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**Managing Drug Involved Probationers with Swift and Certain Sanctions:
Evaluating Hawaii's HOPE**

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Abstract

The rates of successful completion of probation and parole have remained stable—at levels that few consider satisfactory (roughly one-third for parole, roughly three-fifths for felony probation)—in spite of many local, state, and federal initiatives to improve offender outcomes, including treatment-diversion programs. The robustness of these failure rates suggests a need for an offender-management and service-delivery approach that goes beyond the status quo—particularly for drug-involved offenders.

This report describes an evaluation of a community supervision strategy called HOPE (Hawaii Opportunity Probation with Enforcement) for substance-abusing probationers. HOPE began as a pilot program in October 2004 and has expanded to more than 1500 participants, about one out of six felony probationers on Oahu.

HOPE relies on a mandate to abstain from illicit drugs, backed by swift and certain sanctions and preceded by a clear and direct warning. Unlike most diversion programs and drug courts, it does not attempt to impose drug treatment on every participant. Under HOPE, probationers are sentenced to drug treatment only if they continue to test positive for drug use, or if they request a treatment referral. HOPE is distinct from drug courts in economizing on treatment and court resources (probationers appear before a judge only when a violation is detected). HOPE's stated goals are reductions in drug use, new crimes, and incarceration.

Those goals have been achieved, both in the initial pilot program among high-risk probationers and in the randomized controlled trial among general-population probationers where probationers assigned to HOPE were compared to probationers assigned to probation-as-usual. Probationers assigned to HOPE had large reductions in positive drug tests and missed appointments, and were significantly less likely to be arrested during follow-up at 3 months, 6 months, and 12 months. They averaged approximately the same number of days in jail for probation violations, serving more but shorter terms. They spent about one-third as many days in prison on revocations or new convictions.

Our process evaluation demonstrates that HOPE was implemented largely as intended. Sanctions were delivered swiftly and with certainty; there was variation across judges in the sanction “dose,” (defined as the length of the jail sentence) but that variation diminished after the judges learned that subsequent violation rates proved dose independent. The original inconsistency among judges occasioned some discontent among probation officers and probationers, but overall they, and defense lawyers, were enthusiastic about the program. Prosecutors and court employees were less pleased, with court staff reporting increased workloads.

Introduction

A frequent criticism of probation supervision is that probation officers lack the capacity to detect violations of the rules as well as the ability to ensure a quick and consistent response to the violations detected. High rates of noncompliance with probation conditions undermine the efficacy of probation as a sanction and thereby its standing as a meaningful alternative to incarceration. For example, despite rules requiring abstinence, all too often probation practices effectively allow hard-drug-abusing criminals to continue using drugs with impunity, which in most cases means continuing to commit other crimes. Drug testing of probationers tends to be too infrequent, test results come back too slowly, and sanctions are too rare and too delayed. When sanctions are imposed, they tend to be too severe (months, or occasionally years, in prison), which defeats the rationale for probation as a less-costly (pecuniary and non-pecuniary) penalty than incarceration.

Preliminary data from Hawaii's Office of the Attorney General regarding **Hawaii's Opportunity Probation with Enforcement (HOPE)** program gave us reason to be optimistic that re-engineering the probation-enforcement process could yield good compliance with all types of probation conditions, including drug abstinence, among even strongly drug-involved methamphetamine users. It appeared that, if the enthusiastic claims regarding HOPE outcomes could stand up to close examination, HOPE might represent a transformation in probation supervision: drastic reductions in rates of noncompliance achieved primarily through regular random drug testing combined with credible threats of low-intensity sanctions rather than revocations.

The logic behind HOPE is intuitively appealing. The system takes into account what we know about criminals: Crime attracts reckless and impulsive people, for whom deferred and low-probability threats of severe punishment are less effective than immediate and high-probability

threats of mild punishment. Delivering relatively modest sanctions swiftly and consistently is thus likely to be both more effective and less cruel than sporadically lowering the boom.

In this report we provide evidence of the outcomes from an evaluation of HOPE in the Integrated Community Sanctions Unit (ICS), a specialized unit dealing primarily with high-risk probationers. In addition to the ICS evaluation, NIJ provided assistance to support the design of a randomized controlled trial (RCT) to evaluate HOPE in the Adult Client Services Department, a general probation department. This RCT (funded by the Smith Richardson Foundation) was launched in October 2007 and a summary of the findings is also included in this report (see Appendix 3), along with a process evaluation of the later expansion of the program from a single judge's high-risk caseload to probationers at all risk levels from all of Oahu's felony courtrooms.

Background

The Probation Crisis

Enforcing conditions of probation is an important challenge for the criminal-justice system. Probation supervision is intended to provide alternatives to incarceration: In lieu of a prison term, an offender promises to comply with a set of conditions, and an officer is assigned to monitor enforcement, with authority to report violations to the court for possible sanctions. This avoids the cost of incarceration (and the damage it can inflict on the offender's chances of successfully integrating into law-abiding society) and promises rehabilitative benefits from requiring the offender to learn to keep his or her behavior within legal limits in a community setting. Accordingly, probation is widely used. Probationers accounted for more than half the total growth in the correctional population since 1990 (U.S. Department of Justice, 2006). Overall, the correctional population increased by nearly 2.5 million, or 57 percent, from 1990 to 2005 (U.S. Department of Justice, 2006). Failure rates on probation are high and have remained relatively stable (at around 40 percent) (U.S. Department of Justice, 2006).

Misdemeanants, particularly first-time offenders, are especially likely to be sentenced to probation, but even among felons a quarter of males and two-fifths of females are put on probation (U.S. Department of Justice, 2002). Diversion programs, where offenders are referred to drug treatment in lieu of incarceration, such as TASC and California's Substance Abuse and Crime Prevention Act (SACPA) [Proposition 36] also rely on probation supervision as their enforcement mechanism.

Yet high caseloads, a sanctions process that puts large demands on the time of probation officers and judges, the scarcity of jail and prison beds, and the low priority many police agencies give to the service of bench warrants for probation absconders makes it difficult to actually enforce the terms of the probation bargain, and rates of noncompliance are accordingly high. In California only one in four offenders who took the treatment-instead-of-prison bargain offered by Proposition 36 actually completed treatment, a typical result for drug-diversion programs (Urada et al., 2008). As a result, it is common for offenders and officials alike to treat a probation sentence as representing something less than actual punishment. That limits the value of probation as a sanction, leading to the possible incarceration of offenders who might otherwise be well-managed under community supervision.

The HOPE Program and Its Implications

In 2004, Judge Steven Alm of Hawaii's First Circuit created an experimental probation-modification program—**H**awaii's **O**pportunity **P**robation with **E**nforcement (HOPE)—starting with three dozen offenders. Preliminary data on HOPE, released by the research unit of the Office of Hawaii's Attorney General, showed impressive improvements in probationer compliance. With support from the Hawaii legislature, the program was expanded. By early 2009, more than 1,500 probationers had been placed on HOPE.¹

¹ HOPE probationers include drug-involved probationers, domestic-violence probationers, and sex offenders. This study is limited to drug-involved probationers assigned to HOPE who are not being supervised for domestic violence or sex offenses.

The HOPE program has a strong theoretical basis. That swiftness and certainty outperform severity in the management of offending is a concept that dates back to Beccaria (1764). The design and implementation of HOPE sends a consistent message to probationers about personal responsibility and accountability and includes a consistently applied and timely mechanism for dealing with probationer noncompliance. The basic tenets of the HOPE program (the use of clearly articulated sanctions applied in a manner that is certain, swift, consistent, and parsimonious) are well supported by prior research. A clearly defined behavioral contract has been shown to enhance perceptions of the certainty of punishment, which deters future deviance (Grasmack and Bryjak, 1980; Paternoster, 1989; Nichols and Ross, 1990; Taxman, 1999). Under HOPE, probationers are given clear instructions on the content and implications of the Motion to Modify their term of probation and the sentencing judge clearly explains the rules of the probation program. A swift response to infractions improves the perception that the sanction is fair (Rhine, 1993). The immediacy, or celerity, of a sanction is also vital for shaping behavior (Farabee, 2005).

As James Q. Wilson has noted, when we discipline our children, we do not say, “Because [you’ve misbehaved], you have a 50-50 chance nine months from now of being grounded” (Wilson, 1997). Under HOPE, offenders who violate the terms of probation are immediately arrested and are brought before a judge. The *consistent* application of a behavioral contract improves compliance (Paternoster et al., 1997). Under HOPE *every* positive drug test and every missed probation appointment is met with a sanction. *Parsimonious* use of punishment enhances the legitimacy of the sanction package and reduces the potential negative impacts of tougher sentences, such as long prison stays (Tonry, 1996). Under HOPE, offenders are sentenced to very-brief jail stays (typically only a few days in jail) for each violation of the terms of their probation, but the program is progressive in that continued violations result in lengthier sentences.

The drug-testing-and-sanctions component of HOPE has been proposed before (Wish, DuPont, Kaplan, and Kleiman 1997), and has been implemented in various places, with degrees of success seemingly correlated with fidelity of implementation (Kleiman, 2001; Harrell et al., 2001; Harrell and Cavanagh, 1999). The voluminous drug-court literature (reviewed, e.g., in Belenko, 2001) reflects the value of active judicial supervision in dealing with drug-involved offenders. But HOPE is distinct from drug courts in economizing on treatment and court resources. HOPE does not mandate formal treatment for every probationer, and does not require regularly scheduled meetings with a judge; probationers appear before a judge only when they have violated a rule. Contingency management using small-but-consistent rewards has shown promise as an adjunct to drug treatment (Higgins et al., 1991, 1993, 1994) and as a standalone therapy (Shoptaw et al. 2006). This literature underscores the potential efficacy of incentive-based programs. By contrast, the literature on routine probation supervision, even with enhanced resources and reduced caseloads, paints a uniformly discouraging picture (Petersilia 1995), and the need for drastic reforms is widely recognized (Horn 2001, Reinventing Probation Council 1999).

Two open questions, not only in the research literature but among practitioners (Kelly and Stemen, 2005), were the responsiveness of probationers to mild but consistent sanctions and how the probation system could be configured to deliver them. These are the aspects of HOPE that we found most interesting and why we believed a rigorous evaluation of HOPE had the potential to inform the thinking of local, state, and federal policymakers toward probation.

The objective of this evaluation was to closely re-examine the claimed results of the HOPE pilot program and generate an outcome assessment of that program and a process assessment of the expanded HOPE program. We also document the successes and difficulties of the innovation effort leading to HOPE's creation, implementation, and expansion.

Methods

STUDY SUBJECTS

The settings and locations where the data were collected

All probationers included in the pilot program were men and women over eighteen years of age under community supervision by the Integrated Community Sanctions unit in Honolulu. The probation officers had an average total caseload of 87 clients and an average of 4.3 years of experience working as a probation officer.² All probation officers had undergone training in Cognitive Behavioral Therapy (CBT) and motivational interviewing (irrespective of whether they managed HOPE probationers), and were given additional training covering the logistics and new paperwork required for managing a HOPE caseload.

Inclusion criteria for subjects

In October 2004, probation officers at the Integrated Community Sanctions unit in Honolulu developed criteria to identify the probationers in their caseload who were at highest risk of failing probation through continued drug use, missed appointments, or reoffending. The criteria included LSI scores and prior behavior on probation. When the Attorney General's Office selected study groups, the intent was for the HOPE group to be comparable to the comparison group (in terms of risk factors). Our analysis of baseline characteristics of the HOPE and comparison-group subjects shows that the probationers who were assigned to HOPE had higher baseline risk factors (recent histories of missed appointments and positive drug tests). Since 2004, as part of the HOPE expansion, more probationers were added to HOPE.

Description of subjects

Table 1 provides a description of the study groups. Offenders in HOPE were on average slightly younger than comparison offenders. The average age of probationers in HOPE is 36.8 years

² Probation officer caseloads and workloads were estimated from the Integrated Community Sanctions Probation Officer Survey, collected as part of this evaluation (n = 20).

compared with 39.8 for comparison probationers (the difference is statistically significant; $p = 0.02$). HOPE had more males (82 percent) than the comparison group (78 percent) but the difference is not statistically significant ($p = 0.38$). There were slight differences across race/ethnicity. A larger percentage of HOPE probationers were black and a smaller percentage was Caucasian than in the comparison group, but these differences were not statistically significant.

Table 1. Description of Study Groups

	HOPE	Comparison
<i>Demographics</i>		
Age	Average = 36.8 (SD= 11.13)	Average = 39.8 (SD = 11.7)
Sex		
Male	82%	78%
Female	18%	22%
Race/ethnicity		
Black	5%	1%
Caucasian	18%	23%
Asian/Polynesian	66%	62%
Hispanic	1%	3%
Portuguese	1%	0%
Puerto Rican	1%	0%
Other/Unknown	8%	10%
N	940	77

Note: Demographics data are from PROBER

STUDY GROUP EXPERIENCE

In October 2004, the probationers selected for HOPE were contacted by their probation officers and given a date to appear in open court for their warning hearing. Those assigned to the comparison group continued on probation-as-usual.

How HOPE works

The HOPE intervention starts with a formal warning, delivered by the judge in open court, that any violation of probation conditions will not be tolerated: Each violation will result in an immediate, brief jail stay (see Appendix for court transcripts of HOPE Warning Hearings). Each probationer is assigned a color code at the warning hearing. The probationer is required to call the HOPE hotline each morning.³ The probationer must appear at the probation office before 2 pm that day for a drug test if his or her color has been selected. During their first two months in HOPE, probationers are randomly tested at least once a week (good behavior through compliance and negative drug tests is rewarded with an assignment of a new color associated with less-regular testing). A failure to appear for testing leads to the immediate issuance of a bench warrant, which the Honolulu Police Department serves. Probationers who test positive for drug use or fail to appear for probation appointments are brought before the judge. When a violation is detected, the probation officer completes a “Motion to Modify Probation” form and faxes this form to the judge (a Motion to Modify is much simpler than a Motion to Revoke Probation, see description in the process evaluation). The hearing on the Motion to Modify is held promptly (most are held within 72 hours), with the probationer confined in the interim. A probationer found to have violated the terms of probation is immediately sentenced to a short jail stay (typically several days servable on the weekend if employed, but increasing with continued non-compliance), with credit given for time served. The probationer resumes participation in HOPE and reports to his/her probation officer on the day of release. Unlike a probation revocation, a modification order does not sever the probation relationship. A probationer may request a treatment referral at any time; probationers with multiple violations are mandated to intensive substance-abuse-treatment services (typically residential care). The court continues to supervise the probationer throughout the treatment experience, and consistently sanctions noncompliance (positive drug tests and no-shows for treatment or probation appointments).

Probation as usual

³ When HOPE started in October 2004, probationers were tested during their regular probation visits. The HOPE hotline, used since March 2005, was an innovation recommended by a probation officer.

