CONTROLLING DRUG USE AND CRIME AMONG DRUG-INVOLVED OFFENDERS: TESTING, SANCTIONS, AND TREATMENT¹

Mark A.R. Kleiman

SUMMARY

Crime – at least crime of the sort which often leads to arrest and punishment – tends to attract those who are reckless and impulsive, rather than those who fit the model of self-interested rationality. That simple observation has strong implications for efforts aimed at both deterrence and rehabilitation, but those implications have either not been drawn or not been acted on. Moreover, the obvious opposition of interest between offenders and everyone else has been allowed to conceal from the public consciousness the common interest in improving offenders' capacities for self-command.

The relatively small number of offenders (no more than three million all told) who are frequent, high-dose users of cocaine, heroin, and methamphetamine account for such a large proportion both of crime and of the money spent on illicit drugs that getting a handle on their behavior is inseparable from getting a handle on street crime and the drug markets. Yet current policies for dealing with them ignore everything we know both about addiction and about deterrence. For the reckless and impulsive, deferred and low-probability threats of severe punishment are less effective than immediate and high-probability threats of mild punishment. By contrast, current practices for dealing with offenders over-rely on severity at the sacrifice of certainty and immediacy.

The probation and parole systems are the key to managing the population of drug-using offenders. Abstinence from drug use ought to be made a condition of continued liberty, and that condition ought to be enforced with frequent drug tests and predictable sanctions, with treatment offered or required to those whose repeated failure to abstain under coercion alone shows them to be in need of it.

The benefits of mounting such a program would vastly outstrip its costs, and outstrip the benefits of any other program that could be mounted against drugs and crime using comparable resources. The administrative and political barriers are formidable but perhaps not insurmountable.

BACKGROUND

The damage associated with illicit drugs and their control is impressive:

- several million dependent usersiii;
- an illicit industry generating tens of billions of dollars in revenueiv;
- recent cocaine or heroin use by nearly half of all those arrested for serious crimes in big cities^v;
- hundreds of thousands of people, many of them very young, regularly committing felony drug-selling offenses^{vi};
- enormous (though not well-measured) amounts of violence associated with drug transactions, or at least with weapons obtained for use in, and with the proceeds of, drug-selling;
- neighborhood disruption due to the disorder and violence of open illicit markets;
- \$25 billion spent on drug law enforcement, out of a total national enforcement budget of \$125 billion^{vii};

- 350,000 persons behind bars for drug sales or possession^{viii} out of a total national prison-plus-jail population of 1.65 million^{ix};
- injection drug use a strong second to sex in the transmission of HIV^x.

All of this damage is highly concentrated in poor, urban neighborhoods with primarily ethnic-minority populations. (Two-thirds of those admitted to state prisons for drug offenses are African-American.xi)

Offenders make an enormous financial contribution to the illicit drug-dealing industries, with all of their undesirable side-effects: violence, disorder, corruption, enforcement expense, imprisonment, and the diversion of adolescents in poor urban neighborhoods away from school and licit work and toward drug dealing. The numbers are rather startling.

About four-fifths of the cocaine and heroin sold is consumed by heavy, rather than casual, users. (The precise proportion depends, of course, on the definition of the term "heavy," but all of the plausible definitions have to do with people who spend more than \$10,000 per year on their chosen drugs; for cocaine, this group accounts for somewhere between one-fifth and onequarter of all the "current" [past-month] users.xii) This highlyskewed distribution of consumption volumes accords with the general heuristic principle known as "Pareto's Law," (which holds that 80% of the volume of any activity is accounted for by 20% of the participants) and with what is known about the distribution of alcohol consumption.xiii It is also supported by a comparison of consumption-based and enforcement-based estimates of cocaine volumes: a projection of cocaine users' reports on how much they consume from the National Household Survey on Drug Abuse accounts for only about 30 metric tons of cocaine a yearxiv, while

enforcement data suggest total consumption of about 300 metric tons.xv

That gap implies the existence of an unmeasured hard core which uses the bulk of the cocaine. No plausible definition of "casual" use, multiplied by the survey-estimated number of users, could account for any substantial proportion of the \$30 billion estimated annual cocaine market.xvi

Statistics from the Arrestee Drug Abuse Monitoring (ADAM) system (formerly the Drug Abuse Forecasting (DUF) system), suggest that the "hidden" population of heavy users consists largely of frequent offenders.xvii While not all of those who are arrested and who test positive for cocaine are heavy users, the short (48- to 72-hour) "detection window" for the urine monitoring of cocaine use means that heavy users are likely to account for most of the positive post-arrest tests. By one calculation, about 1.7 million different heavy cocaine users are arrested for felonies in the course of any given year, or about three-quarters of the estimated 2.2 million total heavy users.xviii When not in prison or jail, these user/offenders tend to be on probation or parole.

If heavy users account for 80% of the cocaine, and if threequarters of them are in the criminal-justice population, then 60% of the total cocaine is sold to persons under (nominal) criminaljustice supervision. Therefore any short- to medium-term effort aimed at reducing demand for cocaine must focus on this group, on the principle that if you're going duck hunting you have to go where the ducks are.

Conversely, though most users of illicit drugs are not otherwise lawbreakers continued use of expensive drugs by those who pay for their habits from the proceeds of their crimes virtually guarantees continued criminal activity. Among offenders, the use of expensive drugs predicts both high-rate offending and persistence in crime. Therefore any policy to deal with high-rate offenders needs to address their substance abuse problems.

Thus, whether our concern is crime generally or the abuse of illicit drugs, we are drawn to consider policies for dealing with the behavior of a relatively small number of high-volume user/offenders.

Current Policies for Dealing with Addict/Offenders

Neither current drug policies nor current correctional policies offer any real hope of substantially reducing drug consumption by user/offenders. The drug-policy triad of prevention-enforcement-treatment is largely irrelevant. Let's take them in order.

