A RAND NOTE

Improving Data for Federal Drug Policy Decisions

John Haaga, Peter Reuter, editors
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Supported by the Bureau of Justice Statistics, U.S. Department of Justice
PREFACE

As problems associated with illicit drugs have become more prominent in recent years, it has become clear that federal drug policy decisions need improved data collection and analysis. The Office of National Drug Control Policy (ONDCP), established in 1989 to provide a central source of policy formulation for the federal government's drug control efforts, has recognized this in its first two National Drug Control Strategy reports.

At the request of ONDCP, RAND's Drug Policy Research Center convened a conference of nongovernmental experts to develop a set of recommendations for federal data collection and analysis activities. This Note is the final report of that conference. It should be of interest to researchers and federal officials concerned with drug problems.

The conference and the Note were funded by the Bureau of Justice Statistics in the U.S. Department of Justice.
EXECUTIVE SUMMARY

At the request of the Bureau of Justice Statistics (BJS), RAND's Drug Policy Research Center convened a conference of 15 nongovernmental researchers to make recommendations on how to improve the quality of data available for drug-policy decisionmakers.

The federal government is expanding its collection of data on the extent and consequences of illicit drug use, though less is being done to increase data on drug control programs. The conference's primary recommendations aim to ensure that the expansion is carried out so that policymakers have consistent and comparable data about different aspects of the problem. The conference also stressed the need to improve the quality of data analysis and data dissemination; it recommended few new data collection activities.

ESTIMATION OF PREVALENCE, CONSUMPTION, AND EXPENDITURES

Estimates of the total number of drug users, the number who are drug-dependent, the quantities of drugs consumed, and the expenditures on illicit drugs have very high priority. Such estimates are not now available and can be generated only through consistent surveys covering a variety of populations: households, the homeless, prisons, other parts of the criminal justice system, and other institutions. The surveys must have a common core of questions on frequency of use, dependency, consumption, and expenditures. Sampling frames and procedures must permit determination of overlap among surveyed populations.

The principal recommendations in this area are:

1. The National Household Survey on Drug Abuse (NHSDA) should be conducted annually. The national sample size should not be increased beyond approximately 10,000; the numbers of users needed for policy-relevant analyses can be increased through stratification, over-sampling of high-risk populations, and,
for many purposes, concatenating data across years. Funds could be used more effectively to understand the validity of self-reports better, to raise the sample size among high-prevalence subpopulations, and to estimate the effects of undercoverage on prevalence estimates.

2. Data should be collected on a national sample of persons in all components of the criminal justice system. The Drug Use Forecasting (DUF) system for drug use among arrestees needs to be converted into a nationally representative random sample and supplemented with similar samples from those in jails and prisons or from those on probation and parole. Participants in the surveys should be asked a core of questions on their history of drug use and recent consumption and expenditures and administered urinalysis when appropriate. Existing occasional surveys, such as the BJS survey of correctional inmates, can obtain data from some criminal justice populations. Not all data series need to be collected annually.

3. Analysis and synthesis of the results of survey data collection need to be improved. Far too little effort has gone into the "back end" of the data system—analyzing and synthesizing what has been collected. The major agencies involved in drug data collection have given little emphasis to developing internal analytic capabilities, nor have they built the necessary relationships with external sources of analytic capability. They should invest more in both primary and secondary analysis of existing data and ensure integration of data sources across agencies. The agencies should also set a policy of making all data collected by grantees and contractors publicly available, with good documentation, within a reasonable period of time (subject to maintaining privacy protection). They should publish analyses of nonsampling error and should actively promote the use of drug-related data by a wider community of researchers.
4. The goal of this data collection and analysis effort should be to provide the basis for a reasonable and timely picture of the market for illicit drugs in the United States, covering amounts consumed and the numbers of users (of varying degrees of severity) for the major drugs, and prices and expenditures at different levels of the markets. Such estimates could then be used both for periodic assessment of progress against drug use and drug trafficking and for designing new control measures.

