SEPTEMBER 2024

Federal PROBATION

a journal of correctional philosophy and practice

SPECIAL ISSUE ON ADVANCING EVIDENCE-BASED DECISION MAKING IN PRETRIAL SERVICES

Federal PROBATION

a journal of correctional philosophy and practice

PUBLISHED BY
The Administrative Office of the U.S. Courts

Judge Robert J. Conrad, Jr., *Director*

John J. Fitzgerald, *Chief*
Probation and Pretrial Services Office

Federal Probation ISSN 0014-9128 is dedicated to informing its readers about current thought, research, and practice in criminal justice, community supervision, and corrections. The journal welcomes the contributions of persons who work with or study defendants and offenders and invites authors to submit articles describing experience or significant findings regarding the prevention and control of crime and delinquency. A style sheet is available from the editor.

Federal Probation is published three times yearly—in June, September, and December. Permission to quote is granted on the condition that appropriate credit is given the author and *Federal Probation*. For information about reprinting articles, please contact the editor.

Subscriptions to *Federal Probation* are available from the Superintendent of Documents of the Government Printing Office at an annual rate of $16.50 ($22.40 foreign). Please see the subscription order form on the last page of this issue for more information.

Federal Probation can also be accessed online at no charge at www.uscourts.gov.

Federal Probation
Administrative Office of the U.S. Courts
Washington, DC 20544
telephone: 202-502-1651
fax: 202-502-1677
email: Ellen_Fielding@ao.uscourts.gov

Postmaster: *Please send address changes to the editor at the address above.*

THIS ISSUE IN BRIEF

SPECIAL ISSUE ON ADVANCING EVIDENCE-BASED DECISION-MAKING IN PRETRIAL SERVICES

This special issue of Federal Probation *offers our readers eight articles that advance evidence-based decision-making in pretrial services. We have grouped them into two sets of four articles each, with the first four focusing on the federal pretrial services system, and the final four reporting on several studies of pretrial release and detention factors in American county systems undertaken by RTI International. Matthew DeMichele introduces the county-based RTI International studies on p. 41.*

Our first four articles use multiple angles to focus on pretrial decision-making in the federal pretrial services system. "Evidence Over Imitation: Developing Research-Informed Strategies for Pretrial Decision-Making" provides an overview of actuarial pretrial assessments and how they are used—in initial determinations of detention, release, and release conditions; and in the various interventions related to monitoring, treatment, and pretrial supervision for those on release.

The second of the four, "The Presumption for Detention Statute's Relationship to Release Rates Revisited: A Replication and Extension," updates and extends a 2017 Federal Probation *article by Amaryllis Austin. The update by Austin et al. uses newer data and multivariate modeling to study the impact of the presumption for detention statute on federal pretrial release rates.*

In "Revising the Pretrial Risk Assessment (PTRA): Promising Options," Valdez Hoffer and Lowenkamp present key findings from the revalidation of the federal pretrial services system's risk assessment instrument and discuss additional factors for expanding its use in pretrial decision-making.

Finally, the fourth in this opening set of articles on pretrial decision-making in the federal system is "Racial Disparity in Federal Pretrial Detention Recommendations: Trends Over Two Decades and Association with Risk Assessment Implementation." Lowenkamp et al. examine changes in racial disparities in federal detention recommendations from 2004 to 2024. Results of their analysis—which show a 75 percent decrease in racial disparities over the study period, and a significant and sustained drop in disparities following a marker of achieving full PTRA implementation in 2011—underscore the potential value of such structured human decision-making in reducing racial bias and supporting pretrial reform.

In total, the eight articles making up this special issue should provide readers with abundant insights and suggest fruitful avenues of future research in advancing evidence-based decision making in the critical field of pretrial services.

—Ellen Wilson Fielding
Editor

Evidence Over Imitation: Developing Research-Informed Strategies for Pretrial Decision-Making

Kristin A. Bechtel[1]
Thomas H. Cohen[2]
Alexander M. Holsinger[3]
Christopher T. Lowenkamp[4]
Charles R. Robinson[2]

WHEN A PERSON is arrested and charged with a criminal offense, judicial officials must determine whether that person (the defendant) should be released back into the community or detained pretrial (American Bar Association, 2007). The decision to release or detain a defendant pretrial represents a crucial, some would say even key, "pivot point" within the criminal justice process (Carr, 2017). Defendants facing pretrial incarceration are beset with numerous consequences that can border on the catastrophic, including the curtailment of their personal liberties with accompanying losses in their employment status, residential stability, and even parental rights (Stevenson & Mayson, 2017; Bergin et al., 2022). Pretrial detention can also have negative implications for pretrial outcomes, such as failure to appear and new pretrial arrests (Holsinger, Lowenkamp, & Pratt, 2023) as well as case outcomes. A plethora of research studies has empirically demonstrated that detained defendants are more likely to be convicted, receive longer incarceration terms, and engage in higher levels of future criminal activity than defendants placed on pretrial release (Dobbie, Goldin, & Yang, 2016; Gupta, Hansman, & Frenchman, 2016; Heaton, Mayson, & Stevenson, 2017; Leslie & Pope, 2017; Lowenkamp, VanNostrand, & Holsinger, 2013; Koppel et al., 2022; Oleson, VanNostrand, Lowenkamp, Cadigan, & Wooldredge, 2014; Reitler, Sullivan, & Frank, 2013; St. Louis, 2023). In fact, it seems that the pretrial stage is so crucial to the criminal justice process that the statement "pretrial determines mostly everything" sums up the importance of this pivot point quite meaningfully (McCoy, 2007).

In recognition of the heavy costs associated with pretrial detention, many jurisdictions throughout the country are engaged in various reform efforts aimed at reducing pretrial detention in a way that alleviates socio-economic inequalities without resulting in potentially adverse outcomes, including increases in the proportion of released defendants failing to make court appearances or engaging in pretrial crime (Stevenson & Mayson, 2017). Most of these efforts have occurred at the state level, where many jurisdictions are attempting to move from systems where release hinges on the defendant's capacity to pay financial bail to systems in which the release decision is guided by actuarial risk tools (Grant, 2018; Mamalian, 2011; Pretrial Justice Institute, 2012; Stevenson, 2018).[5] At the federal level, the Administrative Office of the U.S. Courts Probation and Pretrial Services Office (PPSO) sponsored its first-ever national conference devoted to federal pretrial issues in 2018. The conference ended with a call to action for federal pretrial officers, judicial officials, and policymakers to devote more attention, resources, policy guidance, and research to pretrial decision-making in the federal justice system.[6]

Given the surging interest and reform efforts focused on the pretrial process, it seems an opportune time to take stock of our understanding of several issues that are of critical importance to the pretrial stage of criminal justice case processing. Specifically, this essay will provide a general overview of actuarial pretrial assessments and the implementation of these tools in criminal court systems and highlight the characteristics of pretrial conditions and interventions related to monitoring, treatment, and supervision currently being delivered to defendants on release and the efficacy of these conditions and interventions. It is our hope that this essay

[1] RTI International. Authors are listed in alphabetical order.

[2] Probation and Pretrial Services Office, Administrative Office of the U.S. Courts.

[3] University of Missouri – Kansas City, Department of Criminology & Criminal Justice.

[4] Probation and Pretrial Services Office, Administrative Office of the U.S. Courts; and Center for Justice and Communities, School of Criminal Justice, University of Cincinnati.

[5] The most recent of these reform efforts occurred in California, which recently passed a law eliminating cash bail for the entire state. The law is scheduled to go into effect on October 1, 2019 (Park, Tuesday August 2018), but was later recalled.

[6] A follow-up federal pretrial conference occurred in 2023 covering issues somewhat similar to those highlighted in the initial federal pretrial conference.

will highlight our current understanding of these key pretrial areas, identify knowledge gaps that a research agenda could fulfill, and initiate a call to action for developing a theoretical framework directed at the pretrial field.

The need for theoretical development in the pretrial arena is especially acute since, unlike the community corrections field where the evolution and development of a comprehensive theoretical paradigm has occurred (that is, the Risk, Needs, and Responsivity model), no similar framework exists in the pretrial sphere (Andrews & Bonta, 2017). As will be demonstrated, attempts to graft the Risk, Needs, and Responsivity model (hereinafter the RNR model) onto the pretrial process have been somewhat problematic; hence, there is an urgent need for more theoretical development directed at this key pivot point within the criminal justice system (Carr, 2017).

Pretrial Risk Assessment

What Do We Know About Pretrial Risk Assessment?

The use of actuarial risk instruments to inform pretrial release and detention decisions has an extensive history. The first pretrial risk instrument dates to the early 1960s, originating with the Vera Institute's attempt to construct a scale capable of predicting whether a defendant would show up to court (Ares, Rankin, & Sturz, 1963; Eskridge, 1983). Since that period, a substantial amount of research has occurred around pretrial risk assessments, with several states and the federal system using these instruments to inform pretrial decision-making (Bechtel, Holsinger, Lowenkamp, & Warren, 2016; Cadigan & Lowenkamp, 2011; Desmarais et al., 2021; Desmarais, Monahan, & Austin, 2022; Goldkamp & Vilcia, 2009; Mamalian, 2011; Picard-Fritsche, Rempel, Tallon, Adler, & Reyes, 2017; Summers & Willis, 2010; LJAF, 2013). Moreover, the recent development of a national pretrial risk tool by the Arnold Ventures Foundation (titled the Public Safety Assessment or PSA) that could be used in any jurisdiction has further accelerated the embracing of these practices by criminal justice officials, stakeholders, and policymakers (LJAF, 2013).

A review of the pretrial risk assessment literature shows most of these instruments using some combination of similar factors to predict a defendant's likelihood of failing to appear or being arrested for pretrial crime. The most common risk elements embedded within these instruments include current offense charge, prior convictions, prior incarceration, pending charges, history of failure to appear, community ties and residential stability, substance abuse, employment and education, and age (Bechtel et al., 2016; Bechtel, Lowenkamp, & Holsinger, 2011; Desmarais & Lowder, 2019; Desmarais et al., 2021; Desmarais et al., 2022; Latessa, Lemke, Makarios, Smith, & Lowenkamp, 2009; Mamalian, 2011). Information on these factors is typically obtained by reviewing criminal records, investigating court documents, and interviewing defendants and verifying the information gleaned through the interview (Bechtel et al., 2016).

While gathering information on these pretrial risk factors should be relatively straightforward, pretrial assessments are often conducted in an environment in which the presence of high caseloads, the lack of staff dedicated to pretrial decision-making, and the limited period between arrest and initial appearance creates barriers to completing these assessments in an accurate, timely, and complete manner (Mamalian, 2011). As a consequence, there have been efforts to construct pretrial assessments based solely on static factors that could be obtained without conducting interviews, while maintaining levels of predictive validity similar to those obtained by risk assessments relying on interviews (Bechtel et al., 2016). These efforts were guided by research showing that the items most strongly correlated with pretrial failure are typically static and related to criminal history—prior convictions, prior felonies, prior misdemeanors, juvenile arrest, and prior failure to appear—and ultimately resulted in the creation of a pretrial risk assessment tool (i.e., PSA) that can be completed without having to conduct an in-person interview with the defendant (LJAF, 2013).[7]

In general, research has shown that risk assessment tools, including those used at the pretrial stage, provide more accurate predictions than clinical approaches where decisionmakers rely on professional judgment or intuition gleaned through interviews or documentation reviews to best assess a person's risk (Andrews & Bonta, 2010; Grove, Zald, Lebow, Snitz, & Nelson 2000). The first meta-analysis of actuarial pretrial tools found a "medium" effect size in terms of their capacities to predict pretrial outcomes of missed court appearances and pretrial crime (Bechtel et al., 2016). Similarly, a recent meta-analysis demonstrated that the predictive validity of pretrial risk assessments could be classified as good to excellent (Desmarais et al., 2021). Other agencies highlight the potential benefits of using risk assessment tools, including a reduction in jail populations and an increase in pretrial release recommendations (Cooprider, 2009; Desmarais, 2022; Lowder et al., 2020; Mahoney, 2001; Marlowe et al., 2020; Stevenson & Doleac, 2018; Viljoen, 2019).

Moving Forward With a Pretrial Risk Agenda – Challenges and Considerations

While we know a great deal about pretrial risk assessments, there's a continual need for a research agenda that can further our understanding of these tools. Constructing a research agenda focused on risk assessments is particularly necessary because, though much effort has been expended on validating the predictive efficacy of these instruments (see Mamalian, 2011; Bechtel et al., 2016), little is understood about how these tools are being implemented by local actors within specific criminal justice systems and their potential limitations in pretrial recidivism prediction that might necessitate non-quantitative approaches to move the field forward.

Of all the varied issues that could inform a pretrial research agenda, one of the most important involves understanding exactly how these instruments are being implemented by local criminal justice actors (Stevenson, 2018). Many proponents of risk tools hope that implementing these assessments will result in an increase in release rates as lower risk defendants are placed on pretrial release without having to pay any financial bail, with no simultaneous increases in missed court appearances or pretrial crime. While the advocates of risk assessment approaches have been optimistic about the potential effects of these devices, there are relatively few empirical studies "about how risk actuarial assessments have affected practices and outcomes" (Berk, 2017: 193). Specifically, several recent studies have shown risk instruments having minimal impacts on overall pretrial release or violation rates (see Brooker, 2017; Cohen & Austin, 2018; Stevenson, 2018); other research, however, has shown that implementing these instruments can be associated with reductions in pretrial jail populations and detention

[7] The PSA is currently being used statewide in Kentucky, Arizona, New Jersey, and Utah. It is also being used in several major cities and multiple counties across the country (See PSA Map on the Advancing Pretrial Policy and Research website: PSA Map | Advancing Pretrial Policy & Research (APPR)).

rates, at least in the short term (Pretrial Justice Institute, 2019), including reducing booking rates, without an increase in failure to appear or new pretrial arrests (Lowenkamp, DeMichele, Klein, & Warren, 2020).

Local criminal justice systems have a variety of organizational, structural, and operational barriers that could potentially thwart the effective implementation of pretrial assessment tools (Mamalian, 2011). Specifically, most criminal courts operate within the context of the "court workgroup," in which key players, including defense attorneys, prosecutors, judges, and pretrial officers, share responsibilities for criminal case processing decisions, including whether to place on pretrial release or keep detained a defendant (DeMichele et al., 2018; Eisenstein, Fleming, & Nardulli, 1988; Eisenstein & Jacob, 1977). Any of these courtroom actors could use their local discretion to impede the effective use of assessment tools in pretrial systems, and the likelihood of pushback could be especially acute in systems where these actors have not bought into using assessments to inform release and detention decisions (Mamalian, 2011). This is particularly true for judges, who in many instances are the ultimate arbiters of the release decision. If, for example, judges have discretion to depart from or ignore the risk assessment guidelines or (as in the case of the federal justice system) must consider factors that do not specifically incorporate risk tools, the risk assessment instrument may not work as intended (Pretrial Justice Institute, 2019). Hence, any pretrial research agenda should consider comprehending the ways in which local court actors interact with and react to attempts to integrate risk assessments into the pretrial decision-making processes.

An additional complication and little noted factor in the effective implementation of risk assessments is the potential for financial bail systems to disrupt the assessment process. Though recent reform efforts have attempted to mitigate the use of financial bail, the Bureau of Justice Statistics (BJS) reports that, for defendants charged with felony offenses in the nation's 75 most populous counties in 2009, bail bondsmen still accounted for the most common forms of pretrial release. Moreover, nearly 90 percent of detained felony defendants were held in jail because they were unable to meet the financial conditions required to secure release (Reaves, 2013). Given that many state and local jurisdictions still rely on bail schedules and bail bondsmen to effect pretrial release, the potential nexus between risk assessments and the imposition of financial bail has been barely acknowledged and poorly understood. In many jurisdictions using bail schedules, defendants could simply bail out of jail prior to being assessed with any risk tool, or, even if assessed as high risk, buy their freedom if bail amounts are attached to high-risk classifications. The extent to which the ability to post financial bail could potentially undermine risk assessment efforts in states using both mechanisms of release needs to be further explored by researchers and policymakers.

In addition to resistance from court actors and bail systems to the wholesale adoption of actuarial assessments, there are a variety of methodological issues associated with deficiencies in the quality and standardization of data warehoused in local pretrial or court systems that could potentially disrupt risk assessment implementation (Mamalian, 2011). Due to a lack of financial resources and personnel, many pretrial programs do not possess information systems that are sufficient to the task of risk validation or even data quality assessment and maintenance (Clark & Henry, 2003; Mamalian, 2011). Even for those systems with adequate pretrial data, accessing the data for validation and research purposes and then employing personnel with the requisite skills to conduct appropriate analyses can be a time consuming and expensive endeavor (Mamalian, 2011).

Jurisdictions, moreover, differ on how they measure or count the core pretrial outcome metrics of failure to appear (FTA) or pretrial crime. Most jurisdictions with pretrial programs, for example, only count FTA or pretrial crime events for those defendants under pretrial supervision, ignoring these outcomes for unsupervised defendants (Pretrial Justice Institute, 2009). Furthermore, a survey of pretrial programs showed that only 37 percent of these programs have the capacity to calculate rearrest rates (Pretrial Justice Institute, 2009). Last, the way FTAs are measured can vary across jurisdictions, with some basing the rate on the number of court appearances with skips, while others base it on the number of defendants with FTAs (Mamalian, 2011; Pretrial Justice Institute, 2009). It is quite possible that the paucity of well-funded and maintained pretrial case management systems, the absence of staff with the skills to conduct analyses directed at risk prediction and quality maintenance, and the lack of uniformity in measuring and collecting various outcomes have hindered the capacity of many local jurisdictions to effectively implement and validate their risk instruments (Pretrial Justice Institute, 2009).[8] Research should focus on how these data quality issues might hinder effective risk assessment implementation and suggest mechanisms for overcoming these data quality barriers and challenges.

An issue related to data quality is that, to our knowledge, there have been no attempts to assess the extent to which court or pretrial staff are being trained on the scoring of pretrial assessment tools and whether these tools are being scored accurately, consistently, and reliably.[9] As a result, the research on the degree of inter-rater reliability among officers using risk assessments at the pretrial stage is slim to nonexistent. The dearth of research on scoring reliability is unfortunate because, though reliability is an often-neglected issue in the risk assessment field (Desmarais & Singh, 2013), its importance is crucial to successful implementation of these devices and to the accurate recidivism prediction. In fact, some studies suggest that poor reliability can result in a degradation of risk prediction (Duwe & Rocque, 2017). A pretrial research agenda should consider attempting to gauge the issue of reliability and the possibility that poor reliability might be hindering the effective application of pretrial risk instruments.

In addition to issues of risk assessment implementation, it's important to acknowledge that research from a few years ago showed pretrial risk assessments have predictive capacities in the "good" range, with AUC-ROC scores ranging in the mid to high 0.60s (DeMichele et al., 2018; Desmarais & Singh, 2013). However, a recent meta-analysis examining pretrial assessments found that the predictive validity of pretrial assessments ranged in the "good" to "*excellent*" range (.70 or higher). Of course, these positive findings are not consistent across tools or by racial groups, as poor AUC-ROC scores have been observed (Medhanie et al., 2023). There are numerous possible explanations for why pretrial assessments are not as predictive as hoped. First, pretrial risk tools are not basing their predictive algorithms on the behavior

[8] See Pretrial Justice Institute's survey of pretrial programs in 2009 showing less than half (41 percent) of jurisdictions are using risk assessments that have been validated over the past five years (Pretrial Justice Institute, 2009).

[9] It should also be noted that there are relatively few studies examining the issue of reliability for risk instruments at the post-conviction stage (Duwe & Rocque, 2017).

of all defendants; rather, they are grounded on the outcomes for only those defendants released pretrial. While detained defendants might engage in criminal misbehavior to the same extent as released defendants, it is more likely that released defendants would have lower risk characteristics and pretrial violation rates than their detained counterparts (Mamalian, 2011; Stevenson, 2018). The extent to which selection biases might be hindering the development of effective risk assessment prediction needs to be better investigated and understood. Another issue is the short time periods many defendants stay on pretrial release, which is especially problematic when trying to predict violent crimes (Mamalian, 2011). Several reports show released defendants remaining on pretrial release for 9 months or less; these short time periods might not be sufficient when attempting to gauge the probability of low base rate events such as violent pretrial crime (Barabas et al., 2019; Pretrial Justice Institute, 2020). Despite the challenge of low base rates and the short period to predict violent pretrial crime, there are pretrial assessments that were developed to predict FTA, pretrial arrest, and pretrial arrest for a violent charge (e.g., Public Safety Assessment), and research has demonstrated the predictive validity of these assessments (Brittain et al., 2021; DeMichele et al., 2020; Desmarais et al., 2016, 2021; Lowder, Lawson et al., 2020; Lowenkamp et al., 2020; Marlowe et al., 2020). Of course, with the COVID-19 pandemic, case processing time frames have increased (Germano, Lau, & Garri, 2022) and court backlogs from the social distancing mandates and lockdowns have been attributed to these delays (Nahra, 2021).

