Judging

Risk

THE USE OF RISK ASSESSMENT IN SENTENCING

BY BRANDON GARRETT AND JOHN MONAHAN

Judges are using risk assessment instruments in criminal cases more than ever before. Their role is increasingly prominent at all stages of the criminal justice system, including policing, pretrial detention, sentencing, corrections, and parole.[1] In its 2017 revision, the Model Penal Code prominently endorsed consideration of risk in the sentencing process and specifically urged its use to potentially divert lower-risk defendants to reduced or alternative sentences.[2] The recently enacted Formerly Incarcerated Reenter Society Transformed Safely Transitioning Every Person (FIRST STEP) Act, perhaps the most far-reaching federal sentencing reform in a generation, mentions risk no less than 100 times and relies on risk assessments to allocate prison programming and prisoner release.[3]

Each of these approaches seeks to use risk assessment to reduce reliance on incarceration by deprioritizing jail and prison for lower-risk offenders.

Put simply, a risk assessment instrument uses risk factors to predict outcomes. A "risk factor" is any item that statistically correlates with the outcome in question and that occurs before the outcome in time — it does not need to "cause" the outcome. Risk factors are gleaned from the criminal history and characteristics of the defendant. The outcome being predicted may be defined to include a wide array of behaviors, including the likelihood of recidivism (as applied to any crime or only violent crime), failure to appear in court, or even technical violations of probation or parole.[4]

We focus here on the role of a sentencing judge in using risk assess-ment. States have made the use of risk instruments advisory, rather than pre-sumptive or mandatory. As a result, the discretion of the decision-maker plays an important role. Very little infor-mation has been available about how judges actually use these risk assess-ments in practice.[5] Do judges find such information helpful or irrelevant? If the former, is risk assessment a valu-able "tool"— but only a "tool" — to promote evidence-based use of alter-native sentences? Or is it something more dispositive — like the tables found in the Sentencing Guidelines Manual?

Defendants have been understand-ably concerned about how judges might use risk assessment instruments. In the *Loomis* case, the Wisconsin Supreme Court rejected an appeal by a male defendant who objected at sen-tencing that he could not review the ▶

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basis for a risk assessment used to inform the sentencing decision. That risk instrument was proprietary and created by a company called Equivant (formerly Northpointe). The defendant argued that this lack of transparency raised a due process issue. For example, it was not possible to assess whether the risk assessment provided the judge information based on invidious factors or factors that have a disparate impact based on race or, as Mr. Loomis emphasized, gender.[6] The U.S. Supreme Court ultimately denied certiorari in the case, but *Loomis* raised a serious due process concern likely to be litigated in future years.

To address these pressing questions concerning how judges use risk assessment at sentencing, we conducted a series of studies of decision-making using risk assessment tools. We focused on Virginia, because, in the words of the *Model Penal Code*: "On risk assessment as a prison-diversion tool, Virginia has been the leading innovator among American states."[7] Virginia does not rely on proprietary software, and it makes its risk assessment instrument publicly available. It was also the first state to

incorporate risk assessment into its sentencing guidelines to permit alternative sentences for the "lowest risk" drug and property offenders.[8] Yet, as we describe, the use of risk assessment, even in a completely transparent fashion, still raises concerns and challenges for judges. Below we discuss what theory informs such a sentencing approach, how the approach was set out in Virginia, and, based upon our studies, how that system has been implemented in practice.

RISK ASSESSMENT AND THEORY OF CRIMINAL PUNISHMENT

In its 2017 revision to the Model Penal Code, the American Law Institute explicitly adopted an approach to criminal sentencing that incorporates risk assessment. A key provision of the Code provides that state sentencing commissions:

> shall develop actuarial instruments or processes to identify offenders who present an unusually low risk to public safety. . . . When accurate identifications of this kind are reasonably feasible, for cases in which the offender is projected to be an unusually low-

risk offender, the sentencing court shall have discretion to impose a community sanction rather than a prison term, or a shorter prison term than indicated in statute or guidelines.[9]