CONSEQUENCES OF DRUG USE AND TRAFFICKING

The Department of Health and Human Services (HHS) should experiment with methods to quantify, and if possible monitor, the important health consequences of drug use (including alcohol) through appropriately modifying existing data series, such as those for motor vehicle accidents (Fatal Accident Reporting System) and episodes of medical care (National Ambulatory Medical Care Survey and National Hospital Discharge Survey). The department should also explore using the National Health Interview Survey for this purpose.

The Bureau of Justice Statistics should experiment with developing measures of community-wide effects of drug use and trafficking.

PROGRAM EFFECTS

Prevention

The Office of Substance Abuse Prevention or the Department of Education should collect data regularly from a sample of local agencies and school districts on the nature and extent of their prevention activities. This would provide, without major expenditure, the first national measure of what prevention messages are being delivered to various categories of children. The planned expansion of Monitoring the Future (the annual survey of high school seniors) to younger classes also provides an opportunity to acquire more timely data on what prevention messages are being received by children.
Treatment

The National Drug and Alcoholism Treatment Unit Survey (NDATUS) coverage of privately funded treatment programs needs to be much improved. An improved NDATUS could serve as a sampling frame for more intensive surveys of programs and clients. NDATUS does not need to be carried out on an annual basis, but the sample surveys should be.

Law Enforcement

A mechanism is needed to assess the impact of drug law enforcement on the criminal justice system as a whole: What proportion of policy and prosecutor time, court time, and jail and prison cells are being allocated to drug offenses (by drug and by severity) and to other offenses? The requisite information could be put together from various sources, for example, by adding items on violations to the BJS inmate surveys. The debate about the severity of sanctions across types of offenses, and about the rational allocation of criminal justice resources, must be informed by better data on the situation caused by intensifying drug law enforcement in recent years. These data should include more careful reporting of data on prices at different points in the distribution system.
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Drug policy has come into sharp focus over the last five years as various problems associated with the sale and use of illicit drugs have moved to the forefront of public concerns. A number of drug problem indicators increased sharply during the 1980s, while other indicators of the prevalence of drug use, particularly those from self-report surveys, declined. The nature of the drug problem seems to have been changing, even as it was generally perceived to be worsening.

Policymakers have been handicapped by inconsistent and fragmented information on the extent and nature of drug problems and on programs aimed at controlling them. For example, with existing data systems, it is extremely difficult to estimate the number of persons who use illicit drugs heavily; indeed, it is not clear whether that number has gone up or down in recent years. Little is known about the effects different kinds of control programs (enforcement, treatment, prevention) have on the drug problem. For enforcement, the centerpiece of control efforts, there are not even estimates of expenditure and activity levels beyond those of the federal government, though state and local governments account for most enforcement. The data that do exist have often been poorly disseminated and have been subject to little analysis.

At the request of the Office of National Drug Control Policy (ONDCP), the Bureau of Justice Statistics (BJS) commissioned RAND's Drug Policy Research Center to convene a conference of nongovernmental experts to develop recommendations for improving the quality of data available for federal drug-policy decisions. The invitees included persons with wide ranging expertise, covering the topics central to the policy data and analysis agenda. This conference report is part of a larger federal government process for reviewing federal data collection efforts that support drug-policy decisions. A number of interagency groups are preparing reports on various elements of the data problem. To ensure the independence of this report, no government personnel were invited to participate in the conference; two representatives of
sponsoring agencies attended as observers and answered certain procedural questions for the participants.

Fifteen researchers participated in a two-day conference, held June 25-26, 1990, at RAND's Washington, DC, office; the participants are listed at the end of this Note. The participants were sent a package of material, including: (1) Department of Health and Human Services (DHHS), "Improving Drug Abuse Statistics," Report of the Public Health Service Task Force on Drug Abuse Data, Office of the Assistant Secretary of Health, Office of Planning and Evaluation, Washington, DC, February 1990; and (2) James J. Collins and Marianne W. Zawitz, Federal Drug Data for National Policy, Department of Justice, Bureau of Justice Statistics, Washington, DC, April 1990. Each person was asked to prepare a memorandum giving his or her recommendations with respect to a designated topic area. These memoranda were distributed at the conference and provided the basis for the 14 hours of discussion that took place. Following the conference, the chair and rapporteur prepared a draft executive summary and report, which were distributed to the participants for their comments.