Importantly, testing for predictive bias in risk assessments has become standard for tool development and validation studies—although validation studies do not consistently provide these analyses or present these findings. As a result, a few pretrial assessment validation studies have revealed differential prediction by race (Medhanie et al., 2023) and by race and gender for pretrial scales that aim to predict a specific outcome, such as FTA (Lowenkamp et al., 2020), and have been moderated by race, but without a disparate impact (DeMichele et al., 2020). While many pretrial validation studies have not found evidence of predictive bias by race or gender, additional research is warranted to confirm that assessments do not exacerbate bias (Desmarais et al., 2021), especially if the information produced by the assessment could result in different decision-making and treatment—such as detaining an individual or assigning unnecessarily intensive release conditions (Desmarais et al., 2022). Relatedly, a serious critique has been raised not only about the use of risk assessments and the output generated, but about concerns about the data entered to produce a score; namely, these tools primarily rely on a review of an individual's criminal history. These data may capture differential treatment across the criminal legal system for Black individuals when compared to similar White individuals (Pierson et al., 2020; Stolzenberg et al., 2013; Kochel et al., 2011). Researchers have started to take a closer look at a possible option to mitigate this concern. Specifically, one study examined the predictive validity of the Public Safety Assessment's New Criminal Arrest (NCA) scale when scored with an abbreviated criminal history rather than with a lifetime review; the study found equal predictive validity regardless of the scale being scored with a 5-year criminal history review or with a lifetime review. As a result, substantially fewer Black individuals were scored as high risk (DeMichele et al., 2023). The potential implications for this could mean that more Black individuals will be released, and pretrial detention and disparities in the jail population could be reduced. This approach has an empirical base, as research has demonstrated that recent convictions are more predictive than convictions from 10 to 20 years ago (Blumstein & Nakamura, 2009; Bushway et al., 2011), and individuals who remain crime free for 5-7 years are no more likely to be rearrested than an individual with no prior system involvement (Blumstein & Nakamura, 2009). Since many assessments use the full criminal history record for scoring (unless the item is time-bound), replicating this study with other pretrial assessments in multiple settings will be an important next step in pretrial research.

While some of the issues mentioned above that hinder effective risk prediction might be addressed by the advent of machine learning algorithms, it is also quite possible that we have reached the limits of what "big data" will tell us regarding a defendant's propensity to miss court appearances or engage in pretrial crime. Perhaps qualitative approaches involving focus groups or strategically structured interviews in which low-risk defendants who failed are asked why they failed and high-risk defendants who succeeded are queried on why they remained free of any pretrial violations are required to move the pretrial risk assessment field forward (Courtland, 2018). Alternatively, reviewing samples of officer field notes for information about defendants who succeeded or failed while on pretrial release might provide another source of valuable information about the causal mechanisms of events leading to pretrial failure. The bottom line is that the integration of conceivably less data-oriented approaches to pretrial risk assessment might be necessary to better understand risk prediction in the pretrial arena.

Pretrial Conditions and Intervention Efforts

What do we know about pretrial conditions and intervention efforts aimed at curbing missed court appearances and pretrial crime?

For those defendants placed on pretrial release, jurisdictions use a variety of conditions both standard and specific to lower the likelihood that the released defendant will miss court appearances or be arrested for pretrial crime (Clarke, 1988; Bechtel et al., 2016). Many of these conditions are applied in blanket fashion and are often imposed without consideration of a defendant's risk of pretrial failure (Bechtel et al., 2016). The types of conditions imposed on released defendants can range from those that are typically considered standard, meaning they are applied to nearly all released defendants, to those that are more specialized in their imposition, meaning they are applied to subsets of released defendants. In many jurisdictions, however, the differences between standardized and special conditions are somewhat ambiguous, as many special conditions have become relatively common in their application (Bechtel et al., 2016).

Pretrial conditions can encompass a variety of interventions, some of which are oriented to restricting the defendant's freedoms, while others are fashioned to either monitor the defendant's behavior or provide rehabilitative services. Pretrial conditions that are focused on restricting the defendant's freedoms include travel restrictions, weapons restrictions, curfews, no contact with victims or witnesses, or no arrest interactions with law enforcement officers. Monitoring conditions typically include electronic monitoring compliance, drug and alcohol testing, or search and seizure. Treatment conditions include a range of interventions involving substance abuse, mental health, or sex offender treatment (Bechtel et al., 2016). In addition to all of the above conditions, some don't fall into any classifiable categories, including court

notification programs, pretrial supervision, or financial bond.

Regardless of the condition or intervention imposed, there is a general theory that pretrial interventions should follow the model imposed on corrections populations at the post-conviction stage (Bechtel et al., 2016). In other words, there exists an expectation that applying the RNR model to pretrial systems would produce results similar to those observed in the community corrections and post-conviction arenas. As will be demonstrated, there has been relatively little empirical research on the efficacy of these pretrial interventions, and many have not worked as intended (Cohen & Hicks, 2023; Bechtel et al., 2016; Mamalian, 2011). We provide a brief overview of some predominant research examining the effectiveness of pretrial conditions and interventions below.

Among the various types of pretrial conditions, perhaps the most common involve monitoring or treatment interventions. Substance abuse testing and location monitoring encompass some of the most frequent forms of monitoring conditions (Mahoney et al., 2001; Pretrial Justice Institute, 2009, 2012). Substance abuse testing has become a particularly commonplace tool to gauge whether defendants are engaged in drug abuse while on pretrial release, but the research on its effectiveness is arguably outdated. Most of the descriptive studies have not found a clear association between drug testing and improved pretrial outcomes, and the limited rigorous approaches have not produced consistent findings. A 1992 RCT conducted in two Arizona counties found mixed results on the impact of drug testing on pretrial misconduct, which included failure to appear and pretrial arrest. One county experienced a slight reduction in pretrial arrest for the treatment group (assigned drug testing), and there was no difference in failures to appear. The other county saw a significant increase in failures to appear and pretrial arrest for the group that had drug testing (Britt et al., 1992). Randomized controlled trials of approximately 300 people in Maryland and in Wisconsin found that those assigned to drug testing did not significantly differ from those who were not assigned to drug testing (Goldkamp & Jones, 1992). Another study explored the use of sobriety monitoring across multiple jurisdictions and found mixed results in terms of avoiding pretrial arrest, but court appearance rates were the same across groups (MDRC), that those who were on sobriety monitoring avoided arrest and made court appearances at the same rates compared to those who were not (Golub, Valentine, & Holman, 2023). Much of the known research is outdated; new research must aim to produce a causal link and examine the relationship between drug and sobriety testing on pretrial outcomes, cost effectiveness, varying intensity levels, and if there are any disproportionate results for certain demographics. Ultimately, judicial authorities need to know when mandating drug testing and sobriety monitoring is beneficial and when it is harmful. Further, electronic monitoring has increased as a mechanism for reducing jail overcrowding and ensuring that released defendants comply with certain specified release conditions (Bechtel et al., 2016), with substantial increases in the use of electronic monitoring resulting from the COVID-19 pandemic and social distancing mandates (Weisburd et al., 2021). At this point, it is difficult to draw conclusions on the benefits and harms of electronic monitoring during the pretrial stage, as the research has been primarily conducted on probation and parole samples. With few exceptions, the research lacks rigor and the results are mixed (Wolff et al., 2017; Sainju et al., 2018; Belur et al, 2020). One study evaluating electronic monitoring found that moderate to high-risk individuals on electronic monitoring had significantly lower rates of rearrest compared to those not being monitored (Wolff et al., 2017). A recent multisite study compared successful outcomes of individuals released on pretrial supervision with electronic monitoring to those released on pretrial supervision without monitoring. The researchers found that those who were not assigned to monitoring were more likely to avoid arrest (76%) compared to those who were (67%) after a six-month period, suggesting that the monitored group's rearrest rate was 9 percentage points higher than the group that was not monitored (Anderson et al., 2023). When the technology is available, electronic monitoring is often assigned to individuals with domestic violence charges; however, one study found that electronic monitoring is not associated with recidivism reductions for these cases (Grommon, Rydberg, & Carter, 2017). Electronic monitoring comes at a cost, which in some jurisdictions is passed onto those under supervision (both pretrial and probation). While many states do not share information about fees associated with electronic monitoring, one report found the average yearly costs of 22 states for one person to be on a monitor was $3,284.08 (Weisburd et al., 2021). Ultimately, the current state of electronic monitoring research for pretrial populations suggests that electronic monitoring should not be broadly applied (Sainju et al., 2018), and additional research focusing on risk levels, less restrictive options, specific populations, dosage, and costs relative to alternative conditions that may produce similar or improved outcomes is warranted.

In addition to these monitoring programs, some pretrial interventions attempt to treat defendants for substance abuse, mental health problems, or specific charges, such as domestic violence or sex crimes. Existing research, however, has failed to generate any conclusive evidence that these pretrial monitoring or treatment programs reduce the likelihood of missed court appearances or pretrial crime (Cohen & Hicks, 2023; Bechtel et al., 2016). Moreover, there is some evidence that the placement of these conditions on lower risk defendants is associated with an increase in the likelihood of pretrial failure (VanNostrand & Keebler, 2009).

Another commonly used pretrial condition involves the placement of released defendants on some form of pretrial supervision program. Pretrial supervision can encompass a range of interventions and management strategies including "face-to-face contacts, home contacts, telephone contacts, collateral contacts, court date reminders, and criminal history checks" (VanNostrand et al., 2011: 29). There are pretrial services standards that support consistent policies being adopted; however, many pretrial practices, supervision techniques, and treatment strategies are not based on a sufficient body of evidence to suggest that the policies and practices are likely to be effective and should be implemented, thereby making it difficult to have a clear understanding about what interventions or practices, if any, should be incorporated into pretrial supervision programs. Some pretrial programs, for example, offer a profusion of services to defendants, while for others, pretrial supervision might entail only monthly phone check-ins via automated calling systems (Bechtel et al., 2016). However, even those services labeled as supportive, such as providing transportation or vouchers to help with court appearance, have yet to be fully studied. The one study on transportation failed to demonstrate an improvement in court appearance as a result of providing transportation subsidies (Brough et al., 2021). Given the lack of standardization of what

even constitutes pretrial supervision (let alone effective pretrial supervision), there is little known about the characteristics of these systems, the supervision stratagems they use, and the services they offer to released defendants.

The lack of uniformity regarding what constitutes pretrial supervision has created significant obstacles to the empirical evaluation of these programs. There are few empirical studies that have attempted to assess the efficacy of these programs, and in general they have not found these programs to be associated with reductions in court skips or pretrial crime (Cohen & Hicks, 2023; Bechtel et al., 2016; Mamalian, 2011; VanNostrand et al., 2011).

Most of the research on pretrial supervision and supervision intensity is descriptive. However, there are two older randomized controlled trials (RCTs) examining pretrial supervision and intensity. One RCT randomly assigned individuals to either more-intensive pretrial supervision or less intensive supervision plus access to services (vocational training or drug/ alcohol counseling). It found no difference in appearance rate or rearrest across the groups (Austin, Krisberg, & Litsky, 1985). A second RCT that randomly assigned individuals to low-supervision or high-supervision conditions in Philadelphia found no difference in appearance rates or rearrest across the two groups for low-risk or moderate-to-high-risk. The study was unable to identify whether certain types of contacts or an optimal number of contacts might be associated with decreases in pretrial supervision violations (Goldkamp & White, 2006).

While there are no RCTs that we have identified examining the impact of pretrial supervision compared with no supervision, a few studies provide some guidance about pretrial supervision policies and practices surrounding the use of assessments and supervision intensity.

Several studies, including older evaluations, have found that conducting assessments and properly matching intensity with an individual's risk level is important for identifying the individuals who are most likely to benefit from either less or more intensive supervision (Goldkamp & White, 2006). One recent evaluation examined whether using current charge only or the Public Safety Assessment (PSA) and Release Conditions Matrix (RCM) was better at predicting any new pretrial arrest and violent pretrial arrests. The results suggest that using the PSA with the corresponding RCM supervision levels is a stronger and more consistent predictor of future arrest compared to using the most recent charges (Labrecque et al., 2024). Another study employed a regression discontinuity designed to estimate the impact of using a pretrial risk assessment conducted by the county pretrial services department as part of their supervision practices. The findings indicate that implementing a tool to inform the release decision resulted in an increase in non-financial bonds and a decrease in pretrial detention (but the effects of these two outcomes dissipated within two months). For pretrial crime, releases associated with the use of an assessment did not result in any changes to violent pretrial crime, although there was some suggestive but non-significant evidence of an increase to non-violent recidivism—and these results were also observed when comparing indigent and non-indigent defendants (Sloan, Naufal, & Caspers, 2023). Relatedly, another study estimating the impact of supervision intensity using a regression discontinuity design in two jurisdictions found that lower intensity supervision was as effective as higher intensity supervision in helping individuals appear in court and avoid new arrests. Further, individuals who received no supervision were just as likely to appear in court and avoid arrests as those who received less intensive supervision. Additionally, risk scores were strongly associated with pretrial arrests and moderately associated with court appearance—so while those who had the higher risk scores were more likely to be arrested pretrial, more intensive supervision did not mitigate this (Anderson et al., 2023). Another study examined the effectiveness of an intensive pretrial supervision program that targeted those who are the least likely to succeed pretrial. The findings revealed that when comparing similarly situated individuals who only differed in terms of program participation (enrolled or not enrolled), the results indicate that there were no significant differences in court appearance and arrests for new crimes despite the supervised group spending nearly twice as long in the community with a pending case (Skemer, Redcross, & Bloom, 2020). Taken altogether, we have yet to reach any firm conclusions on the impact of supervision intensity. Rather there are outstanding questions about applying restrictive conditions during the pretrial period and whether there are any benefits in terms of improving court appearance and public safety. While risk assessments may help by screening lower risk individuals out of supervision (as there may be little benefit to those persons), evaluating supervision intensity and reporting requirements may be an appropriate area of study for a pretrial research agenda.

At this point, the only pretrial supervision strategies that have proved quite successful involve the use of court notification programs to address failure to appear rates (Bechtel et al., 2016; Bornstein et al., 2018; Cooke et al., 2018; Ferri, 2020; Fishbane, Ouss, Shah, 2020; Schnacke, Jones, & Wilderman, 2013). Court notification programs utilize a variety of techniques to connect with defendants about their upcoming court appearances, including mailing out postcards and letters, making telephone calls, sending out text messages, and nudges to defendants. The content of these messages can range from simple notifications of impending court dates to warnings of potential consequences associated with skipping court appearances (Bechtel et al., 2016; Crozier, 2000; Herian & Bornstein, 2010; Nice, 2006; Rouse & Eckert, 1992). Overall, studies on court notification have shown substantial promise, with several demonstrating a reduction in FTA being associated with these programs (Bechtel et al., 2016; Bornstein et al., 2018; Cooke et al., 2018; Ferri, 2020; Fishbane, Ouss, Shah, 2020; Schnacke, Jones, & Wilderman, 2013). Though these initial findings are encouraging, additional work is required before firmer conclusions can be drawn about the efficacy of these programs, especially on unique samples, such as those who are facing challenges with residential and financial stability.

Last, it's important to acknowledge that the imposition of financial bail constitutes another form of restrictive special conditions placed on defendants. In criminal justice systems, defendants can be released on their own recognizance (ROR), unsecured bail, or secured bail. An ROR release means that the defendant was not required to pay or promise to pay any money in order to obtain release. Defendants released via unsecured bail are not obligated to pay for their release either; however, any missed court appearance could result in their having to pay a specified bail amount set by the court. When defendants are released through secured bail, that means the court has imposed a financial bond that the defendant has met by paying the full cash amount, posting property in lieu of a cash payment, depositing a certain percentage—usually ten percent—with the court, or having a third party—typically a bail bondsmen—post the bail in exchange for a fee (Cohen & Reaves, 2007; VanNostrand et al., 2011).

Several outdated studies have found that the more restrictive bond types (e.g., financial bonds) are associated with lower rates of FTA (see Cohen & Reaves, 2007; Helland & Tabarook, 2004). A meta-analysis of pretrial interventions, moreover, highlighted the fact that most studies examining the issue of financial bail and pretrial failure show a reduction in FTA occurring for those defendants placed on financial release (Bechtel et al., 2016). While the likelihood of skipping court seems to be lower for defendants released on financial conditions, it's important to note that none of the older empirical research shows reductions in pretrial crime occurring for defendants released through financial bail (Cohen & Reaves, 2007). Also, some caution is required when interpreting these studies, since many failed to account for differences in risk that might explain the reduction in FTAs when financial bail is used (Bechtel et al., 2016; Bureau of Justice Statistics, 2010).

Most of the recent research examining bail has leveraged policy changes where jurisdictions have placed restrictions on the assignment of financial conditions or have aimed to eliminate the use of cash bail altogether. Evaluations of recent bail reform efforts indicate that many of these policy changes have not resulted in significant increases in pretrial misconduct, including pretrial arrests, arrests for violence, and failures to appear. New Jersey's criminal justice reform resulted in a decrease in pretrial detention, with no observed changes to crime rates (Anderson, Redcross, & Valentine, 2019). An evaluation of a no-cash bail policy for 25 non-violent crimes implemented within the Philadelphia District Attorney's Office found a 41 percent reduction in the use of cash bail, 22 percent reduction in pretrial detention, with no significant increases in missed court appearances or new charges (Gur, Hollander, & Alvarado, 2019; Ouss & Stevenson, 2022).

Moving forward with a research agenda on pretrial interventions

It is our hope that this discussion of pretrial conditions and interventions has clearly shown that there is a glaring lack of empirical research in this crucial area. Specifically, there are few if any studies that have attempted to empirically examine the types of pretrial conditions and interventions currently imposed on released defendants, the characteristics of these interventions, and the overall efficacy of these programs in preventing missed court appearances or pretrial crime (Cohen & Hicks, 2023; Bechtel et al., 2016). To make matters worse, the existing studies focusing on these issues tend to be published as technical reports with relatively few if any peer-reviewed publications examining what conditions or interventions might work in the pretrial field (Bechtel et al., 2016). Furthermore, those studies highlighted in this paper show that most did not work as intended. In other words, there's a paucity of research demonstrating that pretrial conditions and interventions which restrict the defendants' freedoms, monitor their compliance, or place them on various treatment programs can successfully reduce pretrial failure. Additionally, these interventions may exacerbate the likelihood of pretrial failure for defendants on the lower end of the risk spectrum.

The relative dearth of empirical studies centered on what works in the pretrial arena should be contrasted with the community corrections and post-conviction fields, where there exists a solid research base of published peer-reviewed studies highlighting best practices and effective supervision strategies (Andrews & Bonta, 2017). The experience of community corrections research might suggest a way forward for researchers and policymakers interested in implementing a pretrial research and policy agenda. Specifically, research on community corrections did not occur in a vacuum; rather, there has been an extensive effort to develop a theoretical framework (see Andrews & Bonta, 2017; Trotter, 2012) that can serve to guide empirical studies directed at correctional or post-conviction populations (that is, the RNR model). While many assumed that the RNR model could be applied to pretrial populations, that assumption might not be valid. Stated another way, the RNR model might not provide sufficient guidance to understanding people's behavior in pretrial systems, and it might have to be modified, restructured, or replaced by another theoretical framework to place pretrial research on a more solid empirical footing. In sum, we are calling for the academic, research, and policymaker communities to work towards either modifying the existing theoretical constructs of RNR or developing an entirely different theoretical foundation that could be used to move our understanding of the pretrial process forward. Without this necessary theoretical development, it will be difficult to formulate a pretrial research agenda that can assist practitioners in devising evidence-based approaches that highlight best practices in this field.

On a practical level, more work needs to be done conducting research that unpacks the "black box" that is pretrial supervision. Key issues including the types of conditions, contacts, and interventions being imposed on released defendants, the frequency with which these different forms of pretrial supervision are being imposed, and the overall effectiveness of these supervision stratagems have barely been addressed in any systematic fashion. Moreover, and just as importantly, we know next to nothing about the criminogenic needs or treatment barriers of released defendants and whether these issues are being addressed. Future research efforts should consider attempting to ascertain whether core criminogenic factors and treatment barriers can be measured at the pretrial stage and what if anything could be done to alleviate defendants with these problems. Without knowing more about the populations currently on pretrial release and the reasons for their behavior, it's difficult to formulate successful treatment and intervention strategies.

