon facility.

The Synanon approach to the treatment of heroin addiction came to be commonly referred to as the "therapeutic community" approach. By the late 1960s, therapeutic communities were in operation in many urban areas throughout the country. Although there were wide variations in their philosophies and styles of operation, most therapeutic communities viewed heroin addiction as the result of psychological problems. Consequently, they relied upon intensive therapeutic techniques in a residential setting to restructure the client's character and personality so that he or she would assume a normal drug-free lifestyle. Most therapeutic communities held to a rather rigid structure of daily schedules and used a complex system of punishment and reward. Often these programs were run by former heroin addicts, many of whom held a deep mistrust of the traditional medical and mental health professions. Financially, many of these early therapeutic communities were independent from government support. The therapeutic-community concept has continued to develop in several ways beyond its original Synanon form, so that present-day therapeutic communities differ appreciably from their predecessors. Among more recent changes has been a greater acceptance of government funding, to the point where many therapeutic-community programs could not exist without government financial support. Similarly, the earlier total rejection of medical and psychiatric professionals in favor of an ex-addict staff composed of nonprofessional peers of the clients has been tempered over the years; many therapeutic communities have moved to involve professional staff along with their paraprofessional and ex-addict counselors and staff.

However, the focus of the therapeutic community movement continues to be on confronting the character and developmental faults of the treatment client in an effort to "remake" the individual's personality in an intensive, supportive residential setting.

Predictably, as therapeutic-community programs have advanced beyond infancy, they have become increasingly sophisticated in both their treatment delivery plans and their organization and administration. Administratively, greater emphasis has been placed on program accountability in the provision of treatment services and on the development of standards for their operation. In addition, an important shift has occurred in operational philosophy toward an emphasis on preparing the client for reentry to the community rather than on a continued reliance on the protective environment of the program.

The therapeutic communities have also encountered a number of problems, the greatest of which is the lack of voluntary participation as clients by a large number of addicts. Even for those who do seek this type of treatment, retention in treatment continues to be a problem area.
On the other hand, it does appear that for those who do remain in treatment, this approach can elicit significant changes in individual attitudes, personality, and drug-using behavior. There are a number of other issues that therapeutic communities will have to address. An increasing number of their clients are referred from the criminal justice system, a development at odds with the original concept of purely voluntary admission. Other issues are connected with the above-mentioned acceptance of greater professionalism, such as the degree to which traditional medical and social science professionals can be more involved in the therapeutic-community program and the consistency with which certain standards of behavior toward clients can be adopted by the staffs of therapeutic communities.

Today's therapeutic communities must also examine their ability to handle the growing numbers of potential treatment candidates whose primary drug is not heroin. Related to this issue is how a therapeutic program ought to react to problems of alcohol misuse following successful heroin addiction intervention. Lastly, given the traditional therapeutic community stance for total abstinence from all substances in the wide range of psychoactive drugs, they must also now respond to greater societal acceptance of reasonable, moderate use of alcohol and marijuana.

Heroin Treatment and the Criminal Justice System.

It is a central fact that the physical and mental health aspects of heroin treatment in the United States have always been related to the criminal justice system, albeit at some times more closely than at others. The above discussion of the growth and development of the therapeutic-community concept, and subsequent discussions of methadone maintenance, detoxification, and other heroin treatment approaches to be presented below all point out the continued interrelationship of heroin treatment and law enforcement.

One approach to emerge in the 1960s was dubbed "civil commitment." It could be described as "nonpunitive incarceration of an addict for the purpose of rehabilitation." Although civil commitment as such was first instituted by California (1961) and New York State (1962), the early thrust of this approach was the frequent use of civil commitment procedures to confine addicts at the Lexington and Fort Worth hospitals. These procedures allowed the courts to order drug treatment and rehabilitation in lieu of incarceration for convicted felons whose offenses were thought to be related to drug use. The rationale for this was that, while treatment is preferable to incarceration, a strong legal mechanism is needed to force heroin addicts into treatment, hold them there until it is completed, and help ensure their continued abstinence from drugs upon return to the community. A similar federal program, the Narcotic Addict Rehabilitation Act (NARA), was instituted in 1966.

As drug treatment capacity was expanded during the early 1970s to meet an observed increase in heroin use, many programs found their services underutilized. Fewer people than expected appeared voluntarily for treatment. In response to this problem, some of those who considered heroin addiction to be a major source of urban crime even advocated "quarantining" addicts, a move which would have substantially expanded the civil and criminal commitment programs; however, the constitutionally protected rights of the individual precluded any serious thought of implementing this. Other solutions were sought which would gain new clients for the existing
treatment system. One way was the "diversion" of heroin addicts from the criminal justice system into treatment in lieu of criminal prosecution or sentencing.

The new diversion programs were similar in concept to the civil commitment programs, but they operated less formally. Drug-free programs became the primary recipients of "diverted" offenders. (The concept of diverting heroin addicts from the criminal justice system to methadone programs, where clients would be maintained on a synthetic opiate, was and is a sensitive issue.) Due to court-imposed restrictions, the drug-free programs generally chosen were live-in facilities rather than outpatient abstinence programs. Thus, as heroin treatment availability of all types expanded beyond voluntary demand, therapeutic communities turned increasingly to referrals from the criminal justice system as a way to keep their programs going.

In 1973 the federal government instituted a national diversion program for identified heroin users in the federal criminal justice system. This program, named Treatment Alternatives to Street Crime (TASC), provides referrals to federally supported, community-based treatment programs and supervises the referred individual's progress in treatment.

The TASC program has proven to be enormously popular, growing from programs in three cities in 1973 to over forty in 1978. Moreover, it has inspired state and local criminal justice agencies to create similar referral programs for criminal offenders or arrestees. These referrals have been effective in filling up existing treatment "slots" with clients. However, the quasi-involuntary status of these clients has caused problems in the philosophy and operation of treatment programs. The modification of operating procedures toward an emphasis upon such things as urinalysis checks and reporting and termination procedures illustrates a shift in program focus to accommodate not what is best for the client but what is best for the courts. And the financial support from the National Institute on Drug Abuse for drug treatment of criminal offenders has unfortunately lessened both the financial and philosophical support for voluntary treatment.

Methadone.

The greatest impact in the last fifteen years on the treatment of narcotic addiction has come with the use of the synthetic opiate methadone for maintenance of heroin addicts. While methadone had been used at the Public Health Service hospital in Lexington to aid in the heroin withdrawal process since the late 1940s, it was not used as a maintenance drug until the mid-1960s. The reason methadone was selected for testing as a maintenance drug was that, unlike heroin (whose effects last three to five hours), methadone's effects last twenty-four hours. Another difference is that methadone can be taken orally, whereas heroin is injected intravenously.