The conference agreed to divide its deliberations into five general categories: prevalence and incidence, the harms of drug use, prevention, treatment, and enforcement. Not all topics fit neatly into these classifications, so a residual category was also created.

Some limitations of the conference should be noted:

1. The recommendations here represent consensus views. If some participants strongly disagreed with a majority position, the group did not prepare a recommendation; this happened only rarely.

2. The report is based on one meeting. Given the available resources and time, it was impossible to address all issues or to provide detailed recommendations on any single issue. Some topics were given more attention than others because of the specific interests of the participants.
3. The emphasis of the conference was ongoing data collection in support of federal drug-policy decisions, particularly focusing on monitoring and evaluation. It gave little attention to research activities \textit{per se} or to the purely scientific aspects of data collection. It also did not deal with the needs of other levels of government, while recognizing that they may require different kinds of data.
The federal government is in the process of expanding its collection of data on the extent and consequences of drug use in the United States. The recent DHHS Report of the Public Health Service Task Force on Drug Abuse Data lists 64 major data sets that contain information on drug use and its consequences and drug control efforts. In many of these ongoing data collection activities, such as the National Health Interview Survey, the drug-specific items have only recently been added and results are not yet available. The federal government's ability to describe and analyze the national drug problem should be much greater two years from now.

The need is less for further increasing the budget and scope of data collection activities than for ensuring that a variety of those activities be carried out in a manner that enables the data to be integrated into policymaking decisions. Our call, then, is primarily for "discipline" (as one participant put it) or, more narrowly, for integration and validation. For example, data on the prevalence of drug use in various populations should be collected through instruments that have common core items and include questions that will determine the extent of overlap among sample frames; this will enable the data sets to be used to develop total population estimates systematically. In many cases these goals can be accomplished through better use of the surveys that already reach the institutions and populations of primary interest. However, we do recommend some new data collection activities.

Related to this effort is a need for more attention to analysis. One reason that data have been collected in a fragmented fashion is that little use has been made of each individual data set beyond reporting its basic results. It is rare to find any analysis that takes advantage of the plethora of data that have been collected and that integrates them to provide more complete descriptions of problems and policies. The data have often been poorly disseminated. Without external dissemination, most data sets have not received sufficient analysis.
outside of government. Whether internally or through an external grants program, federal agencies should encourage use of multiple data sets to answer basic policy questions. Understanding the difficulties of integrating related data sets in the course of this research will also help with the design of future data collection in support of policy decisions.
III. PREVALENCE, CONSUMPTION, AND EXPENDITURES

PREVALENCE

The most fundamental data for policymakers concern the scale of drug use in this country. How many persons use particular drugs with a given frequency; what quantities of these drugs do they consume; and how much do they spend to purchase these quantities? How are the numbers changing over time? These questions are currently addressed primarily through the two National Institute of Drug Abuse (NIDA) surveys: the National Household Survey on Drug Abuse (NHSDA) and the high school senior survey Monitoring the Future (MF). Important supplemental data are provided by the National Institute of Justice's Drug Use Forecasting (DUF) system. Occasional surveys provide data on other special populations.

It is widely recognized that each survey has limited coverage and that the uncovered populations (e.g., the homeless and those in correctional and psychiatric institutions) may include a large share of the population that uses drugs heavily. The surveys may also face problems resulting from changes over time in willingness to report drug use in different segments of the population. Moreover, the data from surveys other than the NHSDA come from sampling frames that are not well-specified in their overlap with the household population or with each other. The value of the surveys is also lessened by differences in the basic questions employed to measure drug use. These factors greatly complicate the task of combining data sets to provide population estimates of the numbers of drug users and to describe their characteristics.

The NHSDA needs to be carried out annually (as planned for 1990 onward) to meet policy-monitoring needs. However, it is not necessary to ask all questions each year; instead there may be modules of questions that are asked only some years, with a core of questions that are included each year. It is also important to increase the survey's yield of respondents who use drugs heavily, because this relatively
small group accounts for a large share of drug consumption and related problems. However, doubling the sample size to 20,000, as has been proposed for the 1991 survey, is not the most efficient method for accomplishing this. NIDA should experiment instead with more stringent screening of households to select higher-risk individuals for interviewing; sampling probabilities that favor particular age groups in urban areas might achieve the goal more cheaply. Screening might also be used to increase the yield of groups that are of particular interest, such as school dropouts.