The approach taken by the American Law Institute is a hybrid of what sentencing scholars distinguish as two polar opposite approaches to the allocation of criminal punishment — usually termed *retributive* and *utilitarian*. Adherents of the retributive approach believe an offender's moral culpability for crime committed in the past should be the sole consideration in determining his or her punishment. In the best-known retributive theory, known as "just deserts," offenders should be punished "because they deserve it, and the severity of their punishment should be proportional to their degree of blameworthiness" for the crimes they have committed in the past.[10] In contrast, advocates of the utilitarian approach believe that punishment is justified principally by its ability to decrease future criminal acts by the offender or by its ability to deter other would-be offenders from

committing — or continuing to commit — crimes.[11] Many legal scholars, however, have argued that any workable theory of sentencing must address *both* retributive *and* utilitarian concerns, rather than just one of them. The most influential hybrid theory of sentencing is the one developed by Norval Morris, which he called "limiting retributivism." In Morris's theory, retributive principles can only set an upper limit on the severity of punishment, and, within this range of what he called "not undeserved" punishment, utilitarian concerns — such as an offender's risk of recidivism — can be considered.[12] In general, approaches towards the use of risk assessment in sentencing have adopted such a limiting retributivism theory.

RISK ASSESSMENT IN SENTENCING IN VIRGINIA

In 1994, the Virginia legislature voted to abolish parole. In order to avert a resulting fiscal "collapse"[13] of the state's prison system, risk assessment was adopted "to reduce the use of incarceration for nonviolent criminals, in order to offset the increased prison stays for violent offenders" that would result from this legislation.[14] The legislature directed the newly formed Virginia Criminal Sentencing Commission (VCSC) to develop an actuarial risk assessment instrument to guide judges in making sentencing decisions for offenders convicted of several drug and property crimes. In the words of Richard Kern, the first director of the VCSC, one of the "main goals" of the reforms was to "expand alternative punishment/treatment options for some non-violent felons" by adopting actuarial instruments "to divert low-risk offenders" from prison.[15] More specifically, the goal was to divert 25 percent of the "lowest-risk, incarceration-bound, drug and property offenders" from state prison to alternative sentences such as probation, local jails, community service, and outpatient mental health or substance abuse treatment.[16]

The VCSC developed an actuarial instrument that was independently validated by the National Center for State Courts and adopted statewide in 2002.[17] The instrument was called the "Nonviolent Risk Assessment" (NVRA) since its goal was to identify nonviolent offenders at the lowest risk of recidivism for diversion from prison. The NVRA was included as one of the sentencing "worksheets" to be completed for all eligible offenders convicted of one of four drug or property felonies — larceny, fraud, drug schedule I/II (e.g., possession of small amounts of cocaine), and drug/other (e.g., marijuana distribution).[18] If the offender's total score on the NVRA was below a specified cutoff — the cutoff necessary to achieve a 25 percent diversion rate from prison, if judges were to consistently follow the new guidelines — the offender was "recommended for an alternative sanction." If the offender's score was above that cutoff, the prison term recommended by the state's discretionary sentencing guidelines remained in effect.

In 2012, the commission revised and revalidated the NVRA on large samples of eligible drug and property offenders. For example, the NVRA for the crime of larceny now consists of five risk factors: offender age at the time of the offense; gender; prior adult felony convictions; prior adult incarcerations; and whether the offender was legally restrained (e.g., on probation) at the time of the offense. Defining "recidivism" as reconviction for a felony offense within three years of release from incarceration, this research found that 12 percent of drug offenders designated as "low risk" recidivated; by comparison, 44 percent of "higher-risk" drug offenders recidivated. Nineteen percent of property offenders designated as "low risk" recidivated; by comparison, 38 percent of "higher-risk" property offenders recidivated.[19]

HOW JUDGES USE VIRGINIA'S RISK ASSESSMENT

With colleagues, we conducted three types of analyses in our work studying the use of risk assessment at sentencing in Virginia. First, we conducted an analysis of data concerning the use and nonuse of the NVRA by judges, relying on data from the VCSC. Second, we conducted surveys and interviews to learn from Virginia judges how they view the use of risk assessment information at sentencing. Third, we connected these approaches and analyzed whether one particular set of responses by judges — that their use of alternative sentences depends on the presence of local treatment resources — in fact corresponded to patterns that we observed in the sentencing data and in the data on the availability of community programs.