Subjects assigned to the comparison group continued on probation as usual. Probation as usual entails supervision by a probation officer who has received training in CBT and MI. Under probation as usual there is no random drug testing. Probationers are required to appear for scheduled appointments with their probation officers, typically once per month. Drug tests are given only at those scheduled appointments. If the probationer violates the conditions of probation, the probation officer has two choices: “work with” the probationer and encourage the probationer to comply with the conditions of probation, or deem the offender “not amenable to probation” and recommend initiating a motion to revoke probation.

STUDY OBJECTIVES

Specific objectives and hypotheses

The study began with six specific aims (**AIM 1-6**) and six related hypotheses (**H1-6**):

AIM 1: Test the efficacy of HOPE relative to Probation-as-Usual (PAU) on the probation-compliance outcome of drug use.

H1: HOPE, relative to PAU, will produce significant reductions in positive drug tests (test at $\alpha = 0.05$, one-sided).

AIM 2: Test the efficacy of HOPE relative to Probation-as-Usual (PAU) on the probation-compliance outcome of attending scheduled appointments.

H2: HOPE, relative to PAU, will produce significant reductions in missed appointments (test at $\alpha = 0.05$, one-sided).

AIM 3: Test the results of HOPE relative to Probation-as-Usual (PAU) on jail-days served. We had no “a priori” rationale for the direction of the difference; HOPE would have been expected to produce more-but-shorter jail stays, leaving the sign of the on-balance effect indeterminate.

H3: HOPE, relative to PAU, will produce a significant difference in jail days served (test at $\alpha = 0.05$, two-sided).

AIM 4: Test the efficacy of HOPE relative to Probation-as-Usual (PAU) on prison sentences.

H4: HOPE, relative to PAU, will produce significant reductions in prison-days sentenced (test at $\alpha = 0.05$, one-sided).

AIM 5: Test the efficacy of HOPE relative to Probation-as-Usual (PAU) on recidivism.

H5: HOPE, relative to PAU, will produce significant reductions in probation recidivism (test at $\alpha = 0.05$, one-sided).

AIM 6: Test the efficacy of HOPE relative to Probation-as-Usual (PAU) on revocations.

H5: HOPE, relative to PAU, will produce significant reductions in probation revocations (test at $\alpha = 0.05$, one-sided).

In addition to testing these formal hypotheses, we also aimed to document the successes and difficulties of implementing HOPE, through a process evaluation.

THE STUDY OUTCOMES

The effectiveness of HOPE probation is evaluated by comparing HOPE probationers with comparison probationers on two primary and four secondary outcome measures.

Primary Outcomes

- (i) No-shows for probation appointments (average %, by study group)
- (ii) Positive urine tests for illicit-substance use (average %, by study group)

Secondary Outcomes

- (iii) Jail-days served (average days, by study group)
- (iv) Prison-days sentenced (average days, by study group)
- (v) Recidivism (% , new arrests by study group)
- (vi) Revocation rates (% , by study group)

DATA SOURCES

We rely on administrative-data sources to measure primary and secondary outcomes: PROBER and the Criminal Justice Information System (CJIS). PROBER is the case-management system used by the probation offices in Hawaii (and in many other probation offices around the country) and includes detailed records on probationer-supervision episodes, drug-test results, offenses, motions, and many other probationer interactions with the criminal-justice system. CJIS includes comprehensive criminal-record data. For the process evaluation of the HOPE expansion, we collected our own survey data with survey instruments designed for each group of key stakeholders. The groups surveyed were: probationers (n = 211); probation officers in the Integrated Community Sanctions Unit (n = 20); public defenders (n = 11); prosecutors (n = 12); judges (n = 7), and court staff (n = 11). These surveys were collected between November 2008 and April 2009.

Measures taken to enhance quality of measurements

To ensure accuracy of data collection from the administrative data sets, a data supervisor from the research team was assigned to oversee quality control. Two data-consistency checks were implemented: 1) A random sample of probationer hard-copy files was compared with PROBER to ensure that PROBER records were comprehensive, and 2) the records of captured data were double checked (by a separate coder also from the research team) against PROBER. Very few discrepancies were detected, but, when found, were corrected.

Results

Here we describe the results of our primary and secondary outcome analyses. Outcome differences were first tested using t-test (or chi-square tests for binary-outcome variables), and then estimated using regressions that adjust for differences in probationer demographics and baseline measures for the variable of interest.

Primary Outcomes

Drug Testing

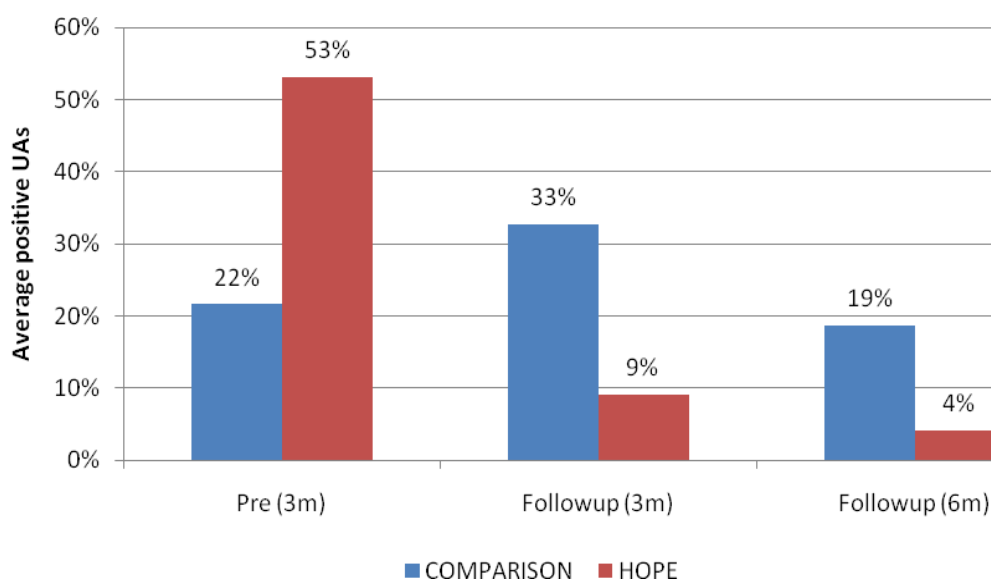
Drug tests were conducted onsite at the probation office in Honolulu. Contested drug tests were sent for laboratory confirmation (the probationer was released pending confirmation). Drug-testing protocols were quite different for HOPE probationers compared with those assigned to the comparison group. Comparison-group probationers were not randomly tested. Testing was conducted on dates scheduled in advance, during routine office visits. HOPE probationers were subject to routine testing, but were also tested randomly (six times per month during their first two months and less frequently thereafter based on performance). Although the study groups were selected to be comparable (drawn from similar cases from the caseloads of other first circuit courts), baseline data show higher-risk (based on recent history of drug use and missed appointments) probationers were assigned to HOPE; Figure 1 shows the differences in drug test outcomes for HOPE and comparison probationers at baseline (average positive drug tests during the three months before the study start date).

In drug tests conducted during the three months prior to their assignment to HOPE, the average HOPE offender tested positive over half the time (53 percent of their baseline drug tests were positive), compared with 22 percent for comparison offenders. We anticipated high rates of baseline positives, as positive drug test rates were among the study selection criteria.

HOPE caused a reversal: HOPE probationers had higher positive drug test rates than the comparison group before being placed on the program, but much lower rates thereafter.

During the first three months following baseline, the probationers assigned to HOPE had a striking improvement in their drug-testing outcomes, with their rate of positive drug tests falling by 83 percent (a decrease from 53 percent to 9 percent).

Figure 1. Average number of positive UAs, by period.



Note: Data are from PROBER. For comparison probationers, data reflect urinalysis results for regularly scheduled UAs. For HOPE probationers UAs include regularly scheduled tests, and random testing. Pre (3m) refers to the average number of positive UAs in the three months before the study start date (baseline). Follow-up (3m) refers to the average number of positive UAs in the three-month period following baseline and Follow-up (6m) refers to the average number of positive UAs in the six-month period following baseline.

Probationers assigned to the comparison group showed no such improvement during the first three months following baseline; instead their positive-test rate increased by half, from 22 percent to 33 percent. When we estimate regression adjusted results controlling for probationer demographics (age, gender, and race/ethnicity) and probationer baseline drug tests, the estimated difference attributable to HOPE during the first three program months is 28 percentage points ($p=0.000$). See Appendix for results.⁴

⁴ We estimated HOPE effects for each of the outcomes using propensity scores, as the offenders in the ICS HOPE group were higher-risk offenders at baseline. The propensity-score method led to even larger effect sizes favoring

Extending the observation period to six months shows an improvement over baseline for both groups. The rate of positive drug testing by fell 93 percent for HOPE probationers (from 53 percent to 4 percent), and 14 percent for comparison probationers (from 22 percent to 19 percent). The difference between HOPE and comparison-probationer urinalysis results was statistically significant both at three months and six months ($p=0.000$). Regression results estimate the effect of HOPE placement at 15 percentage points ($p=0.000$). See Appendix for results.

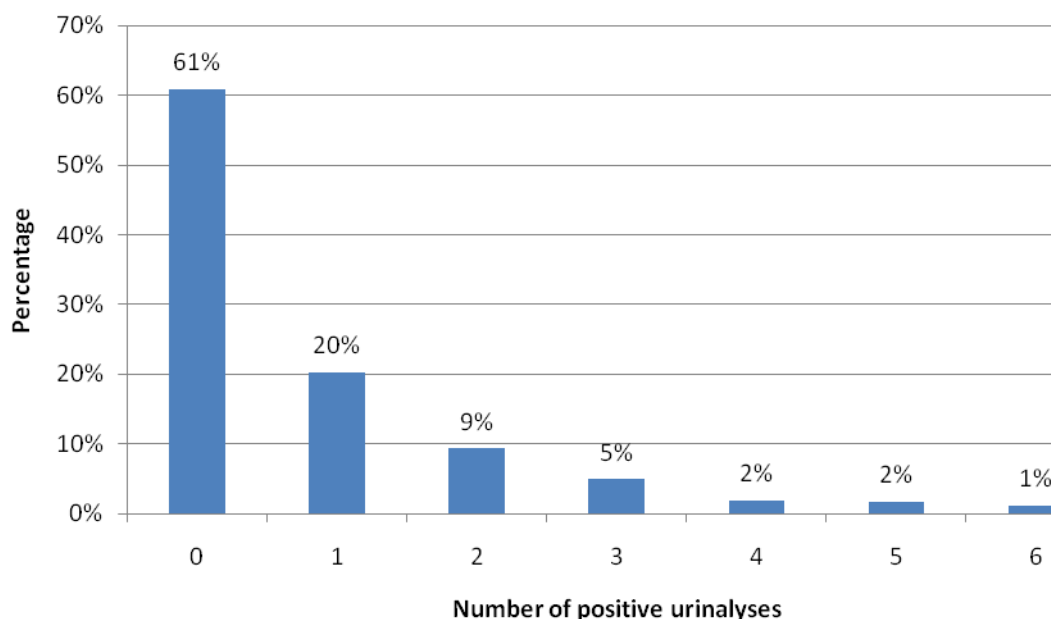
Interviews conducted with probation officers provide a possible explanation for the reversal in trajectory among the comparison group. Probation officers mentioned that they observed some improvement in the behavior of their non-HOPE caseloads once HOPE was implemented. They attribute this to a “spillover effect” of HOPE. As HOPE probationers and comparison probationers would visit their probation officers for regularly scheduled appointments at the same office, they would sit together in the waiting room. Comparison probationers would witness the immediate arrest of HOPE probationers who tested “dirty.” According to probation officers, some comparison-group probationers improved their behavior because they wanted to avoid being transferred to HOPE, and others improved because they did not realize that HOPE was a distinct program, and were afraid that they too might be subject to similar treatment.

Figure 2 is a histogram of positive drug test counts. Only 40 percent of HOPE probationers had any post-warning positive drug test within the first year; of those who had one such test, only half (20 percent of the total) had a second; of those with two positive tests, only half (10 percent of the total) had a third or subsequent positive test. Thus HOPE identified a small minority of probationers who did not desist from drug use under sanctions pressure alone. This “behavioral

HOPE. Conservatively, we have chosen to report results with regression adjustments, without using propensity scores, to avoid any potential criticism that the HOPE effect is an artifact of research design.

triage” function—identifying those in need of treatment by documenting their actual conduct rather than relying on assessment tools—is an independent benefit of HOPE processing.⁵

Figure 2. HOPE Probationers - Number of Positive Urinalyses in 12-months



Note: Data source is PROBER.

Table 2 shows drugs which the probationers admitted to using and drugs for which probationers tested positive. Of those probationers who admitted to substance use that violated the terms of their probation, 15 percent admitted to using alcohol. We show only illicit substance use in Table 2, as alcohol is not an illegal substance and is not included in routine tests. The dominant drug of choice was methamphetamine (69 percent for those who admitted to drug use, and 62 percent for those who tested positive during a drug test).

Table 2. Drug of Choice

	Admitted to drug use	Positive urinalysis
Methamphetamine	69%	62%
Cocaine	11%	13%
Opiates	3%	5%

⁵ We cannot compare outcomes of HOPE probationers to the comparison group in terms of absolute number of positive urinalyses, as the rates of testing were very different across the two groups. HOPE probationers had frequent random testing, while comparison probationers had infrequent scheduled testing.

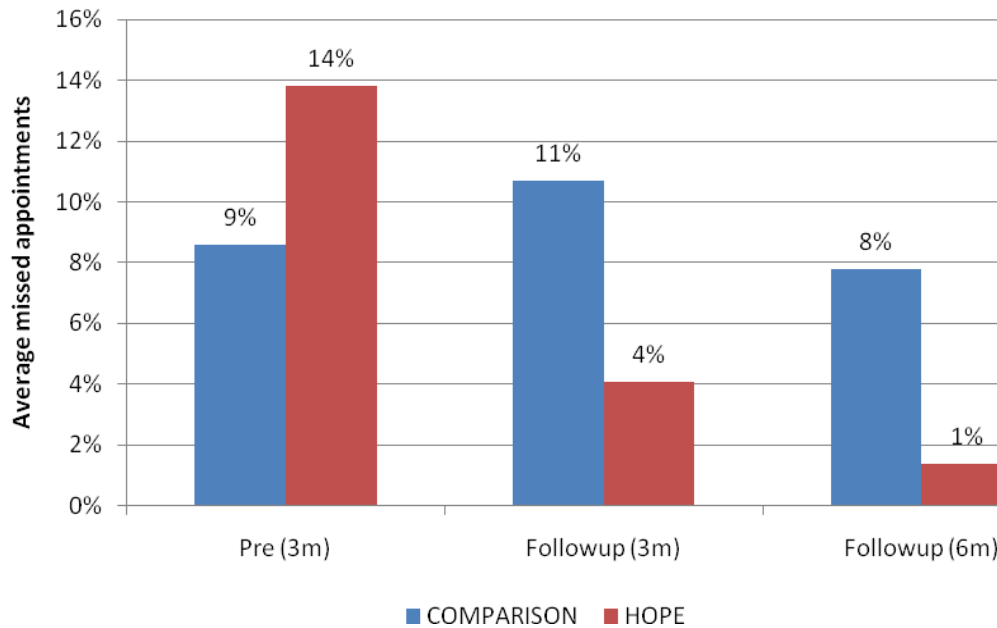
Cannabis	14%	20%
Other	3%	0%

Notes: Data are from PROBER. We show the distributions for illicit drug use and include probationers reporting more than one drug. Of those who admitted to drug use, 15 percent admitted to using alcohol in violation of the terms of their probation.