In 1964, researchers Vincent Dole, an internist and biochemist, and Marie Nyswander, a psychiatrist, described a difference between the behavior of chronic heroin addicts maintained on methadone at a consistent dosage level and that of others maintained on heroin. Those maintained on methadone appeared more alert, energetic, and interested in constructive social activities. In contrast, apparently because of heroin's short duration of effect and the resultant need for frequent injections, the group maintained on that drug was difficult to "stabilize,"
became lethargic after a heroin injection, and underwent mild withdrawal as it wore off. Dole and Nyswander hypothesized that repeated heroin use induces biochemical changes in the body requiring subsequent indefinite therapy with an opiate, just as insulin is required to treat a biochemical deficit in diabetics. Since addicts could be "stabilized" on methadone, these researchers believed that this was the opiate that would leave the individual most functional. The treatment program designed by Dole and Nyswander did more than simply provide a substitute drug to patients. Once patients were stabilized on a fixed daily dose of methadone, they were offered counseling, job training, and various other forms of intensive support to facilitate the development of a productive life away from heroin. The initial few hundred patients they treated did remarkably well, which result aroused considerable interest throughout the country. For the first time, a significant number of heroin addicts were being treated on an outpatient basis within their own communities, rather than being kept in protracted isolation. By the late 1960s, therefore, three general approaches had emerged for the treatment of heroin addiction: drug-free therapeutic communities (residential), methadone maintenance (outpatient), and drug-free incarceration (including both prison programs and hospital programs). Each type of program drew upon different concepts of addiction, and treatment objectives varied from program to program. Individual programs representing all of these categories appeared in most major American cities. In most instances, they operated independently of each other and in fact frequently competed for patients and public support. However, in some cities (e.g., Chicago, Atlanta, and Washington, D.C.) different types of programs were linked together under a single "umbrella" agency; this unifying-agency system was called the "multimodality" approach to treatment. Its strength was that it facilitated referral of clients to the treatment approaches best filling their individual needs. In several cities a central "intake" facility provided initial screening of prospective clients for all treatment modalities, and staff and client together chose the treatment program they felt gave the greatest chance for success. However, there were deep philosophical and ideological divisions fragmenting the heroin treatment field. At times it seemed as if the search was for one "right" form of treatment. Those who thought of heroin addicts as criminals tended to view the most restrictive forms of treatment most favorably. Those who viewed addiction as a product of the societal conditions of the urban poor favored strengthening the social-rehabilitation components of treatment. A gulf which seemed particularly broad was that between supporters of methadone maintenance and those believing in the drug-free approach of therapeutic communities. Even within specific treatment modalities there were wide divergences in program philosophy and program operation. Methadone program directors argued vigorously among themselves about appropriate admissions criteria, dosage levels, counseling techniques, and termination procedures. Therapeutic community directors argued with equal vigor among themselves about reward and punishment systems, duration of time in different phases of treatment, and involvement of medical professionals. These disagreements carried over into public forums, serving to confuse and divide the general public over the efficacy of various types of drug treatment programs. There was little acknowledgment at this time that there might be more than one type of heroin addict, more than one approach to treatment, or that the same person might benefit at one time from methadone maintenance treatment and at another from the therapeutic-community approach. These debates during the late 1960s about treatment approaches to heroin addiction took place in the context of increasing heroin use and rising public concern. Pressure mounted for greater federal involvement in the drug field. But in contrast to drug law enforcement the drug treatment
field was unable to present a unified position; federal support lagged. Heroin addicts were
viewed more as criminals to be feared than as people in need of treatment and assistance. One
would have hardly predicted the enormous expansion of drug treatment programs which soon
occurred.

The two factors that prompted the unanticipated expansion of the national drug treatment effort
in the 1970s were the development of a public health theory of heroin addiction and concern
about returning heroin-addicted Vietnam War veterans. While both these factors soon receded
in importance, the infrastructure of treatment programs created in response to them has
remained generally intact.

Public Health Theory of Addiction.

The public health theory of heroin addiction emerged with the publication in 1969 of a paper
entitled "The Spread of Heroin Abuse in a Community," which looked at the spread of heroin
addiction within an English community.28 The author, d'Alarcon, found that new heroin users
tended to be introduced to the drug by those already addicted. He established a model that bore
a close resemblance to that for the spread of infectious diseases in epidemics. His thesis
suggested that traditional public health methods should be applied to the treatment of opiate
addiction.

For those who endorsed d'Alarcon's theory, it was clearly unacceptable merely to treat small
numbers, even if the quality of care was the best available; what seemed crucial was the
involvement of as many heroin addicts as possible, even if treatment did not always measure up
to desired standards. According to the public health theory, the more people involved the easier
it would be to prevent the spread of heroin use and addiction. Theoretically, the client would
also be less likely to become reinvolved with heroin when most of his peers were in treatment.
In addition, according to adherents of the public health concept, the higher the percentage of
addicts in treatment within a given community, the more the heroin market there would be
undercut and the less lucrative it would become for traffickers.

This public health approach to treatment was an attractive concept for federal strategists
concerned primarily about reducing heroin-related crime. It suggested that heroin treatment
programs handling large numbers of addicts could reduce crime and prevent the continued
spread of addiction as well as help rehabilitate heroin addicts. Moreover, the public health
concept provided an alternative to civil commitment and incarceration, neither of which had
proven to be satisfactory.

Returning Vietnam Veterans. Public support for drug treatment also grew out of fear over the
large numbers of heroin-using returning Vietnam War veterans. These fears seemed to peak
following a congressional report claiming heroin use to run as high as 100 percent in some units
in Vietnam.29 The prospect of addicted former soldiers trained in guerilla warfare left to roam
the streets of urban America was alarming. Yet prison seemed a rather harsh, uncharitable
response for those who had become addicted while in service to their country. Treatment of
some kind, if it would work, seemed more desirable and humane.

Treatment thus rapidly became an important element in the overall national drug strategy, and
federal funding increased substantially. However, federal support grew in rather haphazard ways; several separate federal agencies were funding different kinds of treatment programs, sometimes for different reasons.

The federal commitment to drug treatment entered a new era in June 1971 when the Special Action Office for Drug Abuse Prevention (SAODAP) was created by President Nixon's executive order. SAODAP was empowered to coordinate the federal drug treatment effort as it grew rapidly from $87 to $196 million in 1972. Consistent with the public health theory of heroin addiction, federal strategists sought to provide treatment to every addict needing or wanting it. Large community-based programs were established across the country. Some individual urban programs enrolled more than ten thousand clients in both primary and satellite clinics. These large programs were most often "multimodality," offering a variety of programs to an entrant, who could then choose the one best suited to his or her needs. Transfer between programs was made relatively easy.

As previously stated, the primary goal of the new public health concept of heroin addiction was to get as large a percentage of the addict population into treatment as quickly as possible. However, therapeutic-community programs could handle only a small number of people at a time, and their cost per patient was high (from four to ten thousand per year). Civil commitment could not do much better at involving large numbers; federal NARA and state civil commitment procedures were complicated, so the number of people under civil commitment was never very large. Of the available treatment approaches, methadone maintenance seemed the one best suited to the public health theory of heroin addiction.