SENTENCING COMMISSION DATA

We reviewed all VCSC data from fiscal year 2016 concerning the actual use or nonuse of the NVRA by circuit court judges in diverting offenders convicted of certain drug and property crimes from state prison to an alternative sentence. We found that many — indeed, most — defendants eligible for these alternative sentences did not receive them. Of the total population of 8,443 offenders eligible for risk assessment, information from completed NVRAs was available for 7,416 offenders (88 percent). We found that, of the offend- ▶

ers with available NVRA scores, 46 percent scored in the low-risk category and were therefore recommended for an alternative sentence. Of those low-risk cases, 42 percent received an alternative sentence, and 58 percent did not. Yet alternative sentences were not restricted to low-risk offenders. Of offenders who scored as higher risk on the NVRA, 23 percent (941 people) received alternative sentences.[20]

We also examined the types of alternative sentences that were imposed by sentencing judges. The three most common alternative sentences given to offenders diverted from incarceration in a state prison were supervised probation (86 percent), incarceration in a local jail for a shorter period of time than would have been the case with incarceration in state prison (48 percent), and restitution to the victim of the offender's crime (35 percent). Four other alternative sentences were given less frequently: unsupervised probation (22 percent); community substance abuse treatment (20 percent); a monetary fine (12 percent); and release, given that the length of the sentence to be imposed had already been served at the time of sentencing (11 percent). A wide variety of other types of alternative sentences were imposed on fewer than 10 percent of offenders diverted from incarceration in a state prison.

The percentage of low-risk offenders who actually received the recommended alternative sentence varied strikingly by judicial circuit and individual circuit court judge. There are 120 circuit courts in Virginia, organized into 31 judicial circuits. Among circuits that sentenced at least 40 defendants convicted of eligible drug or property offenses, the percentage of low-risk offenders who actually received an alternative sentence varied from a low of 22 percent

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in one circuit to a high of 67 percent in another circuit, with a mean per-circuit rate of 43 percent. Among the 99 individual circuit court judges making sentencing decisions on these defendants, the percentage of offenders scoring as low risk who actually received an alternative sentence varied from a low of 7 percent for one judge to a high of 85 percent for another judge, with a mean of 41 percent.

SURVEYING VIRGINIA JUDGES

In a follow-up study, we attempted to account for why we saw so much variation in the use of risk assessment at sentencing and why so many eligible offenders do not receive the recommended alternative sentences. With the support of Chief Justice Donald Lemons, we mailed a survey to all circuit judges in Virginia and received responses from 85 judges, or 53 percent.[21] We found that a strong majority of judges endorse the principle that sentencing eligible drug and property offenders should include a consideration of the risk that offenders will commit new crimes, are familiar with the use of the NVRA in

sentencing, and "usually" consider the results of the NVRA in imposing sentences in these cases.

When asked specifically about the availability of local treatment resources that allow for alternative sentencing — such as outpatient drug or mental health programs — within the jurisdiction of their circuit, however, 70 percent of judges rated the existence of these resources as "less than adequate," and five percent of judges rated local resources as "virtually non-existent." The following are representative comments from judges in this survey about the possibility of sentencing defendants to an alternative sentence:

- "The [risk] assessment is useful. The problem is the lack of useful alternatives. In several counties in my Circuit, there are no inpatient treatment options."
- "We need more alternative options — [we] lack sufficient treatment programs and follow-up. Unfortunately, that costs money which communities are reluctant to provide."
- "To accurately impose and/or consider whether or not a judge is complying with a recommendation — bona fide alternative programs must first exist."

An additional qualitative study involved in-depth interviews with circuit court judges in Virginia, who agreed, after having been surveyed, to discuss these questions with us further. That follow-up study reached a similar conclusion: A lack of available local treatment programs was a major factor constraining alternative sentencing for low-risk drug and property offenders.[22]

Further, a sizable minority (12 percent) of judges had discomfort with the goals and the use of risk assessment at sentencing or preferred to rely on judi-

cial judgment. For example, one judge commented: "Frankly, I pay very little attention to the [risk assessment] worksheets. . . . I also don't go to psychics."

RESOURCES FOR TREATMENT

Judges hypothesized, in their responses to our initial, quantitative survey, that a substantial factor explaining the variation in percent of low-risk offenders who actually received alternative sentences was the variation in community programs to which low-risk offenders can be diverted. We aimed to test that hypothesis. Specifically, we examined the premise that the probability a low-risk offender received an alternative sentence increased as the availability of community programs increased.

