Evidence-Based Sentencing for Drug Offenders: An Analysis of Prognostic Risks and Criminogenic Needs

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INTRODUCTION

Substance abusers are disproportionately represented in the criminal justice system. Approximately eighty percent of offenders in the U.S. meet a broad definition of substance involvement and between one-half and two-thirds satisfy official diagnostic criteria for substance abuse or dependence.² In a national sample of U.S. booking facilities, positive urine drug screens were obtained from approximately sixty-five percent of the arrestees in most jurisdictions.³ The positive urine results were not merely

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¹ See NAT'L. CTR. ADDICTION & SUBSTANCE ABUSE, BEHIND BARS: SUBSTANCE ABUSE AND AMERICA'S PRISON POPULATION 28 tbl.1 (1998) (finding approximately 80% of prison and jail inmates were convicted of a drug or alcohol-related offense, were intoxicated at the time of their offense, reported committing the offense to support a drug habit, or have a significant history of substance abuse); CHRISTOPHER J. MUMOLA & THOMAS P. BONCZAR, BUREAU JUST. ASSISTANCE, SUBSTANCE ABUSE AND TREATMENT OF ADULTS ON PROBATION 1995 at 7 (1998) (finding two thirds of probationers are drug or alcohol involved); TIMOTHY A. HUGHES ET AL., BUREAU JUST. STATISTICS, TRENDS IN STATE PAROLE, 1990-2000 8 tbl.10 (2001) (finding 83.9% of parolees are drug or alcohol involved).

² See Seena Fazel et al., Substance Abuse and Dependence in Prisoners: A Systematic Review, 101 ADDICTION 181, 183 & 186 (2006) (concluding from multiple studies that 17.7% to 30% of male prisoners met diagnostic criteria for alcohol abuse or dependence and 10% to 48% met criteria for drug abuse or dependence; for female prisoners, rates were 10% to 23.9% for alcohol abuse or dependence and 30.3% to 60.4% for drug abuse or dependence); Jennifer C. Karberg & Doris J. James, Bureau Justice Statistics, Substance Dependence, Abuse, and Treatment of Jail Inmates, 2002 1 tbl.1 (2005) (finding 45% of jail inmates met diagnostic criteria for drug or alcohol dependence, 23% met criteria for drug or alcohol abuse, and 68% met criteria for either abuse or dependence); Linda A. Teplin, Psychiatric and Substance Abuse Disorders Among Male Urban Jail Detainees, 84 AMER. J. PUB. HEALTH 290 (1994) (finding 61.3% of male urban jail detainees met criteria for current substance abuse or dependence); Linda A. Teplin et al., Prevalence of Psychiatric Disorders Among Incarcerated Women, 53 ARCHIVES GEN. PSYCHIATRY 505, 508 (1996) (finding 63.6% of female inmates met criteria for drug abuse or dependence and 32.3% met criteria for alcohol abuse or dependence). For a discussion of the diagnostic criteria for substance abuse and dependence, see infra notes 78-79 and accompanying text.

³ See NAT'L INST. JUST., ANNUAL REPORT: 2000 ARRESTEE DRUG ABUSE MONITORING

attributable to drug offenders, but rather were obtained from the majority of arrestees for most categories of crimes, including violent crimes,⁴ theft and property crimes.⁵

Substance abuse is associated with a several-fold increase in the likelihood of continued criminal offending.⁶ Fortunately, providing substance abuse treatment can cut recidivism rates substantially;⁷ however, drug offenders are notorious for failing to comply with conditions to attend substance abuse treatment.⁸ Left to their own devices without intensive supervision, approximately twenty-five percent of offenders referred to substance abuse treatment fail to enroll,⁹ and of those who do arrive for treatment, approximately half drop out before receiving a minimally sufficient dosage¹⁰ of three months of services.¹¹

^{7 &}amp; 93 (2003) (reporting urine drug test results from arrestees in 35 booking facilities). Rates of drug-positive urine samples ranged from 52% to 80% across jurisdictions for male arrestees and from 31% to 80% for female arrestees. *Id.* Cocaine, marijuana, methamphetamine and opiates were the most commonly detected drugs. *Id.* at 8 & 93. In addition, 35% to 70% of the arrestees reported heavy alcohol binge drinking in the month immediately preceding their arrest. *Id.* at 41.

⁴ In Los Angeles, for example, 48.6% of male arrestees and 34% of female arrestees for violent crimes, including robbery, assault and weapons offenses, tested positive for illicit drugs. See NAT'L INST. JUST., 1999 ANNUAL REPORT ON DRUG USE AMONG ADULT AND JUVENILE ARRESTEES 50 tbl.3 (2000).

 $_5$ In Los Angeles, 63.3% of male arrestees and 50% of female arrestees for property crimes, including theft, larceny, burglary and stolen vehicles, tested positive for illicit drugs. Id

⁶ See Trevor Bennett et al., The Statistical Association Between Drug Misuse and Crime: A Meta-analysis, 13 AGGRESSION & VIOL. BEHAV. 107, 112 (2008) (concluding illicit drug abuse increases odds of re-offending by 2.8 to 3.8 times). The odds of re-offending are particularly high for certain drugs. The risk of recidivism is more than 6 times greater for crack cocaine abusers and 3.0 to 3.5 times greater for heroin abusers. Id. at 112-113. See also Adele Harrell & John Roman, Reducing Drug Use and Crime Among Offenders: The Impact of Graduated Sanctions, 31 J. DRUG ISSUES 207, 207-08 (2001) (noting active narcotic users commit crimes four to six times more often than when not using drugs); David N. Nurco et al., The Drugs-Crime Connection, in HANDBOOK OF DRUG CONTROL IN THE UNITED STATES 71, 79 (James A. Inciardi ed., 1990) (reporting 40% to 75% reduction in crime-days for narcotic addicts during periods of abstinence).

⁷ See Katy R. Holloway et al., The Effectiveness of Drug Treatment Programs in Reducing Criminal Behavior, 18 PSICOTHEMA 620, 623 (2006) (concluding drug abuse treatment reduces odds of re-offending by 29% to 36%); Michael L. Prendergast et al., The Effectiveness of Drug Abuse Treatment: A Meta-analysis of Comparison Group Studies, 67 DRUG & ALCOHOL DEPENDENCE 53, 61 & 63 (2002) (concluding drug abuse treatment reduces crime by 6 percentage points); Michael Gossop et al., Reductions in Criminal Convictions After Addiction Treatment: 5-Year Follow-up, 79 DRUG & ALCOHOL DEPENDENCE 295, 298 (2005) (finding significantly lower conviction rates 5 years after addiction treatment).

⁸ See generally Douglas B. Marlowe, Effective Strategies for Intervening with Drug Abusing Offenders, 47 VILL. L. REV. 989, 1006-10 (2002) (reviewing high treatment dropout and noncompliance rates among drug abusing offenders).

⁹ See, e.g., UNIV. CAL. LOS ANGELES, INTEGRATED SUBSTANCE ABUSE PROG., EVALUATION OF THE SUBSTANCE ABUSE AND CRIME PREVENTION ACT: FINAL REPORT 3 (2007) [hereinafter SACPA EVALUATION] (finding 25% of offenders diverted to treatment in lieu of incarceration never arrived for treatment).

¹⁰ See id. at 4, 48 (finding 50% of drug offenders dropped out of treatment within 90 days); see also Samuel A. Ball et al., Reasons for Dropout From Drug Abuse Treatment:

A major goal, therefore, of effective correctional programming, is to ensure that drug offenders comply with their treatment and supervisory conditions. A range of sentencing dispositions has been created to identify drug problems among offenders, refer them to treatment, and hold them accountable for showing up and paying attention to the clinical interventions. The challenge is to select from among this array of options the best disposition for each offender that will optimize outcomes at the least cost to taxpayers and with the least threat to public safety.

This article begins by describing the sentencing options that are available in most states for drug-involved offenders, and the benefits and burdens associated with each. A model of evidence-based sentencing is presented that attempts to match drug offenders to dispositions that optimally balance impacts on cost, public safety, and the welfare of the offender. Implementing this model in practice requires an assessment of each offender's risk of dangerousness, prognosis for success in standard treatment, and clinical needs. A typology is presented of four sub-groups of

Symptoms, Personality, and Motivation, 31 Addictive Behav. 320, 320-21 (2006) (concluding approximately 50% of drug abuse clients drop out of treatment within first month); Michael J. Stark, Dropping Out of Substance Abuse Treatment: A Clinically Oriented Review, 12 CLIN. PSYCHOL. REV. 93, 94 (1992) (noting majority of investigators reported over 50% attrition within first month of drug abuse treatment and 52% to 75% attrition from alcoholism treatment); Yih-Ing Hser et al., Effects of Program and Patient Characteristics on Retention of Drug Treatment Patients, 24 EVAL. & PROG. PLANNING 331, 336-37 (2001) (finding in study of over 26,000 clients that approximately 82% in residential drug abuse treatment and 73% in outpatient treatment failed to complete treatment); Michael Wierzbicki & Gene Pekarik, A Meta-Analysis of Psychotherapy Dropout, 24 PROF. PSYCHOL. RES. & PRACT. 190, 192 (1993) (finding mean dropout rate in psychotherapy of 46.86%).

11 Three months of outpatient substance abuse treatment appears to be the minimum threshold for detecting dose-response effects from the interventions. See D. Dwayne Simpson et al., Treatment Retention and Follow-up Outcomes in the Drug Abuse Treatment Outcome Study (DATOS), 11 PSYCHOL. ADDICTIVE BEHAV. 294, 299 & 304 (1997) (finding in national study of outpatient substance abuse treatment programs that 90 days was necessary for improved outcomes).

12 Traditional "wisdom" held that addicts could not be coerced to get well. See, e.g., Richard S. Schottenfeld, Involuntary Treatment of Substance Abuse Disorders—Impediments to Success, 52 PSYCHIATRY 164, 168-171 (1989) (suggesting coercion undermines therapeutic relationship). This notion turns out to be false. Dozens of studies have found that individuals who entered substance abuse treatment under the threat of a legal sanction performed at least as well, and often appreciably better, than those entering voluntarily. See, e.g., John F. Kelly et al., Substance Use Disorder Patients Who Are Mandated to Treatment: Characteristics, Treatment Process, and 1- and 5-Year Outcomes, 28 J. Substance Abuse Treatment 213, 221 (2005) (finding offenders in mandated substance treatment had better outcomes than non-mandated clients 5 years after entry); Brian E. Perron & Charlotte L. Bright, The Influence of Legal Coercion on Dropout From Substance Abuse Treatment: Results From a National Survey, 92 DRUG & ALCOHOL DEPENDENCE 123, 128 (2008) (finding legally mandated clients had longer retention in drug abuse treatment than non-mandated clients).

 $_{\rm 13}$ For a discussion of these sentencing options, see in fra notes 15-48 and accompanying text.

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drug offenders characterized by distinct risk-and-need profiles. Specific recommendations are offered for the clinical and supervisory interventions that should be included in sentencing orders for each offender subtype.

I. DISPOSITIONS FOR DRUG OFFENDERS

A continuum of correctional dispositions is available in virtually all U.S. jurisdictions for intervening with drug-involved offenders (see Figure 1). Programs at one end of this continuum emphasize public health or rehabilitation objectives using less restrictive means, whereas those at the other end emphasize public safety objectives applying restrictive conditions. Programs in the center strive to integrate elements of both public health and public safety approaches by combining criminal justice supervision with mandatory community-based treatment. The dispositions may go by various names and may have different eligibility criteria across jurisdictions; however, the general contours of the programs are comparable in most states.

Functioning of the Offenders

Risks to Public Safety

Pre-Trial Diversion / Administrative Probation

Probation Without Verdict

Functioning of the Offenders

SSSCosts SSS

Drug Courts

Jail / Prison

FIGURE 1: Continuum of Correctional Dispositions for Drug-Abusing Offenders

A. Pre-Trial Diversion or Administrative Probation

Offenders who have been charged with relatively minor summary or misdemeanor crimes may have the opportunity to avoid a criminal record by remaining arrest-free for a specified period of time, satisfying minimal reporting obligations, and

¹⁴ See generally Marlowe, supra note 8 (reviewing sentencing dispositions for drug offenders emphasizing public health vs. public safety objectives and those integrating both objectives); Douglas B. Marlowe, Integrating Substance Abuse Treatment and Criminal Justice Supervision, 2 Sci. & Pract. Perspectives 4 (2003).

completing applicable treatment requirements.¹⁵ Upon satisfaction of the conditions, the charges are dropped, and the record may be expunged.¹⁶

Unfortunately, inadequate compliance with treatment is a major problem in diversion and probation programs. As noted previously, substantial proportions of drug offenders fail to enter substance abuse treatment or drop out prematurely before making therapeutic gains. As a result, these low-intensity dispositions tend to be most effective for less severe offenders who are already predisposed to comply with their conditions and desist from re-offending. Poor compliance among the remainder of drug offenders has necessitated the development of more stringent diversion programs that administer meaningful consequences for failure to follow through with treatment conditions.