First, prevention. Not only is it obviously futile to prevent what has already occurred, there is no evidence that the standard array of either school-based or media-based drug-prevention messages have much to say to those who are likely to develop into drug-involved offenders in the future, as opposed to the middle-class kids whose parents' concerns dominate the politics of drug policy, and especially the politics of the prevention effort. (A focus on preventing drug *dealing*, using some mix of messages to change attitudes and other policies to shrink dealing opportunities, might be more relevant, but that idea is nowhere near the policy agenda.)xx

Second, enforcement. By making drugs more expensive and harder to obtain, enforcement can reduce both consumption by current users and the initiation rate. Compared to the hypothetical baselines of either legalization or zero enforcement, prohibition and enforcement have certainly been successful: illicit-market cocaine costs twenty times the price of the licit pharmaceutical product, and much of the population has no easy access to the drug. But the capacity of more enforcement to drive prices higher, or even to prevent continued price declines, is very limited, as the drug law enforcement explosion of the past fifteen years demonstrates. The value of enforcement in maintaining the borders between places where cocaine is easily available and places where it is not easily available is probably substantial, and it may well be the case that more enforcement at the margin will tend to slow the spread of the zone of easy availability, though that effect is hard to document. But of all users, the hard-core user/offenders are least likely to find themselves unable to acquire supplies.

Third, treatment. A wide variety of "modalities" has been shown to be effective in reducing drug consumption and criminal activity while the treatment lasts, seemingly regardless of whether entry into treatment is voluntary or coerced.xxi But even if there were sufficient treatment slots in programs appropriate to the criminal-justice population, and even if treatment providers were motivated to serve user/offenders rather than other, less refractory, clients, there would remain the problem of recruitment and retention. While some user/offenders want to quit, and even want to quit enough to go through the discomforts of the treatment process, many prefer, or act as if they preferred, cocaine or heroin, as long as they can get it.

In the abstract, there is a good case for expanding treatment capacity, focusing treatment on the user/offender population whose continued drug use imposes such high costs, and using the courts, prisons, and community corrections institutions to force user/offenders to enter, remain in, and comply with treatment. Adding drug treatment to incarceration makes sense, and good in-

prison treatment with good post-release follow-up has been shown to reduce recidivism by about one-fifth, xxii thus more than paying for itself in budget terms alone.

But the unpopularity of user/offenders makes the funding problems difficult if not insoluble; the capacity and willingness of treatment providers to address the needs of this population remain unclear; and the administrative problems of enforcing treatment attendance and compliance through the criminal-justice system are daunting. Starting from the current political situation and the current capacities and practices of the treatment system and the criminal-justice system, it would be fatuous to expect expanded treatment availability to generate large changes in overall drug demand over the next several years.

So much for the repertoire of standard drug policies.

Turning to corrections policies, we see a picture not much brighter. The routine functioning of the of the courts and corrections system does very little to address the substance abuse of those assigned to it, and much of that little is wrong.

Nominally, those on probation or parole are required to abstain from illegal activity, including drug possession, as a condition of their continued liberty. Almost all states give probation and parole officials the authority to administer drug tests, and a "dirty" (positive) test constitutes a violation of conditional release and thus grounds for sanctions, including revocation of conditional-release status and thus incarceration or re-incarceration, for a period up to the original nominal sentence.

In practice, however, most parole and (especially) probation offices are under-budgeted and overwhelmed by their caseloads; a big-city probation officer may be "managing" 150 offenders at

any one time.xxiii Funds for testing are scarce, and facilities for testing, including both equipment and staff to observe the specimen collection, even more so. If the specimens are sent out for analysis, turnaround time is measured in days. As a result, even special, "intensive supervision" probation efforts rarely test more than once a monthxxiv, and routine probation tests much less frequently than that. Thus a probationer on intensive supervision who uses cocaine or heroin has less than one chance in ten of being detected on any given occasion of use. (Perversely, marijuana is detectable for up to a month, making it the most likely to be detected.)

The result is widespread use, and therefore high rates of detection even with infrequent testing. That leaves the community-corrections system in a bind. In most states, probation and parole officers have no individual power to sanction: they can only refer their wayward "clients" back to the parole board (for parolees) or the court (for probationers) with a recommendation that conditional-release status be revoked and the offender incarcerated or re-incarcerated. For probationers, the revocation hearing is a full adversarial proceeding; parole revocation is often simpler and usually swifter, but in any case there is a substantial paperwork burden. If the judge or parole board takes any action at all against the offender (by no means assured given the prisoncrowding problem) it is likely to be severe: a few months behind bars is typical, and offenders have been sent back to finish multiyear sentences for a single positive marijuana test.

As a result, there are strong incentives, especially in the probation system, not to take every positive test back to the judge. Probationers may be counseled, warned, or referred to treatment providers several times before being (in the perhaps unintentionally graphic jargon term) "violated." It is hard to fault probation officers for attempting to "jawbone" their charges out of

drug use rather than proceeding immediately to drastic measures. But the resulting system could hardly be more perverse in its effects.

An offender who has a strong craving for cocaine or heroin is put in a situation where the probability of detection conditional on one use is rather small, and the probability of punishment conditional on detection is larger, but still unknown and far less than certainty. For a hypothetical rational actor, the cumulative probability of eventually going to, or back to, prison for a period of months would be an ample deterrent: the "expected value" of the punishment is surely greater than the user would willingly pay for the pleasure of a single evening with his favorite drug, and the randomness of the punishment would increase its disutility for anyone appropriately risk-averse. That is to say, the current system would be adequate – though still not optimal – to deter drug use by the sort of people who make and administer the laws.