Missed scheduled probation appointments

Missed appointments are described in Figure 3. For probation-officer visits scheduled during the three months prior to their assignment to HOPE, HOPE offenders missed 14 percent, compared with 9 percent for comparison offenders. During the first three months following baseline, the probationers assigned to HOPE had a dramatic improvement in their appointment attendance. Missed appointments fell by 71 percent (from 14 percent to 4 percent). During the first three months following baseline, the probationers assigned to the comparison group had a 22 percent *increase* in their missed appointments (from 9 percent to 11 percent). HOPE and comparison-probationer missed-appointment results were statistically significant at three months and six months ($p = 0.000$). Controlling for probationer demographics (age, gender, and race/ethnicity) and probationer baseline missed appointments, the estimated difference in missed- appointment rates over the first three months attributable to HOPE placement is seven percentage points. ($p = 0.000$).

Figure 3. Average number of missed appointments, by period.



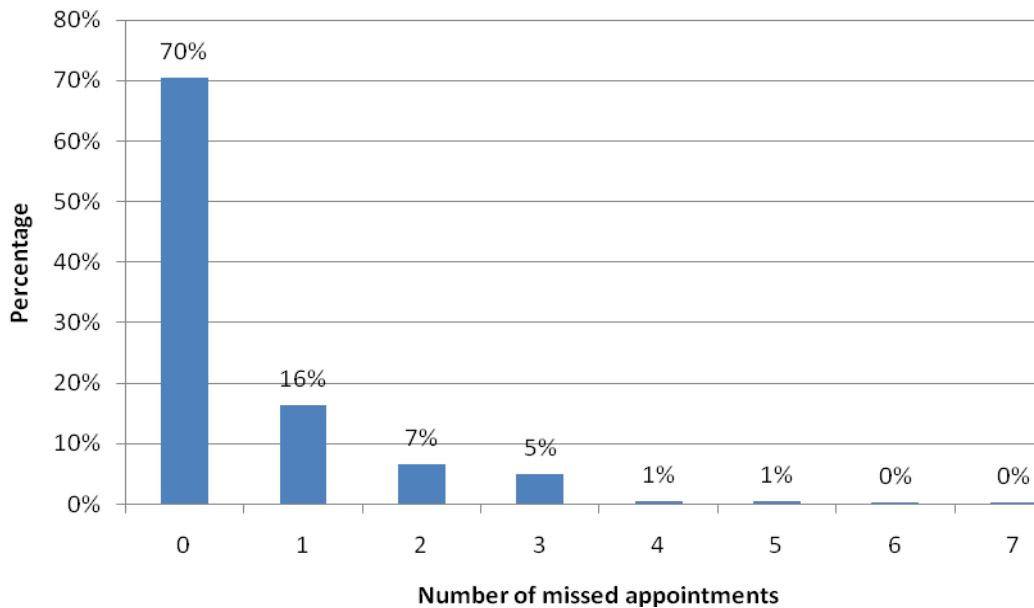
Note: Data are from PROBER. Pre (3m) refers to the average number of missed appointments in the three months before the study start date (baseline). Follow-up (3m) refers to the average number of missed appointments in the three-month period following baseline and Follow-up (6m) refers to the average number of missed appointments in the six-month period following baseline.

Missed appointments during the first six months following baseline showed no significant improvement over baseline for the comparison group (9 percent vs. 8 percent of all appointments) and a dramatic and significant improvement for the HOPE group (from 14 percent to 1 percent). When we estimate regression-adjusted results controlling for probationer demographics (age, gender, and race/ethnicity) and probationer baseline missed appointments, the estimated percentage difference attributable to HOPE placement during six-month follow-up remains unchanged at 6 percentage points. ($p = 0.000$). See Appendix for results.

Figure 4 shows the distribution of missed appointments for HOPE probationers during the 12-month period following their assignment to HOPE. When faced with swift-and-certain sanctions, most probationers are highly compliant with scheduled appointments. Seven in ten never miss an appointment. Of the thirty percent who miss a first appointment, about half (14

percent of the total) miss a second, and of that 14 percent half again (seven percent of the total) miss a third. Of that small group, only a third (two percent of the total) miss four or more appointments.

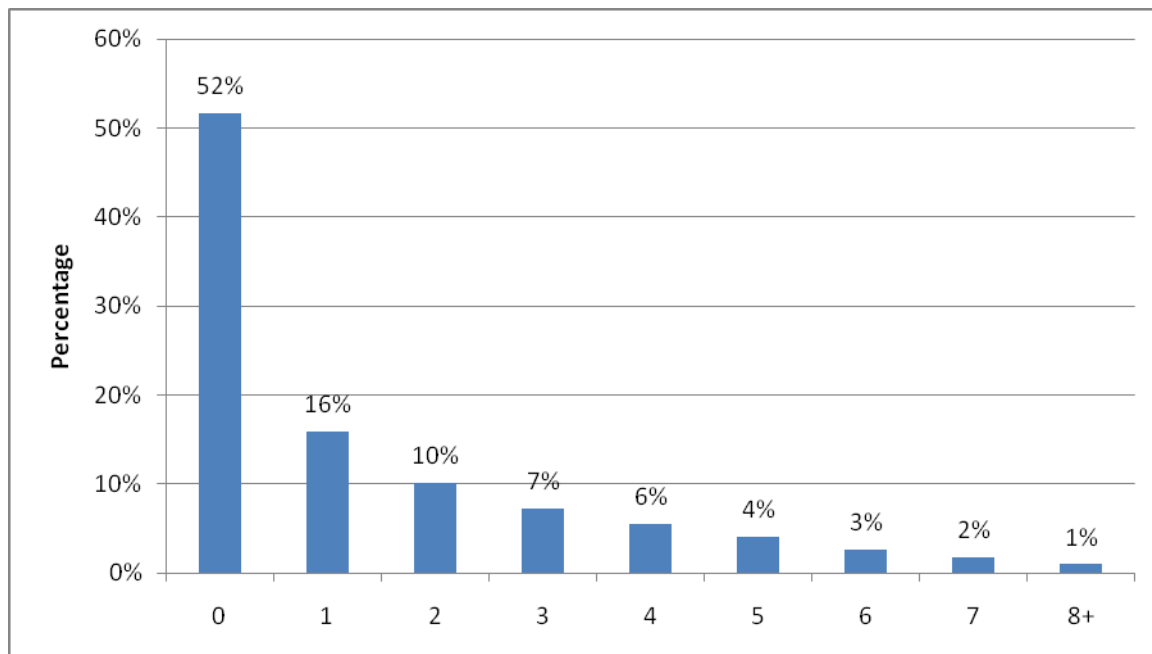
Figure 4. HOPE Probationers - Number of Missed Appointments in 12-months



Note: data source is PROBER.

Figure 5 combines the triage results of missed appointments and positive urinalyses which led us to observe its value as “behavioral triage.” Over fifty percent of HOPE probationers never missed an appointment and never had a positive drug test during the 12 months following their assignment to HOPE. A minority (22 percent) had three or more violations (measured as either positive drug tests or missed appointments).

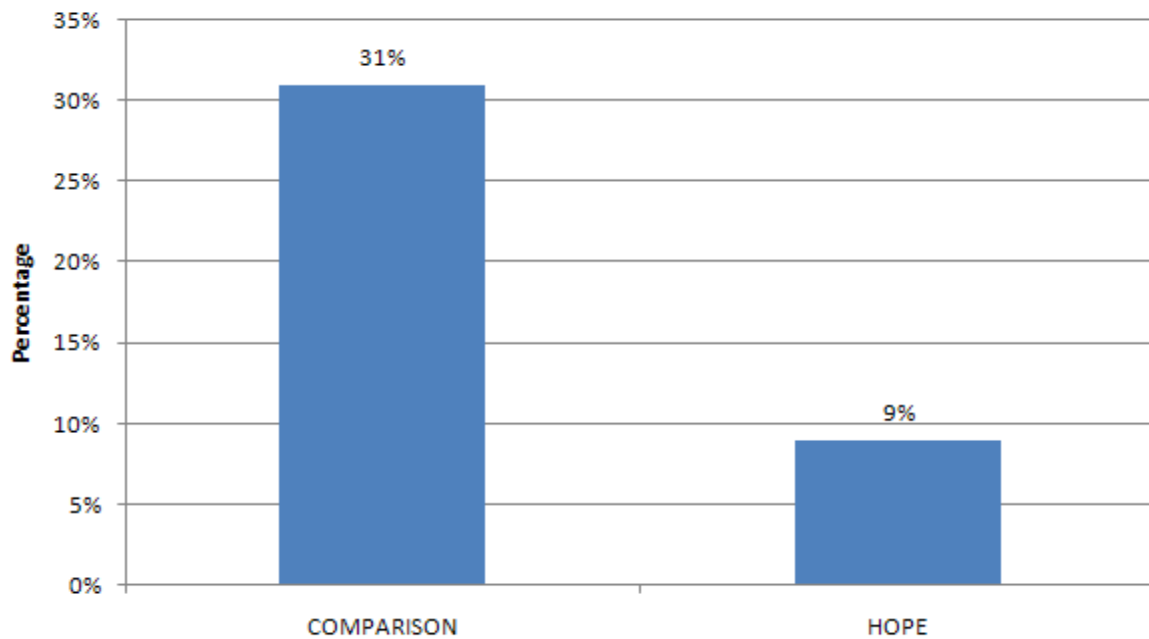
Figure 5. HOPE Probationers – Combined Violations (Number of Missed Appointments and/or positive drug tests) in 12-months



Note: data source is PROBER. The final category shows the percentage of HOPE probationers with 8 or more violations. One probationer (with the largest combined number of violations) had 12 violations.

Revocations

As HOPE targets and sanctions noncompliance, we expected that probationers assigned to HOPE would have a lower probation-revocation rate than those supervised under probation as usual. Probationers assigned to the comparison group were three times more likely to be revoked than HOPE probationers (31 percent vs. 9 percent), who were less compliant at baseline.

Figure 5. Probation revocation: HOPE versus Comparison Probationers

Note: data source is the Hawaii Office of the Attorney General, Research Division.

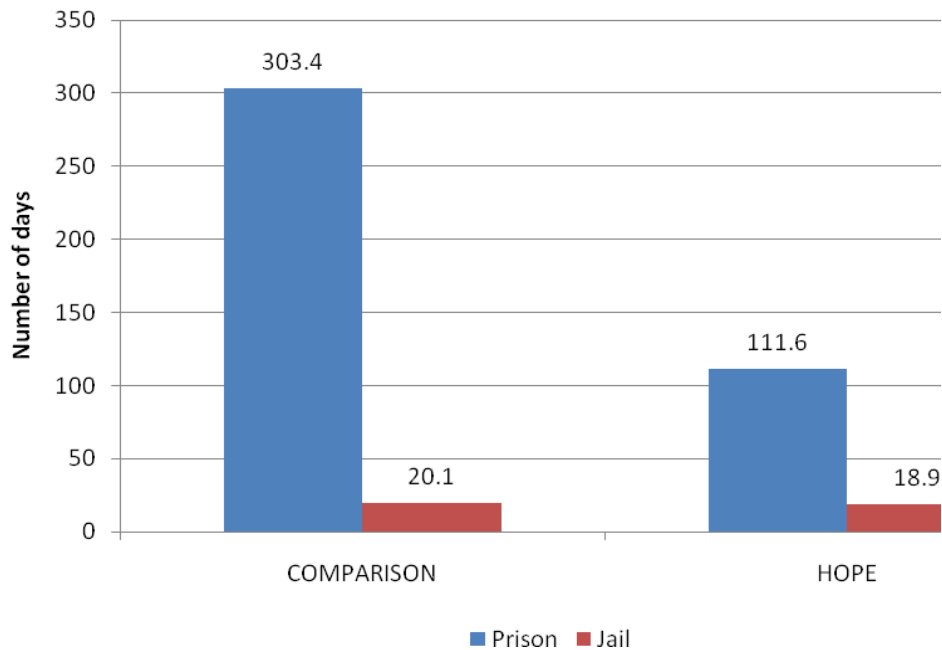
Incarceration

Incarceration days for HOPE and comparison probationers are shown in Figure 6. HOPE probationers spent no more time in jail and much less time in prison. Jail days reported here is the average number of jail days actually served, whereas prison-days is the average number of days sentenced to prison.

As HOPE provides a consistent jail sanction for noncompliance, we might have expected an increase in jail-days served for HOPE probationers. Due to improved compliance when faced with the threat of a jail sanction, overall jail-days served did not increase under HOPE. HOPE probationers averaged 19 jail days compared with 20 days for comparison probationers (this difference is not statistically significant, $p = 0.423$). Thus HOPE is jail utilization neutral. A larger percentage of HOPE probationers experienced a jail sanction, but the average sanction length was shorter (discussed later). We find substantial reductions in prison sentences issued. HOPE probationers are significantly less likely to be revoked from probation, and were therefore

significantly less likely to face a lengthy prison term. We found large significant differences in the average number of prison-days sentenced (an average of 303 days for comparison probationers compared with 112 days for HOPE probationers; $p=0.001$).⁶

Figure 6. Incarceration: HOPE versus Comparison Probationers



Note: Jail-days is the average number of jail days actually served. Prison-days is the average number of days sentenced to prison. The prison-sentence difference is statistically significant ($p = 0.001$), but the difference in jail days served is not ($p = 0.423$).

⁶ Note jail-days here are actual days served. Prison-days are the average number of days to which probationers are sentenced. Due to early release, the actual number of prison days served would be less than the number of days sentenced. If we assume that actual prison-days are 50 percent of assigned prison-days (consistent with the opinions of officials we consulted), HOPE probationers would average about 75 days each behind bars while the comparison group would average 175 days, a reduction of more than 50 percent

Process Evaluation

Since our study did not commence until more than four years after the initiation of HOPE, we could not observe the start-up process. Much of our process report is based on observations and surveys we collected after HOPE had expanded to more or less its current scale.