A major concern with surveys is their reliance on self-reports. While recognizing that self-report of drug use may continue to be the basic measure, more efforts should be made to understand the determinants of its validity. NIDA is planning to supplement current NHSDA field work with a variety of validity studies; these should help to fill this important gap. It may also be possible to provide "ground truthing" for the NHSDA by comparing its results with information obtained in other surveys. For example, the National Health and Nutrition Examination Survey (NHANES) includes both self-report data on health behaviors and physiological testing. If the same items concerning drug use were used in NHANES as in NHSDA or MF, it would be possible to perform some very powerful analyses of error (both random and nonrandom) in the self-report data by comparing estimates derived by different methods.

The value of the NHSDA would be further enhanced by more complete and timely reporting of its results. For example, the survey has invariably included questions on employment and income but the results of these questions have never been published or analyzed. To some extent, this problem will be rectified if public-use tapes are prepared, as has been promised for the 1988 and later surveys. However, with two-year lags in preparation of these tapes, it is still important that the early publications from NIDA provide more details on the correlates of drug use.
SPECIAL POPULATIONS

In terms of prevalence, the current systems are weakest with respect to heavy users. Heavy use is a rare phenomenon in the general population, and it is associated with behaviors that reduce the likelihood of survey contact; also heavy users may be unwilling to participate in a survey when contacted. Yet heavy users are clearly important for both research and policy purposes. Increasing knowledge of the numbers, characteristics, and behaviors of heavy users is critical. This will have to be accomplished through occasional surveys of some special populations in a manner that links with other data sources. The experience gained from the six metropolitan-area studies now being linked to the NHSDA should guide future survey research on special populations.

Some populations need special attention in prevalence data because of the serious harms of using drugs (e.g., pregnant women, intravenous drug users). Targeted surveys, and data collection efforts using methods other than self-report, may be warranted for these populations, though they do not necessarily have to be conducted annually. Four populations need particular attention.

The Criminally Involved. The primary measure of drug use in the criminally active population is DUF, which was developed initially as a possible leading indicator of trends in drug use in individual communities. However, it has also taken on the role of a surrogate measure of the extent of drug use in the criminally active population, which is poorly covered by the NHSDA. To fulfill that second role, it should be strengthened in coverage and sample design.

Two changes are particularly important. First, DUF sites and time segments need to be selected to provide a nationally representative sample of arrestees; the current set of DUF cities does not constitute such a sample of sites and the individual sites are allowed considerable latitude in their process of choosing arrestees for sampling. Second, the urinalysis data need to be supplemented with surveys of histories of prior use, employing the core questions of the NHSDA and the MF. The surveys should be supplemented with questions concerning residential
status that determine the respondent's eligibility for the NHSDA, thus making it possible to estimate the overlap between the two data sources. Data on the frequency of arrest by drug-use status are also important for developing prevalence data for the national arrestee population.

Arrestees represent just one stage of the criminal justice system, though essentially all persons who enter later stages of that system were at one time arrestees. For those under supervision in parole and probation, a combination of urinalysis, questions about prior drug use, and household status is essential for developing population estimates. Given the concern with drug use in correctional institutions, urinalysis may also be appropriate for samples of persons in jails and prisons. Because so many offenders pass through multiple stages of the system, it is particularly important that explicit sampling frames be developed to measure overlaps.

High School Dropouts. It is generally believed that high school dropouts have high rates of drug use. Although eighth and tenth graders are not covered in Monitoring the Future because they generally leave before their senior year, MF is being expanded to include them. This should provide the basis for prospective studies of dropouts in the future. Nonetheless, for the next few years the NHSDA will continue to serve as the primary source of information on dropouts. Efforts should be made to increase the yield of "dropouts" (variously defined), possibly by assigning higher sampling probabilities to demographic groups likely to contain high numbers of dropouts.