Those who run afoul of the laws tend to behave differently. Crack-addicted burglars are much less likely to make careful comparisons between current benefits and anticipated future costs. Otherwise they would be neither crack-addicted nor burglars, since neither crack-smoking nor burglary is an activity with a net positive expected utility activity on any reasonable estimate of values and probabilities. The key to fixing the situation is to adapt the penalty structure to the decision-making styles of the people whose behavior one is trying to influence. **xxv**

Both casual empiricism and results from the psychology and behavioral-economics laboratories suggest that delay and uncertainty greatly weaken the effects of punishment, especially for those whose decision-making does not match the rational-actor models of textbook economics. Fitting deterrence regimes to the behavioral styles of hard-core user/offenders thus requires swift and certain, even if relatively mild, punishment rather than the current policy of randomized Draconianism.

Diversion and Drug Courts

Drug diversion and drug courts are the two major categories of special programs that attempt to use the authority of the criminal justice system to reduce drug-taking by offenders. **xxvi*

Drug diversion involves offering a defendant the option of a deferred, suspended, or probationary sentence in lieu of possible incarceration on the condition of receiving drug substance abuse treatment. Diversion programs vary enormously. Some are formal treatment plans administered under the rubric of TASC (an acronym which once stood for "Treatment Alternatives to Street Crime" but now represents "Treatment Alternatives for Special Clients") a network of specialists who find treatment placements for court-referred clients, monitor their progress, and report back to the court on treatment compliance. Others are as simple as a judge's demand for "thirty in thirty" (attendance at thirty Twelve-Step meetings in the next thirty days) from someone accused of public intoxication or drunken driving.

In drug courts, the judge acts as the case manager, rather than delegating that responsibility to a TASC provider. Defendants come in frequently to review their treatment compliance and drug-test results, and are praised or rebuked for good or bad conduct by the judge in open court. After a period of months, the defendant is sentenced on the original offense, with the promise that the sentence will reflect his pre-sentencing behavior

Because they are built around the idea of treatment, many diversion programs and drug courts tend to put as much stress on showing up for treatment sessions as they do on actual desistance from drug use. They vary widely in their use immediate sanctions to enforce compliance. Some rely primarily either (for diversion programs) on the threat of removal from the program and sentencing on the original charge or (for drug courts) the fact that sentencing is still to come. Many drug court judges hope and believe that praise and reproof from the bench, backed with the judge's reserve powers of incarceration, will serve as sufficiently potent and immediate rewards and punishments without resorting to more material sanctions. Doubtless, they are right for some judges and some offenders.

What drug diversion and drug courts have in common is that participation is voluntary (defendants can, and some do, choose routine sentencing instead) and restricted to defendants whom the court and the prosecution are prepared *not* to incarcerate if the defendants will just clean up their acts. By their nature as "alternatives to incarceration," they cannot apply to those whose crimes have been especially severe. That excludes most violent crimes, and the federal law providing funding for drug courts specifies that defendants admitted to drug-court treatment have no prior violent offenses either. Thus many of the most troublesome offenders, whose drug consumption it would be most valuable to influence, are excluded from the beginning.

Moreover, budget constraints limit drug-court and diversion populations; there is no mechanism by which the net cost savings they likely generate for the corrections system are recycled into program operations. Budgetary stringency both reinforces the programs' limited scope and creates a strong incentive for limited duration as well.

Typically, supervision under such programs lasts for periods measured in months: small fractions of typical addiction, and criminal, careers. This is not only a budgetary matter; it also derives from the limited leverage prosecutors have over most of the offenders eligible for diversion or drug-court processing. Offenders who refuse to enter these voluntary special programs and choose routine processing instead face relatively short prison or jail stays. In practice, some defendants prefer a short fixed period of incarceration to a longer period of supervision that may lead to incarceration if they backslide. The longer the period of supervision, the greater the incentive to just "do the time" and get it over with.

Thus limited scope and limited duration put an upper bound on the potential impact of diversion and drug courts. Making a larger impact could require a more comprehensive approach, embracing millions, rather than tens of thousands, of offenders and functioning as part of routine probation or parole supervision rather than as a special, voluntary program. Given current constraints on drug treatment budgets, the requisite expansion in scale requires decoupling the testing-and-sanctions program from treatment, at least to the extent of imposing a requirement of abstinence on all drug-involved offenders, whether or not paid treatment slots are available for them.

Coerced Abstinence

To make a substantial dent in the drug consumption of addict/offenders, we need a system that will extend the supervisory capacities of drug courts and diversion programs to a larger proportion of the offender population and for longer periods. Such an approach would have to be simple enough to be operated successfully by ordinary judges and probation officers, rather than enthusiasts, cheap enough to be feasible

from a budgetary standpoint, and sparing of scarce treatment and confinement capacity.

One option would be to substitute, to the maximum feasible extent, testing and automatic sanctions for services and personal attention from the judge. By contrast to coerced treatment, this approach might be called "coerced abstinence," because it aims directly at reduced drug consumption rather than at the intermediate goals of treatment entry, retention, and compliance.

Here's how such a system might work:

- Probationers and parolees are screened for cocaine, heroin, or methamphetamine use, using a combination of records review and chemical tests.
- Those identified as users, either at the beginning of their terms or by random testing thereafter, are subject to twice-weekly drug tests. They may choose any two days of the week and times of day for their tests, as long as the two chosen times are separated by at least 72 hours. That means that there is effectively no "safe window" for undetected use.
- Every positive test results in a brief (say, two-day) period of incarceration. (The length of the sanction, and whether and how sharply sanctions should increase with repeated violations, is a question best determined by trial and error, and the best answer may vary from place to place. Maryland appears to be having good results with a program in which the first two "sanctions" are merely warnings. Where there exists a "community service" i.e., punitive labor program with the capacity to enforce compliance, hours of work might make an excellent first sanction.

Even for non-confinement sanctions, confinement is needed as a backup threat for those who fail to comply.)

