Open Letter to the Pretrial Justice Institute

Re: Response to PJI's Position on the Abolition of Pretrial Risk Assessment Instruments

Recently the Pretrial Justice Institute (PJI) re-issued its former statement that argues that all pretrial risk assessment instruments (PRAIs) be abolished.[1] Their rationale is understandable but fails to account for the state of the scientific evidence on PRAIs.

Specifically, PJI claims that all PRAIs are racially biased against Black, Latinx, Indigenous, and low-income people, and where implemented, will serve to increase the current level of racial and ethnic disparity in the nation's jails. PJI further explains its reasoning as follows:

> "Underscoring this new (PJI) position, though, was the understanding, based on research, that these tools are not able to do what they claim to do—accurately predict the behavior of people released pretrial and guide the setting of conditions to mitigate certain behaviors. RAIs simply add a veneer of scientific objectivity and mathematical precision to what are really very weak guesses about the future, based on information gathered from within a structurally racist and unequal system of law, policy and practice."

PJI's preferred system would be as described below:

> "The focus should be on implementing a very narrow detention net and providing robust detention hearings that honor the charge of the Supreme Court forty years ago.[33] And we must prioritize helping people succeed—from assistance with court appointments to connecting people to support services—while addressing the needs of all people victimized by crime."

We agree with these goals and believe that the use of PRAIs are not incompatible with achieving them. Instead, PRAIs are one strategy that can be used to support pretrial reform efforts. They certainly are not the only approach, nor should their use preclude other pretrial reforms. However, their use can support the effectiveness of other reform efforts by providing empirical evidence to inform a presumption of release, elimination of money bail, improved representation at pretrial proceedings, provision of pretrial services, diversion to community-based programs, and, ultimately, reductions in rates of pretrial detention.

PJI has concluded, in contrast with scientific evidence, that use of a reliable and valid PRAI precludes reductions in pretrial detention and increases racial and ethnic disparities. Here is what the science says about PRAIs:

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[1] THE CASE AGAINST PRETRIAL RISK ASSESSMENT INSTRUMENTS   (Pretrial Justice Institute. 2020). https://university.pretrial.org/viewdocument/the-case-against-pretrial-risk-asse

1. There is a large body of social science evidence showing that objective, reliable and valid risk assessment instruments are more accurate in assessing risk than professional human judgements alone.[2] In the world of pretrial detention where over 10 million people are jailed each year after arrest, the court must quickly review the defendant's prior record, current charges, and other relevant factors to make an initial determination—usually in the span of a few minutes—on the suitability and conditions of release. Evaluation of risk is a fundamental component of pretrial release decisions and will occur with or without the implementation of PRAIs. Objective and valid PRAIs are a more efficient, transparent, and fairer basis for making that assessment than a judge haphazardly and quickly scanning a myriad of documents. The benchmark here is not perfection but rather improving upon unaided human judgment, which is universally acknowledged to introduce racial and other biases.

2. PJI bases the argument that PRAIs are racially biased on a single study (ProPublica) of a single instrument (COMPAS) in a single jurisdiction (Broward County, Florida) that did not actually focus on outcomes during the pretrial period.[3] Moreover, several studies have shown that ProPublica's analysis was flawed and misleading.[4] There are many studies of other PRAIs in other jurisdictions that have tested for racial bias in prediction but do not replicate these results.[5]

3. PJI asserts that racial bias in prediction will necessarily perpetuate racial disparities in pretrial decisions, but this is not supported by research. Determining whether PRAIs perpetuate racial disparities requires comparing PRAI-informed decisions to those made without the use of PRAIs.[6] Scientific evidence shows that even when PRAIs perform

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[2] PAUL E MEEHL, CLINICAL VERSUS STATISTICAL PREDICTION   (University of Minnesota Press. 1954);William M Grove, et al., *Clinical versus mechanical prediction: A meta-analysis*, 12 PSYCHOLOGICAL ASSESSMENT 19(2000). J. Jung, et al., *Simple rules to guide expert classifications*, 183 STATISTICS IN SOCIETY 771(2020);Z. J. Lin, et al., *The limits of human predictions of recidivism*, 6 SCIENCE ADVANCES eaaz0652(2020).

[3] Julia Angwin, et al., *Machine Bias*, PROPUBLICA, May 23, 2016. 2016;Jeff Larson, et al., *How We Analyzed the COMPAS Recidivism Algorithm*, see id. at.

[4] Anthony W Flores, et al., *False Positives, False Negatives, and False Analyses: A Rejoinder to Machine Bias: There's Software Used across the Country to Predict Future Criminals. And It's Biased against Blacks*, 80 FEDERAL PROBATION 38(2016);William Dieterich, et al., COMPAS Risk Scales: Demonstrating Accuracy Equity and Predictive Parity (2016);Jeff Larson & Julia Angwin, *Machine Bias: Technical Response to Northpointe*, PROPUBLICA, July 29, 2016. 2016;Cynthia Rudin, et al., *The Age of Secrecy and Unfairness in Recidivism Prediction*, 2 HARVARD DATA SCIENCE REVIEW (2020). Alexandra Chouldechova, *Fair Prediction with Disparate Impact: A Study of Bias in Recidivism Prediction Instruments*, 5 BIG DATA 153(2017);Avi Feller, et al., *A computer program used for bail and sentencing decisions was labeled biased against blacks. It's actually not that clear*, THE WASHINGTON POST, 2016.