Given that the original goal of the NVRA was "to reduce the use of incarceration," we focused our analysis on low-risk offenders whose "alternative" sentence did not merely substitute one form of incarceration (e.g., in a local jail) for another form of incarceration (e.g., in a state prison). Data on community treatment resources came from the Virginia Department of Behavioral Health and Developmental Services. A network of 40 Community Service Boards (CSBs) — acting on behalf of local governments — oversee the provision of community-based behavioral health and developmental disability services across Virginia. Our analysis focused specifically on mental health and substance abuse services provided by these CSBs.

We measured the strength of these community treatment resources in a number of ways. For example, we calculated the total number of recipients of mental health or substance abuse services on a per-capita basis in each judicial circuit as well as the total service capacity in each judicial circuit. In addition, we computed the total cost, in dollars per capita, of all mental health and substance abuse services provided in each circuit. These measures correlated highly, which increased our confidence that we were consistently measuring the same thing — namely, the strength of mental health and substance abuse treatment resources.

With this background, we turned to our original question, and found substantial support for a positive association between the availability of community treatment resources and the likelihood of receiving a nonjail alternative sentence. Judges' likelihood of imposing nonjail alternative sentences on offenders increased from 44 percent in the most resource-poor jurisdictions to 71 percent in the most resource-rich jurisdictions. Circuits with resource levels equal to or greater than the median resource level spent an annual amount per capita on nonjail alternative sentences that was two-and-one-half times more than circuits with resource levels below the median.

Our findings confirm the "treatment resource hypothesis" to be one factor accounting for the wide variation among courts and individual judges

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in the extent to which drug and property offenders assessed as low risk of recidivism actually receive a sentence of community treatment that does not include incarceration in a local jail. These findings are consistent with a "justice reinvestment" model of corrections, whereby states have enacted statutes designed to reallocate the fiscal benefits of reducing mass incarceration to fund expansion of community alternatives to incarceration. To the extent that increased treatment resources in a jurisdiction lead to an increased judicial use of risk assessment to sentence offenders to nonjail alternative sentences — as the judges in Virginia themselves hypothesize — providing these treatment resources will be crucial in efforts to reduce mass incarceration.

RECOMMENDATIONS

These studies of judicial practice and opinion concerning risk assessment produced several important insights into how to better institutionalize the use of risk assessment in sentencing. We believe that risk assessment instruments should only be used at sentencing if they are vetted by scientists, to ensure they are technically valid, and also by legal bodies, to ensure they are approved through a public process. The use of proprietary, nontransparent risk assessment algorithms — unreviewed by scientists, unselected by the public, and at times misunderstood by judges and lawyers — have understandably raised concerns. But selecting a risk instrument that is statistically valid and publicly transparent is not enough; the instrument must also be well understood and valued by decision-makers. Further, decision-makers must have adequately resourced alternatives available, so that they can meaningfully consider ▶

other options in addition to incarceration for lower-risk individuals.

The Virginia approach, because it uses a risk assessment instrument that does not rely on proprietary software and makes the instrument publicly available, addresses many of these concerns and, for this reason, has rightly been commended as a model. But it does not address all concerns. Judicial decision-making is not structured so that alternative sentences are always readily available, nor do resources for community-based alternatives permit such sentencing in many judicial circuits. In other jurisdictions, far less attention has been paid to these concerns, and the use of risk assessment may be more varied or even biased. The result has been a judicial lack of reliance on risk information, if not outright hostility to its use.[23]

A concurring judge in the Iowa Court of Appeals case of *State v. Guise* elaborated: "Even if the emerging risk assessment tools are found to have a place in sentencing as a 'relevant' factor, our law does not allow mere conclusions to be mounted on spikes and paraded around our courtrooms without statistical context."[24] If risk assessment is not properly vetted, validated, and tested, and its results are not made actionable (through, for example, adequate community resources), then information about the risk of reoffending will not improve outcomes. Unless we focus on how judges can most effectively make use of risk assessment, these tools will not achieve their salutary goals to divert low-risk offenders from incarceration.

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1   *See, e.g.*, Sonja B. Starr, 27 Fed. Sent'g Rep. 205, 205 (2015) ("we are already in the risk assessment era"); John Monahan & Jennifer L. Skeem, *Risk Assessment in Criminal Sentencing*, 12 Ann. Rev. Clinical Psychol. 489, 493–94 (2016) (describing use of risk assessment in sentencing).