- The sanction is applied immediately, and no official has the authority to waive or modify it. (Perhaps employed users with no recent failures should be allowed to defer their confinement until the weekend to avoid the risk of losing their jobs.) The offender is entitled to a hearing only on the question of whether the test result is accurate; the penalty itself is fixed.
- Missed tests count as "dirty." (Perhaps the sanction should be somewhat greater, to discourage absconding.)
- After some long period (six months?) of no missed or positive tests, or alternatively achievement of some score on a point system, offenders are eligible for less frequent testing. Continued good conduct leads to removal to inactive status, with only random testing.

To operate successfully, such a program will require:

- the capacity to do tests at locations reasonably accessible to those being tested (since they have to appear twice a week);
- on-the-spot test results, both to shrink the time gap between misconduct and sanctions and to reduce the administrative burden of notifying violators and bringing them back for hearings and punishment;
- the capacity for quick-turnaround (within hours) verification tests on demand;

- authority to apply sanctions after an administrative hearing or the availability of an on-call judge who can hear a case immediately;
- confinement spaces for short-term detainees or other sanctions capacity available on demand; and
- the capacity to quickly apprehend those who fail to show up for testing.

None of these should be, in principle, impossible to obtain; but having all of them together, and reliably available, may well lie beyond the realm of practical possibility in many jurisdictions unless extraordinary political force is brought to bear. Thus elected officials will have to make coerced abstinence one of their goals, or it is unlikely to become a reality.

A wide variety of actual programs could be covered by the rubric "coerced abstinence." Crafting any particular implementation will require the resolution of several major design issues.

• One important but tricky decision involves what drugs to test for, both at the initial screen and for offenders under active monitoring. There is a strong case for omitting marijuana, at least at the initial screening stage: because it remains detectable for long periods and is widely used, any program that does not exclude it is likely to have a substantial proportion marijuana-only clients. The individual and social benefits from reducing marijuana demand among offenders do not approach the benefits from reducing cocaine, methamphetamine, and heroin demand. On the other hand, once an offender is identified as a cocaine, methamphetamine, or heroin user, it may be the case that

continued marijuana use will prove to be a risk factor for backsliding, both because it requires contact with drug sellers and because marijuana intoxication reduces sensitivity to the consequences of actions and thus deterrability. That suggests ignoring marijuana in the preliminary screening, but including it in ongoing monitoring.

- An especially touchy question is whether alcohol should be included. Its very short detection window makes it virtually impossible to detect all alcohol use, but very recent use is detectable in urine. Its legal status reduces the surface justification for forbidding it, but its link to violence (and complementarity with cocaine) create a strong argument for doing so anyway. Alcohol could be another candidate for inclusion in routine testing but exclusion from the preliminary screen.
- The case for an automatic, and therefore necessarily formulaic, sanctions structure is very strong, and such a structure must start out with relatively mild sanctions or the program will collapse of its own weight. But there is no analytic answer to the questions of how to start out and how rapidly, or how far, to increase severity with repeated violations; perhaps escalation will turn out to be unnecessary altogether as long as some sanction is reliably delivered.
- Just as important as the sanctions structure is the reward structure: that rewards shape behavior more powerfully than punishments is a well-established result. Of course, the political problems of rewarding law-breakers for obeying the law are substantial ones, and the best feasible approach may be to use praise and reduced supervision as the primary forms of reward. But collecting an up-front "participation fee" or "fine" that is then

returned in small increments for each "clean" test might greatly reduce the failure rate.

- After some period of compliance, both the need to reward desired behavior and simple budget pressures create a strong case for reduced supervision. Such crucial details as the schedule, the nature of the ongoing monitoring, and what to do with those who backslide under reduced supervision need to be resolved.
- Some participants will prove unable or unwilling to reform under punitive pressure alone. For that group, treatment is essential, if only to reduce the burden they put on sanctions capacity. In addition, it is probably true that the availability of treatment, or perhaps even a requirement to accept treatment, would cut down on violation rates. What sort of paid treatment to offer (and how to make use of the Twelve-Step programs), to whom it should be offered, and whether and under what circumstances it should be required, are all open questions.
- The crucial practical details of how to apprehend absconders, and what sort of confinement capacity to maintain for violations, need to be addressed.

Benefits and Costs

The costs and benefits of such programs will depend on details of their implementation, on local conditions, and on the (as yet largely unknown) behavior of offenders assigned to them. High compliance will translate into great benefits and modest costs, low compliance into the reverse. Only experience, ideally in the form of well-designed experiments, will allow informed judgments about whether, where, and how to put the concept of coerced abstinence into practice.

Still, it is possible to calculate in advance some of the costs and benefits of such programs under specified assumptions about design and results. Those calculations support the idea that coerced abstinence deserves a thorough set of trials.

The catalogue of potential benefits is impressive:

- The primary benefit would be reduced drug abuse (to the extent that substitution is not complete), due not only to the deterrent effect of the sanctions but also to the "tourniquet" effect of interfering with incipient relapses before they can turn into full-fledged "runs" of heavy use. In the District of Columbia Drug Court experiment (see below) coercion outperformed (admittedly not very good) treatment.**

 That would suggest that successful coercion programs might match the reduction of two-thirds in drug consumption typical of users under treatment.
- If that were right, and if all the high-dose user/offenders were under testing and sanctions, and if they account for 60% of total hard-drug consumption, the result would be a reduction in dealers' revenues of 40%. No other feasible anti-drug program offers any real hope of comparable levels of market shrinkage.
- Smaller markets would have manifold benefits: shrinking access for potential new users, protecting neighborhoods from the side effects of illicit markets (most notably violence), diverting fewer adolescents and young adults away from school or licit work into dealing, and reduced diversion of police effort into drug law enforcement and prison capacity into holding convicted dealers. (Currently, about one-quarter of prison cells are occupied by persons serving sentences for drug dealing offensesxxviii; shrinking that number by 40% would allow either a 10% cut in

prison spending, for a savings of about \$3.5 billion per year, xxix or increased imprisonment for non-dealing offenses.)

