Evidence-Based Sentencing: The Science of Sentencing Policy and Practice

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INTRODUCTION

This inaugural issue of the Chapman Journal of Criminal Justice explores evidence-based sentencing, a new frontier in sentencing policy and practice. Sentencing is where much of the action is in criminal practice, particularly since ninety percent or more of cases never go to trial but are settled through plea bargains. Acting within the constraints of applicable presumptive or mandatory sentencing guidelines, probation officers (in making sentencing recommendations), prosecutors, defense attorneys, and judges typically rely on their instincts and experience to fashion a sentence based upon the information available about the offense and offender.

But relying upon gut instinct and experience is no longer sufficient. It may even be unethical – a kind of sentencing malpractice that produces sentencing recommendations and decisions

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1 See GEORGE FISHER, PLEA BARGAINING’S TRIUMPH: A HISTORY OF PLEA BARGAINING IN AMERICA 233 (2003).


3 See GARY B. MELTON, JOHN PETRILA, NORMAN G. Poythress, & CHRISTOPHER SLOBOCIN, PSYCHOLOGICAL EVALUATIONS FOR THE COURTS: A HANDBOOK FOR MENTAL HEALTH PROFESSIONAL AND LAWYERS 290 (3d ed. 2007) ("[t]he probation officer’s presentence report or PSI is generally conceded to be the most influential tangible factor on the ultimate sentence.").

4 I would argue that the failure to apply known best practices constitutes sentencing malpractice and professional incompetence. See ABA MODEL CODE OF JUDICIAL CONDUCT, Rule 2.5 (Competence, Diligence, and Cooperation) ("A judge shall perform judicial and administrative duties, competently and diligently . . . Comment (1): Competence in the performance of judicial duties requires the legal knowledge, skill, thoroughness, and preparation reasonably necessary to perform a judge’s responsibilities of judicial office."); ABA, MODEL RULES OF PROFESSIONAL CONDUCT (2003), Rule 1.1 (Competence) ("A lawyer shall provide competent legal representation to a client. Competent representation requires the knowledge, skill, thoroughness and preparation reasonably necessary for the representation."). See also AMERICAN Psychological Association; ETHICAL PRINCIPLES OF PSYCHOLOGISTS AND CODE OF CONDUCT 1600 (1993) ("Psychologists rely on
that are neither transparent nor entirely rational. Rather, selecting the sentencing option(s) that will best reduce recidivism through deterrence, incapacitation, or rehabilitation is a scientific question that should be informed by the science of best practices — that is, “evidence-based practices,” defined as:

([P]rofessional practices that are supported by the ‘best research evidence,’ consisting of scientific results related to intervention strategies . . . derived from clinically relevant research . . . based on systematic reviews, reasonable effect sizes, statistical and clinical significance, and a body of supporting evidence. Thus, the concept of evidence-based practice in corrections refers to corrections practices that have been proven through scientific corrections research ‘to work,’ to reduce offender recidivism.7

Evidence-based sentencing is part of a broader pattern in contemporary society that involves the use of scientific research to improve the quality of decision making. As in medicine, psychology, education, management, and other fields, science now offers empirically-derived practice guidelines for criminal justice, which is part of a gradual trend towards the use of evidence-based practices in law. Indeed, we may have seen “the dawn of law’s scientific age” with the U.S. Supreme Court’s scientifically and professionally derived knowledge when making scientific or professional judgments . . . ”). A competent and reliable sentencing regime will consider relevant data on recidivism, and apply evidence-based practices when assessing recidivism risk and determining the sentencing option(s) that best reduce that risk. As Professor Hart explains, “judges cannot impose appropriate sentences — those that will best help to protect public safety — without professionals conducting appropriate [evidence-based] violence risk assessment.” Stephen D. Hart, Evidence-Based Assessment of Risk for Sexual Violence, 1 CHAPMAN J. CRIM. JUST. 143, 144 (2009). It is irrational and unethical to make predictions based on legal or clinical experience alone, because research has shown this to be an invalid and inaccurate method for assessing risk. See David Faust & Jay Ziskin, The Expert Witness in Psychology and Psychiatry, 241 SCIENCE 31, 33 (1988) (“If expertise is defined solely by accuracy, the actuarial method is the ‘expert.’”).


6 I use the term “rational” in the Enlightenment sense of the word, connoting an empirical basis for decisions.


9 See Hart, supra note 4, at 145-46 (citing literature on evidence-based practices in criminal justice).

The 1993 decision in Daubert v. Merrell Dow Pharmaceuticals,\textsuperscript{11} which established a new standard for the admissibility of scientific evidence in the federal courts.\textsuperscript{12} Daubert “unequivocally endorses empirically validated assessment and treatment approaches” and evidence-based practices.\textsuperscript{13}

A. The Science Behind Evidence-Based Sentencing

Although there is no uniform definition of “evidence-based sentencing,” it typically includes the following components:

- An assessment of risk factors (that increase the likelihood of recidivism).\textsuperscript{14}
- An assessment of protective factors (that decrease the likelihood of recidivism).
- An assessment of criminogenic needs (“clinical disorders or functional impairments that, if ameliorated, substantially reduce the likelihood that the offender will recidivate”).\textsuperscript{15}
- An estimate of recidivism risk (defined with reference