B. Probation Without Verdict

Most jurisdictions have statutory provisions offering certain drug offenders an opportunity for diversion "with teeth." This model may go by various names but has been generically referred to as probation without verdict. 19 The offender is typically required to plead guilty or no contest (nolo contendere) to the charge(s) and the plea is held in abeyance while the offender completes a term of probation with conditions for treatment and supervision. 20 Satisfaction of the conditions leads to the plea being vacated and perhaps to the opportunity for record expungement. 21 Importantly, because the offender has already pled guilty to the charge(s), failure to complete treatment can lead to immediate sentencing and disposition. 22 This arrangement offers additional coercive leverage to keep offenders engaged in treatment and compliant with their supervisory conditions.

¹⁵ See, e.g., CAL. PENAL CODE § 1000 et seq. (Deering 2008) (authorizing pre-guilty diversion for offenders charged with enumerated non-violent offenses who do not have serious offense history); 35 PA. CODE § 780-118 (2008) (providing for pre-trial disposition in lieu of trial for drug dependent or drug abusing offenders charged with nonviolent crimes); PA. R. CRIM. P. Chap. 3 Parts A and B (providing for pre-trial treatment disposition in lieu of adjudication for minor offenses).

¹⁶ Record expungement ordinarily entitles the individual to respond truthfully on an employment application or similar document that the arrest or conviction did not occur for legal purposes. See, e.g., David S. Festinger et al., Expungement of Arrest Records in Drug Court: Do Clients Know What They're Missing?, 5 DRUG CT. REV. 1, 5-7 (2005) (reviewing legal and practical benefits to drug offenders of obtaining record expungement).

¹⁷ See supra notes 8-11 and accompanying text.

¹⁸ For a discussion of the optimal target population for pre-trial diversion and administrative probation programs, see infra note 152 and accompany text.

¹⁹ See, e.g., 35 PA. CODE § 780-117 (2008) (authorizing probation without verdict for certain nonviolent drug-dependent offenders).

²⁰ *Id*.

²¹ See id.§ 780-117 (3).

²² See id.§ 780-117 (2).

A 2000 ballot initiative in California, entitled *Proposition 36*, applied a probation-without-verdict model to a large segment of drug possession offenders.²³ Pursuant to this law, nonviolent drug-possession offenders who did not have a history of a serious exclusionary offense were entitled to *three* probation-without-verdict opportunities before their probation could be revoked and they could be sentenced to incarceration, unless the State could prove the offender was a danger to public safety or non-amenable to treatment.²⁴ Successful completion of treatment and probation led to the plea being vacated and the opportunity for record expungement.²⁵

The results of this drug policy experiment could be characterized as mixed at best. Evidence suggests Proposition 36 might have benefited a substantial minority of drug possession offenders (approximately 25% of the population) who had relatively less severe criminal backgrounds; however, it was associated with poor treatment compliance and higher re-arrest rates for the remainder of the participants. Regardless, the results yielded some of the best available data on the effects of probation-without-verdict dispositions and offered much-needed guidance on how to select the optimal target population for this approach. Property of the property of t

C. Drug Courts

Drug courts are special criminal court dockets that combine mandatory drug abuse treatment and case management services with intensive judicial supervision, regularly scheduled status hearings in court, random weekly urine drug testing, escalating sanctions for infractions, and escalating rewards for accomplishments.²⁸ Typically, defendants must plead guilty or stipulate to the facts in the criminal complaint as a condition of participation

²³ California Substance Abuse and Crime Prevention Act of 2000, 2000 Cal. Legis. Serv. Prop 36 (West), codified at CAL. PENAL CODE § 1210 et seq (2000).[hereafter Proposition 36].

²⁴ See id.§ 5(e) (3).

²⁵ See id. § 5(d).

²⁶ For further discussion of the effects of Proposition 36, see infra notes 58-63 and accompanying text.

²⁷ For further discussion of the optimal target population for probation-without-verdict dispositions, see infra notes 128-29 and accompanying text.

²⁸ See generally NAT'L. ASS'N. OF DRUG COURT PROF'LS, DEFINING DRUG COURTS: THE KEY COMPONENTS (1997) [hereafter KEY COMPONENTS] (defining 10 key components of drug courts). There are more than 2,100 drug courts in the U.S. and over 1,000 other problem-solving courts that are modeled after drug courts, such as mental health courts and reentry drug courts. See generally C. WEST HUDDLESTON ET AL., PAINTING THE CURRENT PICTURE: A NATIONAL REPORT CARD ON DRUG COURTS AND OTHER PROBLEM-SOLVING COURT PROGRAMS IN THE UNITED STATES 3, 18 (Nat'l. Drug Ct. Inst., 2008) (tallying drug courts and other problem-solving court programs in U.S. as of 12/31/07).

in drug court. Pre-adjudication drug courts often include a diversion component similar to probation without verdict, in which graduates can have the charge(s) dropped and the record expunged.²⁹ Post-adjudication drug courts enable graduates to avoid a sentence of incarceration, shorten the term of probation, or consolidate multiple probation sentences.

Substantial research indicates that drug courts significantly reduce crime and drug abuse,³⁰ and the effects have been shown to last several years.³¹ Unfortunately, drug courts serve only about one half of the currently eligible population and only about 5% of all offenders with substance abuse problems.³² Evidence suggests drug courts elicit the greatest effects for high-risk and high-needs drug offenders characterized by relatively more severe criminal and substance abuse backgrounds.³³ It is important, therefore, to make drug courts more widely available to seriously drug-dependent and criminally involved offenders who can be safely managed in the community. This should include increasing the number and capacity of existing drug courts, as well as widening the eligibility criteria to admit certain offenders charged with non-drug crimes if those crimes were primarily fu-

²⁹ See, e.g., Festinger et al., supra note 16, at 5 (describing record expungement in pre-adjudication drug courts).

³⁰ See David B. Wilson et al., A Systematic Review of Drug Court Effects on Recidivism, 2 J. Exper. Criminology 459, 479 (2006) (concluding drug courts reduce crime an average of 14% to 26%); Jeff Latimer et al., A Meta-Analytic Examination of Drug Treatment Courts: Do They Reduce Recidivism? 9 (Canada Dept. Justice, 2006) (concluding drug courts reduce crime an average of 14%); Deborah Koetzle Shaffer, Reconsidering Drug Court Effectiveness: A Meta-Analytic Review 3 (Dept. Crim. Just., Univ. Nevada, 2006) (concluding drug courts reduce crime an average of 9%); Christopher T. Lowenkamp et al., Are Drug Courts Effective: A Meta-Analytic Review, J. Community Corrections, Fall 2005 at 5, 8 (concluding drug courts reduce crime an average of 7.5%); U.S. Gov't Accountability Off., Adult Drug Courts: Evidence Indicates Recidivism Reductions and Mixed Results For Other Outcomes (2005) (concluding drug courts reduce crime); Steven Belenko, Drug Courts, in Treatment of Drug Offenders: Policies and Issues 309-10 (Carl G. Leukefeld et al. eds., 2002) (concluding drug courts reduce crime and drug abuse); Douglas B. Marlowe et al., A Sober Assessment of Drug Courts, 16 Fed. Sent'g Rep. 153, 153-54 (2003).

³¹ See Denise C. Gottfredson et al., Effectiveness of Drug Treatment Courts: Evidence From a Randomized Trial, 2 CRIMINOLOGY & PUB. POL'Y 171, 189 (2003) (finding reduction in crime lasting 2 years); Denise C. Gottfredson et al., The Baltimore Drug Treatment Court: 3-Year Self-Report Outcome Study, 29 EVAL. REV. 42, 60 (2005) (finding reduction in crime and substance abuse lasting 3 years); MICHAEL FINIGAN ET AL., THE IMPACT OF A MATURE DRUG COURT OVER 10 YEARS OF OPERATION: RECIDIVISM AND COSTS II (NPC Research, 2007) (finding reduction in crime lasting 14 years).

³² See AVINASH S. BHATI ET AL., TO TREAT OR NOT TO TREAT: EVIDENCE ON THE PROSPECTS OF EXPANDING TREATMENT TO DRUG-INVOLVED OFFENDERS 56-58, 66 (Urban Institute 2008) (estimating more than twice as many arrestees eligible for drug courts as available slots, and drug courts treat small fraction of 1.47 million arrestees at risk for drug abuse or dependence each year).

 $_{33}$ For further discussion of the optimal target population for drug courts, $see\ infra$ notes 116-118 and accompanying text.

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D. Intermediate Punishment

Intermediate punishment refers to a range of community-based sentences that may be imposed in lieu of incarceration.³⁵ Examples include military-style boot camps, intensive supervised probation (ISP), correctional halfway houses, day-reporting centers, home detention, and electronic monitoring.³⁶ The aim of these programs is to safeguard public safety while at the same time containing correctional costs and avoiding the debilitating effects of institutional incarceration.

The statutory authorization for intermediate punishment often includes conditions for offenders to attend substance abuse treatment, and receive other needed services.³⁷ In practice, unfortunately, the primary emphasis has tended to be on monitoring offenders, detecting infractions, and responding to violations – and many of the programs have provided relatively minimal clinical services.³⁸ When, however, these programs have incorporated substantial treatment components, they have produced average crime reductions of approximately 10% to 20%.³⁹

E. Incarceration

Incarceration in county jail or state prison is authorized by statute⁴⁰ and recommended by sentencing guidelines in some ju-

³⁴ See BHATI ET AL., supra note 32, at 58-66 (projecting additional cost savings and crime reduction resulting from expanding eligibility for drug courts).

³⁵ See, e.g., 42 PA. CONS. STAT. § 9763 (2008) (authorizing county intermediate punishment in lieu of all or part of county jail sentence); 42 PA. CONS. STAT. §§ 9901-9909 (2008) (authorizing state intermediate punishment in lieu of all or part of prison sentence)

³⁶ See generally Douglas B. Marlowe, Effective Strategies for Intervening With Drug Abusing Offenders, 47 VILL. L. REV. 989 (2002); see supra note 8, at 1004-05 (reviewing intermediate punishment programs); Paul Gendreau et al., Treatment Programs in Corrections, in Corrections, in Corrections in Canada: Social Reactions to Crime 238 (J. Winterdyk ed., 2001)

³⁷ See, e.g., 42 PA. CONS. STAT, § 9763(b) & (c)(2) (2008) (authorizing or requiring treatment, counseling and rehabilitation as condition of county intermediate punishment).

³⁸ See generally Paul Gendreau et al., The Effects of Community Sanctions and Incarceration on Recidivism, 12 CORRECTIONS RES. 10 (2000) [hereinafter Community Sanctions] (describing how intermediate punishment programs have been administered in practice); Paul Gendreau et al., Intensive Rehabilitation Supervision: The Next Generation in Community Corrections?, 58 FED. PROBATION 72 (1994).

³⁹ See Paul Gendreau et al., Community Sanctions, supra note 38, at 12 (concluding addition of treatment in intermediate punishment produced 10% average reduction in crime); STEVE AOS ET AL., EVIDENCE-BASED ADULT CORRECTIONS PROGRAMS: WHAT WORKS AND WHAT DOES NOT 3 tbl.1 (WASH. STATE INST. PUB. POL'Y, 2006) (finding intermediate punishment with treatment reduced crime by 21.9%, whereas intermediate punishment alone did not).

⁴⁰ See, e.g., 35 PA. CODE § 780-113 (2008) (describing prohibited acts and penalties

risdictions⁴¹ for many drug-related offenses, including possession, possession with the intent to distribute (PWID), sales, and manufacturing. The recommended range for the term of incarceration is typically predicated on offense-based factors, including the amount and type of drug that was involved, the offender's prior offense history, and whether the crime involved distribution or manufacturing as opposed to simple possession.⁴² There may also be opportunities for a downward departure or upward departure outside of the recommended range, based upon enumerated offender-based mitigating circumstances or offense-based aggravating circumstances.⁴³

Incarceration has demonstrable *incapacitation* effects, in that inmates are prevented from committing further criminal acts in the community while they are detained.⁴⁴ However, it has minimal *specific deterrence* effects – meaning it does not reduce inmates' engagement in crime or drug abuse after their release. The average effect of incarceration on crime following release from prison is approximately zero.⁴⁵ Equally discouraging, 70%

for drug-related crimes); 18 PA. CODE § 7508 (2008) (same for drug trafficking offenses).