Methadone maintenance.

The new, greater involvement of the federal government in heroin treatment had a distinct effect on the operating styles and characteristics of treatment programs. The new methadone maintenance programs were premised on the Dole-Nyswander pioneer program; in practice, however, they varied considerably from that original model and from each other. As the expanded system developed, a number of new maintenance programs emerged which only dispensed methadone and did not employ an intensive format of personal counseling, job training, and other rehabilitation efforts of the early Dole-Nyswander program. (As it turned out, the provision of counseling and ancillary social rehabilitation services proved to be a key variable in program design and practice.) In part these discrepancies were due to differing program philosophies, but the major factor was that funding for such program services in the new federal strategy was inadequate. Quantity received priority over quality.

The methadone maintenance programs were heavily regulated, due to concern over methadone's potential for diversion into the black market and the absence of complete safety and effectiveness data on methadone. Three federal agencies—the Drug Enforcement Administration, the Food and Drug Administration, and the National Institute on Drug Abuse—became involved in regulating methadone programs. Guidelines specifying staffing requirements have led to improvements in the weakest programs, but these requirements for staffing are minimal. On the other hand, some professionals have
3. Heroin Treatment: Development, Status, Outlook

Written by Administrator
Sunday, 09 May 2010 00:00 - Last Updated Tuesday, 04 January 2011 21:55

contended that the considerable regulatory strictures that resulted have served to undermine methadone treatment’s effectiveness by limiting program flexibility.32 Rigid standards of program compliance have interfered with the delivery of high quality services in other programs. The argument against a high degree of standardization in treatment practices is that standards are often set which are inappropriate or written arbitrarily without sufficient program experience as a guide. The result has been a disruption of the delicate balance between the need for flexibility and creativity on the one hand and the need to protect treatment clients, the general public welfare, and public funds on the other.

Between June 1971 and June 1973 approximately one hundred thousand total treatment "slots" were created by federal funds in virtually every major urban center in the country. A commensurate dramatic increase in state funding also occurred; the governor of every state was required by federal law to designate one coordinating agency ("Single State Agency") for all drug treatment, rehabilitation, and prevention efforts within the state. Initially, funding by the federal government was almost entirely for the treatment of heroin addiction; however, many of the states even at this point concentrated more on non-opiate drug abuse and general drug abuse prevention and education.

Full utilization of treatment did not continue for long after this expansion was completed by late 1973. Among the heroin-using Vietnam War veterans, the need for drug treatment services turned out to be much lower than expected; very few of the returning soldiers continued to use heroin once back in the United States.33 American heroin users and addicts who had not been in military service also appeared for treatment in smaller numbers than anticipated, and those who did generally remained in treatment for shorter periods of time than expected.

The fact that many Vietnam War veterans were able to give up heroin use on their own upon their return challenged the prevailing notion that heroin addiction caused irrevocable physiological craving for the drug. This experience had important implications for the use of methadone in treatment and eventually led to increased pressure on maintenance programs to detoxify clients from methadone rather than maintain stable dosage levels. The inability of treatment programs to attract a high level of utilization also undermined the potential effectiveness of the public health addiction treatment concept. In a number of ways then, as the demand for heroin addiction treatment stabilized during the mid-1970s, treatment programs were assuming new goals and styles of operation.

Heroin Treatment and the General Health Care System

The expansion of drug treatment in the 1970s generally occurred apart from the mainstream of general health and mental health care delivery. Separate facilities were developed to provide treatment for heroin addicts. As a result, heroin treatment is now largely a stepchild in the federal health bureaucracy; there has been little effort to integrate it with other health care agencies and services.

Until 1971, the bulk of the federal heroin treatment effort had been administered by the National Institute of Mental Health (NIMH); the problem was generally viewed as a combined medical
and psychiatric one requiring careful, individualized attention. However, the increase in public concern about heroin addiction during the late 1960s and early 1970s led to changes in public perceptions. Increasingly, heroin problems were seen as public health, social welfare, and criminal justice issues. When NIMH resisted this change, it ultimately lost its administrative role in the expanding federal drug treatment effort to the initiatives of the White House's Special Action Office for Drug Abuse Prevention. (SAODAP). Once the expansion process was complete, responsibility for maintenance of the system was returned to the Department of Health, Education, and Welfare (HEW) and its National Institute on Drug Abuse (NIDA), where it remains to this day.

There are a number of factors which have discouraged the incorporation of heroin treatment into the traditional health care system. There is the general reluctance of health care professionals to treat addicts and their related problems. There is also the absence of any system allowing for reimbursement with federal and private health dollars for services provided by nonprofessional, non-hospital-sponsored programs. Furthermore, contemporary heroin treatment programs simply do not resemble "treatment" in the conventional medical sense, but are focused more on social issues and the provision of rehabilitative social services.

As the number of drug treatment programs expanded during the early 1970s, the concept of treatment also grew. It is now common to refer to heroin treatment as "drug treatment and rehabilitation." Although both terms—"treatment" and "rehabilitation"—elude strict definition, "treatment" generally refers to the more narrowly defined medical functions of directly dealing with immediate physical and emotional ailments. "Rehabilitation" is a more encompassing term; it goes beyond the repair of immediately identifiable ailments, focusing instead on broader efforts at development or restoration of what society defines as a normal, acceptable lifestyle. Although there is some overlap between what constitutes treatment and what constitutes rehabilitation, it is clear that treatment can take place without rehabilitation—and often has done so.

The importance of rehabilitation as a component of treatment has clearly grown. One factor that might help explain this change is that heroin addiction in the 1970s has been more often associated with the inadequate conditions in which many of the urban poor live. Deteriorated economic and social conditions came to be seen as a major cause of heroin addiction among the urban poor, and heroin treatment programs were given increasing responsibility for helping their clients escape such conditions. This kind of social and economic rehabilitation became a very important component of drug treatment programs in the early 1970s and has remained so. However, this development has made the absorption of heroin treatment into the traditional health and mental health care system even more difficult, since critical components of the rehabilitative services provided—e.g., vocational training and legal counseling—would be unlikely candidates for reimbursement under generally accepted notions of national health care schemes. To date, drug treatment programs have had only limited success in securing "third-party" payments (i.e., Medicare, Medicaid, Blue Cross / Blue Shield) even for traditional treatment services. In addition, community drug treatment needs are not ordinarily part of the planning activities of the recently established nationwide network of Health Systems Agencies (HSA), intended to plan for the nation's future health care needs in a systematic fashion. Some steps have been initiated to facilitate the adoption of drug treatment into the overall health care network. An accreditation program for drug treatment programs has been started through the Joint Commission on the Accreditation of Hospitals.35 States now have licensing requirements for drug programs." There is also much closer interaction now between state drug
agencies and state agencies for alcoholism and mental health. Studies have been sponsored to examine possible accreditation systems for paraprofessional drug-treatment program workers. Efforts are underway to insure more careful consideration of drug treatment program needs within the HSA planning systems. All these are encouraging signs of an awareness that drug treatment cannot continue to remain apart from the general health and mental health fields.