The HOPE process is as simple to describe as it is difficult to implement. Its elements are:

1. Monitoring of probationers' compliance with probation terms, and in particular randomized drug testing, with the randomization implemented through a call-in "hot line."
2. A guaranteed sanction—typically a few days in jail—for each probationer's first violation, escalating with subsequent violations. (The results suggest that greater severity on the first offense has no impact on overall compliance)
3. A clear set of rules.
4. An initial warning in open court at which the judge impresses on each probationer the importance of compliance and the certainty of consequences for noncompliance, as part of a speech emphasizing personal responsibility and the hope of all involved that the probationer succeed.
5. Prompt hearings (most are held within 72 hours) after violations.
6. Compulsory drug treatment only for those who repeatedly fail, as opposed to universal assessment and treatment.
7. Capacity to find and arrest those who fail to appear voluntarily for testing or for hearings.

Since probation-officer time, court time, police-officer time, and jail space are all scarce, the feasibility of running HOPE at a large scale depends on low violation rates. The key operating assumption—amply borne out by the results—was that low violation rates would result from the warnings, and the program's demonstrated capacity and will for follow-through on threatened

sanctions, would lead to low violation rates. The key operating insight was that reliability in sanctioning could be achieved only by starting small and growing the program sufficiently slowly so that the demand for sanctions never outstrips the supply. The program has grown from 35 probationers to more than 1400 without adding courtrooms, judges, court clerks, probation officers, police officers, or jail cells; the additional resources voted by the legislature went almost entirely toward additional drug testing and treatment capacity. But that growth took place over a period of years, not weeks.

HOPE has achieved a near-perfect record of assigning sanctions for each violation; and it does well on speed of sanctioning, with seventy percent of all hearings coming within 72 hours of the detected violation. To some (unknown) extent, the impressive outcomes (verified by the randomized controlled trial) depended on these equally impressive program-fidelity results. The success or failure of attempts to replicate HOPE elsewhere may be at risk more from failures of delivery than from recalcitrant clients. The response of the probationers to the convincing threat of immediate sanctions, if that convincing threat is actually delivered, may prove more predictable than the capacity of the system to deliver that convincing threat. As Adele Harrell remarked of the DC Drug Court experiment (where convincing judges to do an RCT took two years and the population of long-term heroin users enrolled in the program drastically reduced their drug use within two weeks), “Changing addict behavior is easy. Changing judge behavior is hard.”

None of the principles of the HOPE project is new. The basic idea is more than thirty years old, yet Honolulu is the first jurisdiction to make it work. While local conditions were in some ways favorable to the project, the key to success seems to have been public-sector entrepreneurship and solid delivery. The fragmented nature of the criminal-justice process creates many opportunities for failures of public management; good ideas, even proven ideas, are more common than good execution. Thus the HOPE story has potential lessons not only for other attempts to enforce the conditions of community corrections but for many different kinds of innovations in crime control.

Although the ideas behind HOPE have been around for years, HOPE did not start with an idea. Rather, it started with a problem: a self-reinforcing pattern of high violation rates and low sanction rates on probation, especially with respect to drug use. To Judge Steven Alm, this problem appeared in the form of probation-revocation motions offered by the probation department against probationers with multiple violations over periods of months. This led him to ask the key question: If the probationer's latest violation is his tenth (not an uncommon number), what happened the first nine times?

The answer he got from probation officers elucidated the nature of the social trap the system was caught in. Because violation rates were high (of probationers with scheduled monthly meetings with a probation officer, which included drug tests, over 50 percent tested positive for one or more illicit drugs and another 14 percent simply failed to appear at all) no probation officer had the time to write up every violation, and no judge would have had the time to hear all those cases had they been filed. That made it seem reasonable for probation officers to set priorities, giving multiple warnings and asking for revocation only once a probationer's file fairly bristled with violations.

But that seemingly sensible approach had a perversely self-reinforcing consequence: Since the most likely result of a violation was a mere warning, there was little incentive for probationers to comply. They had no reason to believe a probation officer's "final warning," any more than they believed the previous warnings that had led to no action. The deferred, low-probability threat of a drastic sanction—probation revocation—was not an effective deterrent. As a result, violation rates remained high.

The central idea of HOPE is the commonsensical one that certainty and swiftness count for more than severity in determining the deterrent efficacy of a threatened punishment. The central operating problem was how to turn that idea into a reality in the face of scarce resources.

Some policy entrepreneurs treat the process of consulting with other actors whose cooperation is needed to the desired change as a formality, a process of appearing to listen in order to obtain buy-in. That was not the approach taken by Judge Alm. (Treating objections as reflecting real constraints; learning how to economize). Indeed, what now seems to be the most effective element of the HOPE process and its one genuine innovation—the warning hearing—was first suggested to the judge by the Public Defender.

Severity is the enemy of swiftness and certainty, because a severe penalty will be more fiercely resisted and requires more due process to support it. Conversely, it ought to be possible to apply a less-severe sanction with less effort. But that is true only potentially. Some of the central innovations in the HOPE process involved reducing the workload demands of imposing a sanction, such as fill-in-the-blanks violation-reporting forms and HOPE hearings that were intended to be quick.

We analyzed court records to study the number of court hours dedicated to HOPE. The histogram in Figure 7 shows the distribution of court times dedicated to HOPE Motions-to-Modify. The average Motion-to-Modify (MTM) hearing was 7.21 minutes. There was a great deal of variation in the duration of MTMs across offenders ($SD = 5.6$ minutes). The shortest hearing lasted just over one minute, and the longest hearing lasted 36 minutes. Figure 8 shows the distribution of court time dedicated to warning hearings. The average warning hearing lasted 9.55 minutes. But 51 percent of the warning hearings involved multiple offenders (referred to as mass hearings). Per offender, the average court time for a warning hearing was 3.51 minutes. There was a great deal of variation in the time devoted to warning hearings ($SD = 6.6$ minutes). The shortest warning hearing lasted only 2 minutes, while the longest lasted 26 minutes.

Figure 7. Distribution of Court Time Dedicated to Motions-to-Modify

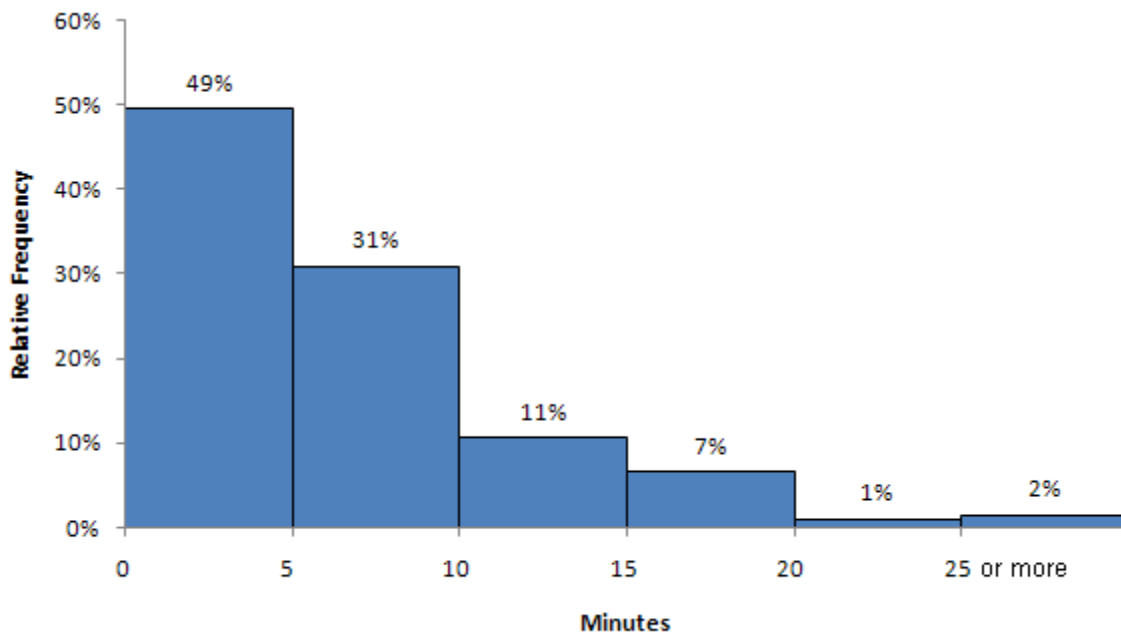
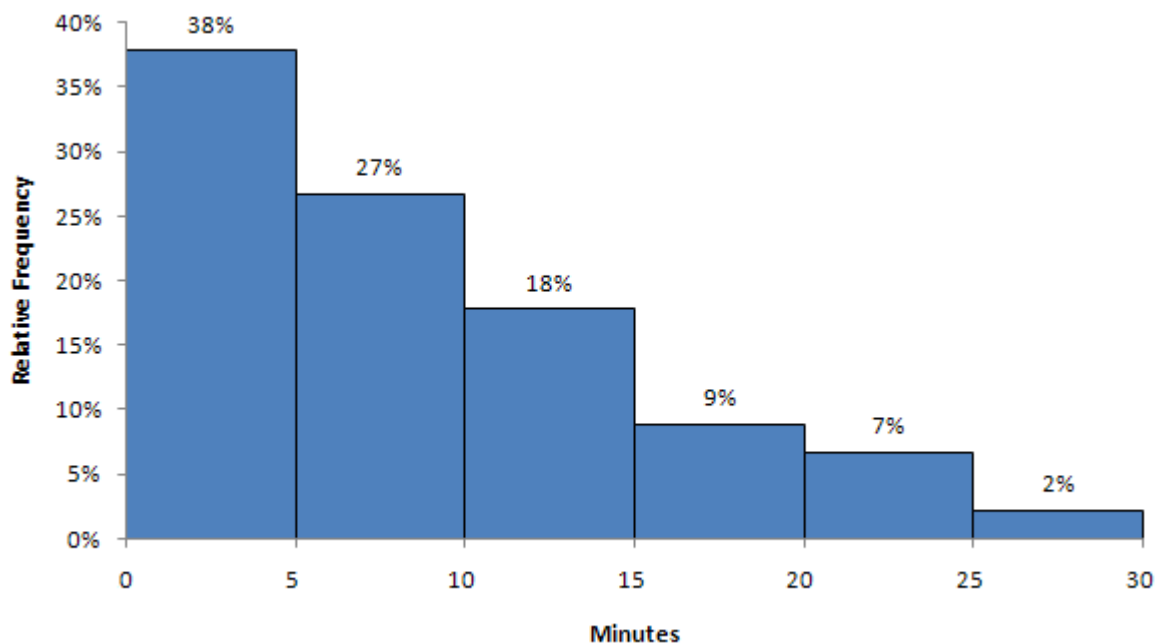


Figure 8. Distribution of Court Time Dedicated to Warning Hearings



The HOPE process contrasts sharply not only with routine probation supervision but with the two other major approaches to managing drug-involved offenders in the community: diversion

programs—such as TASC and California’s Proposition 36 (formally, the Substance Abuse and Crime Prevention Act, or SACPA)—and drug treatment courts. Diversion and drug courts are alike in starting with a formal clinical assessment of the client’s need for drug treatment and the preparation of a corresponding treatment plan; the offender is then mandated to follow that plan.

The central difference between diversion programs and drug courts is the role of the judge. Drug-court judges are proactive, supervising the treatment process, receiving regular reports (sometimes in open court) and administering praise for compliance or rebuke, and sometimes formal sanctions, for noncompliance. Under diversion programs, the probation department is typically in charge, and the judge gets involved only when noncompliance is reported.

Since neither treatment providers nor probation officers have strong incentives for reporting noncompliance, diversion programs tend to have high rates of noncompliance and low rates of sanctioning. Under SACPA, for example, about one-third of those who accept the bargain of (nominally) mandatory drug treatment in lieu of prison never enter treatment at all—a substantial number of those never even show up for a needs assessment—and two-thirds of those who enter fail to complete treatment. Thus the overall completion rate is barely above 20 percent. Yet sanctions are rare, partly by design: The maximum sanction a judge can administer for the first two failures to comply is an order for more treatment. Compliance rates in drug courts are higher: In some cases, more than 50 percent complete the assigned course of treatment. That makes drug courts more effective, but also more expensive, especially in the use of treatment resources.

The HOPE approach is focused directly on reducing drug use and missed appointments rather than on drug treatment: That is, the focus is on outcome rather than on process. (The HOPE approach to sex offenders and domestic-violence offenders, where continuation of the problem behavior is less common and harder to monitor, is more focused on process measures such as attending treatment). Not all drug abusers are addicts. HOPE probationers are not formally assessed with respect to their drug-treatment needs, nor are they mandated to attend treatment.

Treatment is thus reserved for those who request it and for those who repeatedly fail to comply under monitoring and the threat of sanctions. A HOPE probationer who has a third or fourth missed or “dirty” drug test may be mandated into residential treatment as an alternative to probation revocation.

The third violation appears to be a significant marker. Only 39 percent of those put on HOPE fail a drug test within the first year and only 10 percent fail three or more drug tests. The latter group has clearly signaled a need for intensive treatment services. Thus HOPE substitutes the probationer’s actions under the threat of sanction for clinical assessment in allocating treatment resources. Probationers are referred to treatment only if they continue to test positive or if they ask for treatment. Because only a small fraction of HOPE clients face a treatment mandate, the program can afford to use intensive long-term residential treatment, rather than relying primarily on outpatient drug-free counseling as most diversion programs and drug courts do for most of their clients. This result might be called “behavioral triage.”

Compared to a universal assess-and-treat model, behavioral triage has several major advantages.

- Its economical use of treatment allows it to handle a very large number of clients with limited treatment resources while at the same time delivering intensive treatment to those who prove to need it.
- By putting a smaller drain on treatment capacity, it avoids a situation in which mandate-treatment clients’ crowd out voluntary-treatment clients.
- Since the treatment mandate follows repeated failures, which themselves had aversive consequences, it helps break through denial: An offender who has spent three brief spells in jail for dirty drug tests may find it hard to keep telling himself that he is in control of his drug-taking.
- Once a HOPE client is mandated to treatment, his success in abstaining from illicit drug use—not merely his compliance with the order to appear for

treatment—is a necessary condition for his avoiding a prison term. That positions the treatment provider as the client’s ally in the effort to retain his freedom.

Initially, probation officers and their managers were resistant to what became the HOPE initiative. Facing high caseloads and high violation rates, they saw a process of reporting every violation to the court as completely infeasible. They estimated that it required about four hours of work to prepare a revocation motion. That meant that preparing a report on each of a dozen violations per week would require about 50 work-hours per probation officer per week, leaving less than zero time for actually meeting with probationers, let alone performing all their other professional tasks. And that analysis did not even count the hours a probation officer could expect to spend in court during a revocation hearing.

Many policy entrepreneurs would have treated this objection as an instance of “work avoidance” or “resistance to change.” Judge Alm, after some discussion back and forth, recognized it as a perfectly valid problem, and, in consultation with the probation officers and their managers, set about designing a way around the problem.