⁴¹ See, e.g., 204 PA. CODE §§ 303.1 et seq. (authorizing state sentencing guidelines).

⁴² See, e.g., Steven L. Chanenson, The Next Era of Sentencing Reform, 54 EMORY L. J. 377, 399 (2005) (describing sentencing process for drug crimes as inflexible and revolving almost exclusively around offense-based factors); see generally NATL. CTR. FOR STATE COURTS, STATE SENTENCING GUIDELINES: PROFILES AND CONTINUUM (2008) (comparing sentencing guidelines in several states).

⁴³ See Chanenson, supra note 42, at 397 (describing departures from presumptive sentencing range as key to flexibility in sentencing guidelines); see also NATL CTR. FOR STATE COURTS, ASSESSING CONSISTENCY AND FAIRNESS IN SENTENCING 8 (2003) (noting upward and downward departures are reviewable on appeal in some jurisdictions but not others). Mitigating factors for a downward departure might include demonstrable efforts at drug treatment, acceptance of responsibility, or remorse for the crime. See, e.g., United States v. Sally, 116 F.3d 76, 81 (1997) (permitting downward departure if efforts at rehabilitation indicated real, positive behavioral change in excess of that ordinarily present). Aggravating factors might include the involvement of a deadly weapon or drug dealing near a school zone. See, e.g., 204 PA. CODE §§ 303.10(a) & (b) (2009) (providing for sentence enhancements).

⁴⁴ See Pew Pub. Safety Performance Project, Public Safety, Public Spending: Forecasting America's Prison Population 2007-11, 20-22 (2007) [hereafter Pew Safety] (concluding approximately 25% of reduction in crime since 1990s was attributable to prison sentences); Don Stemen, Reconsidering Incarceration: New Directions For Reducing Crime 2 (Vera Inst. Just., 2007); see generally William Spelman, What Recent Studies Do (and Don't) Tell Us About Imprisonment and Crime, 27 Crime & Justice 419 (2000) (reviewing research on the topic).

⁴⁵ See Gendreau et al., Community Sanctions, supra note 38, at 12 (concluding average effect of prison on recidivism is 0.00 compared to community-based sanctions). Within 3 years of release from prison, nearly two thirds of inmates are arrested for a new crime, one half are convicted, and one half are re-incarcerated for a new crime or technical violation. See Patrick A. Langan & David J. Levin, Bureau Justice Statistics, Recidivism of Prisoners Released in 1994 1 (2002). Among inmates charged with drug crimes, 82% recidivate within 4 years. See Cassia Spohn & David Holleran, The Effect of Imprisonment on Recidivism Rates of Felony Offenders: A Focus on Drug Offenders, 40 CRIMINOLOGY 329, 348 (2002). Among all inmates who have serious drug problems, 62% recidivate within 4 years. Id.

to 85% of drug-abusing inmates return to drug use within 1 year of release from prison and 95% return to drug use within 3 years. 46 In short, whatever gains are achieved during the period of incarceration, either for the offenders or for society at-large, are rapidly and decisively lost soon after release. 47

II. EVIDENCE-BASED SENTENCING

Each of the dispositions described above is associated with specific benefits and burdens that are often in direct tension with one another. For example, as one moves from left to right on the continuum in Figure 1, the costs of the interventions increase precipitously, with the greatest costs associated with incarceration. On the other hand, short-term risks to public safety decline substantially from left to right, at least while the offenders are under the supervision of the programs. To make matters more complicated, the effects on the psychosocial functioning of the offenders follow a "curvilinear" pattern, in which the best outcomes are elicited by programs in the middle of the continuum, and the worst outcomes by those at either extreme. In

⁴⁶ See Steven S. Martin et al., Three-Year Outcomes of Therapeutic Community Treatment for Drug-Involved Offenders in Delaware, 79 PRISON J. 294, 307 & 310 (1999) (finding 84% of untreated drug-abusing inmates returned to drug use within 1 year of release from prison and 94% returned to drug use within 3 years); Thomas E. Hanlon et al., The Response of Drug Abuser Parolees to a Combination of Treatment and Intensive Supervision, 78 PRISON J. 31, 36 (1998) (finding 70% of parolees tested positive for illicit drugs within 1 year); David N. Nurco et al., Recent Research on the Relationship Between Illicit Drug Use and Crime, 9 BEHAV. SCI. & LAW 221, 236 (1991) (reviewing re-addiction rates reported in literature exceeding 80% to 90% within one year after prison).

⁴⁷ The research evidence is ambiguous as to whether prison has a *general deterrence* effect by preventing new initiates to crime. *See, e.g.*, MICHAEL TONRY, SENTENCING MATTERS 136-43 (1996).

⁴⁸ It costs an average of approximately \$65,000 per prison bed for construction and other fixed capital costs, and approximately \$24,000 per bed per year for operating costs. See PEW SAFETY, supra note 44, at 20-22. In contrast, it costs approximately \$3,700 per year per offender to run an intensive supervised probation (ISP) program, and approximately \$4,000 per year per offender to run a drug court. See STEVE AOS ET AL., WASHINGTON STATE INST. PUB. POL'Y, EVIDENCE-BASED PUBLIC POLICY OPTIONS TO REDUCE FUTURE PRISON CONSTRUCTION, CRIMINAL JUSTICE COSTS, AND CRIME RATES 9 tbl.4 (2006). The cost of substance abuse treatment in the community is approximately \$16,500 for long-term residential treatment, \$3,300 for short-term residential treatment, and \$3,600 for outpatient treatment. See BHATI ET AL., supra note 32, at 37 tbl.3.4.

⁴⁹ See PEW SAFETY, supra note 44, at 24 (concluding approximately 25% of reduction in then-rising crime and violence rates during 1990s was attributable to prison sentences imposed on drug offenses) (citing STEMEN, supra note 44). However, many criminologists have concluded that the U.S. has reached the point of diminishing returns on incarceration, meaning that the crime-avoidance effect has declined exponentially as the number of persons incarcerated has increased. See, e.g., ROGER K. WARREN, EVIDENCE-BASED PRACTICE TO REDUCE RECIDIVISM: IMPLICATIONS FOR STATE JUDICIARIES 11 (Crime & Just. Inst., Nat'l. Inst. Corrections and Nat'l Ctr. State Ct., 2008). Drug courts, which are at the center of the continuum in Figure 1, have also been proven to reduce crime rates significantly better than diversion and probation without verdict, which are at the lower end of the continuum. See supra notes 30-31 and accompanying text.

⁵⁰ See generally Marlowe, supra note 8 (concluding programs in center of continuum

fact, evidence suggests there may be *iatrogenic effects* from programs at both extremes, in which drug use and crime actually worsen as a function of greater exposure to the interventions.⁵¹

The difficult task facing policymakers and practitioners is to select from among this continuum of options, the most effective and cost-efficient dispositions for use with the large population of drug-involved offenders coming before the courts and into the criminal justice system each year. Unfortunately, what this has often meant historically is the over-application of any one disposition for a large segment of the drug-offender population.

For example, the *War on Drugs* of the 1980s imposed mandatory minimum sentences and longer prison terms for various types of drug crimes, including many drug possession offenses.⁵² This strategy appears to have contributed to a plateau or possible reduction in then-rising crime and violence rates⁵³ and this impact cannot be ignored from a public-safety perspective. Unfortunately, the War on Drugs paid insufficient attention to countervailing considerations of cost⁵⁴ and the psychosocial impact of incarceration on individuals, their families, and their communities.⁵⁵ The result was skyrocketing correctional budgets, population caps imposed on some state prisons by the federal courts in

improve offender outcomes considerably better than those at either extreme); Marlowe, supra note 14.

⁵¹ Iatrogenic effects, or negative side effects, are common in the criminal justice system, especially for programs that are unduly lenient or punitive. See Joan McCord, Cures That Harm: Unanticipated Outcomes of Crime Prevention Programs, 587 ANNALS AM. ACAD. POL. & SOC. SCI. 16, 17 (2003) (noting interventions in criminal justice system have been associated with increased drug use, increased crime, decreased ability to cope with life, and premature death); Douglas B. Marlowe, When "What Works" Never Did: Dodging the "Scarlet M" in Correctional Rehabilitation, 5 CRIMINOLOGY & PUB. POL'Y. 339, 342-44 (2006) (considering why iatrogenic effects might have been caused by lenient treatment-oriented parole program); Anthony Petrosino et al., Well-Meaning Programs Can Have Harmful Effects! Lessons From Experiments of Programs Such as Scared Straight, 46 CRIME & DELINQ. 354, 371 (2000) (concluding Scared Straight programs not only failed to reach their objectives, but may have backfired and done more harm than good).

⁵² Former President Ronald Reagan declared the formal War on Drugs in National Security Decision Directive No. 221 (Apr. 8, 1988). Federal and state laws enacted pursuant to this Directive, including the Anti-Drug Abuse Act of 1988, H.R. Res. 5210, 100th Cong. (1988), increased prison penalties and established mandatory minimum sentences for various drug offenses, including some drug-possession offenses. See, e.g., DAVID BOYUM & PETER REUTER, AN ANALYTIC ASSESSMENT OF U.S. DRUG POLICY 7-9 (2005) (reviewing Anti-Drug Abuse Act and similar laws passed during Reagan administration); STEVEN R. BELENKO, DRUGS AND DRUG POLICY IN AMERICA 315-321 (2000) (same).

⁵³ For a discussion of the impact of incarceration from the War on Drugs on crime and violence rates, see supra note 44 and accompanying text.

 $_{54}$ For a discussion of the high costs of incarceration, $see \ supra$ note 48 and accompanying text.

⁵⁵ See generally John Hagan & Ronit Dinovitzer, Collateral Consequences of Imprisonment for Children, Communities, and Prisoners, in PRISONS (Michael Tonry & Joan Petersilia eds., 1999) (noting imprisonment significantly reduces employment and income, prevents potential wage earners from contributing to their communities, and may detract from children's development).

response to severe overcrowding, and devastation for overburdened minority and lower income communities.⁵⁶

On the other side of the continuum, Proposition 36 in California⁵⁷ emphasized a one-size-fits-all approach intended to be diametrically opposed to the War on Drugs. Pursuant to this initiative, the lion's share of drug-possession offenders were diverted into treatment in lieu of incarceration, and the courts were effectively disabled from responding to noncompliance with appreciably more than an extension of probation and relatively toothless demands for more treatment. The results were predictably lackluster.⁵⁸ Roughly one quarter of the offenders never arrived for a treatment session,⁵⁹ 50% of those who did arrive for treatment dropped out in less than 3 months,⁶⁰ and only one quarter completed treatment.⁶¹ Worse still, criminal recidivism actually increased.⁶²

Evidence-based sentencing seeks to avoid this overapplication of any one disposition for all or most drug offenders. Emphasis is placed, instead, on selecting dispositions that can optimally balance the "three jealous and conflicting masters" of cost, public safety, and the psychosocial impacts on offenders. The goal is to choose the disposition in each case that presents

⁵⁶ See generally Eric L. Jensen et al., Social Consequences of the War on Drugs: The Legacy of Failed Policy, 15 CRIM. JUST. POL'Y REV. 100 (2004) (discussing multitude of social, economic, health, political and human costs of War on Drugs). In particular, evidence suggests the War on Drugs led to disproportionately higher rates of incarceration among lower income and minority citizens, despite the fact that these individuals do not abuse drugs more than other racial, ethnic or income groups. See generally Martin Y. Iguchi et al., How Criminal System Racial Disparities May Translate into Health Disparities, 16 J. HEALTH CARE FOR POOR & UNDERSERVED 48 (2005) (considering how disproportionate incarceration of minorities and the poor may have led to serious health complications).

⁵⁷ For a discussion of Proposition 36 and the probation-without-verdict sentencing model it is based upon, $see\ supra$ notes 19-26 and accompanying text.

⁵⁸ Several commentators predicted Proposition 36 would be a failure because it underestimated the severity of the drug offender population and failed to hold offenders meaningfully accountable for their actions. See generally KEVIN JACK RILEY ET AL., DRUG OFFENDERS AND THE CRIMINAL JUSTICE SYSTEM: WILL PROPOSITION 36 TREAT OR CREATE PROBLEMS? (Rand Corp., 2000) (concluding Proposition 36 underestimated criminal backgrounds and substance use severity of drug offender population); Douglas B. Marlowe et al., Drug Policy By Popular Referendum: This, Too, Shall Pass, 25 J. SUBSTANCE ABUSE TREATMENT 213 (2003) (concluding Proposition 36 was inconsistent with scientific evidence on effective behavior modification for offenders).