However, in spite of the vagaries involved in the old categorical funding system for heroin treatment and the potential advantages in greater coordination with traditional health care agencies, there are risks in too complete an absorption. Drug treatment—particularly for heroin—is but a small portion of the totality of the nation’s physical and mental health care needs. Competing issues and needs might well reduce the position of drug treatment in any reintegrated, total health care system. On the other hand, the advantages of lessening the stigma of drug treatment and improving access to other elements of the health care system are substantial.

**Current Status of Heroin Treatment**

There are now four major heroin treatment types or modalities: methadone and LAAM* maintenance programs (outpatient), detoxification programs (outpatient), drug-free programs (outpatient), and drug-free therapeutic communities (residential). In addition, there are inpatient hospital programs for methadone maintenance and detoxification, civil commitment programs, and drug-free programs in prisons. With the amount of money spent on treatment exceeding the $.5 billion level in 1978, there is an ever-increasing need to evaluate and measure the effectiveness of these different programs and of heroin treatment generally. However, there are major gaps in our knowledge which make it difficult to evaluate efficacy of treatment. For example, we do not have a thorough understanding of the natural history of opiate dependency in those who do not appear for treatment. We lack information on controlled and nonaddictive opiate use and on the spontaneous cessation of addictive use without treatment intervention.

An inherent problem in evaluating the effectiveness of treatment for an individual addict is that heroin dependency is mostly a chronic condition, whereas most treatment episodes and evaluations are short-term in nature. In fact, an addict who achieves a positive benefit from treatment will typically have had several treatment experiences. Therefore, the effectiveness of treatment for that individual cannot be evaluated solely on the basis of one treatment experience, but rather upon the ability of a number of treatment episodes to contribute to his or her eventual success. However, most evaluations of treatment do not follow the individual through several treatment episodes over the years, but rather describe the influence of a single treatment intervention. They do so for individuals having a broad variety of backgrounds and addiction histories.

In addition, the wide variation among treatment program objectives and practices, even within a single treatment modality, makes it extremely difficult to achieve accurate assessments of overall treatment capacity.

Studies of treatment program effectiveness are carried out in the face of continually changing client populations, major shifts in treatment approaches, and changes in social attitudes regarding psychoactive drug use and addiction. The longer-term evaluations of treatment
outcomes are now assessing the impact of programs developed in the early 1970s, while current programs may have already changed in significant ways. Long-term consistent follow-up evaluation must of course follow the actual treatment experience by some considerable length of time, yet the results obtained would apply only to treatment as it existed when provided. Other factors intrinsic to the complexity of drug use and addiction and independent of the kind of treatment provided influence the results of drug treatment. Older clients, for example, are generally less likely to relapse than younger users. The length of time in treatment, the number of previous treatment exposures, the motivation for entering drug treatment, and the socioeconomic status of particular clients all contribute to wide fluctuations in success rates from program to program and modality to modality.

Even less obvious are outside influences which may turn out to be the most important variables in drug treatment success. For example, changes in general economic conditions may play a vital role in the rehabilitation of a former, compulsive user and his assimilation into a productive lifestyle. But treatment evaluations do not take account of such factors, a situation which further qualifies and limits their relevance.

In reviewing the major treatment modalities a number of evaluative studies have been selected to illustrate the kinds of information we do have at hand. Due in large part to the various limitations described above, they have not provided a definitive answer to the public's question of what does and does not work.

Maintenance Programs: Methadone and LAAM.

As noted earlier, the drug primarily used is the synthetic opiate methadone, which has similar pharmacological properties to heroin but a duration of effect of twenty-four hours in blocking narcotic withdrawal, as contrasted to heroin's three to four hours.39 The longer duration of methadone allows the addict to be "stabilized" or maintained on a daily oral dose. LAAM (L-alpha acetyl methadol), a long-acting form of methadone, is now beginning to be used for maintenance purposes.40 Unlike ordinary methadone, which has to be taken every twenty-four hours, LAAM has an effect lasting two to three days. Because LAAM only has to be administered three times per week, all of the drug can be administered at the clinic site, thereby eliminating any possibility of illicit diversion. LAAM has been tested thus far on several thousand addicts. For a number of reasons, not the least of which is that LAAM has fewer subjective effects than methadone,* methadone is still the preferred maintenance drug among clients; LAAM is unlikely to replace it on a wide scale. Its voluntary use will probably be limited to the select group of patients who prefer the absence of a subjective drug effect yet need a drug lasting two to three days or to programs that institute its use as a public health measure to eliminate the problems of diversion with "take-home" methadone.41 Our maintenance treatment experience over a fifteen-year period has essentially centered on the use of one drug, methadone, and will probably continue to do so.

One early evaluation of methadone's effectiveness examined the Dole-Nyswander maintenance program in New York begun in 1964.42 As of 1970, this evaluation showed remarkable program retention of clients, reduction in criminal activity, increases in productive activities (particularly
employment), and cessation of illicit drug use. However, as later critics of this study pointed out, there were some significant limitations to the data which were not widely appreciated at the time.43 Because of the relatively stable nature of this first group of maintenance patients, retention rates were unusually high. More recent federal statistics on methadone maintenance treatment show lower retention rates overall. Of the approximately 24,000 methadone treatment clients who for one reason or another left treatment in 1976, half had been enrolled for less than twenty weeks.44 These more recent data reflect the varied capabilities, standards, and emphases of individual programs and the overall complexity of treating opiate addiction itself. The crime reduction figures of the original Dole-Nyswander group were also misleadingly high at 90 percent. The evaluators had looked at the rate of criminal convictions as applied to total time in treatment, a process which overemphasized the long-term, noncriminal patients, since those convicted of crimes were discharged immediately.45

The results of this first evaluation of the methadone-maintenance heroin treatment modality, so impressive at the time, were a primary basis of the governmentally sponsored methadone treatment expansion in the early 1970s. Later studies of patients who have been treated with methadone maintenance show somewhat contradictory results. Two optimistic assessments showed sharply diminished rates of drug misuse after treatment, compared with premethadone treatment levels.48 But a number of other studies show significant rates of relapse to use of heroin and other drugs soon after termination of maintenance treatment.47