They decided to work on both ends of the problem: the number of reports and the time required to prepare each one. To limit the number of reports, not every probationer was put on HOPE supervision. Instead, together the probation officers identified criteria for selecting probationers on their caseloads whose violation records up to that point were sufficiently long that one more violation would lead them to recommend revocation. That group initially consisted of 35 felony probationers from among several hundred subject to Judge Alm’s jurisdiction. Probationers may be transferred to HOPE as a result of a referral by their probation officer, or a judge may sentence a probationer to HOPE.

To reduce the time required to prepare a report, Judge Alm proposed to treat each new violation as a reason to modify rather than revoke probation: to incarcerate the probationer for a matter of days (initially, typically a week) rather than sending him to prison to complete the remainder of a

multi-year term. The same approach was adopted by the other judges who oversaw HOPE caseloads when the program was expanded. Unlike a revocation, the relatively mild sanction attendant to a probation modification could be justified by a single incident rather than a long string of violations. Consequently, there was no need for the probation officer to prepare an elaborate report documenting multiple lapses over a period of months.

Indeed, the amount of information required turned out to be very small (see appendix): the probationer's name and the details about the latest violation, the nature of the violation (missed appointment, missed drug test, positive drug test), and, if the violation was a positive test, the drug for which the probationer tested positive. All of that could be made to fit on a two-page form with check-boxes and blanks to be filled in. Once the form was filled out and signed, the probation officer would fax it to the judge's chambers. The probation officer's presence would not be required at the subsequent hearing.

Those two changes transformed the impact of HOPE on probation-officer workloads. For example, the first week generated three reports, each of which cost the probation officer no more than a few minutes' effort to prepare and send. That was a surprisingly small number out of thirty-five high-violation-rate probationers, but even had the group generated the ten or eleven violations that might have been expected based on previous behavior, the burden would have been slight.

Workload was not the only source of probation officers' resistance to the HOPE idea. The plan appeared to some of them (about thirty percent), at first blush, as a reduction in their clinical discretion. For non-HOPE clients, the decision about how to handle each violation—with a warning or a report to the court—was among the most important decisions that a probation officer faced, and the management of those warnings a central element of his or her clinical task. Some believed that their discretion increased the respect in which they were held by their clients, and allowed them to establish good personal relationships by tempering justice with mercy when

doing so seemed appropriate. HOPE, by contrast, made that part of their task entirely formulaic, and some interpreted that prospect as an affront to their professional standing.

Here the fact that Hawaiian probation officers are all M.S.W.'s trained in the principles of cognitive-behavioral therapy proved advantageous—perhaps decisively so. Their training made it possible for some of them to see the situation from the probationer's viewpoint, and to understand that what looked to them like the exercise of clinical judgment might look arbitrary or random to their clients. About seventy percent of the probation officers expressed no reservation at this loss of discretion.

It is well known among those who attempt to bring about behavioral changes of all kinds that clients with what psychologists call “internal locus of control” are more likely to succeed. That is, people vary in the extent to which they attribute events in their lives to their own actions and choices rather than to the actions of others and to chance. Those who believe that their choices matter are more likely to actually change their habits; internal locus of control is related to “self-efficacy,” the belief in one's ability to change one's life, another strong predictor of success.

The HOPE process helps move the psychological locus of control from external to internal by making outcomes strongly predictable results of the client's actions. That is, by shifting the locus of control in reality from the probationer officer and the judge to the probationer, HOPE helps the probationer shift his perception of the locus of control. And the judge's speech at the HOPE warning hearing emphasizes the importance of the probationer's taking charge of his own life and accepting accountability for his own actions. That speech also explicitly identifies the probationer as a morally responsible agent—an adult—rather than the helpless subject of decisions by others in an unpredictable criminal-justice system.

The warning hearing also creates a perception of fairness on the part of the probationer. Because the consequences are clearly laid out in advance, there is no sense that the sanctions, when administered, are arbitrary or the result of animus. The strong assertion by the judge of goodwill

toward the probationer, and of the desire of everyone in the process that the probationer succeed, may also be important.

Empirically, the results were striking. In open-ended interviews, probationers consistently identified the process as fair. (As one put it, “strict, friendly, and fair.”) This was true even among those interviewed while actually spending time in jail as a result of a HOPE sanction. To an open-ended question asking for “any additional comments or ideas for improvement,” one probationer in jail responded “Keep up the good work!” Another said, “I’m trying to make my first mistake my last,” and a third added, “Don’t give up on us! It’s a matter of time before it will sink in.” In that group, when asked to agree or disagree with the statement, “HOPE rules are too strict,” the “disagrees” outnumbered the “agrees” by 3:2. Almost 90 percent agreed that HOPE was helpful in reducing drug use and improved their lives in other ways (e.g., family relationships). The biggest complaint from the group in jail was the perceived unfairness that resulted from judge-to-judge variation in sanctions severity, which they discovered by comparing notes. Some of those who had been sanctioned more heavily were quick to attribute the difference to racial bias, when in fact the variation we observed was more at the judge level than at the offender level. That response, combined with the finding that success rates were independent of severity, provides a very strong argument for making sanctions formulaic and moderate. Indeed, in our surveys, lack of uniformity in sanctioning was the primary complaint about the HOPE process from every group: probationers, probation officers, assistant DAs, assistant PDs, and even the judges themselves.

HOPE clients found the daily call-in and the prospect of testing as aids to their recovery. In a sample of 167 HOPE probationers surveyed anonymously in the community (as opposed to those in jail) 96 percent answered “Yes” to the question “Does the regular random drug testing help you avoid drug use?” One said, “It keeps you in line because of zero tolerance. It’s the drug or jail.”

This appreciation of the value of daily call-in occasionally leads to otherwise hard-to-understand choices by clients. HOPE provides few positive incentives for success (as opposed to negative consequences of failure). One of the few rewards following a period of perfect compliance is a change in color code corresponding to a reduction in testing frequency: From the initial frequency of at least six times per month, a long-compliant HOPE client can work his way down to once per month. Some probationers, when told by their probation officers that their testing frequency is being stepped down as a reward request that it *not* be stepped down, because they fear that less-frequent testing will increase their risk of going back to drug use.

Once they had tried the new system—however reluctantly to start with—the probation officers almost universally became converts, as they watched their violation rates drop and experienced the satisfaction of wielding in practice the power they have in law: to be able to enforce their rules with a convincing threat of judicial sanction for any violation.

Judges are typically at least as concerned about maintaining discretion as are probation officers, especially in light of the tendency of legislatures to control their use of that discretion. When the HOPE program expanded from Judge Alm's courtroom alone to cover the other eight felony judges on Oahu, some of the other judges were openly discontented with the change, even in the face of support for the program from the Chief Justice. Nothing compelled those other judges to comply with the HOPE guidelines, and there was no attempt to create a formula for sanctions, but all of them went along with the principle that some confinement sanction would be automatic for each violation.

One judge stood out from his peers in the severity of the sanctions he assigned, especially for a first violation: his average was six weeks when the average of the other judges was one week. When preliminary results of this study were shared with the judges, showing that additional severity did not seem to produce lower violation rates, a process of consultation among them led to a reduction in the dispersion of sanctions and in the overall average sanction length. The chief concern expressed by assistant district attorneys about HOPE is that some judges are, in their

view, now putting on probation offenders who otherwise would have been sent to prison, at some cost in public safety. Indeed, one probationer who had been assigned to HOPE, but who absconded even before his warning hearing, subsequently committed a homicide. There is no way of knowing whether in that homicide case the existence of the program tipped the balance in the sentencing judge's mind; the probation option would have been open to the judge in any case. (Some assistant DAs would like to impose an exclusion criterion preventing anyone with a recent prior conviction for any violent crime from being put on HOPE; though under the Hawaiian sentencing system those defendants would still be eligible for regular probation). Insofar as the HOPE client base in fact has a tougher mix of clients than does routine probation, the dramatically lower re-arrest rate among HOPE probationers is that much more impressive. Of course the other side of the coin is that if HOPE is successfully maintaining in the community those who would otherwise have been sent to prison, the cost savings are substantial.

For judges, probation officers, probationers, and assistant public defenders, HOPE has palpable benefits, in the form of higher compliance rates for the judges and probation officers and fewer days in jail for the probationers, which also pleases their defenders. But HOPE's benefits are less evident to assistant District Attorneys and to court employees. In addition to their concern that HOPE may lead to probation sentences for defendants they would prefer to see in prison, the assistant DAs see the sanctions hearings as added workload. Although those hearings consume an average of less than eight minutes' court time each, they require additional time for out-of-court preparation (despite the largely ornamental role of the lawyers in what is largely a judge-driven hearing). And those demands on time arrive both urgently and unpredictably. That HOPE prevents, as a statistical matter, a large number of much-more-demanding revocation hearings, as well as trials incident to new arrests, is not something assistant DAs directly encounter.

Some assistant DAs complain about the mildness of the HOPE sanctions, not reflecting that the outcome under routine probation would not be a more severe sanction but no referral to court, and therefore no sanction whatever. Three-quarters of assistant DAs think that HOPE means more work for them (including one-quarter who say "much more work"). And some express

frustration at having to appear at (and wait around for) hearings in which they have only a modest role to play. Two sample comments:

Endless hearings -punishment for violations is often inconsequential. -Too many chances -Prosecutor's recommendation carries little, if any, weight.

It is a HUGE waste of time for the prosecution, who spend hours waiting in court for the hearing, only for the Defendant to receive little, if any, jail time.⁷ The prosecutor's input seems to have no impact or consideration by the Court.

This raises the question whether the presence of a prosecutor should be required at a sanctions hearing. By law, the probationer is entitled to representation, but it is not obvious that a prosecutor is actually needed.

Court employees, too, see little in the way of benefit. All they see is the addition of hearings that arrive unpredictably and need to be scheduled quickly. All court employees that we surveyed regarded HOPE as increasing their workload, with a majority saying that the increase had been a large one. Again, whether HOPE is a net addition to court-employees' workload is an open question: The warning hearings (now mostly done *en masse* rather than individually) and sanctions hearings to some extent replace revocation hearings. But from the perspective of court employees the burdens are obvious and the benefits hidden. Enthusiastic judges have little problem communicating that enthusiasm to their clerks, secretaries, and court officers, but less enthusiastic judges may experience less support in running their HOPE caseloads. Like the problem of lack of uniformity, the problem of imperfect compliance by court staff could be eliminated by concentrating all HOPE cases in a single courtroom.

⁷ HOPE probationers are given a jail sanction in response to a violation, but credit is given for time served. In certain cases judges will give credit for time served and release the defendant after the modification hearing.

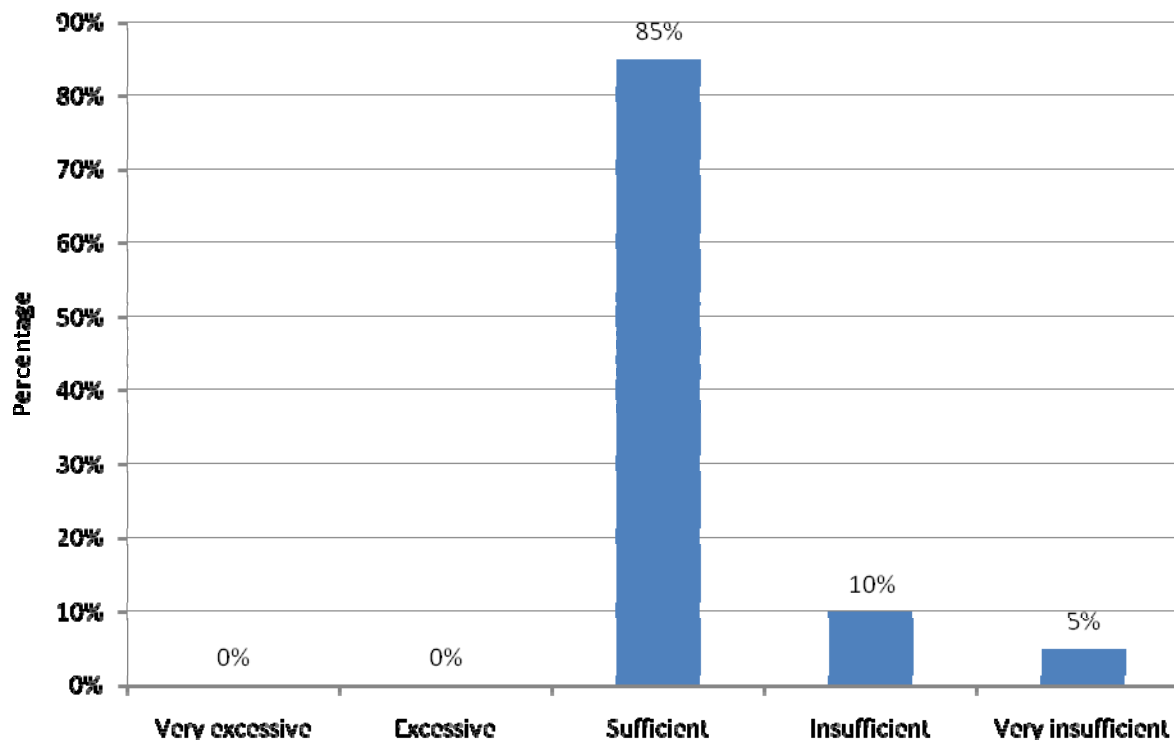
Probation officers from the Integrated Community Sanctions group in the probation department report that the additional workload burden eased off after the first year; now none of them report that the program is “much more work” and about half report that it is less work (about evenly split between “less” and “much less”). Some of the workload issues reported here may be, in whole or part, transition effects that will fade away over time.

Summary of Surveys

Probation Officer Training

Probation officers managing HOPE caseloads in the Integrated Community Sanctions unit received training in Cognitive Behavioral Therapy (CBT), Motivational Interviewing (MI) skills and skills specific to managing a HOPE caseload (new paperwork, etc.). We surveyed staff to determine whether they considered their training adequate to prepare them for the changes needed to oversee HOPE clients (see Figure 9). None of the probation officers had the impression that they had received too much training. The majority (85 percent) considered their training to be sufficient, while 15 percent thought the training they received was insufficient to appropriately prepare them to manage a HOPE caseload. When asked what additional training would have been useful, probation officers responded that that training in time management and additional training on how to manage the process between the probation office and the courts would have helped. The majority seemed to value the time spent on CBT and MI skills and would have liked more similar training through refresher courses, on an ongoing basis.

Figure 9. Probation officer perceptions of the additional training they received to become a HOPE probation officer.