⁵⁹ See SACPA EVALUATION, supra note 9, at 3 & 15-16.

⁶⁰ See id. at 4, 48.

⁶¹ See id. at 4, 39-40. Of the offenders who entered treatment, 32% completed. However, taking into account the offenders who never showed up for treatment in the first place, the completion rate was only 24% of all offenders.

⁶² See id. at 4-5, 57-66 (reporting significantly higher re-arrest rates for drug, property and theft offenses among Proposition 36 clients than comparably matched drug offenders who did not participate in Proposition 36); David Farabee et al., Recidivism Among an Early Cohort of California's Proposition 36 Offenders, 3 CRIMINOLOGY & PUB. POLY. 563, 574 (2004) (same).

the least objectionable risk of recidivism, the greatest likelihood of improving the welfare of the offender, and can do so at the least cost to taxpayers.

It is recognized, of course, that other considerations must and do influence sentencing decisions. For example, judges impose sentences, in part, to vindicate victims' rights, express the community's outrage at egregious conduct, or deter other people from committing similar offenses in the future. Although unquestionably legitimate, these factors are not included in the calculus of evidence-based sentencing because they do not lend themselves readily to empirical validation. There is no practical way, for example, to measure the influence of a sentence on community values, and efforts to gauge general deterrence have been largely unsuccessful.63 When, however, it is decided that value-laden factors such as these should trump empirical considerations of effectiveness, safety and cost, this should be explicitly stated in the sentencing order. A rationale should be articulated for imposing a more severe or less severe sentence than the evidence suggests would be necessary to improve outcomes.

III. ASSESSMENT OF RISKS AND NEEDS

Selecting evidence-based dispositions for drug offenders requires attention to three basic factors: (1) risk of dangerousness, (2) prognostic risks and (3) criminogenic needs.⁶⁴ Armed with knowledge about where an offender stands on these three dimensions, it is possible to predict the type of disposition that is most likely to be effective and cost-efficient for that individual.⁶⁵

⁶³ See TONRY, supra note 47, at 136-43 (concluding general deterrent effects of incarceration are unproven).

⁶⁴ See generally D. A. Andrews & James Bonta, The Psychology of Criminal Conduct (1998) (describing Risk, Needs, Responsivity [RNR] Theory and rationale for targeting interventions to risks and needs of offenders); J. Stephen Wormith et al., The Rehabilitation and Reintegration of Offenders: The Current Landscape and Some Future Directions for Correctional Psychology, 34 CRIM. JUST. & BEHAV. 879, 881 (2007) (concluding effects of correctional treatment are greatest when programs adhere to principles of risk, needs and responsivity); Faye S. Taxman & Douglas B. Marlowe, Risk, Needs, Responsivity: In Action or Inaction?, 52 CRIME & DELINQ. 3 (2006) (introducing special journal issue on recent research on RNR for offenders).

⁶⁵ It is beyond the scope of this article to review specific assessment instruments for measuring these dimensions. Several review articles and monographs address the topic. See generally D. A. Andrews et al., The Recent Past and Near Future of Risk and/or Need Assessment, 52 CRIME & DELINQ. 7 (2006) (reviewing several "generations" of risk and needs assessment instruments for offenders); DAVID W. SPRINGER ET AL., SUBSTANCE ABUSE TREATMENT FOR CRIMINAL OFFENDERS: AN EVIDENCE-BASED GUIDE FOR PRACTITIONERS 17-40 (2003) (reviewing screening, assessment and diagnostic instruments for substance abusing offenders); JAMES A. INCIARDI, CTR. FOR SUBSTANCE ABUSE TREATMENT, SCREENING AND ASSESSMENT FOR ALCOHOL AND OTHER DRUG ABUSE AMONG ADULTS IN THE CRIMINAL JUSTICE SYSTEM (U.S. Dept. Health & Human Svc., 1994) (same); Glenn D. Walters, Risk-Appraisal Versus Self-Report in the Prediction of Criminal Justice Outcomes: A Meta-Analysis, 33 CRIM. JUST. & BEHAV. 279 (2006) (examining pre-

A. Risk of Dangerousness

Arguably, the first obligation of the criminal justice system is to protect citizens from violent or predatory offenders. It would not be acceptable, for example, to reduce correctional costs at the expense of exposing the public to harm. Restrictive dispositions such as incarceration or intermediate punishment may be required for some portion of a violent offender's sentence. 66 However, because most offenders, including violent offenders, are eventually released back into the community,67 it is essential to tailor the "back end" of the sentence so as to include step-down provisions for continuing supervision and treatment upon release. For example, a period of incarceration might be followed by transfer to a correctional halfway house and subsequently to parole supervision.68 As a general rule, it is often a mistake to sentence serious offenders to the maximum period of incarceration, because once they have "max'ed out" on their sentence there may be no continuing authority to monitor and control their conduct after they have returned to the community.69

B. Prognostic Risks

Prognostic risks, sometimes called criminogenic risks, refer to characteristics of offenders that predict poorer outcomes in standard rehabilitation programs.⁷⁰ Importantly, in this context the term "risk" does *not* refer to a risk for violence or dangerous-

dictive validity of several risk assessment instruments for offenders); Roger H. Peters et al., Effectiveness of Screening Instruments in Detecting Substance Use Disorders Among Prisoners, 18 J. Substance Abuse Treatment 349 (2000) (reviewing screening instruments for detecting substance abuse and dependence among inmates); Craig S. Schwalbe, A Meta-Analysis of Juvenile Justice Risk Assessment Instruments: Predictive Validity by Gender, 35 CRIM. JUST. & BEHAV. 1367 (2008) (reviewing predictive validity of risk assessment instruments for juvenile offenders).

66 See, e.g., WARREN, supra note 49, at 26 (stating imprisonment should be reserved for violent, serious and dangerous offenders).

67 See JOAN PETERSILIA, WHEN PRISONERS COME HOME: PAROLE AND PRISONER REENTRY 3 (Oxford Press 2003) (noting 93% of prison inmates are eventually released and 44% are expected to be released within a given year).

68 See, e.g., Barry S. Brown et al., Effectiveness of a Stand-Alone Aftercare Program for Drug-Involved Offenders, 21 J. SUBSTANCE ABUSE TREATMENT 185, 189-90 (2001) (finding drug abusing parolees mandated to aftercare treatment had better outcomes than standard parole); Thomas E. Hanlon et al., The Relative Effects of three Approaches to the Parole Supervision of Narcotic and Cocaine Addicts, 79 PRISON J. 163, 171-73 (1999) (same); Martin et al., supra note 46 (same).

69 See AMY L. SOLOMON ET AL., DOES PAROLE WORK? ANALYZING THE IMPACT OF POSTPRISON SUPERVISION ON REARREST OUTCOMES 8-10 (Urban Inst., 2005) (finding discretionary parolees have better outcomes than inmates released unconditionally); see also Claire McCaskill, Next Steps in Breaking the Cycle of Reoffending: A Call for Reentry Courts, 20 Fed. Sent'g Rep. 308 (2008) (advocating for judicial authority over serious offenders after release from incarceration).

70 $See,\ e.g.,\ WARREN,\ supra$ note 49, at 21-23 (noting criminogenic risks indicate whether offenders are amenable to particular dispositions).

ness, but rather to a risk of failing to respond to standard interventions, and thus for continuing to engage in the same level of drug abuse and crime as in the past. This distinction is crucial because some corrections departments or probation agencies may screen high-risk offenders out of more intensive programs because they perceive them as being a threat to others or somehow less worthy of the services. On the contrary, research reveals the higher the prognostic risk, the more intensive the services should be.⁷¹

Among drug offenders, the most reliable and robust prognostic risk factors include a younger age, male gender, early onset of substance abuse or delinquency, prior felony convictions, previously unsuccessful attempts at treatment or rehabilitation, a co-existing diagnosis of antisocial personality disorder (APD), and a preponderance of antisocial peers or affiliations.⁷² Typically, individuals with these high-risk factors must be closely supervised and held accountable for their actions in order to succeed in treatment and desist from substance abuse and crime.

C. Criminogenic Needs

Criminogenic needs refer to clinical disorders or functional impairments that, if ameliorated, substantially reduce the likelihood of continued engagement in crime.⁷³ Although offenders typically present with a myriad of needs,⁷⁴ not all of them are criminogenic. Some needs, such as low self-esteem, may be the result of living a non-productive lifestyle rather than the cause of it.⁷⁵

Perhaps the most criminogenic of the needs factors is sub-

⁷¹ See generally Christopher T. Lowenkamp et al., The Risk Principle in Action: What Have We Learned From 13,676 Offenders and 97 Correctional Programs?, 52 CRIME & DELINQ. 77 (2006) (finding better outcomes in correctional programs when services were targeted to high-risk offenders).

⁷² See generally Paul Gendreau et al., A Meta-Analysis of the Predictors of Adult Offender Recidivism: What Works!, 34 CRIMINOLOGY 575 (1996); Douglas B. Marlowe et al., Amenability to Treatment of Drug Offenders, 67 FED. PROBATION 40 (2003); Timothy W. Kinlock et al., Prediction of the Criminal Activity of Incarcerated Drug-Abusing Offenders, Fall J. DRUG INISSUES 897 (2003); Matthew L. Hiller et al., Risk Factors That Predict Dropout From Corrections-Based Treatment for Drug Abuse, 79 PRISON J. 411 (1999); Roger K. Peters et al., Predictors of Retention and Arrest in Drug Court, 2 NAT'L DRUG CT. INST. REV. 33 (1999); Devon D. Brewer et al., A Meta-Analysis of Predictors of Continued Drug Use During and After Treatment for Opiate Addiction, 93 ADDICTION 73 (1998).

⁷³ See, e.g., WARREN, supra note 49, at 23-24 (noting criminogenic needs indicate what symptoms should be targeted for intervention).

⁷⁴ See generally Steven Belenko, Assessing Released Inmates for Substance-Abuse-Related Service Needs, 52 CRIME & DELINQ. 94 (2006) (reviewing clinical disorders and functional impairments commonly found among drug offenders).

⁷⁵ See., e.g., WARREN, supra note 49, at 24 (noting prominent examples of non-criminogenic needs include low self-esteem, lack of physical conditioning, and anxiety).

stance dependence or addiction. This refers to a compulsive urge to use drugs or alcohol that reflects neurological or neurochemical damage to the brain from repeated exposure to these toxic substances. The prototypical symptoms of addiction are: (1) intense cravings to use the substance, (2) uncomfortable or painful withdrawal symptoms when levels of the substance decline in the bloodstream and (3) uncontrolled binges triggered by any ingestion of the substance.

If all three of these symptoms are absent, then the correct assessment is substance abuse or misuse. Relational or drug use is under voluntary control in such cases and the level of clinical need is substantially lower. As will be discussed, such individuals require very different treatment and supervision strategies than are necessary for offenders suffering from the brain damage of addiction.

Serious psychiatric disorders commonly co-occur with substance abuse or dependence⁷⁹ and can interfere with an offender's ability to attend treatment or abide by supervisory conditions. Among drug offenders, the most prevalent co-occurring psychiatric disorders include major depression, bipolar disorder, psychotic disorders, organic brain syndromes, and post-traumatic stress disorder (PTSD).⁸⁰ Individuals with these conditions will often require medication management, structured living assistance or other specialized services to function adequately and desist from criminal activity.

Finally, many offenders do not have stable living arrangements, are functionally illiterate, or lack basic job skills or daily

⁷⁶ See generally George F. Koob, The Neurobiology of Addiction: A Hedonic Calvinist View, in Rethinking Substance Abuse: What the Science Shows, and What We Should Do About It (William R. Miller & Kathleen M. Carroll eds., Guilford Press 2006) (describing neuroanatomical and neurobiological brain damage causing addictive behavior).

⁷⁷ See id. at 25 (describing addiction as chronic relapsing disease characterized by compulsion to use drugs or alcohol, loss of control in limiting intake, and emergence of negative emotional states when access is prevented). For the official diagnostic criteria for substance dependence, see AM. PSYCHIATRIC ASS'N, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS 197-98 (2000) [hereafter DSM-IV].