One method for improving knowledge of drug use among dropouts is to add appropriate questions to existing surveys that include large numbers of dropouts. This has been done with the Department of Labor's National Longitudinal Survey of the Labor Experience of Youth (NLS-Y). More surveys should collect such data; where they do so, the items should be taken from the core of the NHSDA or MF instruments (depending on the survey format).

The Homeless and Transient. NIDA is surveying drug use among the homeless and transient in the Washington metropolitan area as part of its Metropolitan Area Surveys Study. If successful, this will provide a
model for such surveys, to be carried out on an occasional basis, for developing national estimates of prevalence in this population.

**Pregnant Women.** Including drug-use questions in the 1988 National Survey of Family Growth (Cycle IV) will provide the first systematic data on drug use during pregnancy. This will be substantially supplemented by questions asked of mothers in the latest National Maternal and Infant Health Survey (NMIHS). The field work for the NMIHS will be completed in 1990, and a tape will be available in 1991. MF also has data on drug use during pregnancy from the follow-up interviews with recent high school graduates (though dropouts and panel attrition make these data less relevant for some purposes, like national prevalence estimates). Data about drug use in this population can be collected on an occasional basis through these surveys. Studies based on analysis of blood, urine, or other excreta from smaller samples of women or neonates would help analyze the validity and reliability of prevalence estimates derived solely from self-report data. This is particularly important given concerns about accuracy of self-reports in this population.

Adequate response rates for these special populations are particularly difficult to attain. One method for doing so is to pay respondents. The Office of Management and Budget (OMB) has routinely objected to making such payments. For some special populations, particularly those who are indigent or near indigent, such payments can substantially raise response rates. Experimentation with payments should be allowed.

**CONSUMPTION AND EXPENDITURES**

Little attention has been given to the estimation of quantities of drugs consumed and total expenditures for drugs; official series for these numbers are no longer maintained. Yet quantity and expenditure estimates are important policy indicators. For example, in evaluating alternative enforcement strategies, it would be useful to know what share of imported drugs are seized by interdiction agencies and useful to estimate the replacement value of drugs seized at all levels as a
share of total revenues of the drug distribution system. The most practical method for developing such estimates is to include consumption and expenditure questions on the survey instruments, though the conference noted that little study has been made of the validity of responses to quantity questions. Questions on cocaine and marijuana consumption have been a part of the NHSDA, but the results have never been published or made available.

A standardized set of consumption and expenditure questions needs to be developed and considered for the core of the population surveys. Where possible, questions concerning the location of sales transactions (street, private setting) and the relationship with seller (friend, stranger) should be included in this core set. These data can provide a better understanding of the role of street markets in the distribution of drugs. Market locational data might also be supplemented by reports from street studies units, described in the final subsection of this Note.

Studies of alcohol have shown that consumption estimates based on self-reports can account for only one-half to two-thirds of actual consumption (based on tax records). Thus, in developing quantity estimates from survey data, attention must be given to the appropriate "multiplier" to be used to scale up estimates based on self-report data. The conference did not develop recommendations on how such multipliers might be developed but did suggest the need for work in this area.

**PRICES AND PURITY**

Prices form an important component of the system by which the government assesses progress in the drug control effort. In recent years, it has become apparent that much can be learned from examining prices at different points in the distribution system. The Drug Enforcement Agency (DEA) reports data for a small number of cities on a quarterly basis, at both the wholesale and retail levels. DEA also maintains the System to Retrieve Information from Drug Enforcement (STRIDE) as a potential national data set. Unfortunately, the published figures have such broad ranges that they provide little information.
More attention also has to be given to reporting purity for such drugs as cocaine and heroin and to reporting potency for marijuana.

One method for improving the quality of both price and purity data would be to develop a program of reporting from a sample of state and local police laboratories. There are approximately 300 state and local crime labs in the country that test chemically for the presence of illegal drugs in samples bought or seized in law enforcement operations; sometimes they also test samples for purity (quantitate) and keep information about the purchase price of buys. A sample of laboratories could be selected for participation in a drug-information reporting system. If such a program were established, indicators, such as price-purity ratios for heroin and cocaine, could be developed and tracked over time more systematically.