\textsuperscript{11} 509 U.S. 579 (1993).
\textsuperscript{12} The Daubert standard has since been adopted in some states. See Richard E. Redding & Daniel C. Murrie, Judicial Decision Making About Forensic Mental Health Evidence, in FORENSIC PSYCHOLOGY: EMERGING TOPICS AND EXPANDING ROLES 683, 687(Alan M. Goldstein ed. 2007).
\textsuperscript{13} Faigman & Monahan, supra note 10, at 656.
\textsuperscript{14} There is now a large body of research in psychology and criminology that identifies the risk factors for criminal behavior generally and for particular types of crime (e.g., violent crime, sexual offending) and cohorts (e.g., juvenile offenders) of offenders. Leading risk factors include, inter alia, criminal history, early age of onset of criminal offending, substance abuse, association with deviant peers, and antisocial personality. See generally MELTON ET AL., supra note 3, at 316-17; Warren, supra note 7, at 24; infra, note 23.
\textsuperscript{15} Douglas B. Marlowe, Evidence-Based Sentencing for Drug Offenders: An Analysis of Prognostic Risks and Criminogenic Needs, 1 CHAPMAN J. CRIM. JUST. 167, 181 (2009) (noting that “although offenders typically present with a myriad of needs, 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.”) Effective programs are ones that directly target the criminogenic risks/needs – i.e., those associated with criminal behavior (e.g., substance abuse, anger control, impulsivity, antisocial attitudes, association with deviant peers). See Daniel H. Antonowicz & Robert R. Ross, Essential Components of Successful Rehabilitation Programs for Offenders, 38 INT’L. J. OFFENDER THERAPY & REHAB. 97, 99 (1994) (finding that “90% percent of successful programs targeted criminogenic needs, whereas only 58% percent of unsuccessful programs did so”); Craig Dowden & .D.A. Andrews, Effective Correctional Treatment and Violent Offending: A Meta-Analysis, CANADIAN J. CRIMINOLOGY 449 (Oct. 2000) (reporting results of meta-analysis of thirty-five treatment program studies, finding a moderately strong relationship between program effectiveness and whether the program targeted criminogenic versus non-criminogenic needs). See generally DORIS LAYTON MACKENZIE, WHAT WORKS IN CORRECTIONS: REDUCING THE CRIMINAL ACTIVITIES OF OFFENDERS AND DELINQUENTS (CAMBRIDGE UNIV. PRESS 2006); LAWRENCE W. SHERMAN ET AL., PREVENTING CRIME: WHAT WORKS, WHAT DOESN’T, WHAT’S PROMISING (NATIONAL CRIME & JUSTICE RESEARCH CENTER 1998).
to particular types of recidivism, in particular contexts, over a specified time period) through the use of scientifically-validated risk assessment instruments and methods.

- An identification of the most effective (i.e., recidivism preventing) sentencing options and interventions (including correctional and treatment programming) based on the particular offender’s risk factors, protective factors, and criminogenic needs.

The use of risk/needs assessment is a key component of the evidence-based approach, and recent years have seen enormous strides in the development of empirically-validated instruments for assessing risk, including actuarial risk assessment tools. Actuarial assessment is “a formal method . . . [that provides] a probability, or expected value, of some outcome. It uses empirical research to relate numerical predictor variables to numerical outcomes. The sine qua non of actuarial assessment involves using an objective, mechanistic, reproducible combination of predictive factors, selected and validated through empirical research, against known outcomes that have also been quantified.”

Progress has also been made in the use of “structured professional judgment,” a cousin of the actuarial method that analyzes risk factors in a less formulaic way, allowing for limited clinical judgment as the needs of individual cases dictate.

Both approaches represent a marked departure from the not-so-old, but very outdated, “clinical judgment” method whereby clinicians would rely upon their clinical experience and intuitions. In contrast, actuarial and structured professional judgment approaches rely on empirically identifiable criminogenic risk and protective factors and/or scientifically validated tools for assessing those factors, providing a quantifiable prediction of risk (stated in probability or categorical format). Because research has consistently shown that these methods provide significantly more accurate predictions than unstructured clinical judgment, which is relatively unreliable, they represent an important advance in risk assessment. Professor John Monahan, who was referred to as “the leading thinker” on violence risk assessment in the landmark U.S. Supreme Court risk assessment case of Bare-
foot v. Estelle, concluded in a recent review of the field, that “[v]iolence risk assessment is likely to continue to move strongly in an actuarial direction.”

By contrast, thirty years ago, we knew very little about the “causes” of crime (more accurately, “risk factors”), how to predict recidivism, or how to rehabilitate offenders. In fact, the state of our knowledge was so poor that it led one researcher to conclude, in what was to become a highly influential review of the extant research on correctional rehabilitation, that “nothing works” in reducing recidivism. Similarly, researchers were also concluding that the “science” of predicting recidivism risk was really no more accurate than “the flip of a coin.”