⁷⁸ See DSM-IV, supra note 77, at 191-99 (2000) (providing official diagnostic criteria for substance abuse). Substance abuse involves the repetitive use of drugs or alcohol under dangerous or inappropriate circumstances, leading to clinically significant impairment or distress. *Id.* at 198-99. If the usage is not repetitive or has not (yet) led to significant impairment or distress, then it is misuse, which is not a formal diagnosis.

⁷⁹ See, e.g., Stephen Ross, The Mentally Ill Substance Abuser, in Am. PSYCHIATRIC PUBL'G, TEXTBOOK OF SUBSTANCE ABUSE TREATMENT 537, 539 (Marc Galanter & Herbert D. Kleber eds., American Psychiatric Publishing, Inc. 2008) (noting 29% of patients with mental illness have substance use disorder and 50% to 60% of individuals in substance abuse treatment have mental illness).

 $^{80\} See\ id.$ at 540-41 (reviewing epidemiological data on prevalent psychiatric disorders among substance abusers).

living skills.⁸¹ For example, they may not know how to dress properly for work, take care of a home, use public transportation, or arrive at appointments on time. Failing to address these serious deficiencies in adaptive functioning leaves the individual vulnerable to continued failures and continued involvement in antisocial activities.⁸² On the other hand, effectively addressing these deficiencies is associated with improved functioning and the avoidance of crime.⁸³

IV. MATCHING DISPOSITIONS BY RISKS AND NEEDS

Risk of dangerousness is primarily relevant to the "in or out decision" in terms of whether an offender can be safely managed in the community. As was noted earlier, even if a decision is reached to incarcerate an offender for some period of time, it remains important to tailor the back end of the sentence so as to allow for continued supervision and treatment after release. Therefore, the following considerations should apply with equal force to the post-release conditions.

Prognostic risks and criminogenic needs indicate what treatment and supervisory conditions should be included in the sentencing order. Conceptually, these two factors may be crossed in a 2-by-2 matrix, yielding four quadrants that have direct implications for selecting optimal correctional dispositions and behavioral care plans for drug offenders (see Figure 2).

The essential point to bear in mind is that interventions which are well suited to offenders in one quadrant may be a waste of resources or even contraindicated for those in another quadrant. Therefore, routinely imposing a particular disposition on a large proportion of drug offenders may serve one group of those offenders well, but is likely to be off the mark or damaging for three other subtypes of offenders. This could explain why one-size-fits-all sentencing policies, such as the War on Drugs and Proposition 36, have generally been so ineffective.⁸⁴

⁸¹ See, e.g., Belenko, supra note 74, at 96-99 (reviewing common functional impairments among drug offenders).

⁸² *Id.* at 96-98 (noting social and behavioral factors predict recidivism and persistent criminal behavior).

 $^{83\,}$ Id. at 100-102 (concluding successful initiatives reduce crime by addressing functional deficiencies).

 $^{84\,}$ For a discussion of the limited effects of the War on Drugs and Proposition 36, see supra notes 52-62 and accompanying text.

<u>FIGURE 2</u>: Risks-and-Needs Quadrants and Associated Practice Recommendations for Drug Offenders

Prognostic Risks High Low • Status calendar • Noncompliance calendar • Intensive treatment • Intensive treatment Treatment is proximal Compliance is proximal High Restrictive consequences Positive reinforcement • Positive reinforcement • Agonist medication Agonist medication Criminogenic Needs • Status calendar • Noncompliance calendar Pro-social rehabilitation Prevention services • Abstinence & compliance are Abstinence is proximal Low proximal • Restrictive consequences • Antagonist medication

A. High Risk / High Need (HR/HN) Offenders

An offender in the upper left quadrant is high on both prognostic risks and criminogenic needs. This individual suffers from drug or alcohol dependence, severe mental illness and/or deficiencies in adaptive functioning. In addition, he or she has a poor prognosis for success in standard treatment or rehabilitation, because of such negative risk factors as an early onset of delinquency or substance abuse, antisocial personality traits, previous failures in rehabilitation, or a preponderance of antisocial peers.

An example of someone fitting this profile might be a 13 year-old boy who begins to hang out with the wrong crowd and starts using cigarettes, beer and marijuana. By the age of 15, he moves on to harder drugs and is stealing pharmaceuticals from his mother's medicine cabinet. By the time he is 16, he is chronically truant from school, committing petty thefts in the neighborhood, and selling drugs to other children at school. Now, he has been arrested on a new drug charge at the age of 23 years and he is compulsively addicted to cocaine. It would be naïve to expect that providing drug treatment alone, or punishment

alone, would be remotely sufficient to help this individual. There is no effective way to punish away his addiction or to treat away his chronically antisocial lifestyle. He will require a combination of intensive supervision, substantial consequences for misbehavior, and intensive treatment to address his compulsive addiction. Any one of these interventions alone will fail.

1. Status Calendar

Research indicates that HR/HN drug offenders should be supervised on a status calendar.⁸⁵ This means they should be required to appear regularly before a criminal justice professional (typically a judge or probation officer) who has the power and authority to administer meaningful consequences for their performance in treatment and on community supervision.⁸⁶ Because of their high level of dysfunction and incorrigibility, they should be kept on a short tether with little wriggle room for committing new infractions or failing to meet their obligations.⁸⁷ Figuratively speaking, if they are given enough rope, they will surely hang themselves.

2. Intensive Treatment

HR/HN individuals also require intensive substance abuse treatment and relevant adjunctive services.⁸⁸ As was noted earlier, addiction reflects a form of brain damage⁸⁹ and can not, therefore, be expected to respond to the mere threat of punishment. Addicts are notorious for continuing to abuse drugs or alcohol despite experiencing severe and persistent negative conse-

s5 See generally Douglas B. Marlowe et al., Adapting Judicial Supervision to the Risk Level of Drug Offenders: Discharge and Six-Month Outcomes From a Prospective Matching Study, 88 DRUG & ALCOHOL DEPENDENCE 4 (2007) (finding high-risk drug offenders performed better in drug court when required to attend frequent, bi-weekly status hearings) [hereafter Adapting Supervision]; Douglas B. Marlowe et al., Matching Judicial Supervision to Clients' Risk Status in Drug Court, 52 CRIME & DELINQ. 52 (2006) (same) [hereafter Matching Supervision]; David S. Festinger et al., Status Hearings in Drug Court: When More is Less and Less is More, 151 DRUG & ALCOHOL DEPENDENCE 151 (2002) (same).

⁸⁶ See generally Douglas B. Marlowe, Judicial Supervision of Drug-Abusing Offenders, SARC Suppl. 3 J. PSYCHOACTIVE DRUGS 323 (2006) (reviewing research on effects of court monitoring for high-risk offenders).

⁸⁷ See generally Melissa Bull, A Comparative Review of Best Practice Guidelines for the Diversion of Drug Related Offenders, 16 INT'L J. DRUG POL'Y, 223, 226 tbl.1 (2005) (finding judicial review and compliance monitoring to be required elements of several best-practice guidelines for drug offenders).

⁸⁸ See, e.g., Meredith H. Thanner & Faye S. Taxman, Responsivity: The Value of Providing Intensive Services to High-Risk Offenders, 24 J. SUBSTANCE ABUSE TREATMENT 137, 142-4 (2003) (finding high-risk offenders had greater improvements in drug use, employment and re-arrests than lower-risk offenders when assigned to intensive drug treatment case management); Faye S. Taxman & Meredith Thanner, Risk, Needs, Responsivity (RNR): It All Depends, 52 CRIME & DELINQ. 28, 36-42 (2006) (same).

⁸⁹ See supra notes 76-77 and accompanying text.

quences. If they were going to respond to punishment alone, they would have done so by now. Formal treatment is required to ameliorate their cravings and withdrawal symptoms, provide them with concrete skills to resist drugs and alcohol, and teach them effective coping strategies to deal with life's stressors and challenges.⁹⁰

3. Compliance is Proximal

There is a body of scientific principles or "laws" governing effective behavioral change. One of these principles, called *shaping*, requires a distinction to be drawn between proximal (or short term) goals and distal (or long term) goals. Proximal goals are behaviors that clients are already capable of engaging in, and that are necessary for long-term improvement to occur. Examples might include attendance at counseling sessions or delivery of urine specimens. Distal goals are the behaviors that are ultimately desired, but may take some time to accomplish. Examples might include drug abstinence, gainful employment or improved parenting.

Although it is appropriate to administer a sanction for every infraction, the magnitude or severity of the sanction should be higher for proximal behaviors and lower for distal behaviors. If an offender receives low-level sanctions for failing to fulfill easy obligations, this can lead to what is called *habituation*, in which the offender becomes accustomed to being punished. A Not only will this fail to improve behavior, it can make behavior worse be-

⁹⁰ See generally A. Thomas McLellan, Evolution in Addiction Treatment Concepts and Methods, in Am. PSYCHIATRIC PUBL'G, TEXTBOOK OF SUBSTANCE ABUSE TREATMENT 93 (Marc Galanter & Herbert D. Kleber eds., American Psychiatric Publishing 2008) (describing goals and methods of effective substance abuse treatment); Michael Gossop, Developments in the Treatment of Drug Problems, in DRUG TREATMENT: WHAT WORKS? 58 (Philip Bean & Teresa Nemitz eds., Routledge 2004) (same).

⁹¹ See generally Garry Martin & Joseph Pear, Behavior Modification: What It Is and How To Do It (Prentice-Hall 1999) (reviewing basic principles of behavior modification); Keith Miller, Principles of Everyday Behavior Analysis (Brooks/Cole Publishing Company 1997) (same).

⁹² See MARTIN & PEAR, supra note 91, at 65-67 (describing principles of shaping); MILLER, supra note 91, at 177-82 (same).

⁹³ See Douglas B. Marlowe & Conrad J. Wong, Contingency Management in Adult Criminal Drug Courts, in Contingency Management In Substance Abuse treatment 334, 344 (Stephen T. Higgins et al. eds., Guilford Press 2008) (describing how to respond to proximal vs. distal behaviors when modifying behavior of drug offenders); Douglas B. Marlowe, Strategies for Administering Rewards and Sanctions, in Drug Courts: A New Approach To Treatment and Rehabilitation 317, 325-326 (James E. Lessenger & Glade F. Roper eds., Springer 2007) (same) [hereinafter Strategies]; Douglas B. Marlowe, Application of Sanctions, in Quality Improvement For Drug Courts: Evidence-Based Practices 107, 112 (Nat'l Drug Ct. Inst., 2008) (same) [hereafter Sanctions].

⁹⁴ See Douglas B. Marlowe & Kimberly C. Kirby, Effective Use of Sanctions in Drug Courts: Lessons From Behavioral Research, 2 NAT'L DRUG CT. INST. REV. 2, 7-8 (1999) (describing habituation in treatment of drug offenders).

cause it can raise the offender's tolerance to withstand punishment. This could account for the "been there, done that" attitude that many offenders exhibit in response to threats of punishment. Over time, they have become inured to inconsequential threats of punishment. This can lead them to push the limits to the point of no return—for example, to the point of incarceration, overdose, or drug-related death.

On the other hand, if an offender receives high-magnitude sanctions for failing to meet difficult demands that are beyond his or her capabilities, this can lead to a host of negative reactions, including depression, hostility, and a disruption of the therapeutic relationship.⁹⁶ It can also lead to what is called a *ceiling effect*, in which further escalation of punishment is impracticable.⁹⁷ Once an offender has been incarcerated, for example, the authorities have used up their armamentarium of sanctions; and, what's worse, the offender *knows* they have exhausted their options. At this point, future efforts to improve that individual's behavior will be extremely challenging.

It is essential to recognize that for individuals who are dependent on drugs or alcohol, abstinence should be considered a distal goal. Substance use is compulsive for these individuals and they should be expected to require time and effort to achieve abstinence. Imposing high-magnitude sanctions for drug use early in treatment would be likely to lead to a ceiling effect and early failure from the program. This could have the paradoxical result of making the most seriously addicted individuals ill-fated for success in corrections-based treatment.

For addicted offenders, high-magnitude sanctions should, instead, be reserved for failing to comply with basic supervision requirements, such as failing to show up for counseling sessions, failing to appear at status hearings, or submitting tampered urine specimens.⁹⁹ Thus, for example, a HR/HN offender might

⁹⁵ See, e.g., Joan Petersilia & Elizabeth P. Deschenes, What Punishes? Inmates Rank the Severity of Prison vs. Intermediate Sanctions, 58 FED. PROBATION 3, 3-6 (1994) (noting serious sanctions, including prison, are no longer viewed as stigmatizing or daunting for some offenders who are experienced with the criminal justice system).