A state and local crime laboratory information system would also provide early warning of the arrival of new chemical entities into the illicit drug market (including designer drugs) and provide a mechanism for monitoring the diversion of legal drugs to the illicit market. DEA should explore the feasibility of creating such a system.

PRODUCTION

Estimates of drug production by individual countries are important in assessing the effectiveness of production control efforts overseas. Each year the National Narcotics Intelligence Consumers Committee (NNICC), an interagency group headed by DEA, publishes estimates of drug production for the United States' most important source countries. Since 1984, the State Department has also published annual estimates in International Narcotics Control Strategy Report (INCSR) for a much larger number of countries. No agency estimates illicit drug production within the United States, except for the NNICC estimates of the share of the marijuana market met by domestic sources.

The NNICC and INCSR estimates sometimes differ substantially. Neither NNICC nor the State Department has published a description of the methods used to generate their estimates. In some source countries, such as Peru, both the government and independent experts have generated
much higher estimates; however, there has been little basis for evaluating these alternative figures.

The conference was ill-situated to make recommendations about how to improve the quality and credibility of these estimates. The technology used to provide estimates of the acreage under drug cultivation, involving satellite and aerial photography, is classified. Outsiders cannot readily determine the accuracy of this technology, which is likely to vary with topographical and meteorological conditions and with the geographic concentration of the production areas. Nor did the group have the expertise to assess another critical component of the estimates, namely assumptions about the efficiency of the production process under prevailing field conditions.

In light of this, the conference limited itself to recommending that NNICC be required to empanel a committee of nongovernmental experts with appropriate clearances. The committee should prepare an evaluation of current estimating methods and make recommendations as to how the quality and credibility of those estimates could be improved.

THE HARMs OF DRUG USE

The primary current data series measuring the harms attendant with drug use is the Drug Abuse Warning Network (DAWN), the oldest existing series in the drug-policy world. NIDA is now implementing a new DAWN sample that will, for the first time, permit estimation of metropolitan-area totals of drug-related emergency room admissions as well as nationwide figures.

DAWN is based on retrospective collation of medical records by a designated reporter. It is no better than the notations made by emergency room staff. Little is known about the quality of these notations, and validation studies need to be conducted.

DAWN was developed initially, as its name suggests, to warn of changes in drug-use patterns in individual communities. Over time, it has become a major indicator of the trends in the national drug problem. The redesign recognizes the dual purpose of DAWN.
In its second role as national trend indicator, attention needs to be given to the variable role of the emergency room (ER) as a source of medical care for different populations. Studies need to be conducted on what determines where individuals go in case of acute drug problems. Data for such studies might be obtained by asking drug users in general population surveys about emergency room use and by asking similar questions of respondents in surveys of known drug-using populations (e.g., persons in treatment). The planned National Survey of Hospital Outpatient and Emergency Departments may yield more complete data on the number of visits related to use of illicit drugs.

It is possible that additional information on harms could be obtained from the National Hospital Discharge Survey and the National Ambulatory Medical Care Survey. Both data sets would tap into much broader populations of facilities than DAWN and have the promise of greatly increasing knowledge of who suffers what harms from drug abuse. At a minimum, there should be a one-time study of non-ER admissions for those suffering acute effects of drug abuse.

The National Health Interview Survey (NHIS) provides an excellent vehicle for examining the relationship between drug use and health status. The 1991 NHIS should include a series of questions on drug use, drawn from the core questions of the NHSDA.

It is widely believed that illicit drugs are a major cause of motor vehicle accidents; that belief has been supported by at least one local study. The Fatal Accident Reporting System (FARS) of the National Highway Transportation Safety Administration does not obtain data on the presence of drugs other than alcohol. Efforts should be made, initially on an experimental basis, to supplement FARS to monitor the most prevalent illicit drugs, as found in both drivers and victims in fatal motor vehicle accidents.

Existing data sets focus on harms to individuals. There are also community harms that remain essentially unmeasured. BJS should consider inclusion of questions on the effects of drug abuse on perceptions of the quality of life in its National Crime Survey (NCS).
Drug Use and AIDS

Among the most dangerous consequences of drug use is the spread of the HIV infection, primarily by intravenous drug users sharing infected needles. Drug abuse also leads to the spread of the infection through unsafe sexual behavior that is often the result of noninjected drug use. Present data systems for monitoring drug-use-related HIV infection need to be improved.