Researchers Dole and Joseph reported in 1977 the results of a study of a group selected from several thousand patients who entered the New York City methadone programs in 1972.48 They compared the progress of a group which had dropped out of treatment with one remaining in treatment. Sixty-eight percent of the dropout out group had returned to some "street" narcotic use (although sometimes in small amounts), while only 7 percent of those who remained were still using illicit narcotics.49 Alcoholism also emerged as a more serious problem after detoxification from maintenance than in the group remaining on maintenance. Altogether, 89 percent of the patients who had left maintenance treatment had either relapsed to narcotic use, used other drugs in a disabling way, become alcoholic, been arrested, or died. This figure should be compared with the 47 percent figure of those still in maintenance who experienced continuing problems with drug abuse, alcohol, or criminality.50

Another study, this one of the Santa Clara County methadone maintenance program in California (1975-77), showed a more positive outcome.51 One quarter of the clients initially admitted to treatment five years previously had stayed in treatment, although not necessarily continuously. One-third of this group had been abstinent from heroin for a minimum of six months. However, a significant percentage of them (25 percent) were still using heroin regularly.52 Half of those no longer in treatment were "successful" graduates of the maintenance program in that they were not incarcerated or using illegal narcotics.55 Effectiveness of maintenance treatment is also indicated by data on some 11,157 patients who remained in the New York City Methadone Program. Correlating length in treatment with drug use and social rehabilitative parameters, this study by the former director of the New York program, Dr. Robert Newman, showed that gainful employment increased while arrests and heroin use decreased.54

These studies may simply be measuring the effectiveness of treatment per se compared to none at all. These data for methadone may just illustrate that heroin addicts can do well if engaged in some type of treatment. But the special feature of methadone maintenance is that it
has involved the participation of a large number of addicts and has had relatively high retention rates compared to other treatment modalities.

Detoxification Programs.

The second major approach to heroin treatment, detoxification, is designed to relieve withdrawal symptoms and to enable heroin dependents to be free, at least temporarily, of their addiction. The ordinary course of treatment in the United States lasts twenty-one days, although some large detoxification programs, such as that of New York City, prescribe a shorter period of seven to fourteen days. The two primary goals of detoxification programs are to detoxify the heroin dependent—withdraw the user as rapidly as possible from dependence on the drug while mitigating the physical discomfort of the process—and outreach, i.e., involving the user in some form of treatment. Studies have found that these short detoxification programs can work reasonably well in so far as achieving the immediate goal of withdrawal is concerned. For the New York City detoxification program, 43 percent of over sixty thousand admissions completed the prescribed detoxification plan with an average stay of six days. However, four recent studies of heroin detoxification show that only 2 to 7 percent of those receiving such treatment remain abstinent for substantial lengths of time. In fact, one study found that on the average heroin use resumed within eight-and-one-half days after starting the brief twenty-one-day detoxification program cycle.

Detoxification efforts are now viewed by many treatment experts as being of value in providing a first step in the involvement of compulsive heroin users in more comprehensive, longer-term forms of therapy, as well as in providing needed medical support during withdrawal. Programs have shown some success in inducing detoxified users into longer-term treatment. For example, the outpatient New York City detoxification program found that a small but significant 15 percent of its clients entered long-term treatment within the month following referral from the detoxification program. In addition, whereas early detoxification efforts were primarily focused on getting the addict off heroin in the shortest possible time, the emphasis has now shifted to longer-duration detoxification. This shift has resulted from the clinical experience of methadone maintenance programs that rapid rates of detoxification from methadone are accompanied by early dropping out and a return to "street" heroin.

There has also been more attention directed at providing the kinds of support during and immediately after detoxification that would help the client accomplish longer periods of abstinence. This has included increased attention to counseling and rehabilitative services and the testing of other pharmacological approaches. For example, several programs are now identifying addicts who show definite symptoms of depression during and immediately after detoxification, and are treating this group with antidepressant drugs. Another approach has been to find nonnarcotic aids to detoxification; one drug now being tested is clonidine, a drug which affects the neurotransmitters in the brain, but is not itself a narcotic.

The introduction of naltrexone has also provided a new and different pharmacological support for heroin dependent patients. Naltrexone is a narcotic antagonist which, while not itself

---

15 / 25
addicting, can completely block the effects of injected heroin; it can be taken orally on a daily or thrice-weekly basis. Unlike an earlier antagonist drug, cyclazocine, naltrexone has virtually no unpleasant side effects. Its safety and effectiveness are now undergoing clinical investigation; approximately one thousand addicts have been treated with it. Thus far it appears that naltrexone is a safe and effective drug.

While the average heroin dependent who takes naltrexone does so for relatively short periods (a few weeks), a few stay on the drug for as long as a year; however, only a small number of heroin addicts have volunteered to take it, and for this reason it may have a relatively small impact on the total treatment effort. Preliminary studies of the drug's effectiveness show that it has provided significant support for heroin abstinence and is positively correlated with the achievement of social rehabilitative goals. Whether the positive results are due to the antagonist drug itself or are simply an indication that the group electing to take it is more highly motivated, naltrexone is likely to remain an important but limited adjunct to treatment during the transition from detoxification to continued abstinence.

Outpatient Drug-free Programs.

Another heroin treatment approach which emerged during the 1960s is outpatient abstinence. In marked contrast to the therapeutic communities and civil commitment programs, with their intensity, rigidity, and cost, outpatient abstinence programs seek to help drug-involved people through individual counseling, group therapy, employment assistance, job training, and other supportive services.

The statistics of this modality are difficult to interpret. The federal treatment data show it to be a leading modality of treatment, but its impact on heroin treatment seems small. Where the outpatient drug-free modality is a component of a methadone maintenance program, it is frequently treating the heroin-addicted population. However, the free-standing outpatient drug-free programs are generally directed primarily not at heroin dependency but at other illicit drug use, including the misuse of prescription drugs.

As a heroin treatment modality, outpatient drug-free treatment is perhaps the most amorphous type. It can range from sporadic, follow-up counseling for clients detoxified from heroin or methadone to more intensive therapy groups of former addicts.

A study by Texas Christian University provides a limited amount of data on the effectiveness of outpatient drug-free treatment for heroin users. Retention rates are low; in 1976 more than 50 percent of those discharged had been in treatment less than twelve weeks. Despite the seeming lack of effectiveness of this modality, it continues to be used. One factor that may account for this high level of utilization in spite of its generally observed limitations is that funding for it is identical on a daily per-patient basis to that of the more intensively and extensively staffed and administered methadone maintenance programs. This funding situation coupled with the preference of criminal justice diversion programs for drug-free modalities over methadone has had the effect of channeling substantial numbers of clients through outpatient drug-free treatment programs.
Drug-Free Therapeutic Community Programs.

The focus of the therapeutic-community concept is on confronting the crucial faults in the personality and character of the former heroin addict within a residential group setting where the addicts' peers form the staff and support structure. It is in the nature of such programs that they are limited in size and, because of their residential character, more costly than outpatient programs. In spite of these limitations, since the therapeutic-community concept began in 1959 "TC" programs have grown greatly in number, involving thousands of heroin-dependent clients over the years. Evaluations of those programs have illustrated both their strengths and weaknesses.