- The direct benefits of reduced consumption are comparably diverse: improved health; improved social functioning (job, family, neighborhood); and reduced crime by the offenders subject to testing and therefore reduced imprisonment demand among a population with a tendency to cycle in and out of confinement. With drug-involved offenders committing about half of all the felonies in big citiesxxx, these potential benefits are great, though it would not be reasonable to expect a shrinkage in crime proportionate to the shrinkage in drug consumption. But if the reduction in overall offending were even half as large as the reduction in drug consumption, and if the sort of drug-involved offenders who would be subject to coerced abstinence account for 40% of the population behind bars for other than drug-dealing offenses, that would be another 13% of total confinement capacity (costing about \$4 billion per year) saved, giving states the choice between increased deterrence and incapacitation for other offenders and cuts in prison spending.
- A reliably operating coerced-abstinence system as part of probation and parole would also be expected to change the behavior of judges and parole boards with respect to making confinement decisions. By making probation or parole more meaningful alternatives to incarceration, the coerced-abstinence approach should lead to more use of community corrections in otherwise borderline cases. Instead of having to guess about whether a given drug-involved offender will elect to go straight this time, the decision-maker can allow the offender to select himself for conditional freedom or confinement by his drug-taking behavior as revealed by the tests.

• Coerced abstinence would also be expected to have beneficial effects on the treatment system. Some of those now referred to treatment by the courts would show themselves capable of abstaining from drug use without treatment, under the steady pressure of testing and sanctions, perhaps with the aid of a Twelve-Step fellowship or similar self-help group. treatment would have increased incentive to succeed, with the pressure coming not from the therapist or the program but from an Those not in treatment who found themselves external force. incapable of complying on their own would have a strong incentive to find treatment, and their repeated failure would bring their treatment need to the attention of the courts and communitycorrections authorities, while the cost of their continual short confinement stays would create a financial incentive for the local government to provide it.

The cost picture is somewhat simpler, though still quite speculative until there are some working models to study. The important elements of cost would be testing operations, probation or parole supervision, sanctions and arrest capacity, and treatment, and a cost calculation will require both unit-cost and volume estimates. For unit costs, we can assume:

- Community-corrections officers at \$60,000 per year, including fringe benefits, overhead, and supervision. Police officers at \$100,000 per year, also inclusive.
- Testing at \$5 for a five-drug screen. This is less than most agencies currently pay, but consistent with the current costs in the mass-production DC Pretrial Services Agency and not hard imagine given the testing volumes that would exist with a full-scale national coerced-abstinence program.

- Confinement costs of \$50/day, less than a typical jail, but consistent with the reduced need for services and security for short-term confinement: roughly the cost of a mediocre motel room.
- Treatment at \$5,000 per year, reflecting a blend of methadone, outpatient drug-free counseling, and therapeutic communities for the most intractable. (Partly a design decision.)

In terms of volume, we assume:

- 10% of the test results will be positive or no-shows. (This should be realistic for early stages of the program, perhaps pessimistic once the reliability of the tests and sanctions has been established in the minds of participants.)
- The average sanction for a violation is 3 days.
- 10% of active cases will be in mandated (paid) treatment, over and above those who would have been in treatment in the absence of the program. (Pure guess, and partly a design decision.)
- One-quarter of the population that originally qualified for active testing will have complied to the point of being moved to some form of low-cost monitoring and not been moved back to active testing as a result of a violation. (Pure guess, and partly a design decision.)
- One probation or parole officer can manage 50 active testingand-sanctions cases.
- One police officer to chase absconders is needed for each 250 active cases.

On these assumptions, total program costs for a group of 1000 probationers who originally qualified for testing and sanctions, with 750 on active testing at any one time, would be:

15 probation officers @ \$60,000 = \$0.9 million 3 police officers @ \$100,000 = \$0.3 million 750 offenders x 104 tests/yr. = 78,000 tests @ \$10 = \$0.8 million 78,000 tests x 10% x 3 days = 23,400 days @ \$50 = \$1.2 million 750 offenders x 10% = 75 treatment slots @ \$5,000 = \$0.4 million

> TOTAL = \$3.6 million \$3600 per offender

This estimate of \$3600 per offender per year represents only about one-eighth of the annual cost of a prison cell. The probation department's share (probation salaries plus testing costs) would be \$2100 per offender, about twice the average annual cost of probation supervision.

Sources of Resistance

Anyone advocating a major change in the way a piece of the public's business is done must confront the public-sector version of the old question, "If yer so derned smart, why ain't ye rich?" If this is such a good idea, why is it not now being pursued? A variety of barriers, conceptual, organizational, and practical, have stood and still stand in the way of developing testing and sanctions into a working piece of administrative machinery.

Conceptually, testing-and-sanctions challenges current understandings both of deterrence and of addiction. It seems hard to conceive that small sanctions would prove effective deterrents to those so signally resistant to the threat of large sanctions. (This resembles the question posed about bottle-deposit laws by the flacks for the beverage industries: "If a \$500 fine doesn't stop a litterbug, what's a 5-cent deposit going to do?" The answer, of course, was that the \$500 fine was largely notional, while the nickel actually gets collected.)

To some, the concept of addiction as a disease process involving loss of voluntary control over drug-taking implies that threats cannot change addictive behavior. This idea is related to the empirically discredited, but still powerful, notion that addiction implies that changes in price have little impact on the quantity purchased (inelastic demand).xxxi There is laboratory-animal evidence that addictive demand is sensitive both to "price" (in the form of effort required) and to consequencesxxxii and human experimental evidence that immediate rewards for non-use can substantially improve treatment success among those trying to quit.xxxiii

Since even pathological behaviors can still be responsive to their consequences, the disease model of addiction does not rule out the possibility that coerced abstinence can succeed. Nonetheless, the notion that addicts are sick and therefore unresponsive to incentives remains a powerful one, and a strong source of resistance to testing-and-sanctions proposals.