Conclusion

This essay sought to take stock of our current state of knowledge of what is probably the most important "pivot" point in the criminal justice system: the pretrial release process. Specifically, it provided an overview of actuarial pretrial assessments and the implementation of these tools in criminal court systems and highlighted the characteristics of pretrial conditions and interventions currently being delivered to defendants on release and the effectiveness of these interventions. Overall, we provide evidence supporting the contention that we know a great deal about the factors that predict pretrial failure and hence can use this information to construct valid pretrial risk assessments. We know a great deal less, however, about the operation of these assessment instruments in local systems and the potential of local court actors, financial bail systems, problematic case management systems, unstandardized outcome measures, and poor training and implementation regimes to thwart the successful utilization of these instruments—hence, negating their capacity to increase release rates for low-risk defendants while minimizing missed court appearances and pretrial crime. Moreover, we might have reached the limits of "big data's" capacity to wring out more effective prediction for released defendants. A renewed pretrial research agenda would move beyond

risk assessment prediction to addressing issues of whether or not these instruments are changing local system behavior without any concomitant increases in defendant flight risk and community dangerousness. Additionally, this research agenda would begin to contemplate ideas for enhancing risk prediction that are more qualitatively based.

In addition to these risk assessment issues, we have demonstrated that the research focused on pretrial conditions and interventions is relatively meager, and what little information exists shows that these programs are in general ineffective at reducing missed court appearances or pretrial crime. There are many possible reasons that might explain these disappointing findings, one of which might be the lack of a theoretical framework that could be used to guide pretrial research. A renewed pretrial research agenda, therefore, must seriously contemplate either revising the RNR model to reflect the unique circumstances of released pretrial defendants or generating a theoretical framework that is distinctively suited to the challenges associated with pretrial supervision. Moreover, this agenda must contemplate providing baseline details about the "black box" of pretrial supervision so that we better understand the conditions, interventions, treatments, and supervision practices being employed on released defendants; furthermore, such an agenda would clarify the criminogenic needs and treatment barriers of released defendants. It is through these efforts that we hope to place the pretrial process on a firmer footing for the 21st century.

References

Anderson, C., Redcross, C., & Valentine, E. (2019). Evaluation of pretrial justice system reforms that use the Public Safety Assessment: Effects of New Jersey's criminal justice reform. New York City: MDRC.

Anderson, C., Valentine, E., & Holman, D. (2023). Effectiveness of pretrial special conditions findings from the Pretrial Justice Collaborative. New York: MDRC. https://www.mdrc.org/work/publications/effectiveness-pretrial-special-conditions

Andrews, D. A., & Bonta, J. (2017). *The psychology of criminal conduct*. Routledge.

Ares, C. E., Rankin, A., & Sturz, H. (1963). The Manhattan Bail Project. *New York University Law Review*, 38–1, p. 67–95.

Austin, J., Krisberg, B., & Litsky, P. (1985). The effectiveness of supervised pretrial release. *Crime and Delinquency. 519*, 523-535.

Barabas, C., Dinakar, K., & Doyle, C. (2019, July 17). The problems with risk assessment tools. The *New York Times*. https:// www.nytimes.com/2019/07/17/opinion/pretrial-ai.html

Bechtel, K., Holsinger, A., Lowenkamp, C., & Warren, M. (2016). A meta-analytic review of pretrial research: Risk assessment, bond type, and interventions. *American Journal of Criminal Justice. 42*. 10.1007/s12103-016-9367-1.

Bechtel, K., Lowenkamp, C. T., & Holsinger, A. (2011). Identifying pretrial failure: A meta-analysis. *Federal Probation, 75*(2), 78-87.

Belur, J., Thornton, A., Tompson, L., Manning, M., Sidebottom, A., & Bowers, K. (2020). A systematic review of the effectiveness of electronic monitoring of offenders. *Journal of Criminal Justice,* 68.

Bergin, T., Ropac, R, Randolph, I., & Joseph, H. (2022, September 12). The initial collateral consequences of pretrial detention: Employment, residential stability, and family relationships. SSRN: https://ssrn.com/abstract=4216882.

Berk, R. A., Heidari, H., Jabbari, S., Kearns, M., & Roth, A. (2017). Fairness in criminal justice risk assessments: The state of the art. *Sociological Methods & Research, 50*, 3-44.

Blumstein, A., & Nakamura, K. (2009). Redemption in the presence of widespread criminal background checks. *Criminology 47*(2), 327-359.

Britt, C. L., III, Gottfredson, M. R., & Goldkamp, J. S. (1992). Drug testing and pretrial misconduct: An experiment on the specific deterrent effects of drug monitoring defendants on pretrial release. *Journal of Research in Crime and Delinquency, 29*(1), 62–78. https://doi.org/10.1177/0022427892029001004

Brittain, B. J., Georges, L., & Martin, J. (2021). Examining the predictive validity of the Public Safety Assessment. *Criminal Justice and Behavior*. https://doi.org/10.1177/00938548211005836

Brooker, C. (2017, November). Yakima County, Washington pretrial justice system improvements: Pre- and post-implementation analysis. https://justicesystempartners.org/wp-content/uploads/2015/04/2017-Yakima-Pretrial-Pre-Post-Implementation-Study-FINAL-111517.pdf

Brough, R., Freedman, M., Ho, D. E., & Phillips, D. C. (2021). Can transportation subsidies reduce failures to appear in criminal court? Evidence from a randomized control trial. *Economic Letters.* 216. https://leo.nd.edu/assets/429962/can_transportation_subsidies_reduce_failure_to_appear_in_criminal_court_brough_phillips.pdf

Bushway, S., Nieuwbeerta, P., & Blokland, A. (2011). The predictive value of criminal background checks: Do age and criminal history affect time to redemption. *Criminology, 49*(1), 27-60.

Cadigan, T. P., & Lowenkamp, C. T. (2011). Implementing risk assessment in the federal pretrial system. *Federal Probation, 75*(2), 30-34.

Carr, J. J. (2017). Why pretrial release really matters. *Federal Sentencing Reporter*, 29, 217-220.

Clark, J., & Henry, D. A. (2003). Pretrial services programming at the start of the 21st century. A survey of pretrial services programs. (NCJ 199773). Washington, DC: Bureau of Justice Assistance Retrieved from https://www.ncjrs.gov/pdffiles1/bja/199773.pdf

Clarke, S. H. (1988). Pretrial release: Concepts, issues, and strategies for improvement. *Research in Corrections*, *1*(3), 1–42.

Cohen, T. H., & Austin, A. (2018). Examining federal pretrial release trends over the last decade. *Federal Probation, 82*(2), 3–12.

Cohen, T. H., & Reaves, B. (2007). Pretrial release of felony defendants in state courts. Washington, D.C: Bureau of Justice Statistics.

Cohen, T. H., & Hicks, W. (2023). The imposition of pretrial conditions on released federal defendants: The overuse of conditions without providing any measurable benefits. *Criminal Justice and Behavior, 50*(12), 1852-1873. https://doi.org/10.1177/00938548231206829

Cooprider, K. (2009). Pretrial risk assessment and case classification: A case study. *Federal Probation, 73*(1).

Courtland, R. (2018). Bias detectives: The researchers striving to make algorithms fair. *Nature, 558*, 357–360.

DeMichele, M., Baumgartner, P., Wenger, M., Barrick, K., Comfort, M., & Misra, S. (2018). The Public Safety Assessment: A re-validation and assessment of predictive utility and differential prediction by race and gender in Kentucky. http://dx.doi.org/10.2139/ssrn.3168452

DeMichele, M., Baumgartner, P., Barrick, K., Comfort, M., Scaggs, S., & Misra, S. (April 25, 2018). What do criminal justice professionals think about risk assessment at pretrial? Available at SSRN: https://ssrn.com/abstract=3168490 or http://dx.doi.org/10.2139/ssrn.3168490

DeMichele, M., Baumgartner, P., Wenger, M., Barrick, K., & Comfort, M. (2020). Public Safety Assessment. *Criminology & Public Policy, 19*(2), 409–431. https://doi.org/10.1111/1745-9133.12481

DeMichele, M., Inkpen, C., Silver, I., & Walker, J. (October 27, 2023). How long is long enough: Using abbreviated criminal histories for pretrial assessment instruments? Available at SSRN: https://ssrn.com/abstract=4615029 or http://dx.doi.org/10.2139/ssrn.4615029

Desmarais, S. L., Johnson, K. L., & Singh, J.

P. (2016). Performance of recidivism risk assessment instruments in U.S. correctional settings. *Psychological Services, 13*(3), 206–222. https://doi.org/10.1037/ser0000075

Desmarais, S. L., & Lowder, E. (February 2019). Pretrial risk assessment tools: A primer for judges, prosecutors, and defense attorneys. *Pretrial risk assessment primer.* (safetyandjusticechallenge.org)

Desmarais, S. L., Monahan, J., & Austin, J. (2022). The empirical case for pretrial risk assessment instruments. *Criminal Justice and Behavior, 49*(6), 807-816. https://doi.org/10.1177/00938548211041651

Desmarais, S. L., & Singh, J. (2013). Risk assessment instruments validated and implemented in correctional settings in the United States. New York, NY: Council of State Governments Justice Center.

Desmarais, S. L., Zottola, S. A., Duhart Clarke, S. E., & Lowder, E. M. (2021). Predictive validity of pretrial risk assessments: A systematic review of the literature. *Criminal Justice and Behavior, 48*(4), 398-420. https://doi.org/10.1177/0093854820932959

Dobbie, W., Goldin, J., & Yang, C. S. (2018). The effects of pretrial detention on conviction, future crime, and employment: Evidence from randomly assigned judges. *American Economic Review*, *108*(2): 201–40.

Duwe, G., & Rocque, M. (2017). Effects of automating recidivism risk assessment on reliability, predictive validity, and return on investment (ROI). *Criminology and Public Policy, 16*, 235-269.

Eskridge, C. W. (1983). Pretrial release programming: Issues and trends. New York, NY: Clark Boardman Company.

Germano, R., Lau, T., & Garri, K. (October 2022). COVID-19 and the U.S. district courts: An empirical investigation. COVID-19 and the U.S. district courts: An empirical investigation (fjc.gov)

Goldkamp, J. S., & Jones, P. R. (1992). Pretrial drug-testing experiments in Milwaukee and Prince George's County: The context of implementation. *Journal of Research in Crime and Delinquency, 29*(4), 430–465. https://doi.org/10.1177/0022427892029004003

Goldkamp, J. S., & Rely Vîlcicã, E. (2009), Judicial discretion and the unfinished agenda of American bail reform: Lessons from Philadelphia's evidence-based judicial strategy, Sarat, A. (Ed.) *Special Issue New Perspectives on Crime and Criminal Justice* (*Studies in Law, Politics, and Society, Vol. 47*), Emerald Group Publishing Limited, Leeds, pp. 115-157. https://doi.org/10.1108/S1059-4337(2009)0000047007

Goldkamp, J. S., & White, M. D. (2006). Restoring accountability in pretrial release: The Philadelphia pretrial release supervision experiments. *Journal of Experimental Criminology, 2*(2), 143–181.

Golub, C., Valentine, E., & Holman, D. (2023). Effectiveness of pretrial special conditions findings from the Pretrial Justice Collaborative. New York: MDRC.

Grant, G. A. (2018). Jan. 1 – Dec. 31: Report to the governor and the legislature. New Jersey Courts. https://www.njcourts.gov/sites/default/files/2017cjrannual.pdf

Grommon, E., Rydberg, J., & Carter, J. G. (2017). Does GPS supervision of intimate partner violence defendants reduce pretrial misconduct? Evidence from a quasi-experimental study. *Journal of Experimental Criminology, 13*(4), 483–504. https://doi.org/10.1007/s11292-017-9304-4

Grove, W. M., Zald, D. H., Lebow, B. S., Snitz, B. E., & Nelson, C. (2000). Clinical versus mechanical prediction: A meta-analysis. *Psychological Assessment, 12 1*, 19-30 .

Gupta, A., Hansman, C., & Frenchman, E. (August 5, 2016). The heavy costs of high bail: Evidence from judge randomization. *Journal of Legal Studies*, *45*(2), *Columbia Law and Economics Working Paper No. 531*, Available at SSRN: https://ssrn.com/abstract=2774453 or http://dx.doi.org/10.2139/ssrn.2774453

Gur, O., Hollander, M., & Alvarado, P. (2019). Prosecutor-led bail reform: Year one. Philadelphia: Philadelphia District Attorney's Office.

Heaton, P. S., Mayson, S. G., & Stevenson, M. (2017). The downstream consequences of misdemeanor pretrial detention. *Stanford Law Review*, *69*, 711, *U of Penn, Inst for Law & Econ Research Paper No. 16-18*, available at SSRN: https://ssrn.com/abstract=2809840 or http://dx.doi.org/10.2139/ssrn.2809840

Holsinger, A., Lowenkamp, C., & Pratt, T. (2023, June). Is pretrial detention an effective deterrent? An analysis of failure to appear and rearrest says no. *Federal Probation, 87*(1), 3-7.

Kochel, T. R., Wilson, D. B., & Mastrofski, S. D. (2011). Effect of suspect race on officer's arrest decisions. *Criminology, 49*(2), 473-512.

Koppel, S., Bergin, T., Ropac, R., et al. (2024). Examining the causal effect of pretrial detention on case outcomes: A judge fixed effect instrumental variable approach. *J Exp Criminol* 20, 439–456. https://doi.org/10.1007/s11292-022-09542-w (Published online in December 2022).

Labrecque, R. M., DeMichele, M., Walker, J., & Silver, I. A. (2024). Sensible pretrial reform: The importance of accounting for risk of violence in judicial release decisions. *Crime & Delinquency,* 0(0). https://doi.org/10.1177/00111287241231741.

Latessa, E. J., Lemke, R., Makarios, M., Smith, P., & Lowenkamp, C. T. (2010). The creation and validation of the Ohio Risk Assessment System (ORAS). *Federal Probation, 74*(1), 16.

Laura and John Arnold Foundation. (November 2013). Developing a national model for pretrial risk assessment. See: LJAF-research-summary_PSA-Court_4_1.pdf (craftmedia-bucket.s3.amazonaws.com)

Leslie, E., & Pope, N. G. (2017). The unintended impact of pretrial detention on case outcomes: Evidence from New York City arraignments. *The Journal of Law and Economics, 60*(3), 529–557.

Lowder, E. M., Diaz, C. L., Grommon, E., & Ray, B. R. (2020). Effects of pretrial risk assessments on release decisions and misconduct outcomes relative to practice as usual. *Journal of Criminal Justice, 73*. https://doi.org/10.1016/j.jcrimjus.2020.101754.

Lowder, E. M., Lawson, S. G., Grommon, E., & Ray, B. R. (2020). Five-county validation of the Indiana risk assessment system–pretrial assessment tool (IRAS-PAT) using a local validation approach. *Justice Quarterly, 37*(7), 1241–1260. https://doi.org/10.1080/07418825.2020.1829006

Lowenkamp, C., DeMichele, M., & Klein Warren, L. (2020, November 9). Replication and extension of the Lucas County PSA Project. *Advancing pretrial policy and research, 2020*, Available at SSRN: https://ssrn.com/abstract=3727443

Lowenkamp, C. T., VanNostrand, M., & Holsinger, A. M. (2013). The hidden costs of pretrial detention. New York: Laura and John Arnold Foundation.

Mahoney, B., Beaudin, B., Carver, J., Ryan, D., & Hoffman, R. (2001). Pretrial services programs: Responsibilities and potential. National Institute of Justice.

Mamalian, C. (2011). *State of the science of pretrial risk assessment.*

Marlowe, D. B., Ho, T., Carey, S. M., & Chadick, C. D. (2020). Employing standardized risk assessment in pretrial release decisions: Association with criminal justice outcomes and racial equity. *Law and Human Behavior, 44*(5), 361–376. https://doi.org/10.1037/lhb0000413

McCoy, C. (2007). Caleb was right: Pretrial decisions determine mostly everything. *Berkeley Journal of Criminal Law, 12*, 135.

Medhanie, A., Hoheisel, G., Ogunleye, J., & Welter, S. (May 2023). Minnesota Pretrial Assessment Tool validation study. https://www.mncourts.gov/mncourtsgov/media/Pretrial-Release/2023-Minnesota-Pretrial-Assessment-Tool-Validation-Study.pdf

Nahra, A. (June 2021). How Covid-19 is still battering the criminal legal system. Brennan Center for Justice. How Covid-19 Is Still Battering the Criminal Legal System | Brennan Center for Justice

Oleson, J. C., Lowenkamp, C. T., Wooldredge, J., VanNostrand, M., & Cadigan, T. P. (2017). The sentencing consequences of federal pretrial supervision. *Crime & Delinquency, 63*(3), 313-333.

Ostrom, B. J. (2007). *Trial courts as organizations*. Temple University Press.

Ouss, A., & Stevenson, M. (2022). Does cash bail deter misconduct? Available at SSRN: https://ssrn.com/abstract=3335138 or http://dx.doi.org/10.2139/ssrn.3335138

Park, T. (August 2018). at https://www.cnn.com/2018/08/28/us/bail-california-bill/index.html

Pierson, E., Simoiu, C., Overgoor, J., Corbett-Davies, S., Jenson, D., Shoemaker, A., ... & Goel, S. (2020). A large-scale analysis of racial disparities in police stops across the United States. *Nature Human Behaviour, 4*(7), 736-745.

Pretrial Justice Institute. (2009). 2009 - Survey of pretrial services programs. Bureau of Justice Assistance.

Pretrial Justice Institute. (2012). Using technology to enhance pretrial services: Current applications and future possibilities. Bureau of Justice Assistance.

Pretrial Justice Institute. (2019). Scan of pretrial practices 2019. https://university.pretrial.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=24bb2bc4-84ed-7324-929c-d0637db43c9a&forceDialog=0

Pretrial Justice Institute. (2020). The case against pretrial risk assessment instruments. https://university.pretrial.org/viewdocument/the-case-against-pretrial-risk-assessment

Reaves, B. A. (2013). Felony defendants in large urban counties, 2009—*Statistical tables. Technical report No. NCJ 243777*. Washington, DC: Bureau of Justice Statistics.

Reitler, A. K., Sullivan, C. J., & Frank, J. (2013). The effects of legal and extralegal factors on detention decisions in US district courts. *Justice Quarterly, 30*, 340 - 368.

Sainju, K. D., Fahy, S., Hamilton, B. A., Baggaley, K., Baker, A., Minassian, T., & Filippelli, V. (2018). Electronic monitoring for pretrial release: Assessing the impact. *Federal Probation, 82*(3), 3–10. https://www.uscourts.gov/sites/default/files/82_3_1.pdf

Skemer, M., Redcross, C., & Bloom, H. (2020). Pursuing pretrial justice through an alternative to bail: Findings from an evaluation of New York City's supervised release program (New York: MDRC, 2020), https://www.mdrc.org/sites/default/files/Supervised_Release_Final_Report.pdf.

Sloan, C., Naufal, G., & Caspers, H. (2023). The effect of risk assessment scores on judicial behavior and defendant outcomes. *Law & Society: Public Law - Crime*.

Stevenson, M. T. (2018). Assessing risk assessment in action (SSRN Scholarly Paper No. ID 3016088). Rochester, NY: Social Science Research Network. Retrieved from https://papers.ssrn.com/abstract=3016088

Stevenson, M. T., & Doleac, J. L. (2018). The roadblock to reform. https://www.acslaw.org/wp-content/uploads/2018/11/ RoadblockToReformReport.pdf

Stevenson, M., & Mayson, S. G. (2017). Bail reform: New directions for pretrial detention and release. Bail Reform: New Directions for Pretrial Detention and Release | Semantic Scholar

Stolzenberg, L., D'Alessio, S. J., & Eitle, D. (2013). Race and cumulative discrimination in the prosecution of criminal defendants. *Race and Justice, 3*(4), 275-299.

St. Louis, S. (2023). The pretrial detention penalty: A systematic review and meta-analysis of pretrial detention and case outcomes, *Justice Quarterly*, DOI: 10.1080/07418825.2023.219362

Summers, C., & Willis, T. (2010). Pretrial risk assessment research summary. Bureau of Justice Assistance. U.S. Department of Justice.

VanNostrand, M., & Keebler, G. (2009). Pretrial risk assessment in the federal court. *Federal Probation, 73*(2), 3-29.

VanNostrand, M., Rose, K., & Weibrecht, K. (2011). The state of the science of pretrial release recommendations and supervision. Pretrial Justice Institute.