Decidedly, this is no longer the case. We have seen enormous advances in the identification of the risk factors that contribute to offending and the protective factors that serve to reduce that risk (for criminal conduct generally and for particular offense types and offender cohorts), and in the science of assessing risk. Our enhanced understanding of the risk factors and developmental pathways for criminal behavior has also led to more sophisticated and scientifically-based rehabilitation programs with proven effectiveness, along with an understanding

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20 Monahan, supra note 18, at 112.
24 See Hart, supra note 4; Heilbrun, supra note 8; Marlowe, supra note 15.
25 Meta-analyses (i.e., a statistical analyses based on pooling results across different studies) of treatment program effectiveness have found that most current programs have a positive effect in reducing recidivism, particularly those that adhere to best practices principles. See generally Antonowicz & Ross; Dowden & Andrews, supra note 15 (finding that successful programs were guided by a sound treatment model, addressed multiple risk/needs factors, targeted criminogenic needs, were individualized according to the learning styles and abilities of offenders, and emphasized cognitive-behavioral treatments); Francis T. Cullen, The Twelve People Who Saved Rehabilitation: How The Science
of why some programs do not work. Some of the scientists who have made these advances are contributors to the current volume. Though much remains to be learned, we now have a considerable knowledge base. Evidence-based sentencing puts this new scientific knowledge to use, in a systematic and structured way, to guide sentencing. It provides far better guidance on how to prevent and reduce crime than do common-sense notions or normative principles of sentencing.

B. The Future of Evidence-Based Practices in Sentencing

Evidence-based sentencing may be an accelerating trend after recent U.S. Supreme Court cases that appear to push federal and state sentencing systems towards allowing greater judicial

26 Ineffective programs tend to be those that: address only one or two criminogenic risk factors, are not sufficiently individualized, are based on treatment approaches that are inappropriate or unproven for the population, are improperly implemented or fail to maintain program quality, do not hold service providers accountable for outcomes, or are of insufficient duration. In addition, some treatment approaches have been shown to be ineffective in preventing or reducing recidivism: boot camps, punishment-oriented programs, intensive supervision programs, and nondirective counseling. See Antonowicz & Ross, supra note 15, at 98-100; Cullen, supra note 15, at 16-17, 20-22; Dowden & Andrews, supra note 15, at 458-60; Lipsey & Wilson, supra note 25, at 325-37.
discretion\textsuperscript{27} that can be exercised, in part, through evidence-based sentencing. Indeed, jurisdictions across the country are beginning to adopt evidence-based sentencing practices that include a scientific assessment of the offender’s recidivism risk as well as sentencing and correctional regimes that have been shown empirically to reduce recidivism.\textsuperscript{28} Reflecting this trend, the Crime and Justice Institute and National Institute of Corrections produced a major report, Evidence-Based Practices to Reduce Recidivism: Implications for State Justiciesties,\textsuperscript{29} and with support of the Conference of Chief Justices and the Conference of State Court Administrators, the National Center for State Courts has embarked on a project to develop evidence-based sentencing practices. Of course, the U.S. Sentencing Guidelines have always included a strong evidence-based component, reflecting empirical information on sentencing practices and recidivism risk.\textsuperscript{30} And, the 2009 draft revisions to the influential American Law Insti-

\textsuperscript{27} See Steven L. Chanenson, The Next Era of Sentencing Reform, 53 EMORY L. J. 377, 377-86, 400-08 (2005) (reviewing recent U.S. Supreme Court cases that have invalidated aspects of mandatory sentencing guidelines, and suggesting that such decisions may allow for greater judicial discretion in sentencing and also provide the opportunity to reform state sentencing systems).

\textsuperscript{28} See AMERICAN LAW INSTITUTE, MODEL PENAL CODE: SENTENCING 70-75 (DISCUSSION DRAFT NO. 2 2009) (hereinafter “ALI”) (discussing eight states, especially Virginia, that have instituted risk assessment procedures as a routine part of sentencing: Kansas (requiring risk/needs assessments, as part of the presence investigation, for those convicted for drug possession); Missouri (sentencing commission includes recidivism risk assessment scores in felony presentence reports provided to judges and the parties); North Carolina and Alabama (sentencing commission is considering the development of risk assessment instruments, based on state recidivism data, for use at sentencing); Oregon (uses sentencing software that provides judges and attorneys with information on state recidivism rates as a function of offense type, offender characteristics, and disposition); Washington (authorizes judges to order a risk assessment as part of the presentencing report and requires them to consider such an assessment in sentencing); Wisconsin (sentencing guidelines incorporate risk assessment into all guidelines worksheets).) In 2005, Oregon passed legislation mandating that seventy-five percent of its funding for correctional programs be allocated to evidence-based programs. OR. REV. STAT. § 182.525 (2005).

Virginia was the first state to mandate actuarial risk assessment in its sentencing guidelines, passing a law in 2007 that directed its sentencing commission to “[d]evelop an offender risk assessment instrument for use in all felony cases, based on a study of Virginia felons, that will be predictive of the relative risk that a felon will become a threat to public safety” and “[a]pply the risk assessment instrument to offenders convicted of any felony [not enumerated in the list of serious felonies] . . . and determine, on the basis of such assessment and with due regard for public safety needs, the feasibility of achieving the goal of placing 25 percent of such offenders in one of the alternative sanctions [provided for under Virginia law].” VA. CODE § 17.1-803 (2007).

\textsuperscript{29} See supra, note 7.