[5] Sarah L. Desmarais, et al., *Predictive Validity of Pretrial Risk Assessments: A Systematic Review of the Literature*, CRIMINAL JUSTICE AND BEHAVIOR (2020);Douglas B. Marlowe, et al., *Employing standardized risk assessment in pretrial release decisions: Association with criminal justice outcomes and racial equity*, 44 LAW AND HUMAN BEHAVIOR 361(2020).

[6] Gina M Vincent & Jodi L Viljoen, *Racist Algorithms or Systemic Problems? Risk Assessments and Racial Disparities*, CRIMINAL JUSTICE AND BEHAVIOR (2020);Jennifer Skeem & Christopher Lowenkamp, *Using algorithms to address trade-offs inherent in predicting recidivism*, 38 BEHAVIORAL SCIENCES & THE LAW 259(2020).

somewhat better for one group or another, their use can improve upon pretrial decisions made without PRAIs for all defendants.[7]

4. The argument that PRAIs increase pretrial detention rates is inconsistent with the contemporary science. Several recently published studies show decreases in pretrial detention rates in decisions that use PRAIs compared to those that do not.[8]

5. The statement that PRAIs "cannot reliably predict violent crime" is not supported by the scientific literature. Instead, research studies show that several PRAIs predict new violent crime during the pretrial period at levels much better than chance and in keeping with risk assessment instruments used in other contexts.[9]

6. It is because of studies of PRAIs that we know that the vast majority of defendants who are released (75-85%)—regardless of race, ethnicity, or income—will not be re-arrested and or fail to appear for their next court hearing. Even smaller numbers (5% or less) will be re-arrested for a violent crime and even a smaller percent, still, will be convicted of violent crime while on pretrial release. With these statistics, defense counsels can more effectively argue for the release of their clients.

7. We know that within the criminal justice system and many other areas of American society, bias exists. These biases exist in the deployment of police, arrest policies, charging decisions, pretrial decisions, and sentencing practices. So any assessment that relies on the data used by criminal justice agencies will have some level of bias, whether conducted using PRAIs or completed by judges in the absence of PRAIs.[10] At least with the use of PRAIs—and in contrast with unstructured judicial discretion—the weighting and role of these data sources in evaluations of risk are clear and transparent.[11]

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[7] Evan M. Lowder, et al., Improving the accuracy and fairness of pretrial release decisions: A multi-site study of risk assessments implemented in four counties (National Institute of Justice ed., Bureau of Justice Programs, U.S. Department of Justice 2020). Christopher T. Lowenkamp, et al., *Replication and Extension of the Lucas County PSA Project*, (2020).

[8] Evan M. Lowder, et al., *Effects of pretrial risk assessments on release decisions and misconduct outcomes relative to practice as usual*, JOURNAL OF CRIMINAL JUSTICE (2020);Marlowe, et al., LAW AND HUMAN BEHAVIOR, (2020);Jodi L. Viljoen, et al., *Impact of risk assessment instruments on rates of pretrial detention, postconviction placements, and release: A systematic review and meta-analysis*, 43 see id. at 397(2019);Evaluation of Pretrial Justice System Reforms That Use the Public Safety Assessment: Effects of New Jersey's Criminal Justice Reform. No. 1(2019);Evaluation of Pretrial Justice System Reforms That Use the Public Safety Assessment: Effects in Mecklenburg County, North Carolina. No. 1(2019).

[9] Desmarais, et al., CRIMINAL JUSTICE AND BEHAVIOR, (2020). Sarah L Desmarais, et al., *Performance of recidivism risk assessment instruments in U.S. correctional settings*, 13 PSYCHOLOGICAL SERVICES (2016).

[10] Vincent & Viljoen, CRIMINAL JUSTICE AND BEHAVIOR, (2020);Sandra G Mayson, *Bias In, Bias Out*, 128 THE YALE LAW JOURNAL 2122(2019).

[11] Sharad Goel, et al., *The Accuracy, Equity, and Jurisprudence of Criminal Risk Assessment*, (2018).