Viljoen, J. L., Jonnson, M. R., Cochrane, D. M., Vargen, L. M., & Vincent, G. M. (2019). Impact of risk assessment instruments on rates of pretrial detention, postconviction placements, and release: A systematic review and meta-analysis. *Law and Human Behavior, 43*(5), 397–420. https://doi.org/:10.1037/lhb0000344

Weisburd, K., Bhadha, V., Clauson, M., Elican, J., Kahn, F., Lawrenz, K., Pemberton, B., Ringler, R., Schaer, J., Sherman, M., & Wohlsdorf, S. (2021). Electronic prisons: The operation of ankle monitoring in the criminal legal system (2021). *GWU Legal Studies Research Paper No. 2021-41*, GWU Law School Public Law Research Paper No. 2021-41, Available at SSRN: https://ssrn.com/abstract=3930296

Wolff, K. T., Dozier, C. A., Muller, J. P., Mowry, M., & Hutchinson, B. (2017). The impact of location monitoring among U.S. pretrial defendants in the District of New Jersey. *Federal Probation, 81*(3), 8–14. https://www.uscourts.gov/sites/default/files/81_3_2_0.pdf

The Presumption for Detention Statute's Relationship to Release Rates Revisited: A Replication and Extension

Amaryllis Austin
U.S. Pretrial Services Office, Northern District of California
Sara J. Valdez Hoffer
Probation and Pretrial Services Office, Administrative Office of the U.S. Courts
Christopher T. Lowenkamp
Probation and Pretrial Services Office, Administrative Office of the U.S. Courts and Center for Justice and Communities, School of Criminal Justice, University of Cincinnati

WITH THE PASSAGE of the Bail Reform Act of 1966, the federal government became the first entity to abolish money bail—a huge step forward in decreasing inequities based solely on a defendant's financial resources and shifting towards a risk-based system of bail. For decades, the federal government was one of the few entities focused on risk. Most states and counties relied on bail schedules and bail bondsman, resulting in a disproportionate effect on indigent defendants and people of color (Arnold, Dobbie, & Yang 2018; Assesfa, 2019; Pretrial Justice Institute, 2017). Despite the gains made by the Bail Reform Act of 1966 in addressing these disparities, the public and federal bench became concerned with the limitations of the Act, specifically its limiting detention only to those individuals found to pose a risk of flight or nonappearance and not allowing for detention based on danger.

This limitation came under increasing scrutiny in the 1980s (US DOJ, 1981). In response to shifting political winds and the request of judges to be able to detain a defendant based on risk of danger, Congress passed the Comprehensive Crime Control Act of 1984, which included the Bail Reform Act of 1984 (S. 1762, 1984). As noted in previous articles, the Bail Reform Act of 1984 had two primary changes compared to the Act of 1966. First, it added the danger prong, giving judges the ability to detain a defendant based solely on the perceived risk of danger to the community. Second, it established two statutory presumptions for detention—the Previous Violator Presumption and the Drug and Firearm Presumption (Austin, 2017).

Historically, the Previous Violator Presumption, which was carefully qualified and subject to certain legal criteria, has not applied to a statistically significant number of defendants (Austin, 2017). The same cannot be said of the Drug and Firearm Presumption, which is triggered simply by the charge and potential sentence with no additional qualifiers or legal criteria to be met (18 U.S. Code § 3142(e)(3).

The effect of the Bail Reform Act of 1984 was immediate and devastating to release rates. Just prior to its passage in 1983, the federal release rate was 76 percent (Kennedy & Carlson, 1988). By 1985, the release rate had dropped to 71 percent. In the years since, this decline has continued relentlessly to our current release rate for fiscal year 2024 of 29 percent, an almost complete reversal in rates (H-14, 2024). This year, even after excluding undocumented noncitizens, the federal release rate was 47 percent (H-14B, 2024).

Most often, the decrease in release rates is justified by suggesting that the average defendant now is a far greater risk than the average defendant was in 1985. Without the aid of an objective and validated risk assessment tool such as the Pretrial Risk Assessment (PTRA), it is difficult to quantify how much the risk profile of our defendants has changed. However, we do have statistics gathered by the Bureau of Justice Statistics (BJS) describing the defendant population in 1985 in detail. In their Special Report published in February 1988, they describe the demographics of federal defendants as follows: 91 pecent male, 74 percent white, 23 percent Black, 47 percent Hispanic, 42 percent between the ages of 21-30, 53 percent unemployed, and 82 percent classified as indigent (Kennedy & Carlson, 1988). As of March 2024, the demographics for of federal defendants were as follows: 87 percent male, 69 percent white, 24 percent Black, 49 percent Hispanic, 27 percent between the ages of 18-30, and 15 percent unemployed (data on financial condition is not currently collected) (Profile, Caseload Data, 2024). On face value, the basic demographics of our defendants have not changed significantly, although the shifts in age and

employment status could indicate a decrease in risk.

When looking at changes to charge types, we see the following, as reflected in Figure 1. Between October 1, 2000, and September 30, 2001 (the first year for which we have data), 39 percent of cases were for Drug offenses, 6 percent for Firearms or Weapons related offenses, 17 percent for Immigration charges, 17 percent for Property and Fraud related charges, 1 percent for Sex Offenses, and 4 percent for Violence (Profile, Pretrial Profiles, 2022). Between June 30, 2023, and June 30, 2024, 25 percent of cases were for Drug offenses, 13 percent for Firearms or Weapons related offenses, 35 percent for Immigration charges, 10 percent for Property and Fraud-related charges, 4 percent for Sex Offenses, and 5 percent for Violence (Profile, Pretrial Services Profiles, June 2024, 2024). Overall, this reflects a 14 percentage point decrease in Drug charges, a seven percentage point increase in Firearms or Weapons related offenses, an 18 percentage point increase in Immigration cases, a seven percentage point decrease in Property and Fraud cases, and a three percentage point increase to sex offense cases. While an argument could be made that weapons and sex cases have doubled, it should be noted that these cases still account for a small percentage of all cases charged each year, especially compared to Drug or Immigration cases. Drug cases are generally higher risk than Immigration cases on risk for danger (DSS 1288, 2024), so the significant changes to these cases, in particular, reflect that the overall risk composition, as a function of cases charged, has most likely decreased.

Additionally, we looked at the detention rates by charge type between 1985 and 2024 (Figure 2). In 1985, 33 percent of drug offenses with a potential 10-year sentence, 67 percent of Immigration cases, 14 percent of Fraud charges, and 47 percent of violent cases, were detained (Kennedy & Carlson, 1988). Between June 30, 2023 and June 30, 2024, 63 percent of defendants charged with a drug offense with a potential 10 year sentence, 90 percent of immigration cases, 20 percent of property and fraud charges, and 69 percent of defendants charged with a violent offense, were detained (Decision Support System (DSS) 1268, 2024).[1] Given the significant increase in detention rates to all major offense types, the overall increase in detention rates cannot be explained simply by a changing defendant profile, but rather a change in the perceived risk of a case.

Finally, we can compare past criminal histories of defendants charged between October 1, 2000, and September 30, 2001 (the first year for which we have comparable data). Fifty-two percent of defendants had prior felony arrests, 39 percent had prior felony convictions, of which 19 percent were for violence, and 27 percent were for drugs (Profiles, 2001). Additionally, 15 percent had prior failures to appear (Profiles, 2001). In contrast, between October 1, 2021, and September 30, 2022 (the most recent year for which we collected data), 37 percent of defendants had prior felony arrests, 29 percent had prior felony convictions of which 14 percent were for prior violence and 18 percent were for drugs (Profile, Pretrial Profiles, 2022). Twelve percent of defendants had a prior Failure to Appear (Profile, Pretrial Profiles, 2022). This reflects that risk composition as a function of prior criminal history has also decreased substantively.

If the demographics of our cases have remained comparable, but the types of cases charged and their prior criminal histories have actually decreased in risk, how can we reconcile this with an ever-decreasing release rate, especially considering our constitutional and statutory obligations?

In this, the law has been clear. The right to bail is enshrined in the Eighth Amendment in that "excessive bail shall not be required." It is further codified in the Bail Reform Act of 1984, which establishes a presumption for release: "the judicial officer shall issue an order that, pending trial, the person be […] released on personal recognizance […] unless the judicial officer determines that such release will not reasonably assure the appearance of the

FIGURE 1.
Changes to Types of Charges Brought 2001 to 2024

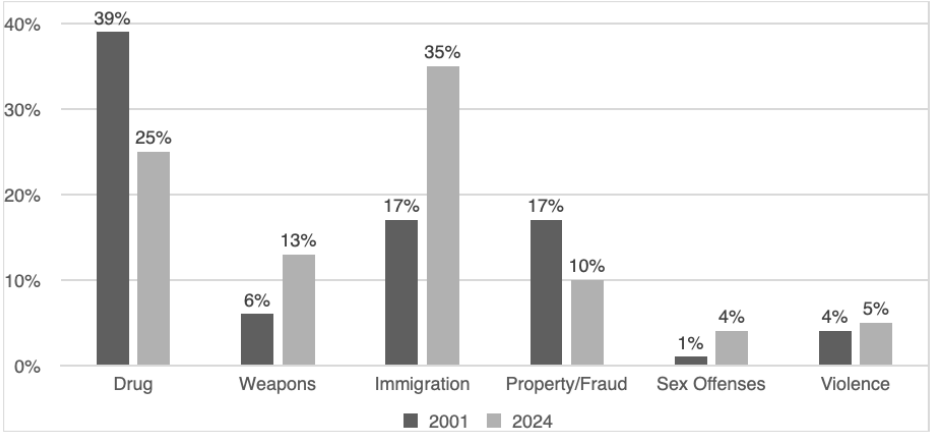
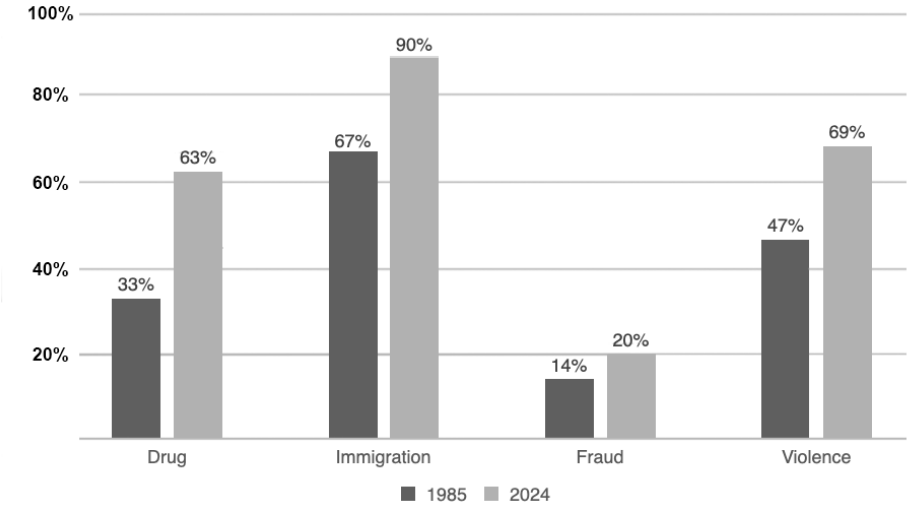


FIGURE 2.
Detention Rates by Offense Type 1985-2024



[1] Data was not available to compare rates for weapons or sex-related offenses.

person as required or will endanger the safety of any other person or the community." As noted in the fourth edition of the Bail Reform Act, "In fact, if a case does not involve any of the factors in section § 3142(f) that authorize a detention hearing, release is mandatory, subject to certain terms and conditions" (Wood, 2022). This was further reinforced by the Supreme Court in 1987, which held in *United States v. Salerno*[2] that, "In our society, liberty is the norm, and detention prior to trial or without trial is the carefully limited exception."

If the legal argument were not sufficient, there is now a wealth of data that ties pretrial detention to worse outcomes, both while on pretrial release and in the long term. Specifically, recent research has documented that pretrial incarceration, especially for extended periods of time, has been shown to negatively impact several criminal case outcomes (McCoy, 2008; Oleson et al., 2014; Oleson et al., 2016; Lowder & Foudray, 2021; Bechtel et al., 2022; St. Louis, 2023). Even short stints of pretrial detention have shown negative case results due to justice-involved defendants being separated from prosocial activities like employment and personal relationships (Holsinger et al., 2023). Studies have shown that only two or three days of pretrial detention for defendants classified as low-risk (such as during the three- to five-day continuance that may occur under § 3142(f) before a detention hearing is held) have been associated with an increased likelihood of failure to appear, and longer periods of incarceration are associated with an increased likelihood of a new arrest (Lowenkamp et al., 2013). More recent research indicates that any length of pretrial detention is not consistently associated with court appearance but is associated with a higher likelihood of rearrest (Bechtel et al., 2022). Further, research has suggested that preventative detention results in an increased likelihood of conviction (Diaz & Salas, 2022; Bechtel et al., 2022). It is theorized this increased likelihood for conviction is driven solely by detainees' desire to exit jail by the quickest means possible, sacrificing their right to prove their innocence (Heaton et al., 2017).

Finally, pretrial detention is also associated with harsher sentencing outcomes, including the increased likelihood of a defendant being sentenced to a term of imprisonment as well as receiving a longer sentence compared to similarly situated defendants who are allowed pretrial release (Oleson, 2016; Lowenkamp, 2022; St. Louis, 2023). This was exemplified in a study involving two federal districts that determined pretrial detention was, in fact, associated with increased prison sentences in the federal system (Oleson et al., 2014). Importantly, pretrial detention has also been shown to contribute to racial disparity in criminal case outcomes (Lowder & Foudray, 2021). Yet, despite the many negative associations tied to pretrial detention, research to date has shown no actual benefits of pretrial detention, not even reducing reoffending (Petrich et al., 2021), which further fails to explain the dramatic decline in pretrial release rates.

In sum, what has changed are not the demographics or risk profiles, or our statutory and constitutional mandates. What has changed is our culture, which was once a culture of release and now is a culture of detention, and this shift can be attributed almost directly to the passage of the Bail Reform Act of 1984 and the creation of the Drug and Firearm Presumption (hereafter referred to simply as the presumption).

In 2016, the first study into the effect of the presumption was conducted (Austin, 2017). This study found that presumption cases accounted for approximately 43 percent of all federal cases, that they were being detained at rates disproportionate to their risk, and that their outcomes did not justify the higher rates of detention. Following the publication of that study, the Criminal Law Committee endorsed a statutory amendment to 18 U.S.C. § 3142(e)(3) that would limit application of the presumption to drug offenses.[3] To date, the amendment has been introduced to Congress as the Smarter Pretrial Detention for Drug Charges Act of 2021 and again in 2023 under the same name; however, the amendment has not been passed (Durbin, 2021). As it is now eight years since the original study was published, the current study aims to update and expand upon the previous research.

Method

The current study was designed to replicate and extend the 2016 study of the impact of presumption on release conducted by this article's lead author. Statistical software was used to identify non-presumptive, presumptive, and wobbler cases to all new cases activated (received) between fiscal years 2016 and 2022, excluding undocumented noncitizens. Wobbler cases were defined as cases that might be subject to the presumption or not, depending on the specifics of their case. For instance, a violent act that does not involve the use of a firearm does not trigger the presumption, whereas a violent act that uses a firearm does. As those specific details are unknown based solely on the statute charged, they were designated as wobblers. Undocumented noncitizens were also excluded, as they are so often subject to immigration detainers that including them could obfuscate the effect of the presumption, specifically compared to the effect of an immigration detainer. After these exclusions, the initial data set consisted of 345,844 defendants, of which 57,176 were PTRA[4] Category 1; 65,655 were Category 2; 95,120 were Category 3; 82,015 were Category 4; and 45,878 were Category 5.

Once the data set had been defined, the data were analyzed across a variety of metrics including release recommendations, release rates, and outcomes. The PTRA was used as a standard risk measurement in comparing the risk of presumption, wobblers, and non-presumption cases. Additionally, the original study was expanded via the use of logistic regression models and racial bias analysis.

Results

Initially, we sought to determine what percentage of cases were subject to the presumption and how this number has changed since 2016. At that time, 44 percent of all cases qualified for the presumption. As can be seen in Figure 3, that number has remained fairly constant, and in fiscal year 2022, approximately 43 percent of all federal cases qualified for the presumption, before considering wobblers. Additionally, the distribution of cases by risk category, charge type, and presumption status was analyzed. As can be seen in Table 1, most drug cases are subject to the presumption,

[2] 481 U.S. 739, 755 (emphasis added). Additional case law on the presumption for release can be found in *United States v. Berrios-Berrios*, 791 F.2d 246, 250 (2d Cir. 1986), *United States v. Holloway*, 781 F.2d 124, 125 (8th Cir. 1986), and *United States v. Orta*, 760 F.2d 887, 890 (8th Cir. 1985).

[3] See: JCUS-SEP 2017, pp. 10-11.

[4] The Pretrial Risk Assessment, or PTRA, is an actuarial risk assessment for use with pretrial defendants. The PTRA was developed in 2009 (see Lowenkamp & Whetzel, 2009), and has been validated three times since its development (see Cadigan, Johnson, & Lowenkamp, 2012; Cohen, Lowenkamp, & Hicks, 2018; and Hoffer-Valdez & Lowenkamp, 2024). The PTRA score is converted into a category score that ranges from 1 to 5. Failure rates for any adverse event (revocation, FTA, or arrest for a new criminal offense) are 5%, 11%, 20%, 29%, and 36% for each category from 1 to 5, respectively (Cohen et al., 2018).

FIGURE 3.
Distribution of Cases by Presumption Status by Fiscal Year

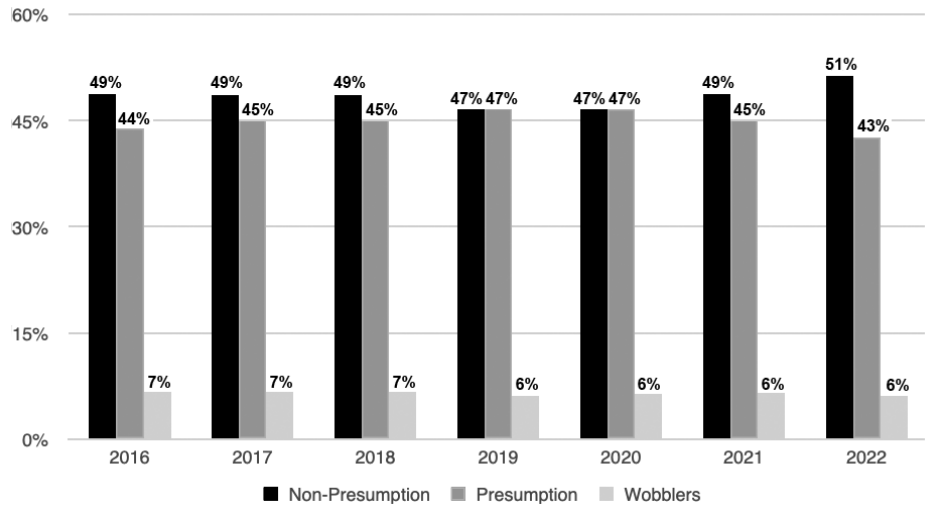


TABLE 1.
Distribution of cases activated FY2016-2022 by Offense Type, Risk Category, and Presumption Status

PTRA Category	N	Non-Presumptive	Presumptive	Wobblers
Drug Offense				
One	6,073	16.24	83.76	0.00
Two	24,340	7.94	92.06	0.00
Three	45,134	3.10	96.90	0.00
Four	37,277	1.73	98.27	0.00
Five	19,979	1.16	98.84	0.00
Property Offense				
One	30,567	99.26	0.21	0.54
Two	14,428	96.78	0.47	2.75
Three	9,446	91.81	0.62	7.57
Four	4,959	85.12	0.75	14.14
Five	1,524	76.25	0.52	23.23
Weapons Offense				
One	1,437	82.39	17.19	0.42
Two	5,622	77.46	22.22	0.32
Three	15,315	79.22	20.65	0.12
Four	23,184	83.48	16.44	0.09
Five	18,966	86.24	13.68	0.07
Sex Offense				
One	6,603	7.83	90.11	2.06
Two	6,567	14.57	83.58	1.84
Three	4,177	31.05	66.39	2.56
Four	1,870	45.67	52.19	2.14
Five	460	49.13	48.26	2.61

regardless of their risk category. Notably, as was seen in 2016, weapons offenses are by and large not subject to the presumption.

As a final descriptive analysis, we looked at the distribution of presumption cases by PTRA risk category (Figure 4). Of note, there are similar numbers of presumption, non-presumption, and wobbler cases across PTRA categories 2-5, with fewer presumption cases in Category 1. At face value, this would seem to reflect that presumption cases are marginally higher risk than non-presumption cases but also that there are significant numbers of presumption cases across all five risk categories.

With these descriptive statistics, the analysis proceeded to the main question: are presumption cases detained at higher rates than non-presumption cases in the low and moderate-risk categories?

This was determined by comparing the release rates for the three categories of cases (presumption, wobbler, and non-presumption) across the five PTRA categories (Figure 5 and Table 2). The results mirror what was found in the initial study; namely, the effect of the presumption is disproportionately large precisely on the lowest risk defendants, with Category 1 presumption cases being released 22 percentage points less than Category 1 non-presumption cases. By Category 2, the discrepancy is still 16 percentage points, but it narrows to 6 percentage points by Category 3, with no significant difference in release rates for Category 4 and 5 defendants. The initial study found a discrepancy of 26 percentage points between Category 1 defendants, 17 percentage points for Category 2 defendants, and 7 percentage points for Category 3 defendants. The disparity in release rates for Category 1 presumption defendants was 4 percent smaller during this analysis, though there appeared to be no significant difference in the discrepancies for Category 2 or 3 defendants compared to the original study. It is possible the difference for Category 1 defendants can be attributed to the fact that the release rates for non-presumption Category 1 defendants have decreased since 2016, when they were released 94 percent of the time compared to 86 percent in 2022. Since the change in release rates to Category 1 presumption cases has only changed by 4 percent (64 percent to 68 percent, respectively), it is logical to conclude the discrepancy has been reduced as a function of the decreased release rates for non-presumption cases rather than any lessening of the effect of the presumption

itself.