In ideological terms, the testing-and-sanctions idea does not, at least at first blush, satisfy either the moralistic/punitive or the compassionate/therapeutic impulses that dominate the current political discourse about drugs, though it has something to offer to each side. That, plus its conceptual complexity, makes it unattractive as a political campaign proposal, except in the masquerade of yet another "get-tough-on-drugs" proposal.

Alongside this lack of popular appeal is active unpopularity with an important interest group: treatment advocates. By no means do all treatment providers dislike coerced abstinence, but it tends to encounter resistance among treatment administrators and advocates on three different grounds. Ideologically, it seems to be in tension with the disease concept of addiction, which is central to treatment providers' self-understanding and to their claims on public and private resources. In economic terms, coerced abstinence is one more competitor for scarce funds. (Curiously, some proponents of drug courts, who might also have been expected to see testing and sanctions as a competitor for funding, have instead been rather friendly toward the idea.) But at a deeper level, those with a strong commitment to drug treatment may reasonably regard testing-and-sanctions as an inferior substitute.

For some drug-involved offenders, simply getting rid of their drug habits would allow them to live substantially happier lives. But for many, their drug habits are only a part, and often the smaller part, of their problems. Drug treatment often involves addressing far more than drug problems; this is most evident in the case of Therapeutic Communities, with their holistic attempt to reshape character. From the viewpoint of those most concerned about persons with addictions, testing-and-sanctions threatens to provide much, if not most, of the benefits of treatment from the viewpoint of crime victims and government budgets while providing little in the way of relief to those suffering from addiction.

The primary form this resistance has taken has been the attempt to redefine testing-and-sanctions proposals as programs either of coerced treatment or of treatment needs assessment for the offender population. That process can be observed in the history of the Breaking the Cycle initiative, a joint effort of the

National Institute of Justice and the Office of National Drug Control Policy.

Nor are the agencies most effected by coerced abstinence, and which will have to do most of the work, necessarily its supporters. Probation departments, usually badly overworked and understaffed, have not in general been aggressive in seeking out new missions and responsibilities. Police are anything but eager to make warrant service a high priority, though shifts towards community policing and towards holding area commanders responsible for reducing rates of criminal activity may be changing that. Corrections officials are not looking for new business, and especially not for the short-stay clients whose processing in and out takes so much effort.

Moreover, by contrast with ideas such as mandatory sentencing that are virtually self-implementing once legislation is passed, the degree of inter-agency coordination required to make a testing-and-sanctions program a success means that its implementation will require enormous effort on the part of whoever takes on the entrepreneurial role.

Finally, coerced abstinence suffers from two budget mismatches, one of timing and one of level of government. Even if the program turns out to be cost-neutral or better in the long run, there is no denying its immediate costs and immediate demands on scarce confinement capacity. The long- term savings are likely to be dismissed as typical program-advocate pie in the sky. Similarly, it is a rare county executive or sheriff who is eager to spend the county's resources on testing-and-sanctions in order to save the Governor money in the form of reduced prison spending.

Experience

To date, there is no hard published data about the effects of testing and sanctions on the model described above as part of routine probation and parole supervision in a large jurisdiction. Scattered judges have created such programs on their own initiative. Informal reports suggest good results, but there have been no published evaluations, and in any case such pioneer efforts often turn out to rely too heavily on the charismatic characteristics of their founders to be easily portable. There have been six more systematic efforts:

Santa Cruz County instituted aggressive testing of known heroin users on probation in the late 1980s, along with a focused crackdown on street-level dealing. The county reported a 22% reduction in burglaries the following year, when burglaries were slightly up in adjacent comparable counties, but there was no careful examination of the relationship, if any, between the testing and the burglary reduction.

The Multnomah Country Drug Testing and Evaluation Program looked like a testing-and-sanctions program at the outset, but evolved into merely one more tool in the probation officer's toolkit, with neither continuity of testing, predictability of sanctions, nor any real program integrity (in terms of which offenders were subject to it and which not). No firm conclusion could be drawn about its performance.

Project Sentry in Lansing, Michigan, has provided mostly short-term testing for drug-involved offenders on probation or presentencing release (about one-third of them felons) over the past 25 years. In the 29,650 specimens collected in the fifteen months ended December 31, 1996, there were 3096 positive tests (where each drug tested for counts as one test). If each positive test represented a different specimen, the positive rate per specimen

would have been just over 10%; double-counting for multiple drugs detected from a single specimen would bring that figure down somewhat.xxxiv

The Connecticut Division of Parole has a few dozen parolees, identified before their release from prison as having had heroin or cocaine habits, on testing and sanctions, and reports very low rates (well under 5%) of positive tests. A new program will embrace a group of parolees who receive six-month reductions in their prison sentences in return for volunteering for twelve months of testing-and-sanctions coverage after release.

Maryland has the largest program to date, covering some 16,000 probationers. xxxv Reportedly, the rate of "dirty" tests fell from about 40% when the program started up to about 7% four months later. Like the Connecticut program, this cries out for formal evaluation.

The largest controlled trial to date has been the "sanctions track" of the District of Columbia Drug Court, where defendants randomly assigned to twice-a-week testing with immediate sanctions based on a formula took less drugs than either those mandated to treatment or those assigned to routine drug-court processing (with test results reviewed by a judge and considered at sentencing time). Since the DC drug court is not restricted to drug-defined offenses but includes drug-involved defendants facing a variety of charges, this result may have some application to the broader run of felony and misdemeanor offenders, but the fact that the drug court is a voluntary diversion program limits the inferences that can be drawn about the potential of testing-and-sanctions as an element of routine probation.xxxvi

The "Breaking the Cycle" program in Birmingham, Alabama, now operating with federal research funding, is intended to be a

full-scale test combining testing and sanctions with treatment, and an elaborate evaluation is planned.