\textsuperscript{30} The U.S. Sentencing Guidelines were developed in part, and are continually refined, based upon ongoing research. See UNITED STATES SENTENCING COMMISSION GUIDELINES MANUAL 4, 368 (2008) (stating that the Guidelines were developed with the goal of achieving sentencing uniformity “by taking an empirical approach that used as a starting point data estimating pre-guidelines sentencing practices,” and that the criminal history factors included in the Guidelines “are consistent with the extant empirical research assessing correlates of recidivism and patterns of career criminal behavior”).
tute’s Model Penal Code sentencing provisions include provisions expressly calling for the use of risk/needs assessments as a routine part of sentencing under state guidelines:


The [state] sentencing commission shall develop, and update as necessary, instruments or processes, based on the best available research, to assess the needs of offenders that must be met to facilitate their rehabilitation, and to assist the courts in judging the amenability of individual offenders to rehabilitative programs in confinement or in the community . . . The commission shall [also] develop . . . offender risk instruments or processes, supported by current and ongoing recidivism research of felons in the state, that will estimate the relative risks that individual felons pose to public safety through future criminal conduct . . . The commission shall study the feasibility of identifying, through risk assessment instruments or processes, felony offenders who present an unusually low risk to public safety . . . [and for whom] the sentencing court shall have discretion to impose a community sanction rather than a prison term, or a prison term of shorter duration than indicated in statute or guidelines.31

The Comment accompanying this Section32 notes the goals underlying the provision. It envisions replacing wholly discretionary predictions about risk with scientifically-based risk assessment procedures (actuarial instruments) that will enhance sentencing accuracy and transparency; using risk assessment to identify low-risk offenders who can be diverted from criminal court processing without posing a risk to public safety; and using risk/needs assessment to match offenders to the appropriate interventions and sentencing options. Importantly, it “contemplates the use of risk assessments only when supported by credible recidivism research, and encourages the use of actuarial risk-assessment instruments as a regular part of the felony sentencing process.”33 It envisions that state sentencing commissions will create jurisdictionally-relevant risk and needs assessment procedures or instruments that “may be incorporated generally into the sentencing guidelines, where their ultimate use resides in the discretion of the trial judge.”34 But such assessments should not be used to support sentences that will be disproportionate (too lenient or harsh) from a retributive standpoint.35

Policymakers, judges, and prosecutors can use evidence-based information to guide sentencing decisions, within a frame-

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31 ALI, supra note 29, at 64 (emphasis added).
32 Id. at 64-68.
33 Id. at 65 (emphasis added).
34 Id. at 66.
35 Id. at 67. See also note 27 & accompanying text.
work of “limiting retributivism.” In such an approach, retributive goals set the floor (i.e., “just deserts” requires a minimum punishment) and ceiling (i.e., fairness dictates that the punishment not be disproportional to the offense/offense history) for sentencing. 36 The utilitarian considerations best addressed through evidence-based practices shape the particular sentence within this broad range of sentencing proportionality.

Indeed, the evidence-based approach will likely result in sentencing decisions that more comprehensively consider relevant utilitarian and retributive considerations. “[R]etribution-oriented judges may concern themselves with the story of crime, and perhaps proceed to construct a narrative about the offender’s criminal history, but they are unlikely to construct a story of the offender’s life as a rehabilitation oriented judge would be likely to do.”37 Risk and needs assessments force judges to focus on both stories—the offense and offense history as well as the risk and protective factors relevant to rehabilitation, all in a more precise and accurate way.

**CONTRIBUTIONS TO THE SYMPOSIUM**

The contributors to this Symposium include prominent scientists, academics, jurists, prosecutors, and practitioners. They have been leaders in responding to the legal and policy challenges posed by evidence-based sentencing, implementing evidence-based sentencing in the states, developing best practices for determining risk and risk reduction strategies, and developing best practices to support the sentencing of important special populations (drug offenders, sex offenders) in the criminal justice system.

A. Perspectives of Prosecutors, Defense Attorneys, and Judges

Part One, **Perspectives on Evidence-Based Sentencing**, begins with prosecutors. The Honorable Bonnie Dumanis, the District Attorney for San Diego County and President of the California District Attorneys Association, provides a unique perspective as both a prosecutor and former judge.38 She argues that the “one

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size fits all” approach to sentencing, which merely increases the punishment for each reoffense,\textsuperscript{39} may be partly to blame for the high recidivism rates seen in most criminal justice systems. Noting that prosecutors seldom consider what happens to a defendant after sentencing, yet judges often see the same offender time and again in their courtrooms, prosecutors must take proactive steps to reduce recidivism.\textsuperscript{40} This requires an individualized approach to sentencing that assesses each offender’s recidivism risk, risk factors, and criminogenic needs. District Attorney Dumanis puts the challenge starkly: “We have two choices: we can continue the revolving door of recidivism or we can create policy to mandate evidence-based sentencing.”\textsuperscript{41} She describes how San Diego County has risen to the challenge by implementing a Community Prisoner Reentry Program for non-violent felony offenders. The program includes a pre-sentencing assessment of the offender’s recidivism risk along with his or her substance abuse treatment, educational, and vocational needs, resulting in an individualized, evidence-based program tailored to each defendant’s risk factors and needs. Offenders in the program have much lower recidivism rates than do their counterparts.\textsuperscript{42} It is one example of how “[e]vidence-based sentencing merges punishment with rehabilitation. Imposing a sentence with appropriate conditions based on the defendant’s individual risk to reoffend and need for treatment or programming does not diminish the prosecutor’s role in advocating for appropriate sanctions; it makes the criminal justice system more effective.”\textsuperscript{43}