For these reasons, the implication for policy is not to abolish PRAIs but to ensure that any form of bias in the assessment process is reduced as much as possible. This can be achieved by adopting the following practices:

a. *Due Process and Transparency*. The scoring and results of any PRAI completed on any individual must be fully disclosed to that person, with an ability to contest its accuracy.

b. *Reliability*. All PRAIs must undergo regular reliability tests to ensure that defendants are scored in a uniform and consistent manner regardless of who is doing the assessment.

c. *Validity.* All PRAIs should be tested using appropriate research methods to ensure they are properly identifying risk to re-offend and/or fail to appear in court during the pretrial period.[12] PRAIs should not be tested on new criminal behavior that occurs after cases have been disposed. Further, future validation studies should strive to use additional measures of criminal behavior as the outcome, such as convictions, filed charges, or even self-report, especially for more serious crimes.

d. *Tested on the Local Population.* Research has shown that a PRAI will perform best if it is tested on its local population rather than a population from another city or state. Consequently, PRAIs that have been developed in other jurisdictions need to be re-tested in the local jurisdiction and adjusted accordingly.

e. *Tested for Racial and Gender Bias in Prediction*. PRAIs must ensure that there is little (if any) racial and gender bias in the risk assessment process. This may be accomplished by ensuring that the outcome predicted by a PRAI is not skewed by race or gender relative to the actual event of concern. When there is evidence of bias in the predictions produced by PRAIs, that strategies are implemented to make the process more fair;[13] for example, by limiting reliance on factors that serve as proxies for race, gender, or income, and focusing on the currently charged offense(s) and prior behaviors within time limits (e.g., felony convictions in the past 10 years).[14] As for reliability, tests of racial and gender bias in prediction should be conducted regularly.

f. *Use in the Pretrial Release Decisions.* PRAIs were not designed to be, nor should they be, the sole determinate of any pretrial release decision or replace judicial decision-making. Instead, they should inform decisions by aiding in the identification of the low-risk

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[12] STANDARDS FOR EDUCATIONAL AND PSYCHOLOGICAL TESTING   (American Educational Research Association, American Psychological Association, National Council on Measurement in Education. 2014);J. P. Singh, et al., *Reporting guidance for violence risk assessment predictive validity studies: the RAGEE Statement*, 39 LAW AND HUMAN BEHAVIOR 15(2015);Kevin S Douglas, et al., *Research methods in violence risk assessment*, *in* RESEARCH METHODS IN FORENSIC PSYCHOLOGY (Barry Rosenfeld & Stephen D Penrod eds., 2011).

[13] Richard A. Berk & Arun Kumar Kuchibhotla, *Improving Fairness in Criminal Justice Algorithmic Risk Assessments Using Conformal Prediction Sets*, ARXIV: APPLICATIONS (2020).

[14] Kristin Bechtel, et al., *Identifying the predictors of pretrial failure: A meta-analysis*, 75 FEDERAL PROBATION 78(2011).

defendants from the few that present greater risk. Given that most detained defendants are suitable candidates for release based on the criteria of flight risk and danger to the community, there should be a presumption of release.[15]

As suggested above, there are many PJI points with which we agree; in particular, that PRAIs should not be used to make pretrial release decisions unilaterally, that communication of PRAIs results should describe likelihood of success, and that the definition of failure to appear in court should be refined. We also agree that, in some jurisdictions, adoption of a PRAI often does not lead to reductions in pretrial population, but only because judges are unwilling to release defendants, regardless of risk.[16] When judges use the results of PRAIs to inform their pretrial decisions, research shows that rates of pretrial release often increase.

Based on PJI's position, all pretrial (and subsequent) hearings would bar consideration of information on current charge(s) and criminal history because they are biased, which begs the question: what would pretrial decisions be based on? At least for the foreseeable future, information on criminal justice involvement and assessments of risk will continue to be introduced and considered in pretrial decisions, as a matter of law and policy. Indeed, most pretrial decisions are currently based upon state law and bail schedules that require consideration of some combination of current charge(s), criminal history, prior failures to appear in court, and ties to the community.[17]

Abolishing PRAIs and allowing judges to return to—or, more accurately, to continue—the practice of making subjective judgments of what constitutes risk would be a major step backwards. While the use of PRAIs will not eliminate pretrial detention and racial bias, they are a step in the right direction. They also are easier to fix than biased human decision-making.[18] A review of the full body of scientific evidence on PRAIs supports this viewpoint.

For further discussion of the potential role of PRAIs in pretrial reform, civil rights concerns related to their use, and potential implications of using AI in this context, see the issue briefs developed as part of the MacArthur-supported Pretrial Risk Management Project: Sarah L. Desmarais and Evan M. Lowder, *Pretrial Risk Assessment Tools: A Primer for Judges, Prosecutors, and Defense Attorneys*; David G. Robinson and Logan Koepke, *Civil Rights and Pretrial Risk Assessment Instruments*; and Alexandra Chouldechova and Kristian Lum, *The Present and Future of AI in Pre-Trial Risk Assessment Instruments*. All are available at http://www.safetyandjusticechallenge.org/resources/

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[15] MELISSA HAMILTON, RISK ASSESSMENT TOOLS IN THE CRIMINAL LEGAL SYSTEM – THEORY AND PRACTICE: A RESOURCE GUIDE (National Association of Criminal Defense Lawyers. 2020).

[16] Marlowe, et al., LAW AND HUMAN BEHAVIOR, (2020).

[17] AMBER WIDGERY, THE STATUTORY FRAMEWORK OF PRETRIAL RELEASE   (National Conference of State Legislatures. 2020).

[18] Berk & Kuchibhotla, ARXIV: APPLICATIONS, (2020).

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