Experimental Approaches

Two sorts of experiments ought to be done to help define the feasibility and utility of testing-and-sanctions programs: one taking the offender as the unit of analysis, the other taking the jurisdiction. Given the variety of circumstances and possible program implementations, each type of experiment should probably be run in more than one location, and in each case a strong argument can be made for a shakedown period of trial-and-error program development before any formal evaluation starts. Too many promising innovations have run aground on the shoals of single, premature evaluations.

At the individual level, one would want to test the extent to which offenders made subject to a well-implemented testing-and-sanctions program would modify their drug-taking behavior and the effect of those modifications on crime and social functioning. That same test would provide estimates of failure rates and thus of sanctions demand. At its simplest, an experiment would involve the random assignment of offenders to either business-as-usual processing or testing-and-sanctions. A useful way to complicate such an experiment would be to introduce systematic variation within the testing-and-sanctions condition, to help answer some of the program-design questions.

Jurisdiction-level experiments would be, in effect, pilot implementations, with results compared either to "control" jurisdictions or to historical results. Either basis of comparison brings with it substantial methodological issues, but there are two sets of questions that can be answered only at the jurisdictional level:

- How closely can the actual performance of courts, probation, police, corrections, and treatment organizations approach to the theoretical design of a testing-and-sanctions program?
- What effect would such a program have on the local drug markets? Here the quantities of interest would include the level of dealing activity, the extent of market-related disorder and violence, and the numbers of dealing-related arrests, convictions, and sentences.

Recent developments

Proposals for coerced abstinence started to float around in Clinton Administration circles almost from the beginning of the first Clinton term, but they were sidetracked into the more treatment-oriented "Breaking the Cycle" experiment and never emerged into political prominence. But during the run-up to the 1996 elections, coerced abstinence was adopted, first as an Administration proposal and then as a law requiring every state to create a program of testing and sanctions for drug-involved offenders as a condition of receiving federal grants to build prisons. Opponents of the program in the Justice Department managed to write the implementing regulations so as to restrict the requirements, even for planning, to prisoners and parolees, exempting the much larger number of probationers.

Still, every state now has to consider whether and how to make drug testing and sanctions abstinence a part of the criminal-justice process. The current approach to drug-involved offenders makes so little sense from any perspective that something almost has to replace it. Perhaps that something will turn out to be some version of coerced abstinence.

ⁱ I have been cultivating this set of ideas for more than a decade now, and a full list of my intellectual debts would be very long. Jerome Jaffe, John Kaplan, Robert DuPont, Eric Wish, and Jerry Gallegher all made theoretical and/or practical contributions to the offender-testing idea before I started working on it. A very special debt is owed to Will Brownsberger, who has been working hard to keep me honest about what is known and what is not known, what is practically possible and what isn't, about this topic. (See his well-argued commentary, below.)

ii Note that this is much smaller than the estimated number of persons "suffering from" or "in need of treatment for" substance abuse disorders. It excludes (1) those whose primary problem drug is nicotine or alcohol (not illicit); (2) those whose primary drug problem is cannabis (not very expensive, even in heavy use, and only weakly connected to crime by users and violence and disorder among dealers); and those who support their expensive hard-drug habits without committing crimes they get repeatedly arrested for (earning it, getting it as presents or as public income support payments, spending savings or inheritances, or committing crimes but not getting caught: either committing safe crimes or committing risky crimes skilfully).

iii Office of Applied Studies, *Preliminary Estimates from the 1995 National Household Survey on Drug Abuse* (Rockville, MD: Substance Abuse and Mental Health Services Administration, August 1996).

iv William Rhodes, Paul Scheiman, Tanutda Pittayathikhun, Laura Collins, and Vared Tsarfaty, What America's Users Spend on Illegal Drugs, 1988-1993 (Washington, D.C.: Office of National Drug Control Policy, Spring 1995).

^V Office of Justice Programs, 1995 Drug Use Forecasting Annual Report on Adult and Juvenile Arrestees (Washington, D.C.: U.S. Department of Justice, June 1996).

 $^{
m vi}$ Peter Rueter, "Can We Make Prohibition Work Better? Assessing American Drug Policy," University of Maryland, speech delivered in Washington, D.C., February 11, 1997, p. 6.

vii Bureau of the Census, U.S. Department of Commerce, Statistical Abstract of the United States: 1998, table 500.

viii Peter Reuter, "Can We Make Prohibition Work Better? Assessing American Drug Policy," University of Maryland, speech delivered in Washington, D.C., February 11, 1997, p. 2.

ix Bureau of the Census, U.S. Department of Commerce, *Statistical Abstract of the United States: 1998*, p. 207.

Centers for Disease Control and Prevention, *U.S. HIV and AIDS Cases Reported Through June 1996*, vol. 8, no. 1, (Atlanta, GA: U.S. Department of Health and Human Services), table 3.

Xi Peter Rueter, "Can We Make Prohibition Work Better? Assessing American Drug Policy," University of Maryland, speech delivered in Washington, D.C., February 11, 1997, p. 5.

xii William Rhodes, Paul Scheiman, Tanutda Pittayathikhun, Laura Collins, and Vared Tsarfaty, What America's Users Spend on Illegal Drugs, 1988-1993 (Washington, D.C.: Office of National Drug Control Policy, Spring 1995), table 3, p. 15.

Norris O. Johnson, "The Pareto Law," *Rev. Econ. Stat.*, Feb. 1937, p. 20; D.H. Macgregor, "Pareto's Law," *Econ. J.*, Mar. 1936, p. 80.

xiv Office of Applied Studies, *Preliminary Estimates from the 1995 National Household Survey on Drug Abuse* (Rockville, MD: Substance Abuse and Mental Health Services Administration, August 1996).

^{XV} Peter Rueter, "Can We Make Prohibition Work Better? Assessing American Drug Policy," University of Maryland, speech delivered in Washington, D.C., February 11, 1997, p. 3.