Professor Chanenson, a former federal prosecutor who is now a member of the Pennsylvania Sentencing Commission and Editor of the \textit{Federal Sentencing Reporter}, explores prosecutors’ responsibilities.\textsuperscript{44} Prosecutors may, at first blush, perceive evidence-based sentencing to be “just another attempt by defendants to avoid responsibility for their crimes.”\textsuperscript{45} Prosecutors also may eschew the resource-intensive nature of this indivi-

\textsuperscript{39} Id. at 20-22. In what will surely become a seminal article in the deterrence literature, Professors Robinson and Darley offer an intriguing analysis of the psychological and criminological literature on punishment, arguing that progressively lengthier prison sentences may have less of a specific deterrent effect than shorter sentences. Offenders gradually become desensitized to incarceration, which loses much of its initial aversive bite by the end of a long prison term. Thus, a shorter sentence “will be experienced as much more aversive than a much longer sentence that is equally aversive at the beginning but less so at the end.” Paul H. Robinson & John M. Darley, \textit{Does Criminal Law Deter? A Behavioral Science Investigation}, \textit{Oxford J. L. Studies} 173, 190 (2004).

\textsuperscript{40} Dumanis, supra note 38, at 20, 24.

\textsuperscript{41} Id. at 21.

\textsuperscript{42} Id. at 23-24.

\textsuperscript{43} Id. at 24.

\textsuperscript{44} Chanenson, supra note 2.

\textsuperscript{45} Id. at 25.
dualized approach to sentencing, which requires a careful examination of each offender’s risk and needs profile so as to match him or her to the most effective sentencing and programming option(s). Consider the evidence-based program for substance-abusing offenders in Pennsylvania, which provides intermediate sanctions (including prison time) combined with substance abuse treatment. Although the program was established with the help and strong support of the Pennsylvania District Attorneys Association, by not referring eligible defendants to the program, some district attorneys “functionally strang[ed] the program” in their counties. Like District Attorney Dumanis, he sees clear benefits to evidence-based sentencing that outweigh the risks: a reduction in recidivism and increase in public safety. He urges prosecutors to stay current on local treatment and programming options, and to commit to the somewhat more difficult task of becoming educated about what the current scientific research says about their effectiveness. Prosecutors should encourage their localities to develop evidence-based programs, and keep an open mind about evidence-based sentencing and the programming options compatible with this approach.

Next, Professor Etienne, a former criminal defense attorney who practiced in the federal and state courts, provides a defense bar perspective. Her article evaluates the fairness and due process concerns raised by the use of risk and needs assessment instruments in evidence-based sentencing. She asks whether “this empirical sentencing model represent(s) the height of individualized sentencing with its systematic and careful accounting of offender (and offense) characteristics? Or does it, using what amounts to a form of statistical profiling, embody the treatment of criminal defendants as ‘members of a faceless, undifferentiated mass’ criticized by [the United States Supreme Court]? The problem is an all too familiar one to social scientists and jurists:

46 See id. at 35.
47 Id. at 35.
48 Id. at 37-39.
49 Margareth Etienne, Legal and Practical Implications of Evidence-Based Sentencing by Judges, 1 CHAPMAN J. CRIM. JUST. 43 (2009).
50 Id. at 49. For example, Virginia was the first state to mandate the use of a risk assessment instrument for purposes of identifying high-risk sex offenders and low-risk, non-violent offenders who should be considered for non-incarcerative alternatives. The instrument considers static criminogenic risk factors such as age and gender – things the defendant cannot change, thus inherently disadvantaging young male defendants (a group with high recidivism rates). See Steven L. Chanenson, Sentencing and Data: The Not-So-Odd Couple, 16 FED. SENT'G REP. 1, 3 (2003); ALI, supra note 29, at 70.
51 See e.g., Richard E. Redding and N. Dickon Reppucci, Effects of Lawyers’ Sociopolitical Attitudes on Their Judgments of Social Science in Legal Decision Making, 23 L. & HUM. BEHAV. 31, 47, 50-51 (1999) (empirical study of lawyers and judges, finding that some expressed skepticism about the value of nomothetic data when applied to deciding
actuarial instruments are used to make predictions about a particular defendant, yet the instruments themselves were developed based on research studies using aggregated group data. Thus, because the instruments can only provide a statistically-based estimate, judges and lawyers may wonder whether research-based predictive data will be on target in an individual case.\textsuperscript{52} It also is troubling that poorer defendants may be disadvantaged if they are unable to retain experts who will present favorable information to legal decision makers. Moreover, newer instruments tend to emphasize dynamic risk factors (e.g., employment status), which wealthier and better educated defendants have the resources to change, making them more likely to receive diversionary or alternative sentences.\textsuperscript{53} Despite these concerns, however, Professor Etienne concludes that evidence-based sentencing will benefit many defendants.\textsuperscript{54} This is because risk assessment instruments often predict lower levels of risk than clinicians\textsuperscript{55} or probation officers do when exercising their professional judgment. Assessments will also elucidate the dynamic criminogenic risk factors that can be ameliorated through rehabilitative or diversionary programs.\textsuperscript{56} Defendants will benefit if, as Professor Etienne urges, risk assessment results are used to identify treatment needs or to mitigate sentences, but not to enhance sentences.\textsuperscript{57} Like Professor Chanenson, she calls for

