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INCREASING THE USE OF DRUG USE FORECASTING (DUF) FINDINGS FOR STATE AND LOCAL  
POLICY AND PRACTICE: NEW COMPUTER PROGRAMS AND DOCUMENTS DEVELOPED

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INTRODUCTION

A decade of research has provided evidence of a strong link between drug abuse and criminal behavior<sup>1</sup>, large numbers of drug-involved offenders flooding the criminal justice system<sup>2</sup>, and the effectiveness of some forms of treatment for reducing the numbers of crimes committed by drug-involved offenders.<sup>3</sup> State and local practitioners have been seeking better information they can use when planning and carrying out their programs for dealing with such offenders. The DUF Program was initiated in 1987 in response to *law enforcement agencies'* growing need for solid information about the nature and extent of the drug use problem among offenders coming to their attention. Unlike methods used for selecting sites and samples in many Federal data collection activities, which do not readily permit obtaining information that is helpful to local policymakers,<sup>4</sup> DUF data are inherently pertinent in the jurisdictions where arrestees are interviewed and tested.

Although DUF findings continue to serve the interests of sheriffs and police departments, many other kinds of agencies' administrators can also make good use of DUF findings. Under National Institute of Justice (NIJ) sponsorship, LINC, a private research company, recently completed a project to help practitioners in the cities and counties that participate in the DUF Program use their DUF data more productively. This was one of several NIJ projects focused on encouraging local applications of DUF findings. The results of the LINC project can help administrators and analysts in any jurisdiction make use of DUF-like data (combinations of urinalysis tests, official records, and self-reports) that they may obtain from arrestees or juvenile detainees.

APPROACH

In order to expand the future use of DUF results, the project:

- o Identified the kinds of State and local policymakers and administrators who can best use DUF findings, the specific types of DUF data they are most likely to use, the formats for presenting DUF findings that are most useful to them, and the routes of disseminating DUF information that are most cost-effective.
- o Formulated and tested materials, including computer programs, that help prepare, present, and disseminate DUF results that respond to these identified State and local needs.
- o Developed products described in this report that any DUF site staff or other interested analysts can acquire for facilitating State and local uses of local DUF findings.

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Program managers in DUF sites participated in telephone and mail/fax surveys and provided compelling recommendations about possible ways to increase the usefulness of DUF data. They also nominated administrators and policymakers in their regions who were using local DUF results for innovative purposes; these nominees provided information about how they already used DUF findings and how findings could be made more useful.

The project derived and refined the new methods and materials for using DUF results by focusing on one development demonstration site -- Multnomah County (Portland), Oregon -- and one test demonstration site -- Denver, Colorado. In both States, many policymakers and administrators of agencies concerned with drug abusers provided important information, ideas, and feedback during interviews and in response to mailed surveys.

The DUF Program staff in Oregon, especially Linda Tyon, Executive Director of TASC of Oregon, and Paul Clem, the DUF program director, cooperated with us closely in the process of designing computer programs and other products. Chris Webster, DUF program director in Colorado, under the direction of William Woodward, Director of the Colorado Division of Criminal Justice, tested the "first draft" of many of the products and made vital suggestions for improvements.

The following sections describe the basic questions and findings of the project and the materials that were produced for facilitating the use of DUF data for State and local policy and practice.

#### WHO ARE THE MOST LIKELY USERS OF DUF DATA?

**Finding:** In addition to planners and managers in law enforcement agencies, policymakers and administrators in many other State and local agencies dealing with drug abuse are using and can make better use of DUF findings in their work.

The research identified three distinct groups of DUF information users:

- o Administrators and their staff who are *responsible for dealing on a day-to-day basis with the populations from which the DUF sample is drawn* (i.e., booked adult arrestees or detained juveniles). In addition to law enforcement officers, these include the staff in booking centers, jails, and juvenile detention centers (especially those facilities where DUF interviewers collect data), judges or magistrates who are responsible for initial arraignment, other court staff who deal with newly arrested or detained populations on a regular basis, and medical personnel in emergency rooms where arrestees and detainees in need of treatment are regularly taken.
- o Agencies directly or indirectly *responsible for providing drug treatment and drug prevention programs*. These include agencies with post-adjudication custody of drug-involved offenders (jails, prisons, community corrections, probation, parole, juvenile facilities), private drug treatment staff, health/mental health agencies, and schools.