XVI William Rhodes, Paul Scheiman, Tanutda Pittayathikhun, Laura Collins, and Vared Tsarfaty, What America's Users Spend on Illegal Drugs, 1988-1993 (Washington, D.C.: Office of National Drug Control Policy, Spring 1995), table 3, p. 15.

xvii William Rhodes, Paul Scheiman, Tanutda Pittayathikhun, Laura Collins, and Vared Tsarfaty, What America's Users Spend on Illegal Drugs, 1988-1993 (Washington, D.C.: Office of National Drug Control Policy, Spring 1995), p. 10.

xviii William Rhodes, "Synthetic Estimation Applied to the Prevalence of Drug Use," *Journal of Drug Issues*, vol. 23 (no. 2, 1993), pp. 297-321.

xix This is not to deny that some cutting-edge programs have shown substantial value in preventing initiation to hard-drug use among high-risk populations. But those are not the programs getting the bulk of current funding. See Jonathan Caulkins, et al, *An Ounce of Prevention, A Pound of Uncertainty: The Cost-Effectiveness of School-Based Drug Prevention Programs*, (Santa Monica, CA: Rand Corporation, 1999).

XX Mark A.R. Kleiman, "Reducing the Prevalence of Cocaine and Heroin Dealing Among Adolescents," forthcoming in *Valpariso University Law Review*.

XXI Carl G. Leukefeld and Frank M. Tims, *Compulsory Treatment of Drug Abuse: Reserach and Clinical Practice* NIDA Research Mongraph 86, National Institute on Drug Abuse. 1994.

XXII Harry Wexler, Douglas Lipton, and K. Forester, "Outcome Evaluation of a Prison Theraputic Community for Substance Abuse Treatment," *Criminal Justice Behavior* vol. 17 (no. 1, March 1990), pp. 71-92.

XXIII Bureau of Justice Statistics, *Sourcebook of Criminal Justice Statistics-1994*, (Department of Justice, 1995), Table 1.71.

XXIV Joan Petersilia and Susan Turner, "Intersive Probation and Parole," in Michael Tonry ed., *Crime and Justice: An Annual Evaluation of Research*, vol. 17 (University of Chicago Press, 1993). Joan Petersilia, "Probation in the United States," in Michael Tonry, ed., *Crime and Justice: A Review of Research*, Vol 17, 1993. Mark A.R. Kleiman, "Community Corrections as the Front Line in Crime Control," *UCLA* Law Review, Vol 46, No 6, August 1999

xxv Mark A.R. Kleiman "Getting Deterrence Right: Applying Tipping Models and Behavioral Economics to the Problems of Crime Control," *Perspectives on Crime and Justice, 1999*, (Washington, DC: National Institute of Justice, forthcoming.)

xxvi For general reviews of drug courts see: Adele Harrell, *Drug Courts and the Role of Graduated Sanctions*, U.S. Department of Justice, Office of Justice Programs, National Institute of Justice (Washington, DC, 1998). The National Association of Drug Court Professionals, Drug Court Standards Committee, *Defining Drug Courts: The Key Components*, U.S. Department of Justice, Office of Justice Programs (Washington, DC,

1997). Drug Court Clearinghouse and Technical Assistance Project at American University, *Looking at A Decade of Drug Courts*, U.S. Department of Justice, Office of Justice Programs (Washington, DC, 1998). XXVII Adele Harrell and Shannon Cavanagh, *Preliminary Results from the Evaluation of the D.C. Superior Drug Intervention Program for Drug Felony Defendants* (Washington, D.C.:The Urban Institute).

xxviii Peter Rueter, "Can We Make Prohibition Work Better? Assessing American Drug Policy," University of Maryland, speech delivered in Washington, D.C., February 11, 1997, p. 2. See also, Bureau of Justice Statistics, *Sourcebook of Criminal Justice Statistics-1994*, (Department of Justice, 1995), Tables 6.11 and 6.24.

XXIX Bureau of Justice Statistics, *Sourcebook of Criminal Justice Statistics-1994*, (Department of Justice, 1995), Table 1.3.

XXX Office of Justice Programs, 1995 Drug Use Forecasting Annual Report on Adult and Juvenile Arrestees (Washington, D.C.: U.S. Department of Justice, June 1996).

xxxi Jonathan P. Caulkins, "Estimating the Elasticity of Demand for Cocaine and Heroin," (under review), Carnegie Mellon University.

XXXII Gene M. Heyman, "Resolving Contradictions of Addiction," *Behavioral and Brain Sciences*, vol. 19 (1995). "Addiction, Rationality, Behavior and Measures: Some Comments on the Problems of Integrating Econometric and Behavioral Economic Research," in Frank J. Chaloupka, Warren K. Bickel, Michael Grossman, and Henry Saffer, eds., *The Economic Analysis of Substance Use and Abuse: An Integration of Econometric and Behavioral Economic Research*, National Bureau of Economic Research. Also in Chaloupka et al, Stephen Higgins, "Applying Behavioral Economics to the Challenge of Reducing Cocaine Abuse," and Nancy M. Petry and Warren K. Bickel, "A Behavioral Economic Analysis of Polydrug Abuse in Heroin Addicts."

xxxiii S.T. Higgins, A.J. Budney, W.K. Bickel, F.E. Foerg, R. Donham, and G.J. Badger, "Incentives Improve Outcome in Outpatient Behavioral Treatment of Cocaine Dependence," *Archives of General Psychiatry*, vol. 51 (1994), pp. 568-576.

xxxiv Gallegher, J.J., "Project Sentry Final Program Report," (Lansing, MI:Project Sentry, 1996). See also, "Project Sentry Quarterly Program Report," (Lansing, MI:Project Sentry, 1997).

XXXV See Faye S. Taxman, *Task Force on Drug-Addicted Offenders*, (Office of the Lieutenant Governor of Maryland, 1997).

XXXVI Adele Harrell and Shannon Cavanagh, *Preliminary Results from the Evaluation of the D.C. Superior Drug Intervention Program for Drug Felony Defendants* (Washington, D.C.:The Urban Institute).