\textsuperscript{52} The difficulty with this argument, however, is that we have no way of identifying those cases for which a more subjective assessment might yield more accurate predictions. See Paul E. Meehl, \textit{Clinical versus Statistical Prediction: A Theoretical Analysis and Review of the Evidence} 138 (1954) (“If a clinician says ‘This [case] is different’ or ‘It’s not like the ones in your [actuarial] table,” This time I’m surer,’ the obvious question is, ‘Why should we care whether you think this one is different or whether you are surer?’”). A sizeable and compelling body of research shows that, overall, actuarial prediction outperforms clinical judgment. See \textit{supra} note 18-20 & accompanying text.

\textsuperscript{53} Etienne, \textit{supra} note 49, at 51-52.

\textsuperscript{54} \textit{Id.} at 45.

\textsuperscript{55} \textit{Id.} at 47. See also \textit{Ali}, \textit{supra} note 29, at 66-69 (discussing problem of false positives).

\textsuperscript{56} Etienne, \textit{supra} note 49, at 50-51. Defendants are most likely to benefit when the risk assessment communicates to the court information on risk management – i.e., the ways in which the risks can be managed or reduced. See John C. Dolores & Richard E. Redding, \textit{The Effects of Different Forms of Risk Communication on Judicial Decision Making}, \textit{Internatl. J. Forensic Mental Hlth.} (forthcoming 2009) (empirical study of judges' use of risk assessment information in release decision making, finding that judges were more likely to release to the community when the risk assessment included information on risk management as compared to when it only provided a prediction of risk level).

\textsuperscript{57} Etienne, \textit{supra} note 49, at 50-51. Indeed, as the drafters of the revised Model Penal Code sentencing provisions point out, use of risk assessment information to miti-
prosecutorial and judicial training on evidence-based program-
ming and practices, particularly in the use of risk and needs as-
essment instruments.58 The Honorable Michael Marcus, a member of the influential
American Law Institute and leading jurist in the development
and promotion of evidence-based practices in the states, con-
cludes this section with a tour de force case for evidence-based
sentencing.59 Giving all stakeholders a seat at the table, Judge
Marcus frames the discussion around a hypothetical series of
“conversations” between prosecutors, defense attorneys, judges,
court administrators, probation officers, crime victims, policy
makers, and academics. He provides a detailed point-by-point
rebuttal to the common criticisms of the evidence-based ap-
proach. More than anything, evidence-based sentencing pro-
motes accountability, forcing decision makers at all levels of the
justice system to assess the impact of their sentencing policies
and decisions on public safety.60 Judge Marcus further argues
that we must apply the evidence-based approach to the retribu-
tive goals of sentencing as well. “[W]e must civilize ‘just deserts’
by identifying its legitimate components and . . . by subjecting
them to evidence based practices” as well. “[A]ffording ‘just
deserts’ a blanket exemption from accountability for achieving
any social purpose is our single most significant barrier to re-
sponsible sentencing.”61 In most cases, legitimate retributive
goals are ones that, in the end, also serve some utilitarian func-
tion, whether that be general deterrence, specific deterrence,
promoting public confidence in the justice system and prosocial
values, or serving the needs of crime victims.62 Therefore, “re-
sponsible sentencing is largely concerned with risk manage-
m.”63 and decision makers in the criminal justice system need
to become well versed on the science and practice of risk assess-

gate sentences raises no constitutional concerns, whereas using it to enhance sentences
(particularly when doing so would constitute a upward departure from sentencing provi-
sions) likely runs afoul of the Sixth Amendment right to have a jury determine, beyond a
reasonable doubt, the existence of operative facts relied upon to enhance sentences.
Moreover, due process concerns are heightened in this context because of the fact that
current technologies are more accurate in identifying low-risk offenders than high-risk
offenders, there being high rates of false positives in identifying high-risk offenders.
See ALI, supra note 29, at 67-70.
58 Etienne, supra note 49, at 53-54.
59 Michael H. Marcus, Conversations on Evidence-Based Sentencing, 1 CHAPMAN J.
CRIM. JUST. 61 (2009).
60 Id. at 71, 75-77.
61 Id. at 72.
62 See id. at 74 (“In the vast majority of cases on the criminal docket, a sentence that
best serves public safety within these limits [of law and proportionality] is also that which
best serves public values . . .”).
63 Id. at 75.
ment. He emphasizes the importance of state sentencing commissions in maintaining databases on recidivism rates and sentencing practices, and in conducting research to support the development of empirically-based sentencing guidelines. So that the research on best practices can be put to use, court information technology should provide probation officers, attorneys, and judges with readily accessible data about each offender and the effectiveness of various sentencing alternatives and programs in reducing recidivism as a function of offender and offense characteristics. (In fact, Judge Marcus has developed such a technology, currently in use in Oregon.)