- o Analysts responsible for monitoring drug use trends in a given area -- especially for the purposes of allocating resources for curbing drug abuse. These include analysts on the staff of local law enforcement agencies, county departments of health or mental health, or State epidemiologists.

LINC Product: A generic dissemination list of types of agencies and key administrators who are most likely to find DUF information useful. This generic list can be tailored for sending DUF reports to specific State and local agencies by simply looking up addresses in the "Blue" Government pages in the local phone directory and, if names of administrators are not listed, calling the agency to determine the names of incumbents.

#### FOR WHAT PURPOSES CAN SITE-SPECIFIC DUF DATA BE APPLIED?

Finding: State and local policymakers and agency administrators in many sites are already using Federally published DUF findings about drug use in their regions. The two primary uses of NIJ-published findings reportedly are: to inform the public about the extent of drug use among local arrestees, and to justify the need for funds for curbing drug abuse in proposals for Federal or State block grants.

*In places where local DUF data have been systematically analyzed to meet purposes defined by State and local agencies, DUF results find much wider use. In addition to the two counties involved in this project, DUF program staff or other analysts in a few other DUF sites have been provided with resources for preparing and presenting local DUF results requested by policymakers or administrators in their area. Together, the uses made of these presentations include:*

- o Planning and needs assessment, such as determining the need for treatment among particular types of arrestees
- o Designing new programs such as drug courts
- o Allocating resources in relation to specific drugs' patterns of high, increasing, or declining use
- o Monitoring and evaluation, such as incorporating DUF findings in a State epidemiology system
- o Recommending legislation, for example, laws to control precursors of drugs manufactured and used locally
- o Staff development and training, such as recognition of symptoms of drugs currently being used by arrestees

- o Incorporating DUF results in programmatic materials, for example, reducing costs of laboratory tests for probationers by limiting them primarily to the specific drugs that are found locally by the DUF laboratory's urinalyses of arrestees; also, incorporating in prevention programs for teenagers current information about the names and characteristics of "new" drugs reported by DUF juvenile detainees.

LINC Product: A one-page checklist of uses and potential uses of DUF results that can be rapidly completed by State and local policymakers and administrators. This list can be used in face-to-face meetings, conferences, or mailed surveys and serves two purposes: (1) determining ongoing and planned uses of DUF reports in particular sites, and (2) stimulating those who fill out the checklist to consider for their agency new uses of DUF findings that are already underway elsewhere.

#### WHAT TYPES OF RESULTS CAN MOST READILY BE USED AND IN WHAT FORM?

Finding: The results of laboratory tests showing the percent of arrestees or detainees confirmed as using specific types of drugs are the most useful type of information produced by the DUF program for State and local applications. However, depending on their function and intended applications, policymakers and administrators may need urinalysis results for specific categories of arrestees or juvenile detainees. These needs can change over time.

Policymakers and administrators, for the most part, have more confidence in urinalysis results than in self-report information about drug use. They value DUF reports that present drug findings that are confirmed by laboratory test for the kinds of drug users that concern their agencies. For example, prevention program specialists working with high-risk inner-city Latino youngsters want to know what the urinalysis results tell about the types of drugs being used by these youngsters; they do not care much about drug use statistics for older black or Caucasian users. Treatment staff who work with female prostitutes want to know about new patterns of drug use that are emerging among similar populations.

As agencies' responsibilities for particular populations shift, so does their need for specific DUF results. For example, although the Colorado Division of Youth Services has been making extensive use of juvenile DUF results, the juvenile data were not of much interest to the administrators of Colorado Department of Corrections (DoC), an adult corrections agency. But when proposed new legislation was designed to shift responsibility for custody of serious youthful offenders to DoC, the staff immediately realized a need to draw on the juvenile DUF results for program and facility planning purposes.