This analysis was then repeated with the release recommendation rates by pretrial services officers, as can be seen in Figure 6 and Table 3. There again we see a now familiar pattern, with non-presumption cases being recommended for release at 94 percent compared to 67 percent for presumption cases, a difference of 27 percent. For category 2 defendants, the difference in release rates was 15 percent. This gap narrowed to a 3 percent discrepancy for Category 3 defendants and no significant difference in release recommendation rates for Category 4 and 5 defendants.

It is worth noting that the difference in officer recommendations for release between Category 1 presumption and non-presumption cases (27 percent) was even greater than the difference in actual release rates for Category 1 presumption and non-presumption cases (22 percent). This would seem to indicate that pretrial services recommendations are applying more weight to the presumption than does the actual court, despite national policy and the Office of General Counsel (OGC) prohibition on their considering the presumption at all.[5] Again, these results are not significantly different from the initial analysis, which also found the greatest discrepancy in release recommendations and rates on Category 1 defendants, with the effect plateauing by Category 3.

This study also expanded on the initial study by looking into the question of racial bias with the application of the presumption: specifically, whether Black defendants subject to the presumption were detained at higher rates than White defendants subject to the presumption. In terms of bivariate analyses, Black defendants were more likely than White defendants to be recommended for release and to be released at the low end of the PTRA scale and when presumption was applicable or possibly applicable. Some of the differences were large and favored Black defendants, some were smaller and favored White defendants, and in some instances there was no difference in rates of recommendation for release or actual release. Given that there are many factors other than risk and presumption that might impact officer recommendations for release and actual release decisions, several multivariate models were estimated. We constructed and estimated a logistic regression model predicting officer recommendation for release. This model controlled for PTRA risk category, age, sex (male), race (Black),[6] presumption status, district, and an interaction term between presumption status and Black. All models used robust standard errors clustered by district. The results of the regression model were then translated into changes in marginal probabilities associated with the interaction between race and presumption status. As is indicated in Figure 7, there are differences in the likelihood of an officer recommending release for Black compared to White defendants in non-presumptive cases, and those differences are statistically significant but relatively small. Further, there are no differences in the likelihood of recommending release for Black compared to White defendants when presumption is applicable or possible (i.e., wobbler status).[7] Multivariate

[5] Under national policy and OGC decisions, there are a total of four factors pretrial services officers should not consider in their recommendations: the presence of the presumption, the weight of the evidence, the potential maximum penalties, and the specific circumstances of the offense.

[6] For the multivariate models, we restricted race to White and Black defendants only. This was done as, historically, disparity in the criminal justice system has typically focused on differences between these two groups. Further, limiting race to two groups makes the estimation and interpretation of interactions terms much more straightforward. Future research will focus on looking at the issue of disparity across other races and ethnicities.

[7] Of note, we also ran a multivariate logistic regression model with Offense Type as a control variable. The addition of this variable does cause some concern, given the correlation offense type

FIGURE 4.
Distribution of Presumption Status by Risk Category

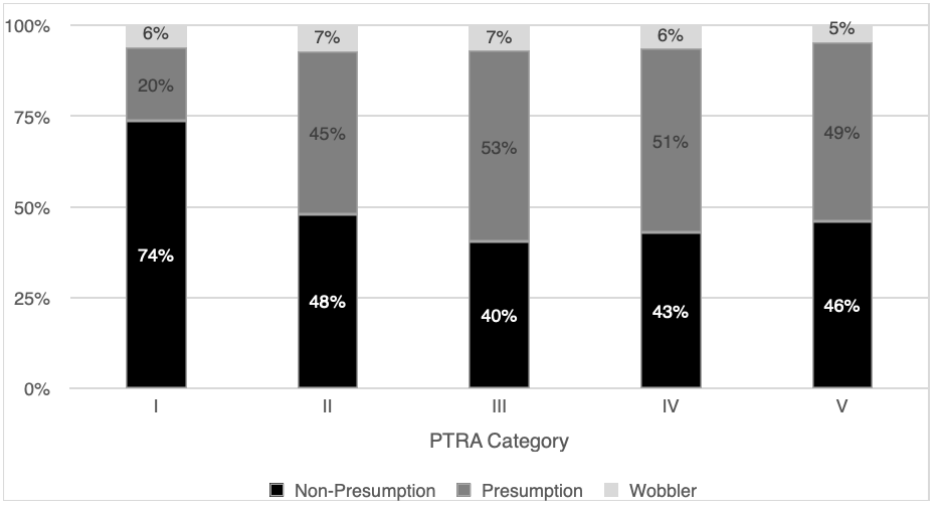
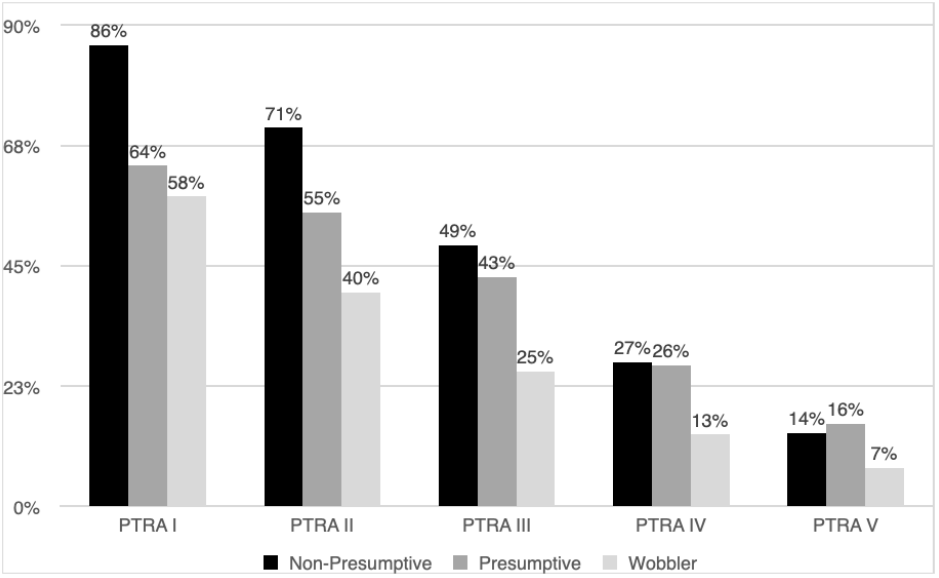


FIGURE 5.
Percent of Defendants Released by Presumption Status and Risk Category



logistic regression models run by risk category indicate no significant differences for the interaction between Black and presumption status.

We also ran a set of logistic regression models with the same control variables listed above predicting actual release. The results of all those models indicated that the coefficients for the interaction term between Black and presumption status are not statistically significant. While it might be the case that race (Black) interacts with presumption status to produce different effects for those with a charge that is not presumptive, the effects are rather small (absolute difference of 4 percent and a Cohen's h value of 0.09, a value categorized as a smaller than small effect size). The smaller than small effect size should further be tempered by the fact that when controlling for offense type, the effect of the interaction between race and presumption status is reduced to null effects. All other effects for the interaction term between Black and presumption status predicting officer recommendations for release were null. This is also true across the models separated by risk category. Race does not interact with presumption status in any of the models when predicting actual release decisions.

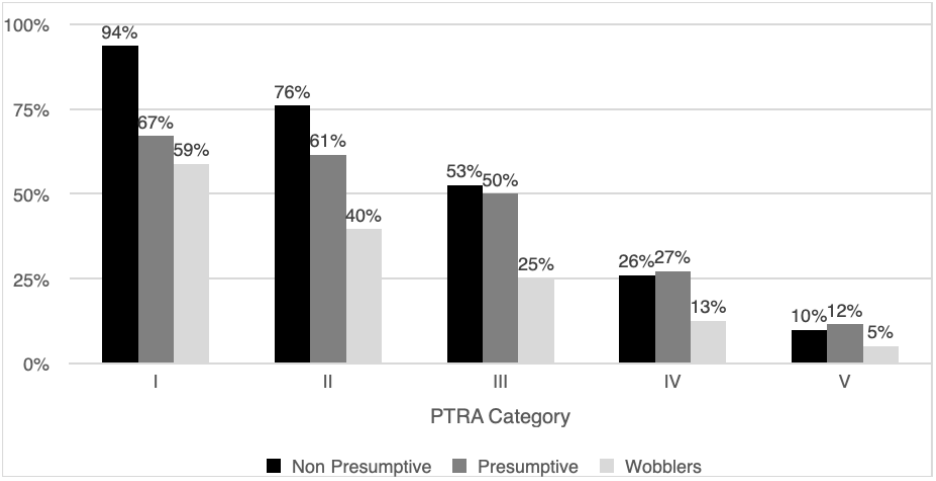
has with presumption status. This model, with the addition of Offense Type, generates differences in probabilities of officer recommendation for release associated with the interaction between Black and presumption status that are not statistically significant.

TABLE 2.
Percentage of Cases Released by Risk Category and Presumption Status

Presumption Status	N	N Released	% Released
PTRA I			
Non-Presumptive	33,043	28518	86.3%
Presumptive	8,677	5532	**63.8%**
Wobbler	2,538	1471	**58.0%**
PTRA II			
Non-Presumptive	25,836	18305	70.9%
Presumptive	22,113	12159	**55.0%**
Wobbler	3,626	1452	**40.0%**
PTRA III			
Non-Presumptive	31,860	15584	48.9%
Presumptive	39,441	16930	**42.9%**
Wobbler	5,257	1330	**25.3%**
PTRA IV			
Non-Presumptive	29,525	7962	27.0%
Presumptive	33,364	8802	**26.4%**
Wobbler	4,132	555	**13.4%**
PTRA V			
Non-Presumptive	17,655	2436	13.8%
Presumptive	18,041	2802	**15.5%**
Wobbler	1,640	119	**7.3%**

Bolded values significantly differ from the percentages for the "Non-Presumption" group at $p < .001$.

FIGURE 6.
Percent of Cases Recommended for Release by Risk Category and Presumption Status



Another question to be updated in this research is whether the higher rates of detention for presumption cases could be justified based on their outcomes. As was suggested in 2016, if low-risk presumption defendants have significantly higher failure rates than low-risk non-presumption cases, then the discrepancy in release rates could be justified. For the purposes of this study, pretrial failure was defined as sustaining a new arrest on pretrial release (of any kind); sustaining a new arrest for a violent offense, specifically; sustaining a failure to appear; or engaging in technical violations that ultimately result in revocation of bond[8] under 18 U.S.C. § 3143.

As can be seen in Table 4, the results of this analysis are also similar to those found in 2016, with low-risk presumption cases being no more or less likely to have a new arrest for any kind of offense, an arrest for a violent offense, or a failure to appear. For Categories 3 and 4, presumption cases were *less* likely to have a rearrest of any kind or for a violent offense than non-presumption cases, and for Category 5 defendants, there was no statistically significant difference in rearrest rates. As far as revocations based on technical violations, presumption cases in all five categories

[8] Although revocations for technical violations were included as "failures," it is worth noting that the likelihood of suffering a technical violation should not be considered in the initial release or detention decision. 18 U.S.C. § 3142 refers only to the failure to appear and/or the safety of the community, and compliance with conditions does not enter the equation until there is probable cause to believe the conditions were violated under 18 U.S.C. §3143.

were much more likely than non-presumption cases to have a revocation for technical violations, though the difference was widest for Category 1 defendants at 14 percent for presumption cases compared to 2 percent for their non-presumption counterparts.

As previously stated, these results are similar to what was found in the original study, which theorized the presumption was overriding the risk principle and low-risk defendants were being treated as high-risk solely on the basis of the presumption. In testing this theory, we compared the average number of conditions applied to low-risk cases, as well as the nature of those conditions. The results (Table 5) reflect that Category 1 non-presumption defendants received an average of 6.5 special conditions of release. In contrast, Category 1 presumption defendants averaged 11.7 special conditions of release, an average of five additional conditions of release. For Category 2 defendants, the discrepancy was 2.5 additional special conditions of release for presumption cases, and by Category 3 the discrepancy was only one special condition of release.

Additionally, research has categorized conditions of release as those that are restrictive in nature or directed at restricting defendant's freedoms (e.g., weapons restrictions and travel restrictions) and those that are monitoring in nature or intended to monitor the behaviors of defendants (e.g., electronic monitoring and substance abuse testing) (Cohen & Hicks, 2023). When looking at the additional special conditions of release based on categorization (Table 6), it was found that 95 percent of presumption Category 1 defendants will receive a condition that is restrictive in nature, compared to 73 percent of non-presumption cases (22 percent differential). Additionally, Category 1 presumption cases received a condition that was monitoring in nature 85 percent of the time, compared to 51 percent for non-presumption cases.

Finally, logistic regression models predicting release recommendations, release rates, and outcomes (FTA, a new arrest for any criminal offense, a new arrest for a violent offense) were estimated. The goal in estimating these models was to understand the effect of presumption status on the different outcomes net the effects of other relevant factors. The six regression models include controls for race, sex, age, total PTRA score, Hispanic ethnicity, citizenship, district, and presumption status.[9]

[9] Again, we also ran alternate models controlling for offense type. We present the models without offense type, as the models without offense type do not generate the same concerns over multicollinearity and the trend in results does not differ when considering the two sets of models (i.e., those that controlled for offense type and those that did not).

We then generate the marginal probabilities for each of the presumption status groups for the six outcomes of interest. The marginal probabilities are contained in Table 7. The models where significant differences between presumption status groups were observed are indicated with an asterisk. The data in Table 7 indicate that when all other factors in the logistic regression models are held constant, presumption and possible presumption cases are less likely to be recommended for release and are less likely to be released. The presumption and possible presumption (wobbler) cases are more likely to be revoked than non-presumption cases. In terms of pretrial outcomes related to the defendant's behavior, presumption and possible presumption cases are not significantly more likely to FTA or be arrested for any criminal offense. Presumption cases are less likely to be arrested for a violent offense, while wobblers are slightly more likely to be arrested for a violent offense when compared to non-presumption cases (1 percent, 3 percent, and 2 percent respectively).

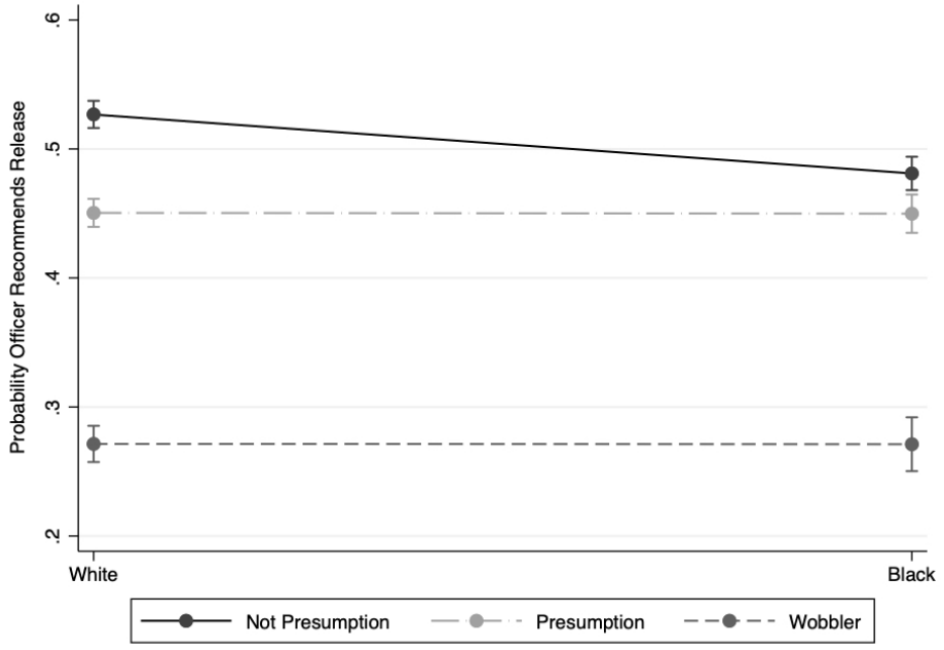
Discussion

Despite the 2017 endorsement of the Criminal Law Committee to modify 18 U.S.C. § 3142(e)(3), an amendment has not passed Congress. In the intervening eight years, it appears the presumption has continued to have an inordinate effect on low-risk defendants, which cannot be explained by their outcomes. In fact, the outcomes for presumption cases reflect that we continue to ignore the risk principle

TABLE 3.
Percent of Cases Recommended for Release by Risk Category & Presumption Status

		Percent Recommended for Release			
PTRA Category	N	Non-Presumptive	Presumptive	Wobblers	Total
I	49,417	94%	67%	59%	86%
II	57,722	76%	61%	40%	67%
III	87,608	53%	50%	25%	49%
IV	77,593	26%	27%	13%	26%
V	44,138	10%	12%	5%	10%

FIGURE 7.
Predictive Margins for Officer Release Recommendation of Interaction Between Black and Presumption Status with 95% Cis



and, in so doing, are making our communities less safe by increasing failure rates for defendants charged with presumption cases. Furthermore, by detaining thousands of low-risk presumption cases (approximately 8,000 since 2016), we increase short- and long-term recidivism while simultaneously placing an even greater burden on taxpayers.

As was seen in 2016, the cost of detaining low- and moderate-risk defendants charged with presumption offenses is significant. When looking at the cost of detaining PTRA 1-2 defendants, excluding those charged with sex or immigration offenses, the cost to taxpayers has been at least $186 million (Table 7). This estimate is net, meaning after excluding the estimated cost of pretrial supervision for these defendants. When we include PTRA 3 defendants, the estimated net cost is at least $651 million (Table 8).

Despite these burdens, an oft-heard argument from stakeholders is that cost savings is not a factor that judges can consider under 18 § 3142(g), otherwise known as the (g) factors. While this is true, it ignores several factors that judicial officers can consider. First, the (g) factors do include the "history and characteristics of the person." This analysis requires the judicial officer to weigh the potential risk of nonappearance and/or danger to the community posed by the specific individual before the court. Research has shown that actuarial risk assessment tools such as the PTRA can lead to better decision-making compared to unaided decision-making, even among those trained specifically in criminal justice (Kleinberg et al., 2017; Cohen et al., 2022; Angelova, Dobbie, & Yang, 2022; Montoya, Skeem, & Lowenkamp, 2024). On that basis, the use of the PTRA by all stakeholders, including judicial officers, should be encouraged. If judicial officers were given access to the PTRA, and were convinced of its utility as a tool, they would be better able to assess a defendant's risk with or without the presumption.

Additionally, there is nothing in the statute to indicate that all (g) factors should be given equal weight or consideration. In fact, while case law on the subject is limited, the Ninth Circuit held in *United States v. Honeyman* that the "least weight should be given to the weight of the evidence against the accused." Judicial officers may put different emphasis on each of the (g) factors in their risk determination. Given this authority and the evidence outlined in the 2016 and now the current study, we suggest that the application of the presumption by judicial officers be strictly limited to what it is provided for by the law. Specifically, under 18 U.S.C. § 3142, a presumption for release is *always* present, even in presumption for detention cases, with the government always retaining the burden of proving that there is no condition or combination of conditions that may be imposed to reasonably assure the defendant's appearance at future court appearances and the safety of the community. The only change in a presumption case is that the defense must present "some" evidence to rebut the presumption. "Even if a presumption is not rebutted, that is not sufficient for an order of detention. The government still has the burden of persuasion, and the court must still consider the factors in section 3142(g) to determine whether the government proved that detention is warranted" (Wood, 2022).

This brings us to another goal of this article—to clarify the correct application of the presumption. The 2016 article incorrectly stated that the "presumption for release was reversed" and that the defendants charged with these offenses are "presumed to be detained unless they can demonstrate by clear and convincing evidence that they do not pose a risk of nonappearance or danger to the community." This conclusion is incorrect in that the defendant never has to prove that release is warranted—the presumption for release remains, and the burden of proving that detention is warranted remains on the government. While the correct application of the law lies with judicial officers, pretrial services officers who routinely identify presumption cases, and inadvertently consider the presumption, should be cognizant that the burden of proof does not change and therefore officers should never assume that a presumption indicates the defendant should be detained.