One problem has been retention of clients. For example, during 1976 more than half of those leaving therapeutic-community programs had been in treatment less than eight weeks, according to data compiled by the National Institute on Drug Abuse.87 As stated previously, drug treatment professionals generally feel that opiate addiction requires longterm involvement with treatment, and therefore tend to stress retention rates as a measure of a particular program's effectiveness. Thus, the difficulty of the therapeutic-community treatment modality in holding a majority of clients for a significant length of time is an important factor.

However, other studies have shown that those who do remain in the therapeutic-community program tend to do well. One large-scale study of former TC clients found 20 percent to be entirely drug abstinent and leading "constructive lives" four years after their initial entrance into treatment.88 Another 25.3 percent were leading constructive lives but continuing to use some drugs—e.g., marijuana—or were in treatment at another program. Other studies have found similar indications of enhanced constructive behavior following a significant period in a therapeutic-community program.89 However, as one experienced drug treatment research team has noted, "The subject probably enters treatment at precisely the point when he is most in trouble; later at any arbitrary follow-up point, he is statistically less likely to be using heroin or to be engaged in other episodic activity."70 It should be pointed out that this statement, while referring to therapeutic communities, is likely to be true of all modalities for heroin treatment.

Other Approaches.

One suggestion for making treatment more acceptable to addicts who might not otherwise seek help has been the introduction of prescribed heroin into a treatment program. While a number of specific proposals of how this would be accomplished and evaluated have been made, no such study has yet been initiated. The idea has met with considerable controversy, possibly because critics have assumed that the proposals are for a long-term heroin maintenance system. In reality what has been proposed is that studies be conducted on the use of heroin in treatment, and that the heroin be used for only a limited time to assess whether short-term heroin
maintenance can be followed by either transfer to methadone maintenance or detoxification, with abstinence treatment in an outpatient or residential setting to follow.

This brief review of the current status of the four major U.S. heroin treatment modalities has found certain differences in objectives and practices as well as in results. However, there are some recognizable similarities: All current forms of heroin treatment in the United States have abstinence from illicit drug use as their ultimate goal. Nearly all of the treatment types share an intermediate treatment objective, the reduction of criminal behavior by clients. They face common issues as well, such as the appropriate relationship between treatment programs and criminal justice agencies, accountability to funding sources, and confidentiality of patient treatment records.

What Are We Treating?

It is critical to an understanding of heroin treatment to examine exactly what it is that we are treating. While the answer may appear to be self-evident, a closer look reveals substantial disagreement and confusion within the field and among the general public as well.

The preceding discussion of the current status of heroin treatment demonstrates that a variety of results have been cited to illustrate the effectiveness or ineffectiveness of a particular program. This variety reflects in part considerable ambiguity concerning why we ought to provide treatment and what we expect from it. While one would think that consensus has been achieved regarding our motivations behind providing "drug abuse treatment," there are in fact several answers to the question, "What are we treating?" For the treatment system has embraced a number of diverse goals. Three of them—crime reduction, social rehabilitation, and abstinence—are examples of goals which have been taken for granted as being desirable, realistic, and achievable. What are the consequences of adopting such ambitious goals for the treatment effort?

Crime Reduction.

The tremendous expansion in heroin addiction treatment efforts during the early 1970s would never have come about without the firm belief that heroin use was responsible for a large amount of crime. It is not surprising, therefore, that one of the prominent goals for many programs was reducing the criminal behavior of those using illicit opiates. Crime reduction is an example of a broadly supported social goal which readily became a treatment goal. Making crime reduction a primary goal for heroin addiction treatment has had two major implications: One is a shift in emphasis from voluntary to involuntary treatment; the other, establishing as a consequence a close alliance with the criminal justice system as a source of client referrals. This shift sits well with those who advocate involuntary treatment, since they
usually believe that it will serve the societal goal of reducing crime, but it creates basic
problems. Where criminal justice system referrals comprise all or most of the client populations,
"drug treatment" is often a misnomer. The primary motivation of the client referred by the
criminal justice system is likely to be obtaining a lighter sentence, a dismissal of pending
charges, or a punishment less severe than incarceration. The heavy influx of criminal justice
referrals has also affected program operations by introducing more coercive procedures, which
make them much less attractive to potential voluntary entrants.
This trend has affected not only the operating style of individual programs but the nature of
entire treatment modalities as well. For example, as discussed earlier, drug-free programs have
become increasingly dependent upon the criminal justice system as a source of clients. In 1976,
one third of the heroin addicts admitted to residential drug-free programs were reported as
involuntary, and one fifth of all heroin users admitted to drug-free outpatient programs were
either involuntary or quasi-involuntary (e.g., civil commitment, the TASC program, or court
referral). This is an unfortunate development; the predominance of criminal justice clientele has
shifted the program from the supportive group therapy approach to an increasingly custodial
role. Thus, emphasizing crime reduction as a therapeutic goal has led to an overlap of values
between treatment and criminal justice. This in turn has encouraged a trend toward involuntary
approaches in heroin treatment. While involuntary treatment may be preferable to incarceration,
it is not preferable to voluntary treatment.
It is not generally recognized that the differences between voluntary and involuntary treatment
are of fundamental importance. Some argue that since many voluntary clients are "forced" into
treatment because of some external pressures, there is really little difference between voluntary
and involuntary treatment systems. This is not so; when a client is free to leave treatment
without adverse legal consequences, he is more likely to recognize that treatment affords the
opportunity for positive change, not because of a threat of adverse consequences, but because
of his or her choosing to take a greater personal role in changing dysfunctional behavior. In
other words, voluntary treatment challenges the concept that the opiate addict is a "helpless"
victim, whereas involuntary treatment, by diminishing choice, perpetuates the status quo. And,
possibly for this reason, involuntary treatment for addiction, while supported by some studies,72
has been shown by others to be largely ineffectual.
It seems certain that crime reduction goals have had and will have a potentially major influence
on program operations. It is still questionable whether heroin treatment in fact significantly
diminishes criminal activity.
The belief that drug treatment is an effective measure for reducing crime stems largely from the
reported effectiveness of pilot methadone programs in reducing the criminal behavior of clients.
For example, the initial results of five years of experience with the original Dole-Nyswander
methadone maintenance program begun in 1970 showed that arrest rates dropped dramatically
from pretreatment levels of 120 (arrests per patient years) to 5.5 during treatment.74 However,
as pointed out earlier, this study did not look at those who had dropped out of treatment or were
otherwise discharged, who in fact showed rates similar to the pretreatment rate. In addition,
those clients with the highest arrest rates prior to treatment were the least likely to remain in
treatment. These limitations were largely unacknowledged at the time, as the public and
policymakers alike saw only the impressive crime reduction statistics.
Overlooked in the push to provide heroin treatment as a means of reducing "street" crime was
the fact that a large percentage of clients had criminal histories predating their initial use of illicit
drugs. A 1976 review of drugs and crime sponsored by the National Institute on Drug Abuse
cited ten separate studies showing that between 57 and 100 percent of clients admitted to a variety of treatment programs had been arrested prior to entering treatment.75 Subsequently, the Harvard Law School Center of Criminal Justice conducted a series of studies to determine the impact of heroin treatment on criminality.78 This study reviewed criminal histories prior to the onset of heroin addiction, during addiction, and after treatment, reviewing aggregate arrest rates as well. The investigators distinguished between arrests for drug offenses and those for offenses against persons or property. They found that the level of criminal behavior as reflected by arrest rates did increase after addiction and decrease somewhat following treatment. However, the reduction observed in non-drug-related crime following treatment was not statistically significant; that is, it could have occurred by chance or through some factor other than the provision of treatment.