LINC Product: A one-page checklist for assessing data needs of target audiences -- the particular populations that interest them and the kinds of information they need. Like the checklist of uses of DUF results, this needs assessment form can be rapidly completed by State and local policymakers and administrators. By distributing the checklist from time to time, especially to new incumbents of the offices likely to use DUF results, DUF program managers can encourage use of the DUF data and quickly determine the specific data tabulations or results that need to be prepared and provided to State and local agencies.

Finding: The three identified groups of DUF information users generally require different types of data and prefer different formats:

- a. Staff in agencies dealing on a day-to-day basis with populations from which the DUF sample is drawn require up-to-date information about the *specific types of drugs found in the urine* of the total group of arrestees or detainees.

This need and preference can be easily satisfied by providing the chief executive officer of such agencies (and the supervisory staff member directly cooperating with DUF) with a clearly labelled copy of the summary laboratory report *as soon as quarterly urinalysis results are available.*

LINC Product: Labels were designed and tested for clarifying the summary urinalysis results. The research showed it is very helpful to have informative labels pasted at the top of urinalysis summary reports, covering up extraneous laboratory information. These labels provide information about the local DUF catchment area, the name of the facility in which data were collected, the name and title of the director of the cooperating facility, the organization administering the local DUF program, the name of the local DUF Program Manager, and approximate date of data collection. The labels help agency directors identify with the DUF program and its results. In Multnomah County and Denver, agency directors who were provided with meaningfully labelled laboratory reports spontaneously sent copies to many of their staff members and to staff in other agencies.

- b. Analysts who are monitoring drug use trends in their area over time can most readily use *individual records of urinalysis results for all drugs tested and the characteristics of arrestees or detainees who provided the urine samples.* They typically prefer data files that they can manipulate themselves along with supporting documentation and statistical program software.

LINC Products: Experienced analysts who want to monitor DUF trends over time can obtain from NIJ the following types of materials prepared by LINC:

- o *Codebooks* providing details about urinalysis results variables, official record variables, and selected self-report variables. Separate codebooks for adult data and juvenile data have been prepared.
- o *Site-specific merged data files.* These SPSS/PC system files contain all adult data collected in each particular site before 1990 and serve as a convenient starting point for adding subsequent data.
- o SPSS/PC *computer programs* and *step-by-step written guides* for combining quarterly data collected in 1990 or later into multi-year SPSS/PC files that contain selected variables for all time periods since the start of data collection in the site.
- o SPSS/PC *computer programs* for *weighting* DUF samples to reflect unchanging mixes of arrestees by offense type over time, and for calculating smoothed graphs showing moving averages of urinalysis results.

c. Staff in other agencies can most readily use *summary information about specific types of drug use among particular subgroups*. They most commonly prefer information presented on an *annual -- not quarterly -- basis*. The best formats are concise summaries that graphically present only the major findings.

LINC Products: Working with a large number of people who cooperated with this project, LINC has developed a standardized format for a two-page report, called *DUFFacts*. It presents annual statistics and trends about major patterns of drug use -- the specific information that was found to be of greatest interest to State and local readers. The adult report focuses exclusively on findings confirmed by urinalysis, while the juvenile report adds, with clear demarcation, some results from self-reports concerning use of tobacco and alcohol.<sup>5</sup>

To support the efforts of local analysts preparing these reports, especially analysts who have had little experience in using SPSS/PC to interpret DUF results, LINC has produced a *series of documents and computer programs* that lead local researchers through all steps needed to produce their own *DUFFacts* reports. One LINC series guides local analysts in preparing *DUFFacts* reports for adult arrestees; the other series, *DUFFacts* for juvenile arrestees. As requested by DUF staff and other analysts in many DUF sites, these documents and computer programs provide detailed guidance for carrying out the following procedures:

- ...Downloading DUF data files from the NCJRS electronic bulletin board using TEAMterm software. Preparing the files for SPSS/PC
- ...Getting started with SPSS/PC
- ...Using SPSS/PC to run LINC programs
- ...Building a DUF data file incorporating data from different quarters and years
- ...Adding recently collected data to the multi-year DUF data file
- ...Analyzing data in a multi-year DUF data file
- ...Preparing a *DUFFacts* report (step by step instructions for incorporating statistically significant analysis results into a *DUFFacts* report)

#### HOW ELSE CAN THE USE OF DUF RESULTS BY STATE AND LOCAL AGENCIES BE EXTENDED?

In addition to providing State and local agencies with specific types of DUF results they require, in a timely fashion and in the format they desire, usefulness of DUF results can also be expanded in the following ways.