The National AIDS Demonstration Research Project has provided data from over 40 communities on 30,000 persons at high risk of transmitting the AIDS virus. These have been the best data source on Intravenous Drug Abusers (IVDA) not in treatment or in prison. The federal government is about to discontinue funding of the projects; some of them should be maintained to continue tracking at the community level and provide indicators of relevant behavioral changes.

Finally, studies of harms related to drug use need to take more explicit account of the major psychoactive legal drug, alcohol. Substance abuse often involves the use of alcohol along with illegal drugs; a better understanding of the harms of abuse of illicit drugs will be developed if the same systems also monitor the harms associated with alcohol abuse as well.
IV. CONTROL PROGRAMS

PREVENTION

Beyond crude and incomplete measures of expenditures, there are no data about prevention programs as a group. We lack information about what messages different children receive either inside or outside of schools. There is a need to inventory prevention programs being used in schools and to gather data regularly on knowledge, attitudes, and perceptions of school students.

The proposition to expand Monitoring the Future to the eighth grade should help. Most school-based prevention programs are delivered in late elementary and junior high school grades, so that eighth graders can report on what programs they have been exposed to and what they have learned from them.

Given the large commitment of federal resources to prevention programs, particularly through the Drug Free Schools Act of 1988, it is also important for the Department of Education to obtain more systematic information about the kinds of prevention programs being implemented. This should be done through a one-time census, followed by annual sample surveys concerning the curricula, policies, and assistance programs being used in schools. Similar occasional data need to be collected on community-based programs.

DRUG TREATMENT

The principal data set describing the size and scope of the drug treatment system is the National Drug and Alcoholism Treatment Unit Survey (NDATUS), carried out biannually by NIDA/NIAAA (National Institute on Alcohol Abuse and Alcoholism); as of 1990 the survey is to be carried out annually. NDATUS is intended to provide a census of all facilities treating drug abusers and to describe the characteristics of their programs and clients. The survey is often administered with the assistance of state agencies to identify eligible programs. In addition, NIDA/NIAAA are in the process of developing a Minimum
Treatment Client Data Set (MTCDS), which will provide certain core data on all admissions to state-supported treatment programs and to some private programs.

The completeness of NDATUS coverage is generally unknown and may vary over time and across states. Privately funded programs are particularly likely to escape detection or to be nonresponsive to the survey as they lack incentives for participation. Decisions about allocating treatment resources require better information about trends and variations in treatments sought. A high priority should be given to studies, in several states and metropolitan areas, to estimate the number and types of drug treatment facilities not covered by NDATUS. In addition, little is known about the scope of drug treatment provided outside the context of the special purpose facilities included in NDATUS; for example, treatment provided by solo practitioners or in private psychiatric clinics. Area studies of NDATUS coverage could also address these other potentially important sources of treatment.

It is not clear that a national drug treatment census needs to be conducted frequently. A more efficient strategy would be to perform the census occasionally, perhaps every five years, and then carry out annual policy-relevant surveys on a sample of facilities. These surveys could include more detail on program characteristics than is now gathered in the annual census and could provide the context for interpreting the results of treatment-effectiveness studies, such as DATOS (Drug Abuse Treatment Outcome Study).

At the moment, there is a notable lack of information about the characteristics of the treated population, except in those states that have maintained a reporting system like that of CODAP (Client Oriented Data Acquisition Program). The new MTCDS should provide such information about admissions, but ADAMHA (Alcohol, Drug Abuse and Mental Health Administration) should experiment with means of increasing information about clients post-admission (e.g., length of stay in treatment) as part of a broader client-based system.
The assignment of unique identifiers to individuals would greatly enhance the potential for tracking. However, it is not clear that such identifiers can be assigned without risking loss of privacy and reducing cooperation by clients and program operators. If the privacy problems can be solved, then the identifiers will make it possible to conduct important large-scale longitudinal research, a major need of the treatment system at the moment.