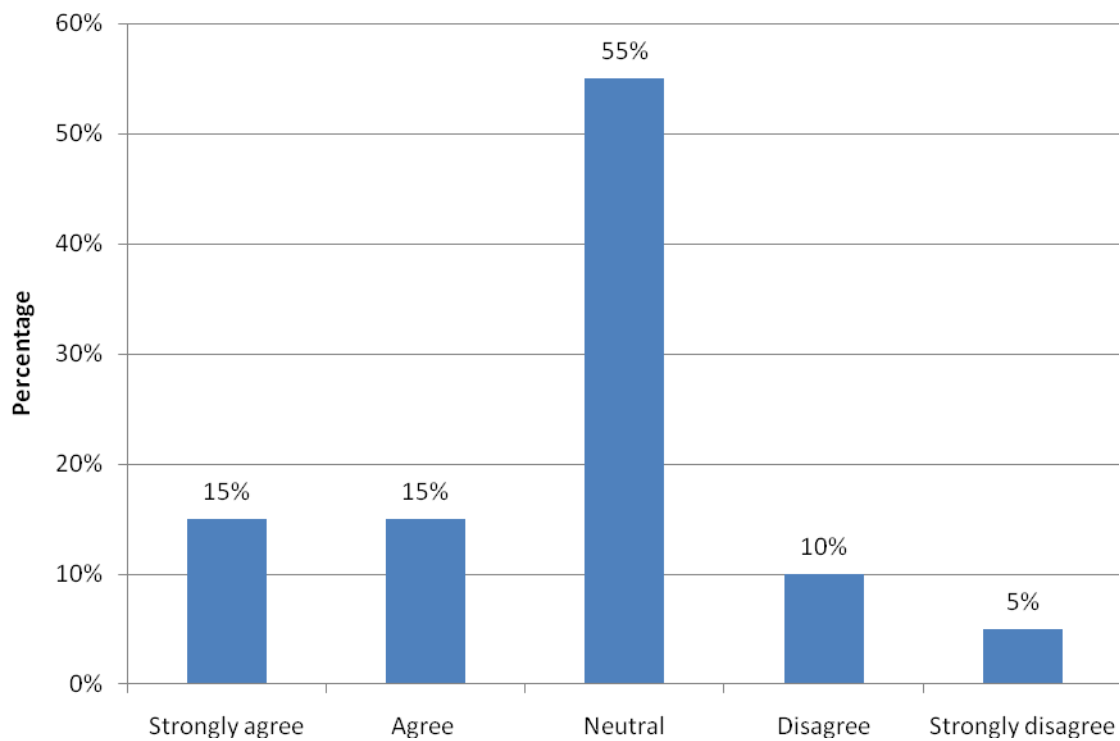
Note: Data are from the ICS Probation Officer Survey (n=20). Data reflect responses to the question “Do you think the additional training to become a specialized HOPE probation officer was....”

Probation Officer Job Satisfaction

As probation officers have the most interaction with HOPE probationers, we were interested to know the impact of HOPE on how probation officers view their jobs. The adoption of HOPE meant that probation officers would lose a substantial amount of discretion in managing their clients (sanctions for non-compliance would be delivered with certainty, rather than at the discretion of the probation officer, as is the case with probation-as-usual). We expected probation officers to be disappointed at this loss of discretion. We were surprised that only a minority of the probation officers (30 percent) thought that jail sanctions should be imposed at the discretion of the probation officer, rather than on a zero-tolerance basis. The majority (55 percent) was neutral on the issue

of probation-officer discretion, and 15 percent were opposed to jail sanctions being at the discretion of the probation officer. (See Figure 10).

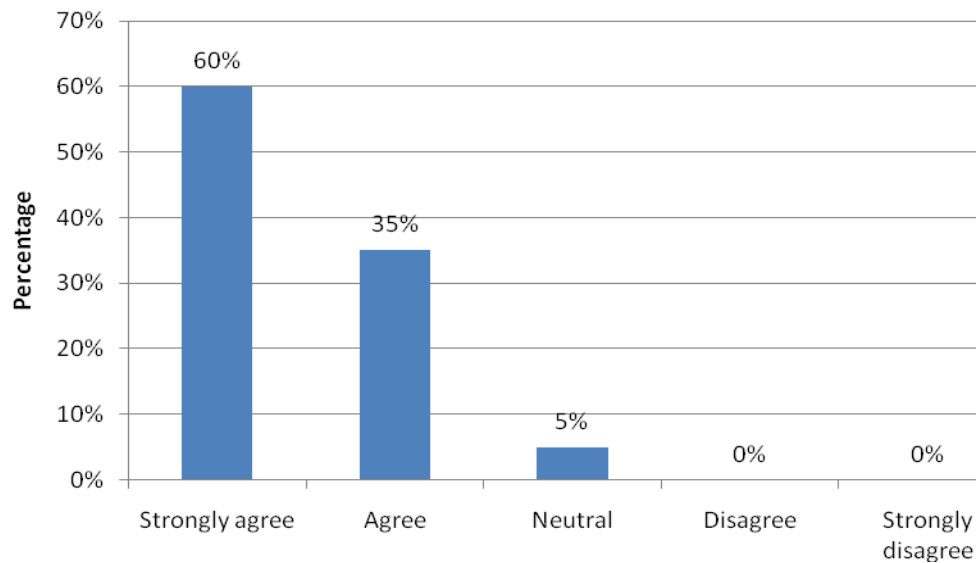
Figure 10. Probation officer perspectives on whether jail sanctions for non-compliance should be at the discretion of the probation officer rather than on a zero-tolerance basis.



Note: Data are from the ICS Probation Officer Survey (n=20). Data reflect responses to the question “Requests to impose short jail terms as a consequence for probation noncompliance should be brought before judges at the discretion of probation officers, rather than on a “zero tolerance” basis”.

Figure 11 summarizes how probation officers viewed their effectiveness under HOPE. The vast majority (95 percent) regarded themselves as more effective at managing their caseloads under HOPE and 5 percent were neutral, but none thought HOPE had made them less effective. This corresponds with probation officers’ views on how their HOPE caseload has performed since being placed on HOPE. All of the probation officers (100 percent) responded that their HOPE cases had shown an overall improvement since being placed on HOPE.

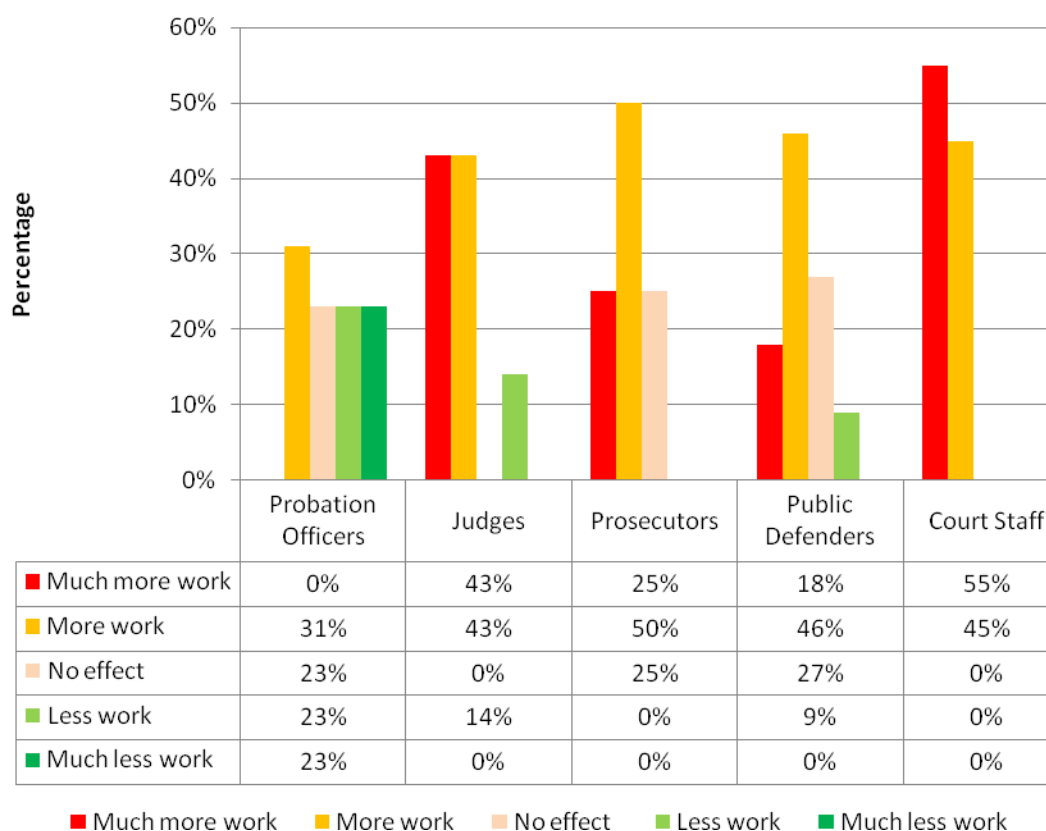
Figure 11. Probation officer perspectives on their effectiveness as a probation officer under HOPE.



Note: Data are from the ICS Probation Officer Survey (n=20). Data reflect responses to the question “My work as a probation officer is more effective under the HOPE policies and procedures.”

Workload of Key Stakeholder Groups

We anticipated that HOPE would affect the workloads of those involved with ensuring that probationers are tested regularly, and sanctioned consistently and swiftly for violations. Across the stakeholder groups, HOPE was regarded as adding to their workload (see Figure 12). For court employees, 100 percent regarded HOPE as resulting in “more work” or “much more work”. Probation officers in the Integrated Community Sanctions (ICS) unit, regarded HOPE as having the least impact on their workload; 31 percent regarding HOPE as adding more work, and 46 percent regarding HOPE as requiring less work. This may be due to increased familiarity with the program. Probation officers in the ICS unit have been managing HOPE caseloads since HOPE was first piloted in 2004. In an earlier survey question, these probation officers commented that HOPE was more work when it was first implemented, but requires less work now that they have more experience with the program.

Figure 12. HOPE and Workload

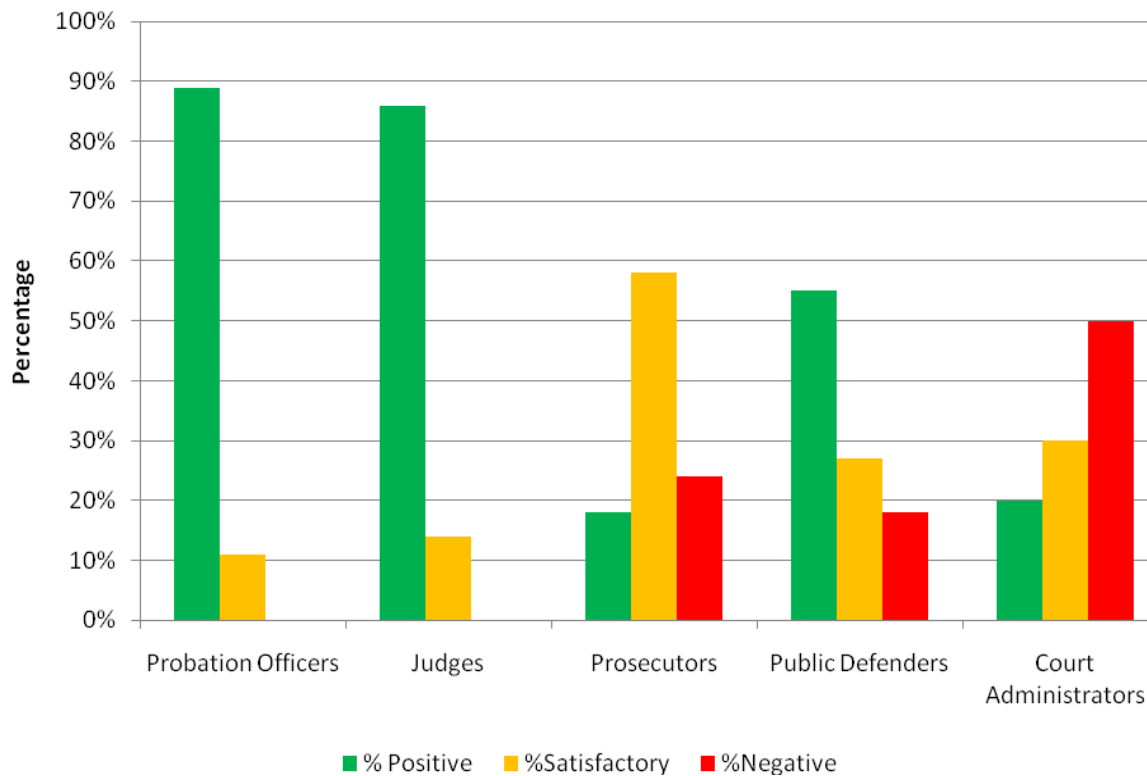
Note: data are from the key stakeholder surveys. Sample sizes are: Prosecutors (n = 12), Public Defenders (n = 11), Judges (n = 7), Probation Officers in the Adult Client Services Division (n = 18), Probation Officers in the Integrated Community Sanctions Unit (n = 20), and Court Staff (n = 11).

General Perceptions

We surveyed stakeholder groups about their general perceptions of HOPE (see Figure 13). Only a small minority reported negative perceptions of HOPE. Probation officers were the most favorable, with nearly 90 percent expressing support for HOPE, followed by judges (85 percent). Court employees had the most-negative general perceptions of HOPE (50 percent). This may be due to increased workload and the limited interaction they have with probationers, i.e., they carry the burden of an increased workload without the accompanying benefits of directly observing improvements in probationer behavior. Just under a quarter of the prosecutors had a generally negative perception of HOPE. In

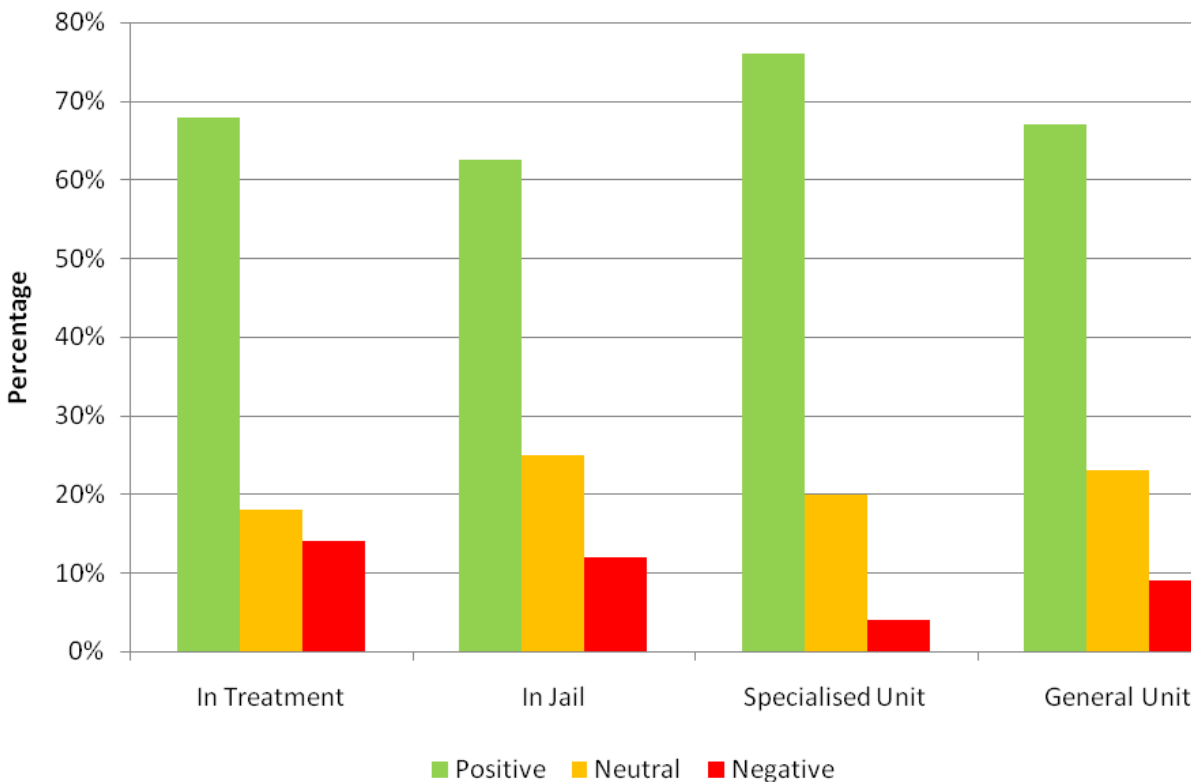
responses to open-ended questions, these prosecutors raised concerns that HOPE may be overused and that some offenders who should be incarcerated remain in the community. These prosecutors would like to see the use of clear criteria for determining who is eligible for HOPE and would like to see exclusion criteria for any offender with a recent history of crimes against persons. Further program improvements recommended by prosecutors include establishing a dedicated HOPE court (to improve consistency of sanctioning),⁸ and allowing probation officers to implement sanctions and modifications without a formal hearing.