TABLE 4.
Outcomes by Risk Category and Presumption Status

Presumption Status	N Released	% Released	Any Rearrest	Violent Rearrest	FTA	Revocation
PTRA I						
Non-Presumptive	28518	86.3%	2.7%	0.4%	0.8%	2%
Presumptive	5532	**63.8%**	**3.4%**	**0.4%**	0.9%	**14%**
Wobbler	1471	**58.0%**	**4.0%**	**1.3%**	1.0%	**10%**
PTRA II						
Non-Presumptive	18305	70.9%	6.3%	1.1%	2.1%	6%
Presumptive	12159	**55.0%**	5.5%	0.9%	2.5%	**14%**
Wobbler	1452	**40.0%**	6.4%	1.6%	2.8%	**16%**
PTRA III						
Non-Presumptive	15584	48.9%	11.2%	2.0%	3.9%	14%
Presumptive	16930	**42.9%**	**8.9%**	**1.7%**	4.4%	**19%**
Wobbler	1330	**25.3%**	**8.6%**	**3.4%**	4.4%	**29%**
PTRA IV						
Non-Presumptive	7962	27.0%	16.4%	3.4%	5.3%	24%
Presumptive	8802	**26.4%**	**13.0%**	**2.2%**	5.5%	**27%**
Wobbler	555	**13.4%**	**14.1%**	**5.6%**	4.9%	**29%**
PTRA V						
Non-Presumptive	2436	13.8%	18.7%	4.1%	6.1%	29%
Presumptive	2802	**15.5%**	16.3%	3.1%	5.4%	**35%**
Wobbler	119	**7.3%**	15.1%	3.4%	4.2%	**39%**

Bolded values significantly differ from the percentages for the "Non-Presumption" group at $p < .001$.

Policy Recommendations

Until Congress passes an amendment to 18 U.S.C. § 3142(e)(3), judicial officers will continue to apply the presumption to all qualified cases, as required by the law. Given this fact, the lack of evidence to support the detention rates on presumption cases, the need to address disparity in our justice system by increasing release rates for all defendants,

and the overall increase to detention rates, we make the following policy recommendations.

First, judicial officers should consider the presumption carefully and be cautious not to give it too much weight, given it is relatively easy to rebut, and even if not rebutted is only one factor, not the deciding factor. Detention is not mandatory and should never be automatic. Judges must always consider all factors outlined in the statute in deciding to release or detain a defendant. With this study, we now have 14 years of data to support the conclusion that the presumption for detention is not an evidence-based factor that should be given significant weight in the release decision. Furthermore, pretrial services officers should not be considering the presumption at all. Instead, all pretrial services officers should receive updated training on the research surrounding the presumption as well as the OGC decision explaining why officers should not consider the presumption in release decisions. Additionally, districts can and should be analyzing their data on a quarterly or bi-annual basis to determine if they are over-recommending detention on low-risk presumption cases.

Second, as noted above, we recommend that judicial officers and pretrial services officers both make the PTRA central to their release analysis. While not intended to be dispositive, the PTRA can and should be used to guide officer recommendations, including recommendations for conditions of release. Recent research into disparity has shown that if recommendations were based solely on the PTRA, release rates could increase by over 30 percent, while negative outcomes would only increase by 1 percent (Skeem, Montoya, & Lowenkamp, 2022). This same research has recommended that increasing release rates for all defendants is the best and most efficient way of decreasing racial disparities in our system, so increasing our reliance on the PTRA would also serve to reduce racial bias.

Previous efforts to increase use of the PTRA have met with minimal success. The PTRA was deployed to all pretrial services offices in 2010, yet correct implementation and buy-in has been gradual at best. Furthermore, stakeholders were not involved in the initial development or implementation of the tool, so buy-in with stakeholders has been equally gradual. To date, approximately 14 districts include the PTRA in their bail reports, and national policy does not reflect an official position on whether or not it should be included in the report. Among the 14 districts that include the PTRA, there is no standard format for doing so, with some sending just the score, while others send full results with predicated failure rates for each of the violation categories. Due to this lack of consistency, it has been difficult to determine the effect of including the PTRA in the report.

Both judicial officers and pretrial services officers have expressed concerns that the PTRA will curtail their professional judgement or that it cannot be considered as it is not a (g) factor. Both of these contentions are inaccurate. The PTRA was never developed or meant to replace professional judgment. Rather, it is meant to augment and serve as a consistent check on professional judgment, ensuring equal treatment of defendants across jurisdictions and demographics. As to whether it is a (g) factor or not, clearly the tool itself is not listed as a factor for the judicial officer to consider. Nonetheless, every question in the PTRA is, directly or indirectly, a (g) factor so in essence the PTRA is simply consolidating most of the (g) factors and providing a statistically valid score for those combinations of factors (Cohen & Lowenkamp, 2018).

Last, given the significant shift towards detention since 1984, efforts to increase release rates should be made thoughtfully, with particular consideration to training and outcomes. A culture of release should be established with leadership in each district, with the aim of prioritizing and supporting increased release recommendations. In recent years, several districts across the country, in both separate and consolidated districts, have significantly increased their release recommendations without seeing an accompanying increase to their failure rates (DSS 1288, 2024). The

TABLE 5.
Conditions by Risk Category and Presumption Status

PTRA Categories	N	Percent with 1 or more Conditions	Mean # Special Conditions
All Released Defendants			
Non-Presumption	88,935	86%	8.50
Presumption	60,193	**97%**	**11.46**
Wobbler	6,247	**95%**	**11.06**
PTRA I			
Non-Presumption	35,442	78%	6.46
Presumption	7,197	**95%**	**11.68**
Wobbler	1,909	**92%**	**9.85**
PTRA II			
Non-Presumption	21,808	86%	8.53
Presumption	15,962	**96%**	**11.14**
Wobbler	1,837	**95%**	**11.16**
PTRA III			
Non-Presumption	18,814	**94%**	**10.48**
Presumption	21,755	**97%**	**11.42**
Wobbler	1,644	**96%**	**11.75**
PTRA IV			
Non-Presumption	9,668	97%	11.29
Presumption	11,518	**98%**	**11.76**
Wobbler	704	**98%**	**12.27**
PTRA V			
Non-Presumption	3,024	98%	11.25
Presumption	3,695	98%	**11.80**
Wobbler	146	97%	12.12

Bolded values significantly differ from the percentages and mean for the "Non-Presumption" group at $p < .001$.

commonality in these districts is courageous leadership by the chief, who has been willing to engage stakeholders and staff in culture change initiatives. Furthermore, the fact that outcomes have not worsened should be highlighted and advertised to other districts struggling with release rates, to counter the belief that increasing release will lead to higher rates of failure (DSS 1294, 2024). Additionally, pretrial services officers and stakeholders should receive annual training on the Bail Reform Act of 1984 and our statutory obligations under the Act. Officers should track their release recommendation rates, and significant decreases should be analyzed and addressed.

In line with returning to our statutory roots, pretrial services should start increasing release recommendations with the "low-hanging fruit," meaning the cases most likely to succeed if released. Once a district has addressed these cases, they can begin to take more chances on higher risk cases. Specifically, there are two categories of cases that have traditionally experienced high rates of detention despite their low-risk status: PTRA 1-3 presumption cases and immigration cases. This study has confirmed that low-risk presumption cases exist and, if released, those defendants would do well in a majority of cases. Therefore, we suggest that a district seeking to increase their release rates gradually can begin by targeting these cases while following the risk principle and being mindful not to over-condition these defendants with excessive conditions of release.

Additionally, judicial officers, federal defenders, and assistant United States attorneys should renew their focus on the correct application of 18 U.S.C. § 3142(f)(1). While a detention hearing may be requested under (f)(1) for a variety of serious offenses, most illegal immigration cases simply do not fall within (f)(1) and are mandatory release cases unless a judge makes a finding under (f)(2) or orders temporary detention under 3142(d)(1)(B). Despite this, in fiscal year 2024, only 8 percent of those charged with immigration offenses were released, many of whom were low-risk defendants. A significant problem with the release of undocumented noncitizens is the amount of resources it would require for a district, especially those on the Southern border, to process these cases appropriately. While this is a legitimate logistical concern, the same logic applies to the financial cost of detaining presumption cases—the law does not allow for the detention of defendants simply because the logistics are challenging. Ultimately, the resource concern needs to be addressed by Congress, but in the meantime, pretrial services officers are encouraged to follow the law and make recommendations for release in these mandatory release cases.

Even with the significant changes created by adding the danger prong into the release decision, the greater shift caused by the Bail Reform Act of 1984 was a shift away from release and from the correct application of the law. This has resulted in a system where release has become the carefully limited exception, instead of detention. While the challenges are many, they can and have been overcome in many districts by engaging in the above recommendations. We hope that Congress will soon address the Criminal Law Committee's recommendation and amend 18 U.S.C. § 3142(e)(3). In the interim, actions can be taken to minimize the effect of the presumption, avoid incorrect application of the statute, decrease racial disparity, and safely increase release rates for all defendants.

TABLE 6.
Types of Pretrial Conditions by Risk Category And Presumption Status

		Percent with Condition				
Presumption Status	N Released	Restriction	Monitoring	Treatment	Education Employment	Other Party Guarantee
PTRA I						
Non-Presumptive	28518	73.1%	50.7%	26.4%	33.3%	8.9%
Presumptive	5532	94.7%	84.8%	56.6%	51.3%	18.9%
Wobbler	1471	91.1%	77.6%	48.1%	38.7%	16.6%
PTRA II						
Non-Presumptive	18305	80.8%	69.9%	45.4%	48.3%	14.6%
Presumptive	12159	95.1%	85.8%	62.9%	58.6%	21.6%
Wobbler	1452	93.7%	86.6%	68.0%	50.1%	25.3%
PTRA III						
Non-Presumptive	15584	90.6%	85.2%	65.0%	62.7%	21.8%
Presumptive	16930	96.6%	89.9%	73.8%	65.1%	22.4%
Wobbler	1330	93.6%	90.6%	72.7%	52.0%	32.6%
PTRA IV						
Non-Presumptive	7962	94.5%	92.8%	77.7%	63.5%	25.5%
Presumptive	8802	97.1%	95.1%	82.0%	62.8%	23.2%
Wobbler	555	96.4%	95.0%	83.2%	52.1%	30.3%
PTRA V						
Non-Presumptive	2436	94.7%	95.2%	78.7%	58.2%	26.1%
Presumptive	2802	96.3%	96.0%	83.0%	56.2%	25.3%
Wobbler	119	95.0%	90.8%	84.9%	37.0%	26.9%

TABLE 7.
Marginal Probabilities from Logistic Regression Models Predicting Six Outcomes

	Release Recommendation*	Release*	FTA	Arrest Any	Arrest Violence*	Revoked*
Non-Presumption	0.51	0.49	0.03	0.08	0.02	0.10
Presumption	0.46	0.43	0.02	0.07	0.01	0.14
Wobblers	0.29	0.28	0.03	0.08	0.03	0.16

TABLE 8.
Cost of Pretrial Detention versus Pretrial Supervision for PTRA Categories I & II (Excluding Cases for Sex Offense and Immigration)

Year	Detained PTRA I & II Presumption Cases	Average Days Detained	Daily Cost Detention	Average Days Supervision	Daily Cost of Supervision	Total Cost Detention	Total Cost Supervision	Difference
2016	1,326	296	$87	399	$11	$34,147,152	$5,819,814	$28,327,338
2017	1,379	293	$87	393	$11	$35,152,089	$5,961,417	$29,190,672
2018	1,464	322	$89	426	$11	$41,955,312	$7,746,024	$34,209,288
2019	1,499	306	$90	481	$11	$41,282,460	$7,453,028	$33,829,432
2020	1,145	343	$92	452	$11	$36,131,620	$3,917,045	$32,214,575
2021	1,003	259	$98	311	$12	$25,458,146	$1,203,600	$24,254,546
2022	392	121	$101	100	$12	$4,790,632	$470,400	$4,320,232
Total	8,208					$218,917,411	$32,571,328	$186,346,083

TABLE 9.
Cost of Pretrial Detention versus Pretrial Supervision for PTRA Categories I, II, & III (Excluding Cases for Sex Offense and Immigration)

Year	Detained PTRA I, II, & III Presumption Cases	Average Days Detained	Daily Cost Detention	Average Days Supervision	Daily Cost of Supervision	Total Cost Detention	Total Cost Supervision	Difference
2016	4,837	280	$87	382	$11	$117,829,320	$20,325,074	$97,504,246
2017	4,929	284	$87	387	$11	$121,785,732	$20,982,753	$100,802,979
2018	5,231	303	$89	413	$11	$141,064,377	$27,447,057	$113,617,320
2019	5,376	308	$90	477	$11	$149,022,720	$26,729,472	$122,293,248
2020	3,945	349	$92	452	$11	$126,666,060	$13,886,400	$112,779,660
2021	3,537	270	$98	320	$12	$93,589,020	$4,626,396	$88,962,624
2022	1,162	146	$101	109	$12	$17,134,852	$1,519,896	$15,614,956
Total	29,017					$767,092,081	$115,517,048	$651,575,033

References

Angelova, V., Dobbie, W., & Yang, C. (2022). Algorithmic recommendations and human discretion. *National Bureau of Economic Research*, Working Papers 31747.

Austin, A. (2017). The presumption for detention statute's relationship to release rates. *Federal Probation*, *81*(2), 52-63.

Arnold, D., Dobbie, W., Yang, C. S. (2018). Racial bias in bail decisions. *Quarterly Journal of Economics,133*(4):1885–1932. doi: 10.1093/qje/qjy012.

Assefa, L. S. (2019). Assessing dangerousness amidst racial stereotypes: An analysis of the role of racial bias in bond decisions and ideas for reform. *J. Crim. l. & Criminology,108*, 653–678.

Bechtel, K., Connor, T., & Lowenkamp, C. (2022). Pretrial supervision: Race and revocation. *Federal Probation, 86*(3), 35-42. Retrieved from https://www.proquest.com/trade-journals/pretrial-supervision-race-revocation/docview/2811283292/se-2

Cohen, T. H., & Hicks, W. (2023). The Imposition of pretrial conditions on released federal defendants: The overuse of conditions without providing any measurable benefits. *Criminal Justice and Behavior*, *50*(12), 1852–1873. https://doi.org/10.1177/00938548231206829

Cohen, T., & Lowenkamp, C. (2018). Revalidation of the Federal PTRA: Testing the PTRA for predictive bias. *Criminal Justice and Behavior*, 46(2), 234-260.

Cohen, T. H., Lowenkamp, C. T., Bechtel, K., & Flores, A. W. (2020). Risk assessment overrides: Shuffling the risk deck without any improvements in prediction. *Criminal Justice and Behavior, 47*(12), 1609–1629. https://doi.org/10.1177/0093854820953449

Diaz, A. M., & Salas, L. M. (2022). Pretrial detention and conviction. *European Journal of Law and Economics, 53*(1), 1-25. oi:https://doi.org/10.1007/s10657-021-09723-4

Durbin, R. J. (2021, February 12). *S.309 - Smarter Pretrial Detention for Drug Charges Act of 2021.* Retrieved from Congress.gov: https://www.congress.gov/bill/117th-congress/senate-bill/309

H-14. (2024, June). *Caseload Statistics Data Tables.* Retrieved from Uscourts.gov: https://www.uscourts.gov/statistics-reports/caseload-statistics-data-tables?tn=&pn=All&t=71&m%5Bvalue%5D%5Bmonth%5D=&y%5Bvalue%5D%5Byear%5D=

H-14b. (2024, June). *Caseload Statistics Data Tables.* Retrieved from Uscourts.gov: https://www.uscourts.gov/statistics-reports/caseload-statistics-data-tables?tn=&pn=All&t=71&m%5Bvalue%5D%5Bmonth%5D=&y%5Bvalue%5D%5Byear%5D=

Heaton, P., Mayson, S., & Stevenson, M. (2017). The downstream consequences of misdemeanor pretrial detention. *Stanford Law Review, 69*(3), 711-794. Retrieved from https://www.proquest.com/scholarly-journals/downstream-consequences-misdemeanor-pretrial/docview/1883067276/se-2

Kennedy, S., & Carlson, K. (1988). Pretrial release and detention: The Bail Reform Act of 1984. *Bureau of Justice Statistics Special Report*, 1-8.

Kleinberg, J., Lakkaraju, H., Leskovec, J., Ludwig, J., & Mullainathan, S. (2017). Human decisions and machine predictions. *The Quarterly Journal of Economics, Presidence and Fellows of Harvard College*, *133*(1), 237-293

Lowder, E. M., & Foudray, C. M. A. (2021). Use of risk assessments in pretrial super-

vision decision-making and associated outcomes. *Crime & Delinquency, 67*(11), 1765-1791. https://journals.sagepub.com/doi/10.1177/00111287211022642

Lowenkamp, C. T., Van Nostrand, M., & Holsinger, A. (2013). The hidden costs of pretrial detention. Laura and John Arnold Foundation. www.arnoldfoundation.org

Lowenkamp, C. T. (2022). The hidden costs of pretrial detention revisited. https://www.researchgate.net/publication/359797731_THE_HIDDEN_COSTS_OF_PRETRIAL_DETENTION_REVISITED

Montoya, L. M., Skeem, J. L., & Lowenkamp, C. T. (2024). A pretrial policy based on risk assessment would reduce unnecessary incarceration, increase racial fairness, and save money. Unpublished manuscript. UNC, Chapel Hill.

Oleson, J. C., Lowenkamp, C. T., Cadigan, T. P., VanNostrand, M., & Wooldredge, J. (2014). The effect of pretrial detention on sentencing in two federal districts. *Justice Quarterly*, *33*(6), 1103–1122. https://www.tandfonline.com/doi/full/10.1080/07418825.2014.959035

Petrich, D. M., Pratt, T. C., Jonson, C. L., & Cullen, F. T. (2021). Custodial sanctions and reoffending: A meta-analytic review. *Crime and Justice 50*. https://www.journals.uchicago.edu/doi/10.1086/715100

Pretrial Justice Institute (2017). The state of pretrial jstice in America. Retrieved from https://www.prisonpolicy.org/scans/pji/the_state_of_pretrial_in_america_pji_2017.pdf.

Profile. (2022, September). *Pretrial profiles.* Retrieved from JNet: https://jnet.ao.dcn/court-services/probation-pretrial-services/caseload-tables/pretrial-profiles

Profile. (2024, June). *Caseload Data.* Retrieved from JNet: https://jnet.ao.dcn/resources/data-analysis/caseload-data

Profile. (2024, June). *Pretrial Services Profiles, June 2024.* Retrieved from JNet Pretrial Services Profiles: https://jnet.ao.dcn/resources/data-analysis/caseload-data/pretrial-services-profiles-june-2024

Profiles. (2001, September). *JNet.* Retrieved from Pretrial Profiles: https://jnet.ao.dcn/court-services/probation-pretrial-services/caseload-tables/pretrial-profiles

Skeem, J. L., Montoya, L., & Lowenkamp, C. (2002, December 31). Understanding racial disparities in pretrial detention recommendations to shape policy reform. Available at SSRN: https://ssrn.com/abstract=4143498 or http://dx.doi.org/10.2139/ssrn.4143498

Thurmond, S. (n.d.). *S.1762 - 98th Congress (1983-1984): Comprehensive Crime Control Act of 1984. congress.gov | library of Congress.* Congress.gov. https://www.congress.gov/bill/98th-congress/senate-bill/1762

U.S. Department of Justice. (1981). *Attorney General's Task Force on Violent Crime.* Washington, DC: National Institute of Justice. Print.

Wood, J . (2022). *The Bail Reform Act of 1984, Fourth Edition*. Federal Judicial Center. Available at The Bail Reform Act of 1984, Fourth Edition | FJC.dcn.

Revising the Pretrial Risk Assessment (PTRA): Promising Options

Sara J. Valdez Hoffer
Probation and Pretrial Services Office, Administrative Office of the U.S. Courts
Christopher T. Lowenkamp
Probation and Pretrial Services Office, Administrative Office of the U.S. Courts
and Center for Justice and Communities, School of Criminal Justice, University of Cincinnati

THE SPEEDY TRIAL ACT of 1974 authorized the creation of 10 demonstration pretrial services agencies with duties that included verifying and reporting information to the judicial officer about federal defendants and recommending appropriate release conditions (Cadigan, 2007). In the hearings before Congress regarding the expansion of pretrial services from the 10 demonstration agencies to all federal jurisdictions, policymakers and judges presented the value of pretrial services to judicial officers in assisting with decision-making regarding release decisions. For example, Judge Morris E. Lasker noted, regarding the information gathered by pretrial services and the ability and willingness to supervise defendants, that "the judicial officer feels much easier about releasing a defendant on bail." Senator Ervin explained, "[I]t is common knowledge that many Federal judges are reluctant to release defendants pursuant to the Act… This situation exists because district courts do not have personnel to conduct interviews of…arrested defendants." The sentiment at the time indicated that pretrial services offices were an asset to advancing the preference for pretrial release established by the Bail Reform Act of 1966 and retained in the Bail Reform Act of 1984 (Wanger, 1987). After pretrial services offices were deemed a "good thing" to enhance the federal pretrial system, the Pretrial Services Act of 1982 inserted pretrial services into the federal criminal justice system (Cadigan, 2007).