B. Use of Risk and Needs Assessment in Evidence-Based Sentencing

Part Two, *Use of Risk and Needs Assessment*, introduces us to the science and practice of risk assessment and its use in the criminal justice system. Professor Heilbrun and colleagues define risk assessment, trace its evolution, and provide an overview of the leading risk and needs assessment instruments currently in use. Professor Heilbrun, a forensic psychologist who is a leading scholar in best practices in forensic assessment, illustrates how “[r]isk assessment, an area in which there has been substantial scientific and professional progress during the last two decades, can provide an important contribution to decisions made at the sentencing or diversion stage of criminal adjudication.” Important advances in the science of risk assessment include, *inter alia*, the development of constructs (e.g., risk and protective factors, amount and type of harm, risk level) more meaningful than the older amorphous notion of “dangerousness;” more sensitive and accurate risk assessment instruments; instruments that assess a wider range of criminogenic risk and protective factors – historical (or “static”), contextual (“dynamic” or changeable), and clinical (which may be static or dynamic); instruments designed for specific populations (e.g., sex offenders, youthful offenders, incarcerated offenders vs. parolees) and contexts (e.g., sentencing); and, advances in how professionals communicate risk information to legal decision makers. It is important that instruments be normed with reference to

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64 Id. at 75.
65 See supra, note 29.
66 Heilbrun et al., supra note 8.
68 Heilbrun et al., supra note 8, at 141-42.
69 Id. at 129-34.
jurisdictionally-specific data and conditions, since some risk factors (e.g., access to firearms) may differ across geographic areas. This further illustrates the importance of research conducted by state sentencing commissions, and Professor Heilbrun provides useful tips for the development of jurisdictionally-specific risk instruments.70 The article concludes by illustrating one important use of risk/needs assessment – to determine which offenders to “divert” from criminal court to a specialized drug or mental health court.71

The next article is by Professor Hart,72 a leading researcher on sex offenders and risk assessment, and developer of the Risk for Sexual Violence Protocol.73 Using the example of sex offender risk assessment to explore the nature of risk assessment and evidence-based practices generally, he sounds a note of caution by emphasizing the limitations of this relatively nascent science. As he points out, there still is much we do not know about risk and offending, and the science of risk assessment remains quite imperfect. “With respect to the assessment of risk for sexual violence, there is a large evidence base . . . Thousands of studies have been conducted . . . . Yet the evidence base is still insufficient to identify exactly what are the critical risk factors, how they relate to each other, or the causal roles they play with respect to sexual violence.”74 More fundamentally, there is disagreement in the field as to what constitutes “evidence-based” risk assessment, as well as how much and what type of clinical discretion (if any) should be used in assessing risk.75 Professor Hart explores these areas of scientific disagreement by illustrating how a putative sex offender would fare under two contrasting approaches (discretionary vs. non-discretionary) to “evidence-based” risk assessment.76 His conclusion, echoing Professor Etienne’s concerns about the hazards of “profiling” by way of actuarial assessment, is sobering. “[A]lthough a risk assessment procedure may be characterized generally as evidence-based (to some greater or lesser degree), the risk assessment of a given offender is not. It is impossible to directly measure (using some technology) or calculate (using some natural law) the specific probability or absolute likelihood that a particular offender will commit sexual violence, and even impossible to estimate this risk

70 See id. at 135-37.
71 Id. at 137-41.
72 Hart, supra note 4.
74 Id. at 146.
75 Id. at 147-48.
76 See id. at 153-63.
with any reasonable degree of scientific or professional certainty.”77 Nevertheless, Professor Hart concludes that “judges cannot impose appropriate sentences – those that will best help to protect public safety – unless professionals conduct appropriate sexual violence risk assessments . . . good sentencing requires good risk assessment; evidence-based sentencing requires evidence-based risk assessment.”78 Risk assessment is invaluable when used appropriately and in conjunction with other information, which necessitates an understanding of the limitations of risk assessment instruments and how to interpret and use the information they provide. Professor Hart makes a clarion call for probation officers, prosecutors, and judges to become knowledgeable about risk/needs assessment.79

Drug and substance-abusing offenders are a particularly important population to target for best practices in correctional programming. Substance abuse is the leading risk factor for criminal offending, especially violent crime, and a high percentage of defendants have substance abuse problems.80 Dr. Marlowe, the science and policy chief at the National Association of Drug Court Professionals and a prominent voice on drug courts and drug offender treatment, offers a typology of drug offenders – based on their risk and needs levels – to guide treatment and sentencing decisions.81 His model “match[es] 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.”82 Since treatment noncompliance is an endemic problem with this population, the model emphasizes ways to promote compliance.83 He proposes different sentencing options and interventions for four types of drug offenders, those with: (1) high