⁸ This recommendation has since been incorporated into the HOPE model. There are plans to start a dedicated HOPE court later in 2009.

Figure 13. General Perceptions of HOPE

Note: data are from the key stakeholder surveys. Sample sizes are: Prosecutors (n=12), Public Defenders (n= 11), Judges (n=7), Probation Officers in the Adult Client Services Division (n=18), Probation Officers in the Integrated Community Sanctions Unit (n=20), and Court Employees (n=11). Data reflect responses to the question “What is your general perception of HOPE probation?”

Figure 14 describes the HOPE probationers’ general perceptions of HOPE. Four groups of probationers were surveyed: probationers who were in the community under the supervision of the Integrated Community Sanctions unit (marked as “Specialized”), probationers in the community under the supervision of the Adult Client Services branch (marked as “General”), probationers who were serving a jail term as a HOPE sanction, and HOPE probationers who were referred to residential treatment by the court. All four groups of probationers had positive perceptions of the program.

Figure 14. HOPE Probationers' General Perceptions of HOPE (n=211)

Note: data are from the key stakeholder surveys. Sample sizes are: In Treatment (n = 28), In Jail (n = 16), Integrated Community Sanctions or “Specialized Unit” (n = 50), Adult Client Services (n = 117). Data reflect responses to the question “What is your general perception of HOPE probation?”

Study Limitations

Our study has a number of limitations.

Limited follow-up due to contamination

Although the pilot study in the Integrated Community Sanctions unit was launched in October 2004, we had a limit to the follow-up period we could study for probationers assigned to the comparison group. We restricted follow-up to one year to avoid study

group contamination. Due to the high rate of non-compliance in the comparison group, after one year, judges began to transfer comparison probationers to HOPE. By the end of the second year, nearly 40 percent of the probationers were transferred. This limits our analysis of revocations and incarceration. The data reported here were actual revocations and sentences to jail or prison. In the absence of HOPE, judges would not have had the opportunity to transfer probationers to another program. High-violation probationers would have been revoked and sentenced to prison. The transfer opportunity results in a downward bias of the estimate of HOPE on revocations and prison stays.

Spillover

The spillover effect refers to improved behavior among probationers assigned to the comparison group who wish to avoid a transfer to HOPE, or who did not realize that they were not subject to HOPE terms. Any spillover effects result in a bias against HOPE findings.

External validity

The external validity of these results is questionable. Delivering HOPE-style sanctions in a swift-and-certain manner requires cooperation and a willingness to change work practices. Whether this structural shift can be accomplished in other jurisdictions remains an issue. Probation officers in Hawaii have received training in CBT and MI, it is unclear whether jurisdictions without similar training would produce the same results. Future studies of testing and sanctioning strategies such as HOPE would be needed to identify the essential elements of the model, including factors such as probation officer training.

Decomposing essential elements

HOPE entails regular random drug testing coupled with swift and certain sanctions. Our study is unable to identify the crucial elements needed to produce the HOPE result, i.e., whether regular random drug testing on its own would have produced the HOPE effect, or whether the

combination of testing and sanctions is necessary. Future studies that use an alternative experimental design that manipulates the HOPE punishment schedule would be needed to address this question.

Persistence of HOPE-effect

Probationers were studied only while they were under community supervision. We do not know whether the effects of HOPE (e.g., reduced drug use and new arrests) continue after probationers complete their probation terms under HOPE. What happens to HOPE probationers once they complete probation, in particular, their long-term drug use and criminality is an important remaining question. At the time this evaluation was conducted, it was not possible to assess long term effects as the number of probationers who had completed their probation term was too small to support a rigorous statistical analysis. Probationers placed on HOPE when HOPE was first implemented are beginning to complete their terms. In the near future there will be a sufficient number of HOPE probationers who have completed their probation term to permit an assessment of whether the effects of HOPE persist.

Selection of study groups

A further limitation is how the study groups were selected. When the Attorney General's Office selected a comparison group, the intention was to include similar offenders to those assigned to HOPE. Our analysis shows pre-existing differences between the study groups, with HOPE, on average, including higher-risk probationers. Although our analysis includes controls for baseline characteristics, the nonexperimental design may affect estimated outcomes. Our concerns with the research design led us to request and design (with the assistance of NIJ) a true randomized controlled trial, which was funded by the Smith Richardson Foundation. The RCT was launched in October 2007, and uses an intent-to-treat design that follows the Consort Statement (Consolidated Standards of Reporting Trials). A summary of the findings from the RCT is provided in Appendix 3.

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Appendix 1 – Tables of Results

Table A1. Urinalyses adjusted for demographics and baseline urinalysis results.

	Urinalyses (3M)	Urinalyses (6M)
Baseline	0.1673 (0.0271)***	0.0675 (0.0198)***
Black	0.0345 (0.0629)	0.0077 (0.0448)
Caucasian	0.0494 (0.0319)	0.0058 (0.0241)
Hispanic	0.7267 (0.2158)***	0.6426 (0.1398)***
Other	0.0224 (0.0312)	0.0008 (0.0235)
Male	0.0050 (0.0268)	0.0172 (0.0199)
Age	0.0007 (0.0012)	0.0009 (0.0008)
Comparison	0.2781 (0.0419)***	0.1525 (0.0260)***
_cons	-0.0250 (0.0517)	-0.0339 (0.0383)

Notes: *** denotes significance at the 1-percent level, ** 5-percent level, and * 10-percent level. The omitted race/ethnicity category is Asian/Polynesian. The omitted gender category is female. The omitted study group is HOPE. Baseline is a three month follow back period.

Table A2. Missed appointments adjusted for demographics and baseline urinalysis results.

	Missed Appts (3M)	Missed Appts (6M)
Baseline	0.1197 (0.0238)***	0.0697 (0.0154)***
Black	-0.0118 (0.0227)	0.0017 (0.0119)
Caucasian	0.0141 (0.0127)	0.0001 (0.0071)
Hispanic	-0.0343 (0.0814)	-0.0402 (0.0396)
Other	0.0132 (0.0127)	-0.0026 (0.0070)
Male	-0.0167 (0.0121)	-0.0075 (0.0069)
Age	-0.0005 (0.0004)	-0.0001 (0.0002)
Comparison	0.0731 (0.0145)***	0.0600 (0.0073)***
_cons	0.0514 (0.0197)***	0.0206 (0.0110)*

Notes: *** denotes significance at the 1 percent level, ** 5 percent level, and * 10 percent level. The omitted race/ethnicity category is Asian/Polynesian. The omitted gender category is female. The omitted study group is HOPE. Baseline is a three month follow back period.

Appendix 2 – Example of a Warning Hearing

Good morning.

I am Judge _____.

You are here because we believe that you can be successful on probation, rather than being incarcerated at Halawa or in Mississippi or wherever they are now sending folks.

But you are also here because you haven't been doing your part and following the rules of probation, and the probation officer thinks you are headed for a revocation.

I hope you do succeed on probation. So does your lawyer, your probation officer, and your family. I think you can succeed on probation, or I wouldn't have put you on probation to begin with.

But to do so, you must act responsibly. You are the one responsible for making sure that you comply with your conditions of probation. When you are on probation rather than being sent to prison, you are making a deal with me to follow the rules.

Hopefully, you will learn that the more responsible you are, the more freedom you will have. The less responsible you are, the less freedom you will have.

The 3 things I am immediately concerned about for you on probation are illegal drug use, meeting regularly with your probation officer, and complying with the other conditions of your probation, like going to drug treatment, etc.

[If drugs are an issue] You have to call the drug test hotline every weekday morning [441-8962]. If you miss a drug test a warrant will be issued immediately.

If you are using drugs, you are breaking the law, you are violating your probation and, if you are in treatment, it's not working. Unless you recently found some cash on the sidewalk or inherited some money, continuing to test positive for drugs also means that crimes are probably being committed by someone in order to get the drugs.

If you miss an appointment with your probation officer, it tells me one of 3 things:

- 1) you know you will test positive;
- 2) you are doing something you shouldn't be doing; or
- 3) you are blowing off the probation officer.

All 3 are bad.

You are being brought here to court today so I can clearly spell out what the consequences will be if you don't follow the rules of probation.

From now on, if any of these things happen -- if you fail a drug test, if you fail to meet with your probation officer when you are supposed to, or you fail with other terms of your probation, such as not getting an assessment, not going to treatment, etc. -- you will go to jail.

If you test positive, you will be arrested on the spot, held in custody, and we will have a hearing two days later. If you used drugs, you will go to jail.

If you missed a drug test or a scheduled appointment or don't comply with other conditions of probation, I will issue a bench warrant for your arrest immediately, and HPD's SSD (SWAT Team) or Crime Reduction Unit (CRU) officers will arrest you. They have agreed to serve the warrants for me. They won't come alone. They will arrest you at work or home or wherever. That would be embarrassing and folks may get hurt. It is better to just come in even if you violated. If you did, you will go to jail but not for as long as you will if we have to find and arrest you.

I understand that things happen in life. If your car breaks down on the way to the probation office, push it to the side of the road, call your probation officer, tell her/him that you will be late, and get on the bus. If you or your child is at the Emergency Room, call your probation officer to reschedule your appointment and be ready to bring proof of the medical treatment when you come for that appointment. But apart from that type of thing, if you try to reschedule your appointment, I am expecting the probation officer to say 'no' and to notify me immediately if you miss the appointment so I can issue the warrant.

All of your actions in life have consequences, good or bad. If you confront your problems and learn to change your thinking and your behavior, you will be able to follow the rules of probation and be able to remain free in society. Remember, responsibility brings more freedom.

On the other hand, if you violate the rules, there will be consequences, and they will happen right away. But it's all about choices.

You may now have daily responsibilities like a job, or a class, or you may have a special event coming up -- baby's first luau, son's football game, daughter's graduation, whatever.

If you test positive, miss an appointment or otherwise don't comply, you will go to jail right away. And you may get in trouble with your job or miss that special event. But that will really be your choice. You didn't care about your job or that luau or that graduation when you got high or missed the appointment or didn't go to treatment. It wasn't important enough to you then. You made a choice to use. You are not 13 years old. You are an adult. You can make a choice not to use and to be responsible about seeing your probation officer when you are supposed to and complying with the other terms of your probation.

Remember, these violations will modify your probation and will send you to jail. If the probation officer sees that you continue to violate the terms of your probation and that you are no longer suitable for being on probation at all, they may file a motion to revoke your probation.

If I see such a revocation motion in front of me and the violations are proven, I may well give you the 5, 10 or 20 years in prison. The probation officers are my eyes and ears in working with you and supervising you outside of court. I rely on them and their judgment.

If you are unable or unwilling to comply with the terms of probation, the place for you is prison. That will give the probation officers more time to work with those folks who want to be on probation, who want to change their thinking and change their behavior and learn to be responsible.

Do you understand everything I just said? Do you have any questions for me?

Good. I wish you luck and success on probation and hope I don't see you back here.

Appendix 3 – Summary of Results of the Randomized Controlled Trial of HOPE

This appendix summarizes the methods and results of the randomized controlled trial (RCT) of HOPE that was launched in October 2007. The original HOPE evaluation in the Integrated Community Sanctions Unit had two key weaknesses. First, the evaluation was based on a quasi-experimental design rather than a true experiment. Second, the original HOPE program was implemented in a probation office where caseloads were smaller than those typically found in other jurisdictions. To address these weaknesses, NIJ provided support for us to design and implement an experimental approach (an RCT) in a separate general probation office where probation officers supervised larger caseloads. The RCT was funded by an award from the Smith Richardson Foundation to Pepperdine University. The RCT used an intent-to-treat design, i.e., all offenders assigned to the HOPE condition were included in the HOPE group, even if they failed to appear for their warning hearing to formally enter the program. This distinction had important implications for our study, as 30 percent of the offenders who had their probation revoked and were sentenced to an open term under HOPE had never appeared for a warning hearing.

The full text of the RCT is written to comply with the standards detailed in the CONSORT Statement (Consolidated Standards of Reporting Trials). Here we provide a summary of the methods used and the study findings.

METHODS

STUDY PARTICIPANTS

Settings and locations where the data were collected

All probationers who were candidates for inclusion in the randomized controlled trial were men and women, over eighteen years of age, under community supervision by the Adult Client

Services probation unit in Honolulu. The probation officers had an average total caseload (study and non-study participants) of 176 clients.⁹

Eligibility criteria for participants

Probation officers at the Adult Client Services unit developed their own study-eligibility criteria to identify the probationers in their caseload who were at highest risk of failing probation (risk was based on probationer LSI scores and prior behavior on probation). A study group of 507 probationers was identified by the probation officers. Of this group, 493 were deemed eligible for inclusion in the study by probation-office supervisors. (See Subject Selection section below).

STUDY INTERVENTION

In October 2007, the study group was randomized to one of two conditions: HOPE (treatment group) or probation-as-usual (control group). Those probationers assigned to HOPE were contacted by their probation officers and given a date to appear in open court for their warning hearing. As we use an intent-to-treat design, all subjects assigned to HOPE are included in the HOPE outcome data, whether or not they appeared for their warning hearing (93 percent of the probationers assigned to HOPE were contacted by their probation officers and appeared for their warning hearing).