Other studies have indeed shown some correlation between the provision of heroin treatment and lowered crime rates. A study in Detroit conducted by the Public Research Institute analyzed crime rates and heroin-treatment enrollments for a four-year period. Results showed that property crimes decreased city-wide by 2.3 percent when treatment enrollments increased by 10 percent.77 However, another study conducted in California found that arrests actually increased during treatment.78 Given the difficulties with using arrest records as a reflection of actual criminal activity, most studies on the impact of drug treatment on criminality conclude that there is some reduction in crime among those in treatment compared to their earlier pretreatment behavior, but there are sometimes wide discrepancies from program to program. Such differences could be due to the studies themselves, the programs, the client population being treated, or some combination of these and other factors.

These studies do not address the question whether treatment's effect on criminal activity simply reflects the participation in any form of treatment of clients normally incapable of regulating their drug use or avoiding arrest. Nor do these evaluative studies answer whether the observed decline in criminal behavior could be due in part to the normal process of "maturing out" as regards crime and addiction, a phenomenon many observers have noted.79 In short, while involvement in any type of heroin treatment appears to have some inhibitory effect on criminal activity as measured by arrests, these changes do not seem to be profound.

The more a program seeks specifically to reduce criminal behavior, the more the client is apt to view it as a branch of the criminal justice system, and voluntary entrance becomes less likely. For the program to maintain program funding, involuntary referrals become more likely. This cyclical situation reinforces the penal aspect of heroin treatment.

**Social Rehabilitation.**

Treatment for heroin dependency is also viewed as a mechanism by which to produce social benefits other than crime reduction. Many inner city users come from broken families, live in substandard housing, experience inadequate education, and are unemployed. Whether these social conditions cause heroin addiction, or whether it is heroin addiction that prevents the individual from achieving a more productive lifestyle, it is believed that the addict can rehabilitate himself, and be free of the old environment, once free of heroin.
Treatment programs have become increasingly aware that specific social rehabilitation services are essential factors in successful treatment of many of their clients. Thus, treatment programs have now taken upon themselves the task of rectifying their clients' deficiencies in education, employment, and personal relationships, as well as treating addiction itself. Social rehabilitation is an example of a treatment program goal which is gradually, though grudgingly, gaining more support by the general public.

Employment is an example illustrative of the issues and problems involved in emphasizing social rehabilitative goals in heroin treatment. Employment is considered by many to be fundamental to the rehabilitative process; unemployment, after all, is high among heroin addicts. Periods of high unemployment affect unskilled, undereducated minority populations disproportionately, and for the past eight years, unemployment rates in general have been high. In the early 1970s, the federal government considered a subsidized program for employers who would hire former drug addicts. However, before such a program could be enacted, the employment boom which had coincided with the Vietnam War leveled off, and jobs generally became more difficult to find. Nearly half the opiate addicts in treatment in 1976 had less than a high school education, and three quarters were unemployed at the time of entry into treatment. Only 2 percent of all those in treatment in 1976 completed a "skills development" program while in treatment.

Historically, outbreaks of "drug epidemics"—and outbreaks of public concern over drug use—have occurred during periods of job shortages and high labor surpluses, particularly at the bottom of the job-skill market. It has been hypothesized that such "drug epidemics" are the result of social class repression aimed at removing portions of the lower socioeconomic classes from the labor market by stigmatizing them as addicts and deviants. This is compounded by the fact that more than half the clients entering treatment for opiates have criminal records. This double stigmatization underscores the stereotypical portrait of heroin addicts as unmotivated and prone to steal, thus making potential employers extremely leery of hiring ex-addicts. The labor surplus and discriminatory hiring practices serve as disincentives to ex-addicts in seeking employment. These hurdles to finding jobs make recidivism to drugs and crime more likely, thus leading to a self-fulfilling prophecy which reinforces existing prejudices. While many treatment programs consider vocational rehabilitation a priority, the proposed new federal methadone regulations suggest a near-total lack of federal concern with employment for drug treatment clients. The new regulations provide only very general guidelines for referrals to community programs and a listing of employment and training services. There is no requirement for close coordination between programs and community organizations or for any kind of follow-up on the outcome of referrals. While recent interpretations of the 1973 federal statute forbidding discrimination against the handicapped include drug treatment clients and ex-addicts in their definition, increasing employer interest in hiring ex-addicts and otherwise lowering the barriers to employment have not been emphasized. This situation persists despite the fact that several long-term studies have found employment to be one of the best predictors of success in treatment. Although some of the large federal labor-training programs such as CETA (Comprehensive Employment and Training Act) accept treatment-program referrals, coordination has been weak and completion rates low. The few specific job development programs for former treatment patients that do exist have not been expanded much beyond the pilot stage.

In the private sector there have been some initiatives toward providing jobs for former addicts. One effort in New York City, called the National Association on Drug Abuse
Problems (NADAP), has organized the participation of industry and labor and placed some 800 recovered addicts in jobs in the New York City area over the past decade. Another innovative approach to developing employment for addicts was undertaken by the VERA Institute of Justice, also located in New York City. This program, the Wildcat Service Corporation, was later incorporated as a pilot program for job development by the federal government. While this project was geared toward skill development and training, it also demonstrated that, given a reasonable work environment with some support, former heroin addicts can be successful at work. During the first three years of the Wildcat experiment, over thirty-five hundred ex-addicts worked on public service projects; 69 percent continued working for six months or more or were hired into nonsubsidized jobs.

The major drawback to supported-work programs is the difficulty in developing subsequent job opportunities following the supported-work experience. In the absence of long-term jobs, trainees remain in the supported jobs. For example, during the three-year period only 438 (12.5 percent) of the Wildcat graduates were able to move into nonsupported jobs.

Obviously, training people for jobs which do not exist and trying to find employment for those not considered desirable employees handicap efforts to rehabilitate treatment clients. Treatment programs have been criticized for their failure to provide successful job programs; however, with unemployment rates in many areas exceeding 50 percent (especially in primarily black and Hispanic communities with large numbers of young unemployed), it would be truly extraordinary if addiction treatment programs could obtain employment for large numbers of clients. Unrealistic expectations of what can be accomplished in social rehabilitation—employment being but one example—inevitably foster feelings of failure and futility by the client, the program, and the public at large.