The decision associated with the release or detention of pretrial defendants has been recognized as one of the most critical components of the criminal justice process (McCoy, 2007; Oleson et al., 2014 & 2017; Cohen et al., 2018; Cohen & Lowenkamp, 2019; & St. Louis, 2023) and the rising federal detention rate has frequently been identified as a concern for the system (Rowland, 2018; Austin, 2017; Austin et al., 2024). Under the statute, pretrial services has a core duty of assisting with judicial decision-making regarding the release of pretrial defendants. Specifically, Section 3154 of Title 18 of the United States Code outlines one duty of pretrial services as, "Collect, verify and report to the judicial officer, prior to the pretrial release hearing, information pertaining to the pretrial release of each individual charged with an offense, including information relating to any danger that the release of such person may pose to any other person or the community" and "…include a recommendation as to whether such individual should be released or detained, and if release is recommended, recommend appropriate conditions of release…" (18 U.S.C. §3154(1)). In engaging in that role, pretrial services officers take into consideration the same factors judicial officers consider in making a release decision, with the exception of three specific factors: the weight of the evidence, the presence of the statutory presumption for detention (Austin, 2017), and the potential penalty for the offense charged.[1] As a result, federal probation and pretrial services officers regularly make recommendations that are documented as influential in pretrial decision-making. In fact, recent research has shown that recommendations for detention by officers strongly correlate with judicial decisions for detention (Skeem et al., 2023).

Based on the duty of pretrial services officers to make influential recommendations on the decision for release or detention of pretrial defendants, the Probation and Pretrial Services Office (PPSO) within the Administrative Office of the U.S. Courts (AO), the office tasked with oversight of the work of probation and pretrial services officers (Lowenkamp et al., 2023), has engaged in several efforts to assist pretrial services officers in fulfilling the mission of pretrial services. Specifically, these efforts have focused on aiding officers in decision-making regarding releasing pretrial defendants. To date, one of the most valuable developments of PPSO has been the creation of the federal pretrial risk assessment tool known as PTRA (Pretrial Risk Assessment). The PTRA is an actuarial risk assessment instrument used to identify a defendant's likelihood of engaging in pretrial misconduct, such as failing to appear for court, committing criminal activity, or engaging in conduct that

[1] The Administrative Office of the U.S. Courts: *Guide to Judiciary Policy*, Volume 8, Part A. This document is available internally to employees of the Judiciary only.

results in revocation of pretrial release; it is one of the key tools federal pretrial services officers rely on when engaging in pretrial decision-making (Lowenkamp & Whetzel, 2009; Cadigan & Lowenkamp, 2011; Cadigan, Johnson, & Lowenkamp, 2012; Cohen et al, 2018). Yet, despite the availability and administration of this reliable risk assessment tool in the federal system, the federal pretrial system has continued to see steady increases in the overall detention rate and rates associated with officer recommendations for detention,[2] indicating room for additional improvements.

Since the PTRA is consistently used in the federal pretrial services system, ongoing research must be conducted to ensure its validity (Cohen & Lowenkamp, 2019). This report is intended to achieve two primary goals. First, it provides a synopsis of key findings from a recent study that sought to once again establish the predictive validity of the PTRA on a large sample of released federal defendants to support further officer reliance on the PTRA in pretrial decision-making. Additionally, this article presents possible revisions to the current PTRA to further aid officers and other outside stakeholders, particularly judicial officers, in pretrial decision-making for the federal pretrial system. The goal is to assist all system stakeholders in making risk-informed pretrial decisions.

Risk Assessment in Pretrial Work

The use of actuarial risk assessment in pretrial work predates that done in other areas of criminal justice (Cadigan et al., 2012). Several influential organizations such as the American Bar Association (ABA), the National Institute of Justice (NIJ), and the National Association of Pretrial Services Agencies (NAPSA) have issued recommendations about adopting and using standardized guidelines such as risk assessments in assisting with bail decisions (Lowenkamp et al., 2008). Pretrial risk assessment instruments were designed to overcome limitations associated with human decision-making that can lead to biased or unfair decisions in pretrial work by forecasting the likelihood of defendants failing to appear in court or committing a new crime while on pretrial release (Desmarais et al., 2021). Research has shown that, compared to unassisted decision-making, risk assessment instruments can lead to better decision-making for those operating in the criminal justice system (Kleinberg et al., 2017; Angelova, Dobbie, & Yang, 2022; Montoya, Skeem, & Lowenkamp, 2024).

Pretrial risk assessment tools are used in many jurisdictions to inform the pretrial release decision and the choice of appropriate conditions of release, and they have been regarded as a strategy to advance pretrial reform (Desmarais et al., 2021). In fact, in a survey on pretrial practices across the United States, approximately two-thirds of surveyed counties used a pretrial risk assessment tool (Desmarais et al., 2021). However, recently, concerns have been noted that pretrial risk assessment instruments contribute to racial disparity (Desmarais et al., 2022). Still, research has documented that pretrial risk assessment instruments are a promising tool in helping to reduce pretrial detention (Kleinberg et al., 2017; Montoya et al., 2024), have fair to excellent predictive validity in predicting pretrial outcomes (Zottola et al., 2021), and have predictive validity that is generally comparable across racial and ethnic subgroups (Cohen et al., 2018; Desmarais et al., 2022). Thus, they are designed to "… increase pretrial release rates while limiting pretrial misconduct and maintaining public safety" (Lowder et al., 2023).

Risk Assessment in the Federal Pretrial Services System

In the federal system, the use of actuarial pretrial risk assessment was initially explored when the Office of Federal Detention Trustee (OFDT), a former agency in the Department of Justice that was responsible for the efficient and fair expenditure of funds associated with federal detention programs, sponsored a study with the support of the AO (VanNostrand & Keebler, 2009; Cohen & Lowenkamp, 2019). The purpose of the study was twofold: To "identify statically and policy-relevant predictors of pretrial outcome to identify federal criminal defendants who are most suited for pretrial release without jeopardizing the integrity of the judicial process or safety of the community…" and to "develop recommendations for the use of OFDT funding that supports the Federal Judiciary's alternatives to detention program" (VanNostrand & Keebler, 2009, p. 1). The most important recommendation of the study was that the results be used to develop a "standardized empirically-based risk assessment instrument to be used by federal pretrial services" (VanNostrand & Keebler, 2009, p. 7). The study noted that the risk assessment tool would help reduce disparity in risk assessment practices, serve as a foundation for evidence-based practices (EBP) in release and detention recommendations, and allow for developing policies regarding release and detention recommendations.

The PTRA

Research has documented the development of the PTRA and its implementation (Lowenkamp & Whetzel, 2009; Cadigan & Lowenkamp, 2011; Cadigan, Johnson, & Lowenkamp, 2012; Cohen & Lowenkamp, 2019). In short, the PTRA was initially constructed based on data from the OFDT-funded study conducted in 2009 (Cadigan et al., 2012). The study comprised federal defendants granted pretrial release between the years 2001 and 2007 (the final sample size varied between 185,000 and 215,000 released defendants) and resulted in the identification of nine items that were incorporated into the tool's scoring algorithm, including the current offense, factors related to the defendant's criminal history, employment status, residence status, and substance abuse. Eleven items were ultimately incorporated into the PTRA, including age and educational attainment. A detailed overview of the PTRA development and scores associated with the instrument can be found in several publicly available articles (Lowenkamp & Whetzel, 2009; Cadigan & Lowenkamp, 2011; Cadigan, Johnson, & Lowenkamp, 2012; Cohen & Lowenkamp, 2019). As a result of the study, PPSO constructed and validated the PTRA and ultimately implemented it in 2010 (Lowenkamp & Whetzel, 2009; Cohen et al., 2018; Cohen & Lowenkamp, 2019) to be used in connection with a thorough investigation and the pretrial services officer's professional judgment.

Because the PTRA is used extensively in the federal pretrial system, there is a need for ongoing, comprehensive research that addresses its validity. The PTRA was constructed in 2009 and validated shortly after that in 2011 (Cadigan et al., 2012). In 2018, a large study was conducted to evaluate the predictive efficacy of the tool further (Cohen et al., 2018). That study involved 85,369 released defendants with PTRA assessments completed during their intake between 2009 and 2015. Findings in the study revealed the PTRA continued to perform well in predicting pretrial violations of various categories, including new criminal arrests for violent offenses. As a result, the PTRA continues to be widely used by pretrial services officers in the federal pretrial system. Recent

[2] According to Table H-3 of the Federal Pretrial Services Statistical Tables for the Federal Judiciary, for the 12-month period ending December 31, 2023, pretrial services officers recommended detention in 65.5 percent of cases activated.

PPSO records reflect the PTRA is currently completed timely, before the judicial decision (Valdez Hoffer, 2018), in approximately 82 percent of federal pretrial cases.[3]

Despite findings confirming that the PTRA performs well, over the years pretrial services officers have been hesitant to incorporate it into their decision-making process (Cohen et al., 2018). As of 2014, the PTRA was completed in a timely, useful manner in only half of all cases (Cohen et al, 2018). Additionally, through various educational and collaborative efforts to address the rising detention rate, PPSO has learned of concerns associated with PTRA that include a perception it fails to address the danger posed by defendants and its failure to assess all the factors required for consideration under 18 USC §3142(g).

Present Study: The PTRA

The current study sought first to provide an updated evaluation of the PTRA's predictive efficacy. The sample used for this study is drawn from pretrial activations between fiscal years 2016 and 2022. To be included in the study, the observation had to have a PTRA score completed by an officer, and the case had to be closed by the end of fiscal year 2022. These criteria led to a sample size of 243,454 observations. Of those, 114,827 were released during pretrial. Figure 1 shows the distribution of the total PTRA scores for detained and released populations. There is approximately 60 percent overlap between these two populations (indicated by the light gray shading). In Figure 1, there are three colors of shading. The white shading represents the distribution of scores for the released population. The dark-gray shading represents the distribution of scores for the detained population. The light-gray shading represents areas where there is an overlap of the two distributions. So, for example, focusing on a PTRA score of seven, roughly 14 percent of the released sample has a PTRA score of seven (evidenced by the white shaded bar). Roughly 10 percent of the detained sample has a PTRA score of seven (evidenced by the light-gray shaded bar). Focusing now on a PTRA score of eight, it can be seen that roughly 12 percent of the released sample has a PTRA score of eight (light-gray shading) and roughly 16 percent of the detained sample has a PTRA score of eight.

[3] PTRA completion rates solely refer to the date of completion in relation to the date of the judicial decision and do not include a comparison of PTRA score to recommendation to demonstrate officer reliance.

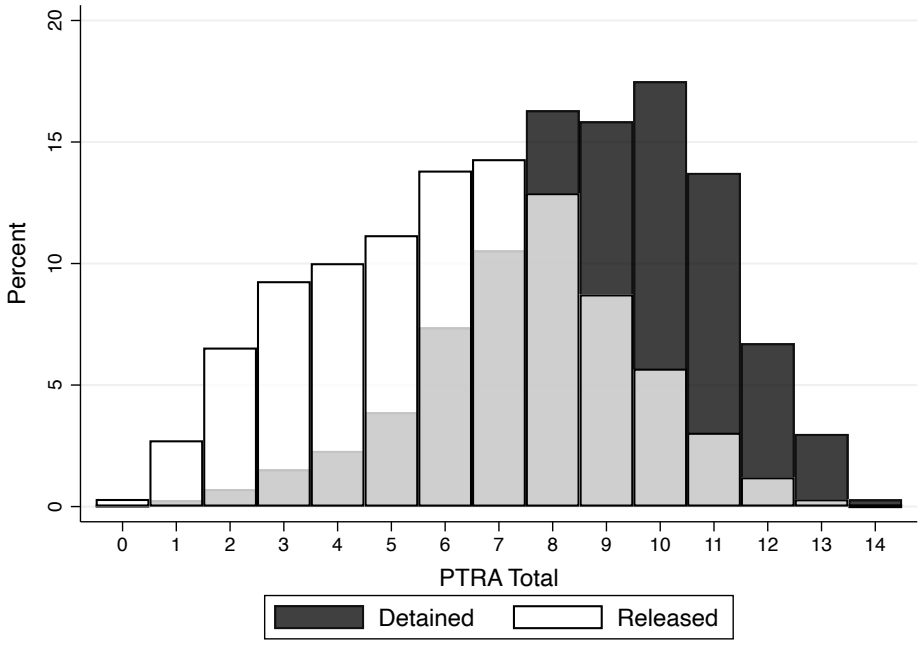
The average risk score for the detained sample is somewhat higher than that for the released sample (8.75 versus 6.13; $t(230{,}597) = 260.44$; $p < 0.001$). While Figure 1 does not contain mean PTRA total scores for each group, it is readily observable that the detained sample is at higher risk (dark grey shading), while the released sample is at lower risk (no shading). The average risk scores and distributions for the detained and released samples contain important information, as previous research has not reported on the risk scores of the detained sample. This information demonstrates that while the two groups differ in average risk scores and the distribution of risk scores, there is substantial overlap between the two groups and released and detained defendants at each PTRA score. While the two groups might, and probably do, differ on other unmeasured factors, the information contained in Figure 1 and this paragraph might assuage, to some degree, concerns that the released and detained populations are too different to use existing pretrial failure rates to estimate likely failure rates if a greater percentage of detainees were released.

Turning to the sample of released defendants used for this validation study, Table 1 contains descriptors of the sample. The sample in this study is standard for a sample of released defendants from the federal courts. Seventy-two percent of the sample is male, and most of the majority is White (62 percent). About one-quarter of the sample is identified as being Hispanic. The overwhelming majority of defendants are charged with a drug, property, or firearms offense (combined roughly 75 percent). The average age of the sample is 38 years, and the average PTRA score is 6.13. The failure rates are also fairly typical for federal pretrial defendants at 1.64 percent for FTA, 8.13 percent for an arrest for any offense, and 1.54 percent for an arrest for a violent offense. Almost 11 percent of the released defendants are subsequently revoked, and almost 17 percent experience one of the outcomes mentioned above.

Table 2 presents the failure rates for each of the five outcomes by risk category and the AUC-ROC values generated for the Total PTRA score and each of the five outcomes. Consistent with earlier research on the PTRA and pretrial risk assessment in general, the AUC-ROC values in Table 2 are all in the good to excellent or moderate to large range. Further, there is an increase in the failure rates as one moves from one category to the next. While some of the differences between risk categories might not be practically meaningful due to low overall base rates (e.g., FTA/Absconsion and arrest for a violent offense), the failure rates associated with other individual outcomes and combined outcomes are practically meaningful when allocating resources by risk.

Figures 2a through 2e present the varying failure rates by total PTRA score. The average failure rate for each score is represented by a

FIGURE 1.
Distribution of PTRA Scores for Released and Detained Defendants



diamond, and the 95 percent confidence interval for each point estimate is represented by the "whiskers" extending from each diamond. The point estimates do not significantly differ when the confidence intervals overlap. For some outcomes, such as FTA/Absconsion and violence (Figures 2a and 2c), it is apparent that the different scores can be grouped into categories from a statistical and practical standpoint. However, for outcomes like arrest for any offense, revocation, and any adverse event, many of the scores are meaningful and statistically differ from the point estimates of the neighboring scores.

For example, Figure 2e presents the failure rates defined as "any adverse event" for each PTRA score (ranging from 0 to 13). With a few exceptions, failure rates for each score significantly differ from those in the scores next to it. More specifically, the failure rates between 1 and 2, 10 and 11, 11 and 12, and 12 and 13 do not differ from one another to a statistically significant degree ($p > 0.01$). Such a finding is not unusual and usually leads to the creation of risk categories. Even so, the information in Figure 2e indicates that it might be beneficial to use the risk scores when reporting normative information on the PTRA or increase the total number of categories beyond the current number of risk categories on the PTRA.

TABLE 1.
Sample Characteristics

Variable	N	%
Sex		
Male	82,295	71.68
Female	32,508	28.32
Missing	24	0.02
Race		
Asian	2,680	2.33
Black	34,141	29.73
Native American	3,984	3.47
Other	875	0.76
Pacific Islander	581	0.51
White	71,693	62.44
Missing	873	0.76
Hispanic Origin		
Yes	29,279	25.50
No	81,888	71.31
Missing	3,660	3.19
Offense Type		
Drug	40,169	34.98
Escape or Obstruction	1,040	0.91
Firearms	13,365	11.64
Immigration	8,658	7.54
Property	33,580	29.24
Public Order	4,416	3.85
Sex Offense	5,471	4.76
Other	2168	1.89
Violence	5,597	4.87
Missing	363	0.32
Offense Class		
Felony	104,838	91.30
Misdemeanor	9,624	8.38
Missing	365	0.32
PTRA Category		
I	33,144	28.86
II	28,690	24.99
III	31,215	27.18
IV	16,538	14.40
V	5,240	4.56
FTA/Abscond	1,888	1.64
Arrest Any Offense	9,340	8.13
Arrest Violent Offense	1,765	1.54
Revoked	12,308	10.72
Any Adverse Event	18,976	16.53
PTRA Score	6.13	2.62
Age	38.00	13.15

TABLE 2.
Predictive Validity of the PTRA for Five Outcomes

Outcome	N	AUCROC	Lower	Upper
FTA/Absconding	114,827	0.706	0.689	0.723
Arrest for Any Offense	114,827	0.675	0.666	0.684
Arrest for Violent Offense	114,827	0.680	0.661	0.699
Revocation	114,827	0.713	0.705	0.720
Any Adverse Event	114,827	0.707	0.701	0.713

Preliminary PTRA Revision Analysis

While the current data indicates that the PTRA is still valid in predicting pretrial outcomes, we conducted additional analyses to explore a revision to the PTRA. The additional analyses had two goals: the first was to improve accuracy, and the second was to address the field's concerns about the content of the PTRA (such as that it lacks complete coverage of the 3142(g) factors).

Currently, the PTRA generates one risk score representing a risk category associated with the likelihood of pretrial failure (Cadigan et al., 2012), which is defined in several ways. Following the work of VanNostrand & Lowenkamp (Laura & John Arnold Foundation, 2014), we conducted additional analyses to explore the potential for three scores to better inform pretrial decision-making (we refer to this as a "major revision"). The analyses determined that it is, in fact, possible, based on available data, to create three separate scores to specifically assess the risk of failure to appear, the risk of new criminal arrest for any offense, and the risk of dangerousness (as defined by a new arrest for a violent, weapons, sex, or drug trafficking offense). The FTA scale included 13 factors,[4]

[4] The FTA scale factors included age, criminal justice status, drugs used, class of offense (Class A or B

the dangerousness scale (defined as an arrest for a violent, weapons, sex offense or trafficking in drugs) included 19 factors,[5] and the scale predicting an arrest for a non-dangerous offense included 14 factors.[6] The AUC-ROC values for each scale were 0.68, 0.74, and 0.71 for FTA, arrest for a dangerous offense, and arrest for a non-dangerous offense, respectively. These values are slightly higher than the AUC-ROC values that are generated with the existing PTRA; however, these scales require the scoring of additional factors not currently on the PTRA.

Given the significant increase in the number of factors[7] to create the three scales, we also attempted to create a revised PTRA that addresses some of the concerns about the original PTRA (such as that the PTRA was not developed to predict violence or dangerousness specifically), but that maintained its relative brevity (we refer to this as a "minor revision"). Specifically, in addition to eight items included in the current PTRA,[8] we added the following: prior felony violent convictions, age at first arrest for a violent offense, criminal justice status at arrest or prior arrest while on supervision, Class A or B felony offense, if the defendant was under supervision at the time of the offense, and total number of felony counts in the current offense. This exercise proved somewhat successful, too, as we were able to generate AUC-ROC values in the good to excellent range for each outcome of interest by changing the weighting of the current PTRA factors, eliminating some, and then adding a small number of additional factors related to predicting arrests for new criminal offenses (both dangerous and non-dangerous). Thus, with these items, we were able to predict outcomes (FTA, likelihood of committing a dangerous offense, and likelihood of committing a non-dangerous offense) with the same level of accuracy as in the major revision.