*Provide important information that is new or counter-intuitive.* The high-rate of drug abuse among arrestees demonstrated by DUF data was originally eye-

opening; now, however, this information is common knowledge. DUF results that demonstrate increases or decreases in use of particular drugs among specific groups of arrestees may have more practical importance than simply reconfirming past findings. So do DUF results that run counter to media presentations. For example, when the media proclaimed that "ice" (methamphetamine) use was sweeping mainland USA, most sites with DUF programs rapidly determined that methamphetamines were not being used by many adults or juvenile arrestees or detainees.

*Use DUF findings as a basis for communicating about local substance abuse problems and innovative responses.* In many DUF sites, high rates of drug use among arrestees and juvenile detainees have been static and are considered by some State and local agencies as business as usual. Presentations of new DUF results -- even those that show stable patterns -- should be undertaken as opportunities to stimulate ideas about creative ways to tackle drug problems. A cover letter accompanying a DUF report, a telephone call to a recipient of DUF findings, or handing out *DUFFacts* reports at a meeting can highlight particular problems and alert key administrators to implement possible solutions.

For example, although in past years virtually no youth were found to use opiates, in 1992 DUF urinalysis reports on juvenile detainees in Denver showed that a small but increasing number of youth were using opiates. When this information was sent to the director of the youth facility in which DUF operates, she began intensifying prevention focussed on heroin use and AIDS education.

*Emphasize that although DUF is a Federally-funded program, DUF results tell us about State and local problems.* The more policymakers and administrators realize that DUF results are not abstract statistics but findings about people who daily walk through their doors, the more likely they are to use DUF results for strategy and planning. By constantly reminding readers that DUF participants were detained in specifically named State and local facilities, that particular agency staff are responsible for overseeing them, and that local people are victims of the crimes they have committed, drug use findings are literally brought home. For example, in Oregon, the DUF laboratory summary sheets were transformed into a flier that elicited much local interest by a simple label that said:

Multnomah County, Oregon  
NIJ Drug Use Findings  
Summer 1992

Donald E. Long Home  
James A. Anderson  
Superintendent

TASC of Oregon, Inc.  
Paul Clem  
DUF Project Manager

Male Juvenile Detainees

Laboratory Tests of Urine



Keep reports as concise as possible. Administrators most likely to use DUF results for policy or practice are busy people with little time to read. Thick research reports about DUF findings are likely to remain unread. Using LINC documents and computer programs designed to produce *DUFFacts* reports will help analysts decide what is important to say and to present findings in a brief format. DUF reports that are valuable for policymakers can be produced by experienced statisticians using any computer programs and formats that they like; all they have to remember is the bottom line for increasing the usefulness of DUF results: *be clear! be brief!*

All documentation and computer programs produced by LINC as part of this project have already been provided to DUF program managers in all 24 DUF sites. These materials are in the public domain. If you are interested in obtaining copies, contact your local DUF Program Manager or call \_\_\_\_\_ [NIJ to supply name and telephone number of contact].

#### Endnotes

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<sup>2</sup>Wish, Eric D. and Bernard A. Gropper. 1990. "Drug Testing by the Criminal Justice System: Methods, Research, and Applications," in James Q. Wilson and Michael Tonry (editors) Drugs and Crime Chicago: The University of Chicago

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Problems Volume 1. Washington, DC: National Academy Press.

<sup>4</sup>For example, to collect drug use data from emergency room admissions,  
DAWN sites are selected to provide national estimates, and the identities  
of individual participating hospitals are not divulged to local agencies  
that might find the data useful. Similarly, the Bureau of Justice  
Statistics periodically surveys inmates in state prisons about their drug  
use; but the prisons and sample sizes selected are not suitable for  
generating state-level or local area estimates.

<sup>5</sup>We have seen many DUF reports that present extensive demographic  
information about the composition of the DUF sample but, based on this  
research project, recommend against including such information in a  
report intended to appeal to policymakers.