⁹⁶ See Marlowe & Kirby, supra note 94, at 15-16 (describing negative side effects of excessive punishment for difficult behaviors); see generally Crighton Newsom et al., The Side Effects of Punishment, in The Effects of Punishment on Human Behavior (Saul Axelrod & Jack Apsche eds., Academic Press 1983) (reviewing side effects of punishment).

⁹⁷ See Marlowe & Kirby, supra note 94, at 9 (describing ceiling effects in treatment of drug offenders).

⁹⁸ See Marlowe, Strategies, supra note 93, at 329-30 (concluding abstinence is distal goal for addicts and proximal goal for substance abusers); Marlowe, Sanctions, supra note 93, at 112 (same).

⁹⁹ Infractions that threaten public safety, such as new crimes or impaired driving, are necessarily conceptualized as proximal because they cannot be permitted to recur. Offenders who fail to refrain from these behaviors might be considered poor candidates

receive a verbal reprimand or more treatment for providing drugpositive urine samples, but might receive community service or jail detention for skipping out on treatment or absconding from supervision.¹⁰⁰ Providing different magnitudes of consequences for proximal vs. distal behaviors makes it possible to steer between habituation and ceiling effects and achieve greater success.

4. Restrictive Consequences

If HR/HN offenders fail to comply with basic conditions of supervision, it may become necessary to impose restrictive consequences on them, such as home detention, day-reporting to a community correctional center, or jail detention. Importantly, however, the restrictive consequences are not necessarily intended to improve the offender's behavior, but rather to protect the public. Many HR/HN offenders have long ago habituated to or reached a ceiling effect on punishment, and can be expected to persist at engaging in substance abuse despite severe negative repercussions. ¹⁰¹ For them, long-term improvement requires more than sanctions. It requires the use of positive reinforcement to cultivate pro-social behaviors that can compete naturally against substance abuse and crime.

5. Positive Reinforcement

A major limitation of punishment is that the effects tend to be fleeting, especially for HR/HN offenders. Once punishment is lifted, bad habits often return abruptly unless new behaviors have emerged to take their place. Thus, a HR/HN individual who is released from supervision should be expected to resume substance abuse precipitously unless he or she has found a new job, developed hobbies, cultivated healthy social relationships, or

for community-based treatment and might best be treated in a correctional halfway house, residential facility, or prison or jail setting. See, e.g., Marlowe, Strategies, supra note 93, at 326.

¹⁰⁰ Of course, this should not continue indefinitely. After several weeks or months of treatment, when it has become easier for the offender to achieve abstinence, then it would be appropriate to administer more severe consequences for continued drug or alcohol use. See, e.g., id. at 326 (noting distal goals eventually become proximal goals as offenders progress through treatment).

¹⁰¹ See, e.g., Marlowe, Strategies, supra note 93, at 328-29 (noting high-risk offenders tend to be less responsive to sanctions and more responsive to rewards); C. Mark Patterson & Joseph P. Newman, Reflectivity and Learning from Aversive Events: Toward a Psychological Mechanism for the Syndromes of Disinhibition, 100 PSYCHOL. REV. 716 (1993) (noting criminal offenders and drug abusers tend not to learn effectively from punishing events).

¹⁰² See, e.g., Ron Van Houten, Punishment: From the Animal Laboratory to the Applied Setting, in The Effects of Punishment on Human Behavior 13, 22 (Saul Axelrod & Jack Apsche eds., 1983) (concluding effects of punishment extinguish rapidly once it is discontinued).

engaged in other pro-social activities that are inconsistent with drug abuse and crime.¹⁰³

This requires criminal justice professionals not only to punish crime and drug use, but also to reward productive activities that are incompatible with crime and drug abuse. 104 Unfortunately, this practice runs counter to many professionals' inclinations. HR/HN offenders are characteristically irresponsible and provocative, making them, perhaps, the least desirable population to whom to offer rewards. One's natural inclination is to want to weed these individuals out of positive reinforcement programs and marshal scarce rewards for the less severe and less antagonistic offenders. However, this inclination is inconsistent with effective treatment. HR/HN offenders tend to be least responsive to punishment and most responsive to rewards;105 therefore, denying them access to rewards and focusing on punishment is precisely the wrong strategy. The best approach is to put feelings aside and offer them rewards for engaging in good behaviors that portend better long-term adjustment. 106

¹⁰³ See id. at 23-24 (concluding "it is always wise to ensure that alternate behaviors are made available that can lead to similar amounts of reinforcement as the behavior that is being punished."). Pro-social behaviors are likely to be continuously reinforced with such rewards as praise, prestige and wages long after treatment and criminal justice supervision have ended. Moreover, returning to crime or drug abuse would be likely to lead to the loss of these new-found rewards; for example, being ostracized from peers or fired from a job. See, e.g., Marlowe, Sanctions, supra note 93, at 113 (discussing benefits of using rewards to maintain effects over long term).

¹⁰⁴ Numerous studies have reported that high-risk, antisocial drug abusers responded equally as well, if not better, to positive reinforcement than lower-risk individuals. See generally Douglas B. Marlowe et al., An Effectiveness Trial of Contingency Management in a Felony Pre-Adjudication Drug Court, J. APPLIED BEHAV. ANALYSIS, 41 J. APPLIED BEHAV. ANALYSIS, 565 (2008) (finding better outcomes from positive reinforcement for high-risk drug offenders); Nena Messina et al., Treatment Responsivity of Cocaine-Dependent Patients with Antisocial Personality Disorder to Cognitive-Behavioral and Contingency Management Interventions, 71 J. CONSULTING & CLINICAL PSYCHOL. 320 (2003) (finding equivalent outcomes from positive reinforcement for antisocial drug abusers); Douglas B. Marlowe et al., Impact of Comorbid Personality Disorders and Personality Disorder Symptoms on Outcomes of Behavioral Treatment for Cocaine Dependence, 185 J. NERVOUS & MENTAL DISEASE 483 (1997) (same); Kenneth Silverman et al., Broad Beneficial Effects of Cocaine Abstinence Reinforcement Among Methadone Patients, 66 J. CONSULTING & CLINICAL PSYCHOL. 811 (1998) (same).

¹⁰⁵ See generally Nancy M. Petry, Discounting of Delayed Rewards in Substance Abusers: Relationship to Antisocial Personality Disorder, 162 J. PSYCHOPHARMACOLOGY 425 (2002) (finding antisocial drug abusers tend to be preoccupied with short-term, high-magnitude rewards); Diana Fishbein, Neuropsychological Function, Drug Abuse, and Violence: A Conceptual Framework, 27 CRIM. JUST. & BEHAV. 139 (2000) (suggesting relative imperviousness to sanctions and preoccupation with rewards among drug abusers and offenders might reflect damage or developmental immaturity to frontal lobe of brain).

¹⁰⁶ Concerns that offenders may use rewards for ill-advised acquisitions do not appear to be warranted. See John M. Roll et al., A Comparison of Voucher Exchanges Between Criminal Justice Involved and Noninvolved Participants Enrolled in Voucher-Based Contingency Management Drug Abuse Treatment Programs, 31 AM. J. DRUG & ALCOHOL ABUSE 393, 396-97 (2005) (finding drug offenders were most likely to use rewards to pay fines and fees); David S. Festinger et al., Higher Magnitude Cash Payments Improve Re-

6. Agonist Medications

Addiction medications are grossly underutilized in the criminal justice system. ¹⁰⁷ Evidence supporting the effectiveness of several of these medications is incontrovertible and there is no empirical justification for denying them to addicted offenders. One class of addiction medications, called *agonists*, stimulates the central nervous system (CNS) in the same manner as illegal drugs. ¹⁰⁸ For example, methadone is itself an opiate that works similarly to illicit opiates, such as heroin. However, because the effects of methadone are considerably longer, more gradual, and less intense than those of heroin, ¹⁰⁹ an addicted individual can continue to function safely and effectively on this medication while performing daily chores and routines. A newer medication, called buprenorphine, has what are called *partial agonist* properties because it does not stimulate the CNS to the same degree. ¹¹⁰

For offenders who are addicted to opiates, agonist medications can control or eliminate cravings and withdrawal symptoms, and at sufficient dosages make it difficult or impossible for the offender to become intoxicated by ingesting illicit opiates. ¹¹¹ There is a substantial body of research spanning several decades demonstrating that the appropriate and medically supervised administration of methadone can significantly reduce crime, drug abuse and health-risk behaviors, and contributes to better adaptive functioning, among opiate addicted individuals. ¹¹² Compa-

search Follow-up Rates Without Increasing Drug Use or Perceived Coercion, 96 DRUG & ALCOHOL DEPENDENCE 128 (2008) (finding cash payments as high as \$160 did not increase rates of drug-positive urines among drug abusers); David S. Festinger et al., Do Research Payments Precipitate Drug Use or Coerce Participation?, 78 DRUG & ALCOHOL DEPENDENCE 275 (2005) (same for cash payments up to \$70).

107 See, e.g., James Cornish & Douglas B. Marlowe, Alcohol Treatment in the Criminal Justice System, in Handbook of Clinical Alcoholism Treatment 197, 205-06 (Bankole Johnson et al. eds., 2003) (concluding "efficacious medications such as naltrexone for alcoholics or methadone for opiate abusers are almost wholly unavailable to criminal justice system populations").

108 See Richard S. Schottenfeld, Opioid Maintenance Treatment, in AM. PSYCHIATRIC PUBL'G, TEXTBOOK OF SUBSTANCE ABUSE TREATMENT 289, 290-91 (Marc Galanter & Herbert D. Kleber eds., 2008) (describing clinical pharmacology of agonist medications, including methadone).

109 See id.

110 See Eric C. Strain & Michelle R. Lofwall, Buprenorphine Maintenance, in AM. PSYCHIATRIC PUBL'G, TEXTBOOK OF SUBSTANCE ABUSE TREATMENT 309, 310-11 (Marc Galanter & Herbert D. Kleber eds., 2008) (describing pharmacology of buprenorphine).

111 See id. at 311 (describing ability of buprenorphine to suppress withdrawal symptoms and provide blockade against illicit opiates); Schottenfeld, supra note 108, at 292-93 (same for methadone). However, the offender could still potentially become intoxicated by ingesting a different class of drugs, such as alcohol or cocaine.

112 See Herbert D. Kleber, Methadone Maintenance 4 Decades Later: Thousands of Lives Saved But Still Controversial, 19 J. Am. MED. ASS'N 2303 (2008) (reviewing 40 years of research on effectiveness of methadone); Jerome J. Platt et al., Methadone Maintenance Treatment: Its Development and Effectiveness After 30 years, in HEROIN IN THE AGE OF CRACK-COCAINE 160, 172-178 (James A. Inciardi & Lana D. Harrison eds., 1998) (review-

rable evidence is amassing in favor of buprenorphine.¹¹³ Recent studies prove these positive effects hold just as well for addicted criminal offenders.¹¹⁴ The criminal justice system should make agonist medications readily available for opiate addicted offenders under appropriate medical supervision.

7. Suited Disposition

Of all the community-based dispositions for drug offenders (see Figure 1), drug courts come closest to offering the full range of evidence-based services that are typically required for HR/HN drug offenders. These judicially monitored programs supervise drug offenders on a status calendar, require adherence to a mandatory regimen of substance abuse treatment and needed adjunctive services, administer sanctions and restrictive consequences for noncompliance, and provide positive reinforcement for productive achievements. Although attitudes concerning the use of agonist medications may vary across drug court programs, the drug court field explicitly endorses the use of evidence-based medications, including methadone and buprenorphine. 117

B. Low Risk / High Need (LR/HN) Offenders

An individual in the upper right quadrant is low on prognostic risks, but high on criminogenic needs. Such an individual suffers from drug or alcohol dependence, severe mental illness or poor adaptive skills, but does not have negative risk factors that would predict a poor response to standard treatment. An example might be a woman with a long history of heroin addiction who commits crimes solely to support her drug habit, such as petty thefts, prostitution and low-level dealing or bartering. But for

ing 30 years of research on effectiveness of methadone); Schottenfeld, *supra* note 108, at 295-96 (reviewing research on beneficial effects of methadone).

 $^{^{113}}$ See Strain & Lofwall, supra note 110, at 311-312 (reviewing research on beneficial effects of buprenorphine).