77 Id. at 163.
78 Id. at 143.
79 Judges and lawyers typically have little or no training in science, and few understand basic statistical concepts. Judicial training and continuing legal education programs on risk/needs assessment tools and best practices in evidence-based sentencing would be especially useful. See Redding & Murrie, supra note 12, at 689 (reviewing studies of judges’ understanding of the scientific method and of how to apply the four-factor Daubert test). The Federal Judicial Center’s Reference Manual on Scientific Evidence (2000), designed as a user-friendly bench manual for judges on various types of scientific evidence, should be expanded to include a chapter on risk assessment. See e.g., DAVID L. FAIGMAN, DAVID H. KAYE, MICHAEL J. SAKS, & JOSEPH SANDERS, SCIENCE IN THE LAW (2002) (leading multi-volume treatise for lawyers and judges on forensic and social science evidence, which includes chapter on risk assessment).
80 See Marlowe, supra note 15, at 167-68.
81 Id.
82 Id. at 169-70.
83 Id.at 168-69, 186-99.
prognostic risks-high criminogenic needs, (2) low risks-high needs, (3) high risks-low needs, and (4) low risks-low needs. The model specifies whether each offender type should receive intensive treatment, agonistic medications (e.g., methadone), prevention services, prosocial rehabilitation and/or positive reinforcement for compliance. It also specifies the type of court calendar to which they should be assigned and whether restrictive consequences (e.g., jail detention) should be imposed for noncompliance.\textsuperscript{84} It is critical to match interventions to offender type in this manner, since interventions that may be indicated for one offender type may be contraindicated for others. “[R]outinely imposing a particular disposition on a large proportion of drug offenders may serve one group of these 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 politics, such as the War on Drugs and [California’s] Proposition 36, have generally been so ineffective.”\textsuperscript{85} Research shows that, generally speaking, the best outcomes are achieved through intermediate dispositions (e.g., diversion to drug court, correctional halfway houses) that incorporate treatment and needed services, as opposed to probationary sentences or incarceration. The former poses a substantial risk to public safety, the latter is quite costly, and both often have negative effects on recidivism and recovery.\textsuperscript{86}

The Symposium concludes with an article by Mark Bergstrom,\textsuperscript{87} Executive Director of the sentencing commission in Pennsylvania, a state paving the way for evidence-based practices. Mr. Bergstrom outlines what state sentencing commissions must do in order to develop and implement evidence-based sentencing systems. Mr. Bergstrom notes the history of the Commission’s research in Pennsylvania, as driven by changing policy considerations. While early research focused on the development and implementation of equitable and uniform sentencing guidelines, current efforts address evidence-based considerations like identifying recidivism predictors, correctional and treatment program effectiveness, and their impact on sentencing decisions.\textsuperscript{88} This research would not be possible without “a reliable sentencing information system and the expertise to analyze and trans-

\textsuperscript{84} Id. at 183-99.
\textsuperscript{85} Id. at 183. The California Substance Abuse and Crime Prevention Act (“Proposition 36”), passed by ballot initiative in 2000, mandated three probation opportunities for nonviolent drug offenders not having a prior serious offense. See \textit{CA. PENAL CODE} §. 1210 \textit{et seq.}
\textsuperscript{86} Marlowe, \textit{supra} note at 15, at 176-77.
\textsuperscript{87} Mark H. Bergstrom, \textit{The Pennsylvania Experience: You Need a Toolkit to Build a Roadmap}, \textit{1 CHAPMAN J. CRIM. JUST.} 203 (2009).
\textsuperscript{88} Id. at 205-06.
form the data into meaningful information” directly understandable and useful to decision makers. A strong research capacity, which Mr. Bergstrom calls “the basic currency of a sentencing commission,” is critical to such efforts. The article provides a roadmap on how best to achieve and maintain high-quality data; how to integrate data across systems and information sources; and, how best to present the data to guide policy decisions, develop or refine sentencing guidelines, and determine sentences in individual cases.

CONCLUSION

The contributors to this volume have provided a rich knowledge base on the emerging practice of evidence-based sentencing. The Journal will build on this foundation with next year’s symposium, Specialty Courts in Criminal Justice: Challenges and Opportunities. Prominent in the trend towards the use of evidence-based practices is the proliferation of “problem-solving” or “specialty” courts, most notably drug courts, DUI courts, mental health courts, and domestic violence courts. With the increasing recognition of the role that substance abuse, mental health problems, and other psychological and family problems play in offending, these courts are designed to address the criminal charges as well as the underlying risk factors that contribute to the cycle of offending. Some studies suggest that these problem-solving courts, in which risk and needs assessments are often central to the adjudication of cases, can produce substantial reductions in recidivism in the target populations at reduced cost. Yet, as will be explored in the Journal’s next symposium, the empirical data on their effectiveness is open to interpretation, and the wisdom of these courts is hotly debated on jurisprudential and philosophical grounds.

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89 Id. at 205.
90 See id. at 207-11.
91 See WARREN, supra note 7, at 17-18 (reviewing studies, including meta-analyses, on the cost effectiveness of drug courts and their effectiveness in reducing recidivism).
the LLM Program in Prosecutorial Science. And, of course, it would not have been possible without the unflinching dedication and hard work of the Journal staff, with special thanks to the entire Editorial Board (Editor-in-Chief Arlinda Witko, and Mazi Bahadori, James Blalock, Pashi Tasvibi, Meghan O’Brien Taylor, and Kelli Winkle) for producing the inaugural issue of the Chapman Journal of Criminal Justice.