Abstinence.

A goal to which nearly every American heroin treatment program gives special emphasis is abstinence from drugs. While some programs seek only abstinence from use of illegal opiates (e.g., heroin), most seek an end to all illicit drug use, and some try to limit the consumption of alcohol as well. Most programs view abstinence from all opiates, both illegal heroin and prescribed methadone, as a primary goal. Other psychoactive substances that are commonly regarded as "medicine" (prescription drugs and over-the-counter preparations) or are not considered to be drugs at all (nicotine and caffeine) do not ordinarily enter into the abstinence equation.

Abstinence is often viewed as a preliminary step to achieving other treatment objectives such as crime reduction and social rehabilitative goals. However, though emphasis on abstinence certainly does not preclude working on these other treatment goals, seeking the elimination of all drug misuse may mean the treatment program is concerned more with the drug use of the client than with the problems at the root of the drug use. To put it another way, the focus may be on the use per se rather than on whether it is dysfunctional for the client. The degree to which abstinence is stressed as a program goal can have a marked effect on the nature of the treatment provided.
For example, this concentration on abstinence, which may be a reflection more of society's cultural values than of concern for the client's personal benefit, has resulted in pressure against long-term methadone maintenance. This pressure exists in spite of data indicating that long-term maintenance may be the best treatment choice for a sizeable number of heroin addicts. Upon reflection, it is evident that stressing drug abstinence alone as an outcome of treatment may be much too narrow, simplistic, and difficult to achieve.

Follow-up studies of abstinence success rates reveal one common theme, that long-term abstinence following treatment is difficult to achieve. Studies in New York and California have assessed abstinence at five and ten years after discharge following treatment. The New York City Program review showed that 32 percent of those discharged from treatment programs were not using opiates, while the California program found that 54 percent of the clients who had been discharged were still abstinent.

However, these studies of New York and California clients show very different results for the use of illicit opiates during methadone treatment. In the New York City program review, only 1 percent of those continuously in treatment showed regular illicit opiate use, with 6 percent showing intermittent use, while in California a study reported the unusually high statistic that 25 percent of those in treatment were using heroin daily.

Other follow-up studies of shorter duration on earlier programs show a startling range of results in terms of abstinence. One critique of follow-up studies reported abstinence rates following treatment being as high as 92 percent and as low as 6.6 percent. Even studies that use a sample of clients from within the same institution show a remarkable range in the abstinence rates achieved through treatment. For instance, three studies of clients released from Lexington found abstinence rates of 25 percent, 13.5 percent, and 6.6 percent.

The preponderance of evidence indicates that sustained abstinence is very difficult to achieve and usually requires a long period of treatment. Nearly two-thirds of all clients entering treatment for opiate addiction in 1976 had at least one prior treatment experience; 11 percent had been in treatment four or more times. A twelve-year follow-up study assessing the outcome of 100 patients released from Lexington found that all but ten had become readdicted to heroin at least temporarily within the first two years. Of the ten who did not, three had died within four years after discharge, two had turned to alcohol, and three had never been heavily addicted in the first place. "In other words, virtually all addicts who have been physically addicted and did not die, relapsed." The fact that the most encouraging results reported by all treatment modalities, including methadone, are for clients who remain in treatment shows that effective treatment for opiate dependency requires a long-term commitment on the part of society, the specific program staff, and the client. The overall efficacy of treatment cannot be judged on the basis of a brief episode of treatment or by the immediate achievement of abstinence. The experience of cigarette smokers is illuminating on this point: While many people quit on the first attempt, many more require two, three, or more attempts before they can sustain abstinence over a long term. Although backsliding is discouraging, the short periods of abstinence do provide a background from which to make future—perhaps more successful—attempts to control use.

Three goals of treatment have been reviewed to show the complexity and consequences of "what we are treating." One, crime reduction, is a societal wish that has become a treatment goal; the second, social rehabilitation, is a program goal that has gained gradual public acceptance; and the third, abstinence, is a goal shared by both the public and the treatment programs. It is evident that the more general and ambitious the goals of heroin treatment are,
the less we can expect. It is also evident that when a treatment program places undue emphasis on the goals of public opinion, individualized care suffers. There is a need to clarify our treatment goals and make them more realistic and specific to each client’s needs.

Conclusion

It is a mistake to view heroin treatment in monolithic terms. There are different kinds of heroin addicts, each with different problems and needs. There is no one treatment approach applicable in every situation; to the contrary, a multiplicity of approaches is indicated—some long term, others short term; some involving intensive therapy, others not; some emphasizing a drug-free orientation, others using chemotherapy. It is unwise to limit unnecessarily the availability of alternative treatment practices in a futile search to find a single "right" one. Instead, we ought to be encouraging a greater investigation of innovative approaches in heroin treatment and a broadening of treatment alternatives to attract as many troubled users as possible.

One of the most positive developments in the drug field over the past decade has been the growth of a nationwide drug treatment system capable of providing assistance to hundreds of thousands of dysfunctional drug users, users who previously had few alternatives. Drug treatment program workers provide this essential assistance under generally difficult and unattractive conditions. Under the best of circumstances it is hard to provide quality treatment, but under the circumstances characteristic of most programs—poor physical facilities and overworked staffs with limited training and little public appreciation of their efforts—these difficulties are compounded.

Despite the investments made in heroin treatment—particularly during this past decade—programs have not fulfilled public expectations, and government support has become tenuous. Yet the gap between program accomplishments and general public expectations is more attributable to unrealistic expectations than to any failure of the programs themselves. To the extent that treatment programs set unachieveable goals they diminish public comprehension of their role and genuine accomplishments, and thereby diminish public support.

Heroin treatment cannot eliminate crime. It cannot guarantee that all clients will not revert to misuse of drugs. Heroin treatment programs cannot take undereducated, unskilled, and often unstable addict-clients and change them all into educated, employed, and stable model citizens. When heroin treatment does result in an individual success story, the general retort is often "What about all the rest?" In this atmosphere it is difficult to appreciate either the limitations or the accomplishments of heroin treatment. Until the public can more readily accept heroin treatment for what it realistically is, rather than conceiving it as what many wish it to be, the future stability of treatment programs is likely to remain precarious. Furthermore, heroin treatment’s increasing alliance with and reliance on the criminal justice system, coupled with a resistance against moving closer to the regular health care system, does not bode well for the future.

The authors acknowledge with gratitude the contributions of Peter G. Boume, Robert Newman, and Norman E. Zinberg.
'L-alpha acetyl methadol, a long-acting form of methadone.

*The client on methadone, while not experiencing a high (in fact, feeling quite the opposite), feels the effects of having taken a drug. This feeling is less pronounced with LAAM.