¹¹⁴ See generally Timothy W. Kinlock et al., A Study of Methadone Maintenance for Male Prisoners: 3-Month Postrelease Outcomes, 35 CRIM. JUST. & BEHAV. 34 (2008) (reporting positive outcomes using methadone with prison inmates); Timothy W. Kinlock et al., A Randomized Clinical Trial of Methadone Maintenance for Prisoners: Results at 1-Month Post-Release, 91 DRUG & ALCOHOL DEPENDENCE 220 (2007) (same); Stephen Magura & Andrew Rosenblum, The Effectiveness of In-Jail Methadone Maintenance, 23 J. DRUG ISSUES 75 (1993) (same for jail inmates).

¹¹⁵ See Lowenkamp et al., supra note 30, at 10 (finding doubling of effectiveness of drug courts for high-risk clients); Jonathan E. Fielding et al., Los Angeles County Drug Court Programs: Initial Results, 23 J. SUBSTANCE ABUSE TREATMENT 217, 223 (2002) (finding high and medium risk offenders received greatest benefits in drug court).

¹¹⁶ For a discussion of drug courts, see supra notes 28-29 and accompanying text.

¹¹⁷ See generally Karen Freeman-Wilson, Methadone Maintenance and Other Pharmacotherapeutic Interventions in the Treatment of Opioid Dependence (Nat'l Drug Ct. Inst. Practitioner Fact Sheet, 2002); Jeffrey Tauber, Buprenorphine in the Treatment of Opioid Addiction (Nat'l Drug Ct. Inst. Practitioner Fact Sheet, 1999).

her addiction, this criminal activity would not have occurred. For such a woman, it might make perfect sense to provide treatment in lieu of a criminal justice disposition. So long as she is receiving the treatment she needs, the criminal justice system does not need to expend substantial resources on her. Indeed, requiring her to spend time with the man in the above example could expose her to antisocial influences and perhaps predation.¹¹⁸

1. Noncompliance Calendar

Individuals with this profile generally do not require supervision on a status calendar. Research reveals they can perform just as well, or even better, on a noncompliance calendar. Rather than spending substantial time in court or at probation appointments, they should focus their energies on treatment. However, if they stop going to treatment, they should be brought immediately before a judge or other official to receive a swift and substantial consequence. Allowing them to continue to fail and use drugs would be a betrayal both to them and to the community at-large.

2. Intensive Treatment

Because these individuals are high need, they require intensive substance abuse treatment and indicated adjunctive services. As was discussed previously, treatment should focus on such issues as ameliorating cravings and withdrawal symptoms, teaching concrete skills for resisting drugs and alcohol, and developing more effective and less self-destructive coping strategies.

3. Treatment is Proximal

Treatment attendance is the proximal behavior for LR/HN offenders. Failing to attend treatment should trigger a non-compliance hearing and elicit a substantial negative consequence to avoid habituation and ensure future compliance. On the other

¹¹⁸ See David S. DeMatteo et al., Secondary Prevention Services for Clients Who Are Low Risk in Drug Court: A Conceptual Model, 52 CRIME & DELINQ. 114, 119 (2006) (reviewing iatrogenic effects from mixing high-risk and low-risk offenders).

¹¹⁹ See generally Marlowe et al., Adapting Supervision, supra note 85 (finding low-risk drug offenders performed equally well on noncompliance calendar as status calendar); Marlowe et al., Matching Supervision, supra note 85 (same); Festinger et al., supra note 85 (finding low-risk drug offenders performed better on noncompliance calendar than status calendar).

¹²⁰ Because they are high needs, the same rationale applies as for HR/HN offenders. See supra notes 88-90 and accompanying text.

 $^{^{121}}$ For a discussion of proximal vs. distal behaviors, $see\ supra$ notes 92-97 and accompanying text.

hand, because these individuals are dependent on drugs or alcohol, abstinence should be considered a distal goal. For the first several weeks or months, treatment-oriented consequences rather than punitive sanctions should be imposed for positive drug tests. 122 For example, they might be required to attend more frequent counseling sessions or transferred to a more intensive modality of care, such as residential treatment or recovery housing, in response to evidence of continued substance abuse.

4. Positive Reinforcement

As was discussed previously, addicted individuals are notorious for continuing to abuse drugs or alcohol in the face of persistent and severe negative repercussions. They have typically reached a ceiling effect on or habituated to punishment, and the threat of sanctions no longer exerts substantial control over their behavior. This requires criminal justice professionals to reward productive activities that can compete effectively against crime and drug abuse. In the absence of such rewarding activities, they may be expected to return rapidly to substance abuse and associated crime soon after they are released from supervision.

5. Agonist Medications

Finally, agonist medications such as methadone and buprenorphine are also indicated for LR/HN offenders who are addicted to illicit opiates. ¹²⁵ Medically supervised administration of these medications can control cravings and withdrawal symptoms, make it difficult for the offender to become intoxicated on opiates, and reduce serious health-risk behaviors, such as needle sharing and unprotected sex. ¹²⁶ There is no empirical justification for denying these evidence-based treatments to individuals suffering from what is a chronic and potentially life-threatening illness.

6. Suited Disposition

Evidence suggests LR/HN offenders can perform adequately in probation-without-verdict dispositions.¹²⁷ The emphasis in

¹²² Marlowe, *Sanctions, supra* note 93, at 111 (distinguishing when it is appropriate to apply therapeutic consequences vs. punitive sanctions for drug offenders).

¹²³ See supra notes 89-90 and accompanying text.

 $_{124}$ Because they are high needs, the same rationale applies as for HR/HN offenders. See supra notes 102-106 and accompanying text.

¹²⁵ Because they are high needs, the same rationale applies as for HR/HN offenders. See supra notes 107-114 and accompanying text.

¹²⁶ For a discussion of the positive benefits of agonist medications, see supra notes 111-114 and accompanying text.

¹²⁷ See, e.g., Marlowe, supra note 86, at 330 (noting probation without verdict may be effective and cost-efficient for low-risk offenders). For a discussion of probation without

these programs is on retaining offenders in substance abuse treatment while keeping them away from the more savvy and antisocial high-risk offenders. Failure to go to treatment, however, can trigger a noncompliance hearing and the imposition of sanctions to get them back on track. 128 Because the offenders are required to plead guilty and a criminal sentence is held over their heads, the court and probation department have the authority to apply meaningful consequences for noncompliance in treatment.

C. High Risk / Low Need (HR/LN) Offenders

Individuals in the lower left quadrant have substantial prognostic risks, but are low on criminogenic needs. These individuals do not suffer from drug or alcohol dependence, severe mental illness or deficient adaptive skills. On the other hand, they do have negative risk factors for failure in traditional correctional rehabilitation programs, such as antisocial character traits, prior failures on supervision, or deviant peer affiliations. Unfortunately, many of these individuals wind up in treatment-oriented dispositions on the happenstance that they were arrested for a drug crime or self-reported a substance abuse problem. This can waste scarce treatment resources and disrupt the treatment programs for the offenders who do require the services.

1. Status Calendar

Because these individuals are at risk for failing to comply with supervision conditions, they should be supervised on a status calendar.¹³⁰ They should be required to appear regularly be-

verdict, see supra notes 19-26 and accompanying text.

¹²⁸ This was one of the critical missing elements of California's Proposition 36, which made it difficult for courts to impose meaningful consequences for offenders' noncompliance in treatment. See generally Marlowe et al., supra note 58 (discussing limitations of Proposition 36 and similar initiatives).

¹²⁹ See David S. DeMatteo et al., Outcome Trajectories in Drug Court: Do All Participants Have Serious Drug Problems?, 36 CRIM. JUST. & BEHAV. 354 (2009) (finding one third of misdemeanor drug court participants did not have drug problems based on urine results and clinical interviews); Douglas B. Marlowe et al., The Judge is a Key Component of Drug Court, 4 CRUG CT. REV. 1, 21 (2004) (finding 35% of felony drug court participants did not have drug problems based on clinical interviews); Douglas B. Marlowe et al., Are Judicial Status Hearings a Key Component of Drug Court? During-Treatment Data From a Randomized Trial, 30 CRIM. JUST. & BEHAV. 141, 151 (2003) (finding 53% of misdemeanor drug court clients did not have drug problems based on clinical interviews); see generally Mark A. R. Kleiman et al., UCLA Policy Research Ctr., Opportunities and Barriers in Probation Reform: A Case Study of Drug Testing and Sanctions (2003) (concluding 30% to 40% of drug offenders do not have drug problems); Gregory P. Falkin et al., Drug Treatment in the Criminal Justice System, 58 Fed. Probation 31, 31 (1994) (same).

¹³⁰ Because they are high risk, the rationale is the same as for HR/HN offenders. See supra notes 85-87 and accompanying text

fore a criminal justice official with the power to administer meaningful consequences for violations or for failing to follow through on their obligations.

2. Pro-Social Rehabilitation

HR/LN individuals do not require standard clinical services. They do not have an addiction or mental illness in need of treatment. On the other hand, this does not mean they do not require any services. Offenders in this quadrant may be poorly socialized or may have antisocial attitudes or cognitions that require remediation. Certain types of behavioral and cognitive-behavioral interventions have been shown to reduce recidivism in this population. Effective programs generally focus on altering the offenders' distorted perceptions, encouraging them to think before they act and consider the consequences of their actions, and build a sense of empathy for others. In addition, vocational preparation, job training, and educational programming may be required for many of these individuals to prevent them from returning to criminal activity. Effective programming to criminal activity.

3. Abstinence and Compliance are Proximal

For these offenders, abstinence is a proximal goal. ¹³⁴ Drug and alcohol use are under their voluntary control and should not be permitted to continue. These individuals may accept low-level sanctions as a mere "cost of doing business" for being able to continue using drugs. Therefore, higher magnitude sanctions should be administered at the outset to rapidly squelch substance abuse. Importantly, several studies of what are called *coerced abstinence* programs have demonstrated that administering escalating sanctions, including brief intervals of jail detention, for drug-positive urine samples can significantly reduce crime and drug abuse in this group. ¹³⁵ Higher-magnitude sanctions should also be admi-

¹³¹ See, e.g., Kevin Knight et al., An Assessment for Criminal Thinking, 52 CRIME & DELINQ. 159, 162-63 (2006) (noting criminal thinking and antisocial attitudes are strong predictors of negative outcomes among offenders).

¹³² See generally Mark W. Lipsey, Cognitive-Behavioral Programs for Offenders, 578 Annals Am. Acad. Pol. & Soc. Sci. 144 (2001) (reviewing effective cognitive-behavioral programs for offenders); David B. Wilson et al., A Quantitative Review of Structured, Group-Oriented, Cognitive-Behavioral Programs for Offenders, 32 CRIM. JUST. & BEHAV. 172 (2005) (same); Aos et al., supra note 39, at 14, tbl.2 (same).

¹³³ See AOS ET AL., supra note 39, at 14, tbl.2 (finding positive effects for work and educational programs for offenders).

 $_{\rm 134}$ For a discussion of proximal vs. distal goals, $see\ supra$ notes 92-97 and accompanying text.

¹³⁵ See generally Adele Harrell & John Roman, Reducing Drug Use and Crime Among Offenders: The Impact of Graduated Sanctions, 31 J. DRUG ISSUES 207 (2001); Angela Hawken & Mark Kleiman, H.O.P.E. for Reform, The American Prospect (2007), at http://www.prospect.org/cs/articles?article=hope_for_reform (retrieved August 9, 2008).

nistered if these individuals fail to comply with other basic supervision requirements, such as failing to arrive for their probation appointments.

4. Restrictive Consequences

If HR/LN offenders fail to comply with basic supervision conditions, including failing to abstain from drugs or alcohol, it may become necessary to impose restrictive consequences to protect public safety. They can not be permitted to continue to act in a dangerous or irresponsible manner in the community. If the offender does not pose an immediate threat of violence or physical injury, the restrictive consequences do not necessarily need to involve jail or prison, but might include home detention, dayreporting to a community correctional center, electronic monitoring, or phone-monitored curfew.

5. Antagonist Medications

Antagonist medications work very differently from agonist medications, in that they do not stimulate the CNS in the same manner as illicit drugs. Rather, they block the effects of illicit drugs while providing no intoxication of their own. ¹³⁶ For example, a drug called naltrexone binds to opiate receptors in the brain and prevents opiates from getting through to those nerve cells. ¹³⁷ As a result, the individual can not get high on opiates. At the same time, naltrexone is non-addictive, non-intoxicating, and has minimal side effects. ¹³⁸ Although naltrexone has been approved for the treatment of opiate and alcohol addiction for decades, it is infrequently used in clinical practice because addicts rarely comply with the regimen. ¹³⁹ Naltrexone does little to reduce addicts' cravings and withdrawal symptoms and does not treat the underlying causes of addiction; therefore, it tends to be resisted by patients.