2   Model Penal Code: Sentencing § 6B.09(3) (Am. Law Inst. 2017).

3   First Step Act of 2018, Pub. L. No. 115-391, 132 Stat. 5194.

4   Risk assessment is distinct from risk management, which describes an effort to *reduce* risk through supervision or treatment interventions.

5   *See* Richard Berk, *An Impact Assessment of Machine Learning Risk Forecasts on Parole Board Decisions and Recidivism*, 13 J. Exp. Criminol. 193, 193 (2017) (noting we have "scant information about how actuarial risk assessments have affected practices and outcomes").

6   *State v. Loomis*, 881 N.W.2d 749 (Wis. 2016), *cert. denied* 137 S. Ct. 2290 (2017). *See also* Alyssa Carlson, *The Need for Transparency in the Age of Predictive Sentencing Algorithms*, 103 Iowa L. Rev. 303 (2017).

7   Model Penal Code: Sentencing § 6B.09(3) (Am. Law Inst., Proposed Final Draft 2017).

8   Brian J. Ostrom et al., *Offender Risk Assessment in Virginia: A Three-Stage Evaluation* (2002), http://www.vcsc.virginia.gov/risk_off_rpt.pdf [https://perma.cc/E573-QNZT]; Virginia Criminal Sentencing Commission, *2010 Annual Report* 38–41 (2011), http://www.vcsc.virginia.gov/2010AnnualReport.pdf [https://perma.cc/GXW6-QKG9].

9   Model Penal Code: Sentencing § 6B.09(3) (Am. Law Inst., Proposed Final Draft 2017).

10   Richard S. Frase, Just Sentencing: Principles and Procedures for a Workable System 8 (2013).

11   Christopher Slobogin, *Prevention as the Primary Goal of Sentencing: The Modern Case for Indeterminate Dispositions in Criminal Cases*, 48 San Diego L. Rev. 1127, 1127–72 (2011).

12   Norval Morris, The Future of Imprisonment (1974).

13   Richard Kern, *Overview of Virginia's Truth-in-Sentencing System* 15, 20 http://sfc.virginia.gov/pdf/committee_meeting_presentations/June%2019%20meeting/Virginia%20Felony%20Sentencing%20Guidelines.pdf [https://perma.cc/AL35-9ZZ8].

14   Kevin Reitz, *"Risk Discretion" at Sentencing*, 30 Fed. Sent'g Rep. 68, 70 (2017). *See also* Richard Kern and Mark Bergstrom, *A View from the Field: Practitioners' Response to Actuarial Sentencing: An "Unsettled" Proposition*, 25 Fed. Sent'g Rep. 185, 188 (2013).

15   Kern, *supra* note 13.

16   Richard Kern & Meredith Farrer-Owens, *Sentencing Guidelines with Integrated Offender Risk Assessment*, 16 Fed. Sent'g Rep. 165, 169 (2004) ("The non-violent risk assessment tool adopted as part of the discretionary sentencing guidelines serves to safely divert a significant share of low risk felons away from expensive prison beds into less costly alternative punishment programs.").

17   Ostrom, *supra* note 8.

18   Virginia Sentencing Guidelines, Larceny, Section D, http://www.vcsc.virginia.gov/worksheets_2012/Larceny.pdf [https://perma.cc/N684-VZNW].

19   Virginia Criminal Sentencing Commission, *2012 Annual Report* (2012), http://www.vcsc.virginia.gov/2012VCSCAnnualReport.pdf [https://perma.cc/67J9-E2YU].

20   These findings are described in Brandon L. Garrett, Alex Jakubow & John Monahan, *Judicial Reliance on Risk Assessment in Sentencing Drug and Property Offenders: A Test of the Treatment Resource Hypothesis*, 46 Crim. Just. & Behav. 799 (2019).

21   John Monahan, Anne Metz & Brandon L. Garrett, *Judicial Appraisals of Risk Assessment in Sentencing*, 36 Behav. Sci. & L. 565–75 (2018).

22   Anne Metz, John Monahan, Brandon L. Garrett & Luke Siebert, *Risk and Resources: A Qualitative Perspective on Low-level Sentencing in Virginia*, 47 J. Cmty. Psychol. __ (forthcoming 2019).

23   For a detailed discussion of these issues, see Brandon L. Garrett and John Monahan, *Judging Risk,* 108 Calif. L. Rev. __ (forthcoming 2020).

24   *Iowa v. Guise*, No. 17–0589 at *10 (Iowa Ct. App. 2018).