HOW SAMPLE SIZE WAS DETERMINED

We balanced statistical and practical considerations in determining sample size. As the RCT represented the probation office's first experience with HOPE, the goal was to avoid overburdening the probation officers who would need to manage the HOPE caseload, and adjust their workloads accordingly. Guided by preliminary data on urinalyses and appointment no-shows from the HOPE pilot study in the Integrated Community Sanctions unit, we originally estimated that sample sizes of 150 subjects in each group would be sufficient to detect outcome significant differences across groups. Our actual sample size exceeded these original estimates.

⁹ Probation officer caseloads were estimated from the Adult Client Services Probation Officer Survey.

RANDOMIZATION: GENERATION

The randomization used “third-party” assignment. On the morning of the random assignment, the research team was presented with an electronic list of eligible probationers to be included in the study. Probationers were then allocated to HOPE and control, by the research team, through simple randomization. The randomization was conducted by computer, and was witnessed by representatives of the probation office and judiciary.

ADMINISTERING INTERVENTION

Probation officers were provided with lists of names of probationers in their caseloads who had been assigned to HOPE. Probation officers contacted probationers to inform them of their transition to HOPE and the court date to appear for their HOPE warning hearing. See description of HOPE program above.

DATA SOURCES

We used two administrative data sources to measure outcomes: PROBER and the Criminal Justice Information System (CJIS). PROBER is the case-management system used by probation offices in Hawaii (and in many other probation offices around the country) and includes detailed records on probationer-supervision episodes, drug-test results, offenses, motions, and many other probationer interactions with the criminal-justice system. CJIS includes comprehensive criminal-record data.

BASELINE DEMOGRAPHICS AND CHARACTERISTICS OF EACH GROUP

Simple randomization was used to select study groups. The characteristics of the groups are described in Table A1. The demographic profiles of probationers in HOPE and the control group are similar. The average age of HOPE probationers was 36.2 years and control probationers was 35.4. The difference in age across the two groups is not statistically significant ($p = 0.44$).¹⁰ Nearly three quarters of the study sample were male (75 percent for HOPE and 71 percent for control). The sex difference across groups was not statistically significant ($p = 0.16$). The race/ethnic profiles of the groups were similar, with no meaningful differences across groups.

¹⁰ For quantitative variables the p-values reported reflect results of t-tests, for qualitative variables, the p-values refer to Chi-2 tests.

LSI scores and prior arrests were used to assess any differences in baseline risk. The average baseline LSI score for HOPE probationers was higher than for control probationers, 27.8 percent v 26.8 percent ($p = 0.07$). A slightly higher percentage of HOPE probationers were assessed as HIGH risk on the LSI, 46.7 percent v 44.1 percent for control probationers, but this difference was not statistically significant ($p = 0.57$). The average number of prior arrests at baseline for HOPE probationers was 17.0, compared with 16.4 for control probationers; this difference was not statistically significant ($p = 0.66$) and we found no statistically significant differences in the most serious prior charges across the groups.¹¹

Table A1. Description of Study Participants

	HOPE	Control
Demographics		
Age	Average = 36.1(SD= 10.58)	Average = 35.4 (SD = 10.06)
Sex		
Male	75%	71%
Female	25%	29%
Race/ethnicity		
Black	5%	3%
Caucasian	16%	14%
Asian/Polynesian	65%	64%
Portuguese	1%	2%
Puerto Rican	1%	1%
Other/Unknown	11%	14%
Assessment		
Baseline LSI	27.8	26.8
% Assessed Level High	46.7%	44.1%
Prior Criminal History		
Prior Arrests	Average = 17.0 (SD = 14.2)	Average = 16.4 (SD = 14.4)
Most Serious Prior Charges		
Drug	35%	33%
Property	30%	34%
Violent	22%	22%
Other	14%	11%

Note: Data were obtained from PROBER and CJIS. The median number of prior arrests for probationers assigned to HOPE was 13, and for control was 12. The median age of HOPE probationers was 35.2, and of control was 34.4. The median LSI for HOPE probationers was 28, and for control was 27.

¹¹ p-values ranged from 0.33 to 0.93. None of the tests showed statistically significant differences.

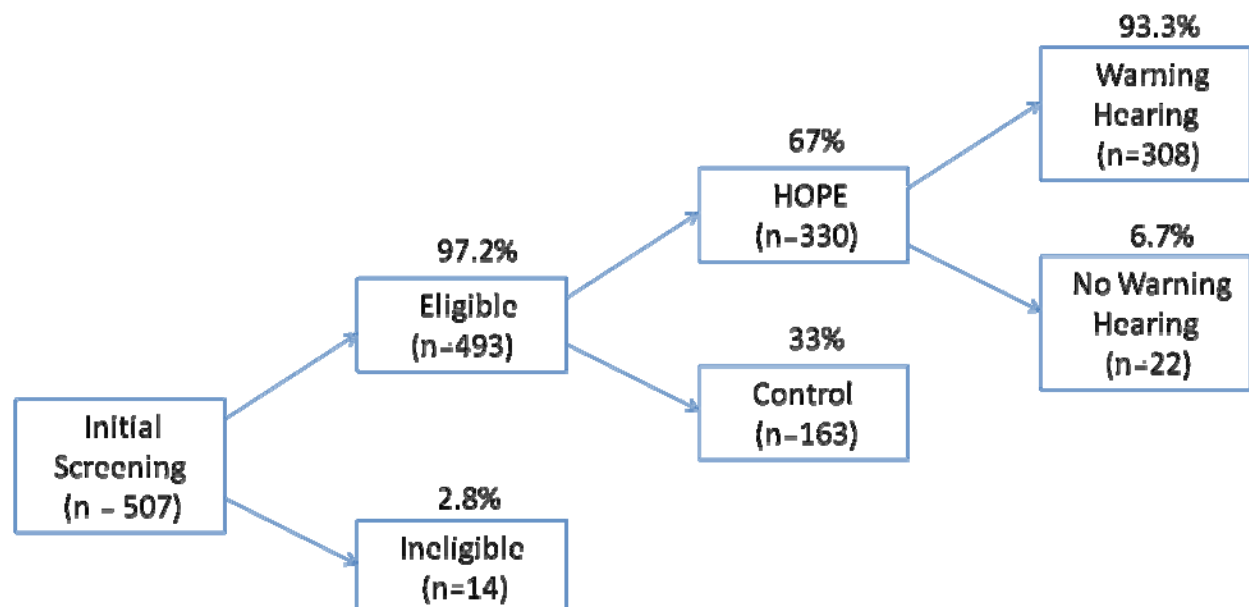
DATES OF RECRUITMENT AND FOLLOW-UP

The RCT uses an intent-to-treat design. The study start-date for all study participants is the same and begins on the date of randomization. The follow-up period for all subjects is one year, ending in October 2008.

NUMBER OF PARTICIPANTS

In an initial screening by probation officers, 507 probationers were identified for the study. Fourteen were deemed ineligible for inclusion in the study by probation-officer supervisors. These include ten probationers who had either transferred (or were preparing to transfer) to another unit (domestic violence unit or mental-health court), two who were identified as pending deportation, one who was deceased, and one who had a pending application for transfer to drug court. Of the eligible probationers, two thirds were assigned to HOPE ($n = 330$) and one third assigned to control ($n = 163$). Twenty-two probationers (6.7 percent) assigned to HOPE never appeared for their warning hearing. As the study used an intent-to-treat design, probationers assigned to HOPE who never appeared for their warning hearing were included in the HOPE group.

Fig A.1. Assignment to Study Groups



FINDINGS

Primary outcome measures.

The effectiveness of HOPE probation is evaluated by comparing HOPE probationers with control-group probationers on three primary and two secondary outcome measures. All variables reported correspond to outcomes observed over the one-year follow-up period.

Primary Outcomes

- (i) No-shows for probation appointments (% , by study group)
- (ii) Positive urine tests for illicit-substance use (% , by study group)
- (iii) Re-arrest rates (% , by study group)

Secondary Outcomes

- (iv) Revocation rates (% , by study group)
- (v) Days incarcerated (average days, by study group)

Table A2 and the accompanying notes provide a summary of the findings of the randomized controlled trial. Each of the results reported was statistically significant ($p < 0.01$) across groups.

Table A2. Summary of RCT Findings

Outcome	HOPE	Control
No-shows for probation appointments (average of appointments per probationer) *	9%	23%
Positive urine tests (average of tests per probationer)**	13%	46%
New arrest rate (probationers rearrested)	21%	47%
Revocation rate (probationers revoked)	7%***	15%
Incarceration (days sentenced)	138 days	267 days

* The no-show results are calculated as follows: The percentage of missed appointments is calculated for each offender. The average of these percentages is reported in Table A2. This approach gives equal weight to each offender, irrespective of how many appointments were scheduled for that probationer. An alternative measure calculates the total number of missed appointments divided by the total number of appointments. Using this

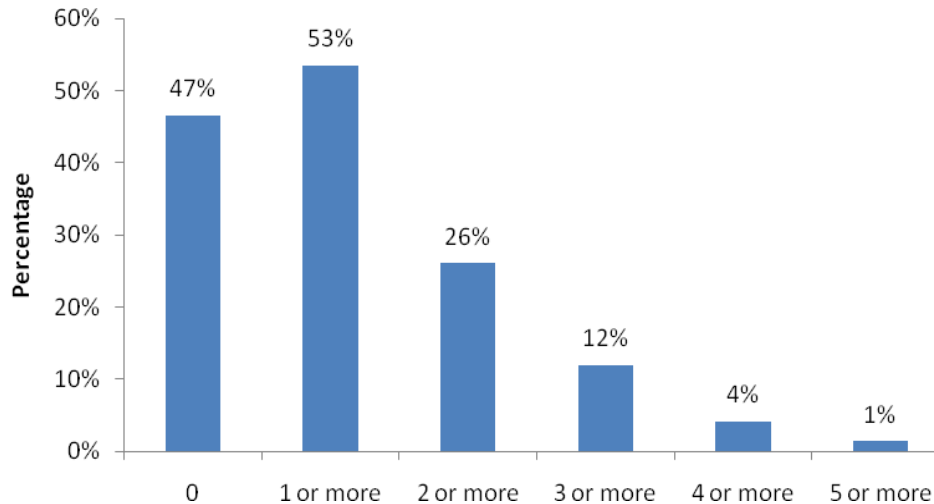
approach, the frequency of missed appointments was 5 percent for HOPE probationers and 18 percent for control probationers.

^{**} Positive urinalyses results are calculated as follows: The percentage of positive urinalyses tests is calculated for each offender. The average of these percentages is reported in Table A2. This approach gives equal weight to each offender, irrespective of how many tests that probationer is subjected to. An alternative measure calculates the total number of positive urinalyses divided by the total number of tests. Using this approach the frequency of positive urinalyses was 9 percent for HOPE probationers and 41 percent for control probationers.

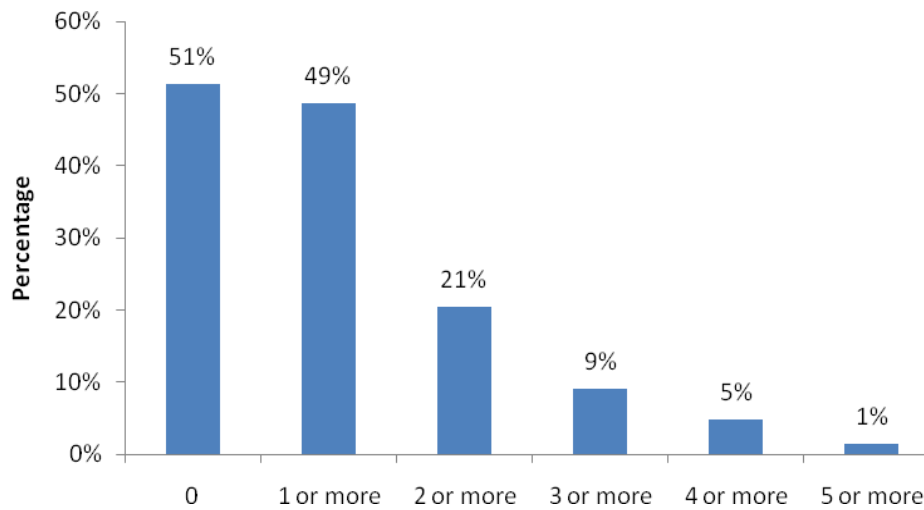
^{***} Thirty percent of the HOPE probationers who had their probation revoked had never appeared for their HOPE warning hearings. The revocation rate among those who appeared for a warning hearing was 5 percent.

Figures A.2–A.4 show the distribution of the number of missed appointments, positive urinalyses, and combined missed appointments and positive urinalyses for HOPE probationers during the 12-month period following their assignment to HOPE.

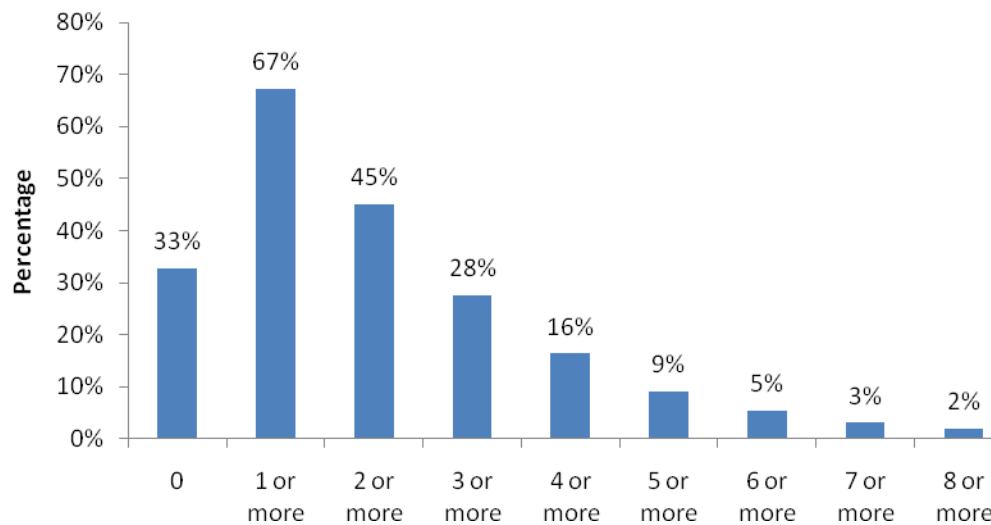
Figure A.2. Distribution of Number of No-Shows



Data source: PROBER

Figure A.3. Distribution of Number of Positive Urinalyses

Data source: PROBER

Figure A.4. Distribution of Number of Total Probation Violations (Missed Appointments and Positive Urinalyses)

Data source: PROBER

The findings of the RCT are consistent with those from the evaluation of HOPE conducted in the Integrated Community Sanctions unit (the latter unit was dedicated to the highest-risk probationers, and the evaluation relied on a quasi-experimental design).