The notion of measuring "demand for treatment" has been given attention in recent years. This is best approached not through study of "waiting lists," which are a function of many program-level decisions as well as an unknown amount of duplication and omissions of individuals, but through inclusion of clinically validated instruments in population surveys. Such instruments have not been included in the NHSDA to date; NIDA should conduct exploratory work on including a shortened version of an instrument, such as the Diagnostic Interview Schedule (DIS), in the survey.

DRUG ENFORCEMENT

Drug enforcement receives the bulk of drug-control expenditures at every level of government. For the federal government, adequate information is available concerning both the expenditure levels and the arrests, convictions, and incarcerations resulting from those expenditures. At the state and local levels, much less information is available on all of these matters except for arrests, which are collected as part of the FBI's Uniform Crime Reports system. The existing data systems do not permit even a description of how much drug enforcement is being carried out by state and local agencies, let alone an assessment of how well this enforcement is working. Also needed is an estimate of how much of the cost of this enforcement is being borne by other criminal justice functions.

To remedy this, the Bureau of Justice Statistics should develop a survey that permits the tracking of inputs and outputs of drug enforcement. For each of the major elements of the criminal justice system (police, courts, correctional facilities, probation, and parole)
data are needed on the manpower and other resources (cell years, court
days) devoted to dealing with drug offenders. Output measures, for the
same elements, include the following: arrests (by drug), asset
seizures, forfeitures, dispositions of arrests, sentences (accrual
basis), and correctional population. The conference did not develop
recommendations as to how such a survey should be implemented.

OTHER RECOMMENDATIONS AND COMMENTS

A great deal of interest has been expressed in developing better
estimates of the "costs of drug abuse." The conference generally felt
that such estimates were neither technically feasible nor important for
policy development, though some participants disagreed. Many of the
most important costs, such as those associated with crimes that are
( causally) related to drug abuse or the decline in the quality of family
life, lack a clear conceptual or empirical base for estimation.
Moreover, for policy purposes, it is the costs of particular components
of the drug problem that would be helpful in making resource decisions;
global cost estimates do not assist in this respect.

In a few cities, street studies units have been funded for
monitoring drug distribution and use. These units can provide regular
and timely reports on populations that are very difficult to reach
(e.g., heavy users not in treatment) and they can monitor more
effectively the leading indicators of changes in drug problems. These
units can also provide information about changes in prices and other
conditions (such as the ease with which drug sellers can be found)
relevant to assessing the effectiveness of control programs. The
federal government should experiment with expanding these units to
additional cities and integrating them into broader data-reporting
systems, such as those included in the Community Epidemiological
Workshop Group (CEWG), a semiannual meeting of officials and researchers
from major cities. Strengthening the CEWG is also desirable as a method
for improved linkage between the federal government and state and local
governments in the monitoring of drug problems. In that respect, more
attention to standardization of reporting forms used by CEWG,
particularly for health data, would help considerably.
DISSEMINATION

A major weakness of the current system of data collection, both from a scientific and policy perspective, is the lack of dissemination of data sets for secondary analysis. For example, NHSDA, DAWN, STRIDE, and NDATUS have not been made available as public-use tapes, nor have agencies generally been willing to make the data available to researchers who have sought them. Consequently, the published research based on these data is meager. Only the annual high school senior surveys of Monitoring the Future have been made available for secondary analysis, and a valuable research literature using MF has emerged.

The conference strongly urges that all federal agencies that collect data in support of drug-policy decisions make public-use tapes available in a timely fashion and facilitate access to the data when it is requested. Public-use tapes may require careful editing to protect individuals, a problem of particular concern with longitudinal data. But without better public dissemination, the data will continue to be underused.

NIDA has proposed releasing a public-use tape of the 1988 NHSDA in late 1990. It should also make the 1982 and 1985 NHSDA available for analysis as well.

One reason that little attention has been given to the preparation of public-use tapes is that sufficient funds have also not been available for their analysis. Agencies should also develop grants programs for such analysis.
APPENDIX A

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APPENDIX B
DATA SOURCES REFERENCED IN THIS REPORT

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<th>AGENCY</th>
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<td>International Narcotics Control Strategy Report</td>
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<td>Labor Dept.</td>
<td>National Longitudinal Survey of the Labor Experience of Youth</td>
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