Importantly, however, offenders who are not addicted to alcohol or opiates might be excellent candidates for naltrexone. 140

¹³⁶ See Charles O'Brien & Kyle M. Kampman, Antagonists of Opioids, in Am. PSYCHIATRIC PUBL'G, TEXTBOOK OF SUBSTANCE ABUSE TREATMENT 325, 325-326 (Marc Galanter & Herbert D. Kleber eds., 2008) (describing pharmacology of antagonist medications).

¹³⁷ See id. at 326-327 (describing effects of naltrexone).

¹³⁸ See id. at 327-328 (describing minimal side-effect profile of naltrexone).

¹³⁹ See id. at 326 (noting naltrexone is most effective for motivated or coerced drug abusers, such as impaired professionals, probationers, and business people).

¹⁴⁰ See generally Charles O'Brien & James Cornish, Naltrexone for Probationers and Parolees, 31 J. Substance Abuse Treatment 107 (2006) (introducing special journal issue on use of naltrexone in criminal justice system); Douglas B. Marlowe, Depot Naltrexone in Lieu of Incarceration: A Behavioral Analysis of Coerced Treatment for Addicted Offenders. 31 J. Substance Abuse Treatment 131 (2006) (discussing coercive use of

It provides a full blockade against opiates and a partial blockade against alcohol, yet does not get offenders intoxicated or cause addiction. Non-addicted offenders who are substance abusers or misusers could be safely blockaded on this drug, leaving minimal concerns that untreated symptoms of addiction are being neglected. 141

6. Suited Disposition

HR/LN offenders do not belong in treatment-oriented dispositions because they do not have an addiction, mental illness or other impairment requiring clinical services. On the other hand, they do require close monitoring, substantial sanctions for continued substance abuse or other infractions, and psychosocial rehabilitation aimed at improving their educational and job skills and altering antisocial attitudes and attachments.

These services can typically be administered in standard community correctional programs, such as halfway houses, intensive supervised probation, and day-reporting centers. Serious consideration should be given, however, to buttressing the curricula in these programs with closer monitoring on a judicial status calendar, a coerced abstinence regimen that administers escalating sanctions for drug-positive urine specimens, ¹⁴³ and antagonist medications when indicated and medically prescribed.

D. Low Risk / Low Need (LR/LN) Offenders

Finally, offenders in the lower right quadrant are low on both prognostic risks and criminogenic needs. These individuals are typically naïve to both the criminal justice system and the substance abuse treatment system. They do not suffer from addiction or other impairments and do not have negative risk factors that would portend failure in standard interventions. It is typically unnecessary to expend substantial resources on this

naltrexone for criminal offenders); James Cornish et al., Naltrexone Pharmacotherapy for Opioid Dependent Federal Probationers, 14 J. Substance Abuse Treatment 529 (1997) (finding naltrexone reduced drug abuse and technical violations among federal probation-

¹⁴¹ See, e.g., DeMatteo et al., supra note 118, at 128 (suggesting naltrexone might work best for non-addicted, drug-involved offenders). Another medication, called disulfiram or antabuse, causes an uncomfortable physical reaction in individuals who imbibe alcohol. See, e.g., A. Thomas McLellan, Evolution in Addiction Treatment Concepts and Methods, in AM. PYCHIATRIC PUBL'G, TEXTBOOK OF SUBSTANCE ABUSE TREATMENT 93, 97-98 (Marc Galanter & Herbert D. Kleber eds., 2008) (describing disulfiram). Like naltrexone, compliance with disulfiram tends to be poor for alcoholics but might be better for alcohol abusers who do not suffer from cravings or withdrawal symptoms.

¹⁴² $See\ generally\ DeMatteo\ et\ al.,\ supra\ note\ 118$ (discussing why drug courts are not suited for non-addicted offenders).

¹⁴³ For a discussion of coerced abstinence regimens, $see \ supra$ note 135 and accompanying text.

group because they have a low probability of recidivism. The best course of action is to use the current arrest episode as a "teachable moment" to alter their trajectory of substance abuse and divert them out of the criminal justice system.

1. Noncompliance Calendar

LR/LN offenders can usually be supervised on a noncompliance calendar.¹⁴⁴ It is generally not desirable to have them spend substantial time in court or at probation appointments because this will require them to interact with the more severe offenders. In addition, because they tend to be relatively higher functioning individuals, LR/LN offenders are more likely to be gainfully employed, in school, or taking care of a home. Requiring them to attend frequent court hearings or probation appointments could interfere with their ability to meet these daily responsibilities.¹⁴⁵ Of course, in the event they do begin to exhibit substance use or criminal activity, they should be brought in quickly for a noncompliance hearing and, if necessary, transferred to a status calendar.

2. Prevention Services

Individuals in this quadrant generally do not require standard treatment services. They do not have an addiction or mental illness, and thus there are no symptoms to treat. On the other hand, they have begun to engage in a risky behavior (illicit substance abuse) that could lead them into serious trouble in the future. Individuals who are engaged in risky activities, but have not yet developed a clinical disorder, are best suited to what is called a secondary prevention or early intervention approach. 146 Rather than treating formal symptoms, prevention programs teach participants about the potential dangers of substance abuse and the serious legal and medical complications that could ensue.¹⁴⁷ Once offenders are already addicted to drugs or alcohol, there is no point in teaching them about the dangers. They are aware of what can happen, because it has happened. On the other hand, education can be very useful beforehand when matters have not yet reached this serious point.

Importantly, prevention services should be administered in

¹⁴⁴ Because they are low risk, the rationale is the same as for LR/HN offenders. See supra note 85 and accompanying text.

¹⁴⁵ See DeMatteo et al., supra note 118, at 118 (discussing why scheduling considerations favor noncompliance calendars for low-risk offenders).

 $^{^{146}}$ See id. at 123-25 (discussing why secondary prevention strategies are indicated for low-need offenders).

 $_{147}\ Id.$ at $125\mbox{-}30$ (presenting conceptual framework and recommendations for intervening with LR/LN offenders).

an individual format or in separately stratified groups, so as to keep these individuals away from the offenders in the other quadrants. Mixing offenders with different risk-levels together in groups can lead to iatrogenic effects, in which the low-risk individuals begin to engage in higher levels of substance abuse and crime. 149

3. Abstinence is Proximal

For these individuals, abstinence is the proximal goal.¹⁵⁰ Drug and alcohol use are under their voluntary control and should not be permitted to continue. Given that substance abuse is the primary, if not sole, presenting problem for these individuals, it would be appropriate to focus the case plan primarily on squelching this particular behavior.

Because LR/LN offenders typically pose minimal risks to public safety, it is rarely necessary to impose restrictive conditions on them in response to noncompliance. Paradoxically, however, a threat of serious sanctions, including detention, may be most effective for this particular group of offenders. Because they have not been repeatedly exposed to punishment in the past, they are unlikely to have hit a ceiling effect on or habituated to sanctions. They are apt to remain fearful of incarceration or of receiving a criminal record, and will be predisposed to apply themselves heartily to avoid such negative consequences. In other words, as counterintuitive as it might seem, punishment tends to work best for less severe offender populations and these individuals generally do not require positive rewards to succeed. Criminal justice professionals can rely primarily on the threat of punishment to keep LR/LN offenders in line, and reserve positive rewards for the more severe offenders in the other quadrants.

4. Suited Disposition

Pre-trial diversion or administrative probation is best suited for LR/LN offenders. Because they have a low likelihood of re-offending, it is not a wise investment of resources to target these individuals for intensive services. The longer they are involved in the criminal justice system, the greater is the likelihood that they will adopt antisocial attitudes, develop antisocial relationships, or perhaps be preyed upon. That would be the very es-

¹⁴⁸ *Id.* at 118-19 (explaining why LR/LN offenders should be treated individually or in separate groups).

¹⁴⁹ *Id*.

 $_{150}$ Because they are low needs, the rationale is the same as for HR/LN offenders. See supra notes 134-135 and accompanying text.

 $_{151}$ For a discussion of pretrial diversion and administrative probation, $see\ supra$ notes 15-16 and accompanying text.

sence of an iatrogenic effect.

CONCLUSION

Evidence suggests there are at least four subtypes of druginvolved offenders characterized by different profiles of prognostic risks and criminogenic needs. Dispositions that are well suited to one of these subtypes may be a waste of resources or injurious to the others, or may pose an unacceptable risk to public safety. Evidence-based sentencing seeks to incorporate these empirical findings into the sentencing process. In addition to (not instead of) considering other important value-laden issues – such as victims' sentiments – judges, defense counsel and prosecutors are encouraged to include data on effectiveness and costeffectiveness in their calculus of decision-making when advocating for or rendering sentencing dispositions.¹⁵²

Ideally, risk-and-need profiles should be explicitly referenced in sentencing guidelines or statutes as permissible or mandatory factors to be considered in sentencing. Virginia, for example, amended its sentencing guidelines to recommend (not require) non-incarcerative sentences for nonviolent drug and theft offenders who scored in the lowest quartile (lowest 25th percentile) on a risk assessment tool. This represents a noteworthy first step towards incorporating risk assessment—and perhaps one day, needs assessment—into criminal sentencing.

Importantly, the intent here is not to limit judicial discretion, but rather to extend it to encompass a wider range of relevant considerations. There are three general approaches to accomplishing this, representing various degrees of intrusiveness into judicial discretion, but never supplanting it. At the least intrusive level, risk and needs data could be permissive factors that judges may consider when selecting sentences from within the recommended range or departing downward or upward from that range. A slightly more intrusive approach would be to require sentencing judges to take these factors into consideration; how-

¹⁵² See generally Michael Marcus, Archaic Sentencing Liturgy Sacrifices Public Safety: What's Wrong and How We Can Fix It, 16 Fed. Sent'g Rep. 76 (2003) (advocating consideration of outcome data when rendering sentencing decisions); Steven L. Chanenson, Sentencing and Data: The Not-So-Odd Couple, 16 Fed. Sent'g Rep. 1 (2003) (same).

¹⁵³ See NAT'L CTR. FOR STATE COURTS, OFFENDER RISK ASSESSMENT IN VIRGINIA: A THREE-STAGE EVALUATION 2-3,6-8 (2002) (concluding risk tool successfully identified low-risk candidates for diversion from incarceration, was well received by judges and probation officers, and yielded net benefit of \$1.2 million); Richard P. Kern & Meredith Farrar-Owens, Sentencing Guidelines With Integrated Offender Risk Assessment, 16 Fed. Sent'G Rep. 165, 168 (2004) (concluding risk tool was well received and not as yet challenged on appeal).

¹⁵⁴ See, e.g., NAT'L CTR. FOR STATE COURTS, supra note 153, at 2 (noting Virginia judges did not perceive risk tool as infringing on judicial discretion).

ever, the factors would not be dispositive or entitled to any particular weight. A judge would remain free to impose a sentence in seemingly direct conflict with the empirical evidence.

Finally, the most intrusive approach would be to erect a rebuttable presumption in favor of imposing an evidence-based disposition, and would require judges to state on the record why they chose to depart from the empirical data. This would not necessarily create a reviewable issue for appeal. The standard for appeal could be quite restrictive, such as an abuse of discretion or clearly erroneous finding. However, requiring the rationale to be articulated on the record would help to shape how sentencing arguments are framed in court proceedings. It could also provide a basis for President Judges or the public to evaluate sentencing judges' performance. It would be possible, for example, to know whether a particular judge has a penchant for imposing more costly or less effective dispositions. Pennsylvania has experimented with making sentencing information available to the public, and the results have been largely favorable. 155 This process led to better quality research being conducted on the sentencing information, as well as better informed input from policymakers and the public. 156

Regardless of what model is incorporated into sentencing statutes or guidelines, it is difficult to argue against at least considering empirical information on effectiveness and cost-effectiveness, when rendering criminal dispositions. Failing to heed this information has led to an unquestionable crisis for the criminal justice system in this country. Our correctional system is overloaded, state budgets are buckling under huge expenditures, minorities and the poor have been disproportionately injured, and yet recidivism remains at historic highs. We can and must do better.

¹⁵⁵ See generally Mark H. Bergstrom & Joseph S. Mistick, The Pennsylvania Experience: Public Release of Judge-Specific Sentencing Data, 16 FED. SENT'G REP. 57 (2003).
156 Id. at 62-63.

¹⁵⁷ See generally PEW CTR. ON THE STATES, ONE IN 100: BEHIND BARS IN AMERICA 2008 (2008) (describing correctional crisis in U.S.).