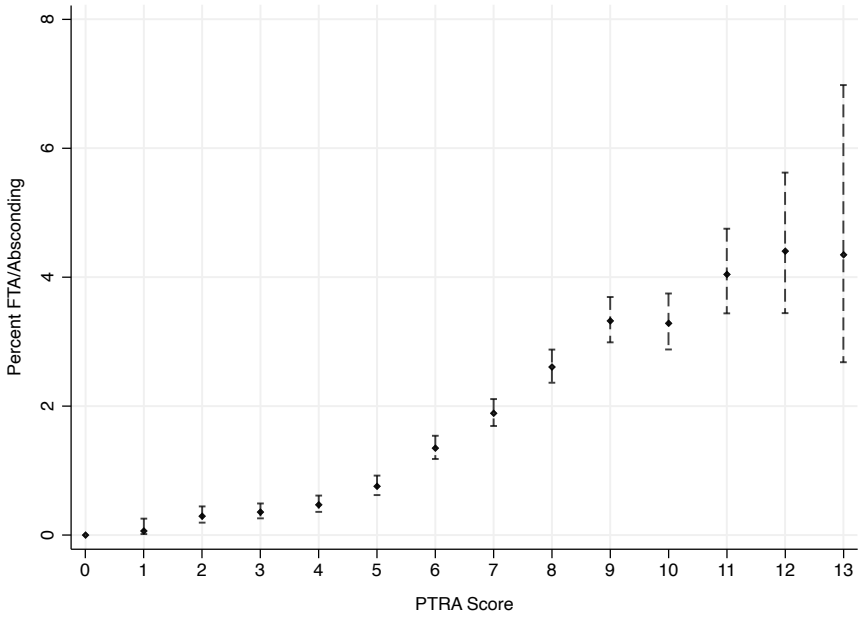
In summary, the analyses we conducted provided some promising results. First, the original PTRA remains a valid predictor of pretrial outcomes of interest. Second, while the difference in failure rates across risk categories might not be large, the differences for some outcomes are statistically significant, and the failure rates at the limits of the scale likely provide some meaningful information for practice. Third, for non-violent offense, revocation, and the combined measure, any adverse event, the failure rates across categories are statistically significant and practically meaningful. Sometimes the failure rates on these outcomes across *individual PTRA scores* are practically and statistically significant. This finding might provide some guidance as we continue to consider how to best present risk assessment results to maximize use by officers and other stakeholders.

The additional analyses related to developing a PTRA revision also provided promising results. First, by creating new scales sensitive to each of the individual outcomes of interest,

TABLE 3.
Failure Rates by Risk Category for Five Outcomes

PTRA Category	N	FTA/ Abscond	Arrest Any Offense	Arrest Violent Offense	Revoked	Any Adverse Event
I	33,144	0.35	2.95	0.49	2.54	5.01
II	28,690	1.08	6.24	1.09	7.74	12.44
III	31,215	2.23	10.24	1.99	14.38	21.55
IV	16,538	3.31	14.9	2.91	20.84	30.86
V	5,240	4.16	17.44	3.61	24.96	36.55
All	114,827	1.64	8.13	1.54	10.72	16.53
AUC-ROC Full Score	114,827	0.706	0.675	0.680	0.705	0.701

FIGURE 2a.
FTA/Absconsion Rate by PTRA Score



felony), offense type, prior non-dangerous offense, residential status, education status, employment status, prior failure to appear, pending charges, substance abuse history, and citizenship.

[5] The dangerousness scale factors included age, age at first arrest, criminal justice status, criminal activity while under supervision, criminal associations, current drug offense, current or past child victim, current dangerous offense, felony charge, history of weapon use, pattern of similar activity, prior dangerous offense, residential status, employment status, pending charges, substance abuse history, safety concerns for a person, time arrest-free, and violent behavior history.

[6] The non-dangerous arrest scale factors included age, age at first arrest, criminal justice status, criminal activity while under supervision, criminal associations, current offense type, prior felony counts, pattern of similar activity, residential status, prior convictions, pending charges, substance abuse history, time arrest-free, and prior failures to appear.

[7] From 11 in the current PTRA to 32 unique factors in the major revision.

[8] The PTRA items included in the minor revision were number of felony convictions, prior failures to appear, pending felonies or misdemeanors, current offense type, age, educational attainment, residential status, and citizenship status.

we increased accuracy in predicting arrest for a dangerous offense and for a non-dangerous offense. Second, we could maintain most of the increase in predictive accuracy even when reducing the number of factors in the "major" revision (i.e., the minor revision). Third, with both the major and minor revisions, we are able to address some of the concerns officers have expressed about the coverage of the 3142(g) factors in the PTRA and the prediction of dangerousness.

Directions Forward

This study revalidated the original PTRA, demonstrating that it remains a valid risk assessment instrument for pretrial decision-making. Additionally, an expanded analysis of the PTRA was conducted to identify additional factors that can be incorporated into it to assist not only federal pretrial services officers but potentially judicial officers in pretrial decision-making. It should be noted that the potential revisions contained in this manuscript are examples of possible directions to take in revising the PTRA. Ultimately, the decision to revise the PTRA and the exact direction any revisions take will depend, to some degree, on input from the field.

FIGURE 2b.
Arrest Rate for Any Offense by PTRA Score

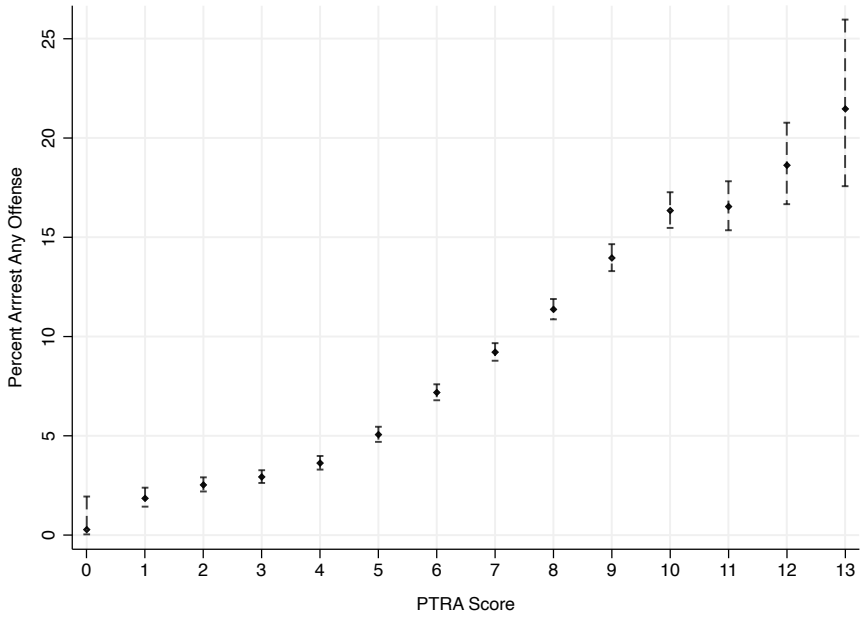
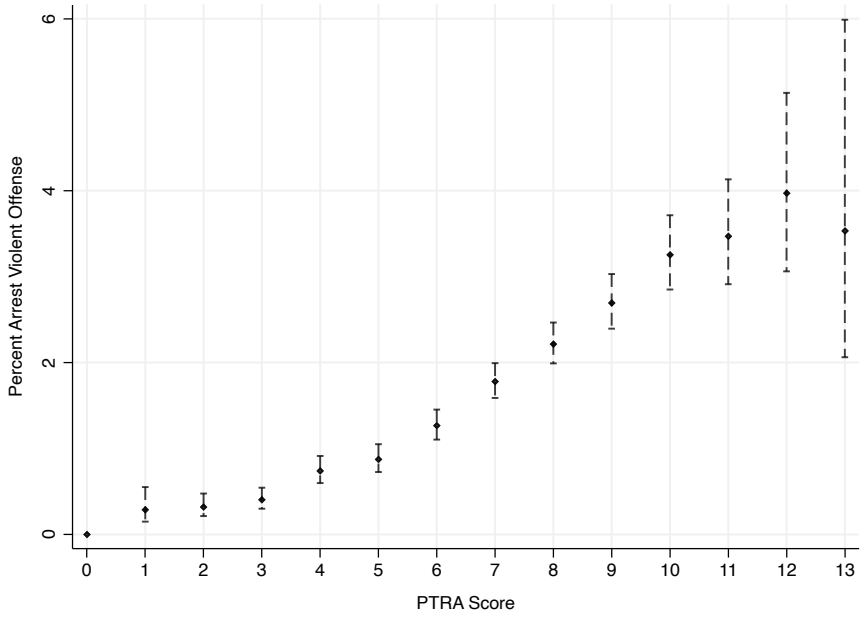


FIGURE 2c.
Arrest Rate for Violent Offense by PTRA Score



Expanding the Use of PTRA for Officers

Over the years, pretrial services officers have hesitated to accept the PTRA as part of their decision-making process (Cohen et al., 2018). Pretrial risk assessments, including the PTRA, have been regarded as a favorable method to address pretrial concerns associated with pretrial decision-making and have been shown to continuously demonstrate good to excellent predictive accuracy (Desmarais et al., 2022; Cohen et al., 2018). Simulation studies relying on actuarial risk assessment to shape pretrial decision-making have demonstrated increased release rates with no impact on public safety (Kleinberg et al., 2017; Montoya et al., 2024), benefits that accrue disproportionately to Black defendants, and large reductions in detention costs while maintaining public safety (Montoya et al., 2024). As such, efforts must continue to advance the consistent use of the PTRA. Thus, if incorporating the expanded factors outlined above into the PTRA could increase officers' feelings of ease in recommending release, PPSO should construct an updated PTRA that incorporates those items.

Additionally, while this study has primarily focused on pretrial decision-making as a function of pretrial investigative work, it is also important to address pretrial supervision, another statutory duty of pretrial services officers, as another critical component in the mission of pretrial services to reduce unnecessary detention. As previously noted, when policymakers and other stakeholders were assessing the value of pretrial services to the criminal justice process following the study of the 10 pretrial services demonstration agencies, the stakeholders clearly indicated that the ability of pretrial services to supervise pretrial defendants on pretrial release was also critical to judges feeling confident in releasing defendants on bail (Wanger, 1987). Thus, one primary purpose of the Pretrial Services Act of 1982 was to increase release rates by placing defendants who would be detained into pretrial supervision programs (Cohen & Austin, 2018). As a result, there have been significant increases in the number of defendants on federal pretrial supervision.[9]

[9] According to Table H-7 of the Federal Pretrial Services Statistical Tables for the Federal Judiciary,

While there are growing numbers of studies of pretrial risk assessments to assist with the initial release decision, there are fewer studies that evaluate the use of risk assessment to inform pretrial supervision, even though nearly half of all local jurisdictions report using pretrial supervision as a component of pretrial reform (Lowder & Foudray, 2021). Research has found issues with decision-making regarding pretrial release and court-ordered conditions (Zettler et al., 2022). Further, pretrial agencies do not always approach work following the risk principle (Lowder & Foudray, 2021). A concern exists regarding the use of pretrial supervision and conditions, because conditions expose defendants to pretrial detention based on revocation of pretrial release for noncompliance (Bechtel et al., 2022; Bechtel et al., this volume), and studies have shown[10] consequences for revocation of pretrial release, including longer imprisonment sentences (Oleson et al., 2014).

Pretrial risk assessment tools may assist with the appropriate level and type of supervision (Lowder & Foudray, 2021). For example, when applying the PTRA, a "category one [can be] associated with release with no conditions, while the remaining four categories propose gradually increasing supervision intensity" (Bechtel et al., 2022). The analysis presented in this report has shown that, at least initially, the PTRA may be a reliable tool to assist federal pretrial officers with pretrial supervision. Thus, future efforts to inform pretrial decision-making should continue to include attention to supervision while on pretrial release.

Expanding the Use of PTRA: A Tool for Judges?

To date, there is no known actuarial risk assessment tool for federal judges engaging in pretrial decision-making. Instead, judges are directed under Section 3142(g) of Title 18 of the United States Code to consider several factors not necessarily established in the literature correlating with the risk of pretrial failure. Specifically, under the statute, judicial officers are ordered to consider the nature and circumstances of the offense, including whether the offense is a crime of violence, a violation of section 1591, a federal crime of terrorism, or involves a minor victim or controlled substance, firearm, explosive, or destructive device; the weight of the evidence against the person; the history and characteristics of the person, including the person's character, physical and mental condition, family ties, employment, financial resources, length of residence in the community, community ties, past conduct, history relating to drug or alcohol abuse, criminal history, and record concerning appearances at court proceedings and whether, at the time of the current offense or arrest, the person was on probation, parole, or other release pending trial, sentencing, appeal, or completion of sentence for an offense under federal, state, or local law; and the nature and seriousness of the danger to any person or the community that would be posed by the person's release. As a result of this statutory obligation, judges have expressed concerns about considering the PTRA in

FIGURE 2d.
Revocation Rate by PTRA Score

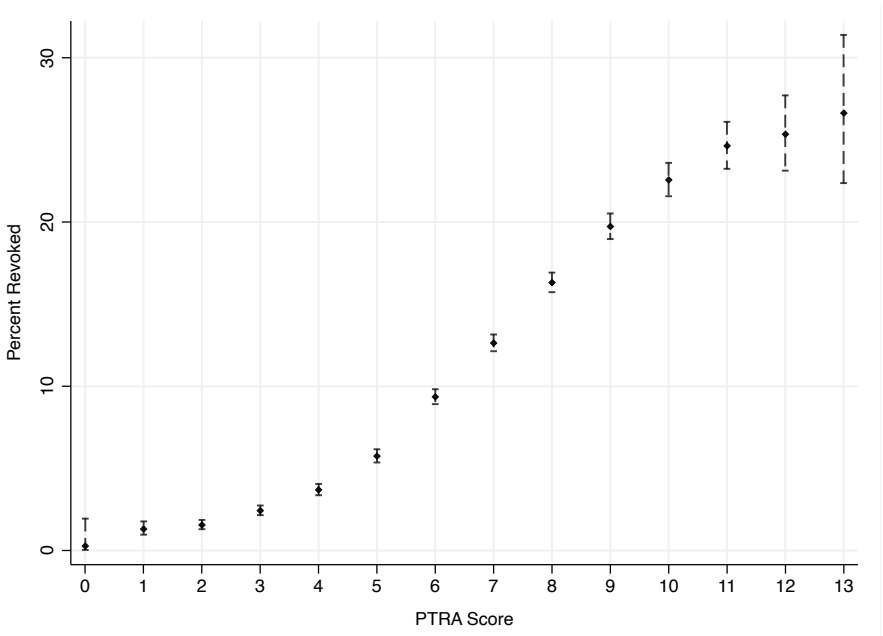
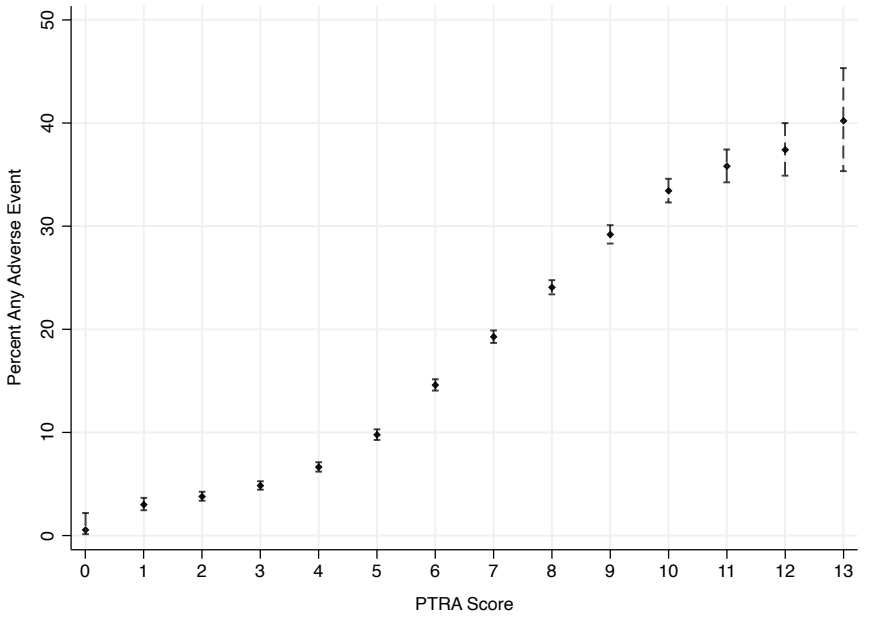


FIGURE 2e.
Rate of Any Adverse Event by PTRA Score



the 12-month period ending March 31, 2024 reflects 28, 566 defendants were under pretrial supervision.

[10] The federal risk principle outlines that low-risk defendants are most likely to succeed if released pretrial, and alternatives to detention are most appropriate for moderate- to high-risk pretrial defendants (VanNostrand & Keebler, 2009).

judicial decision-making, because it does not address all the required statutory factors. Though recent studies have shown minimal impacts on release rates, others have documented that when judges use risk assessment results in pretrial decision-making, pretrial release rates sometimes increase (Bechtel et al., 2024; Desmarais et al., 2022). While preliminary analyses in this study indicated the possibility of including a larger set of the factors listed in 3142(g), if there is interest in providing judges with the results of an actuarial risk assessment that covers most, if not all, of the factors they are directed to consider in making pretrial release decisions, then additional analysis will be required. Even so, based on the preliminary research conducted here, it appears such an endeavor, from a statistical standpoint, might be fruitful.

Conclusion and Implications

The current study sought to examine the PTRA's continued validity and to identify potential additions that can be made to expand the use of the PTRA in hopes of achieving better outcomes in the federal pretrial services system. Findings from this analysis show that the PTRA continues to perform well in predicting pretrial outcomes. Additional analysis relating to revising the PTRA identified the potential to revise the PTRA, increasing its accuracy in predicting specific outcomes related to new criminal behavior, and expanding the use of the PTRA to assist judges in pretrial decision-making. Finally, the revisions could also address continued concerns expressed by officers relating to the content of the original PTRA and the weighting of factors.

Recent research has emphasized that the recommendations of pretrial services officers are strongly correlated with judicial release decisions (Skeem et al., 2023). Yet, over the past several years, the federal pretrial services system has seen steady increases in the national detention rate and has tried to identify possible explanations for these trends (Cohen et al., 2018; Austin, 2017). The analysis in this report supports the contention that officers can rely on the PTRA in its current version when making pretrial decisions. Such reliance on the PTRA could dramatically improve federal detention outcomes through improved rates of recommendations for release by pretrial services officers without compromising public safety (Montoya et al., 2024). As a result, any immediate action taken should focus on policy revisions that improve officer reliance on the PTRA.

The analysis also presents several ways that PPSO has begun exploring revisions and expanded uses of the PTRA. The discussion and review of the extant literature on pretrial risk assessment demonstrates that the PTRA not only can assist officers in initial decision-making but may also assist officers in decision-making associated with pretrial supervision, such as the need to modify excessive conditions of supervision placed on low-risk defendants. The analysis contained in this paper indicates that future revisions could expand the tool to include factors that are relevant to judicial officers in the decision-making process, which may increase the use of this instrument and the rate at which risk-informed decisions are made.

References

Angelova, V., Dobbie, W., & Yang, C. (2022). Algorithmic recommendations and human discretion. *National Bureau of Economic Research*, Working Papers 31747.

Austin, A. (2017). The presumption for detention statute's relationship to release rates. *Federal Probation, 81*(2), 52-63. Retrieved from https://www.proquest.com/trade-journals/presumption-detention-statutes-relationship/docview/1967286333/se-2

Austin, A., Hoffer-Valdez, S., & Lowenkamp, C.T. (2024). The presumption for detention statute's relationship to release rates: A replication and extension. *Federal Probation, this volume*.

Bechtel, K., Connor, T., & Lowenkamp, C. (2022). Pretrial supervision: Race and revocation. *Federal Probation, 86*(3), 35-42. Retrieved from https://www.proquest.com/trade-journals/pretrial-supervision-race-revocation/docview/2811283292/se-2

Bechtel, K., Cohen, T., Holsinger, A., Lowenkamp, C., & Robinson, C. (2024). Evidence over imitation: Developing research-informed strategies for pretrial decision-making. *Federal Probation,* this volume.

Cadigan, T. P., Johnson, J. L., & Lowenkamp, C. T. (2012). The re-validation of the federal pretrial services risk assessment (PTRA). *Federal Probation, 76*(2), 3-9,56. Retrieved from https://www.proquest.com/trade-journals/re-validation-federal-pretrial-services-risk/docview/1223859841/se-2

Cadigan, T. P. (2007). Pretrial services in the federal system: Impact of the Pretrial Services Act of 1982. *Federal Probation, 71*(2), 10-15,39. Retrieved from https://www.proquest.com/trade-journals/pretrial-services-federal-system-impact-act-1982/docview/213980308/se-2

Cadigan, T. P., & Lowenkamp, C. T. (2011). Implementing risk assessment in the federal pretrial services system. *Federal Probation, 75*(2), 30–34. https://www.uscourts.gov/sites/default/files/75_2_5_0.pdf

Cohen, T. H., & Austin, A. (2018). Examining federal pretrial release trends over the last decade. *Federal Probation, 82*(2), 3-12,56. Retrieved from https://www.proquest.com/trade-journals/examining-federal-pretrial-release-trends-over/docview/2167707999/se-2

Cohen, T. H., & Lowenkamp, C. T. (2019). Re-validation of the federal PTRA: Testing the PTRA for predictive biases. *Criminal Justice and Behavior.*, *46*(2), 234–260. https://doi.org/10.1177/0093854818810315

Cohen, T. H., Lowenkamp, C. T., & Hicks, W. E. (2018). Revalidating the federal pretrial risk assessment instrument (PTRA): A research summary. *Federal Probation, 82*(2), 23-29,56. Retrieved from https://www.proquest.com/trade-journals/revalidating-federal-pretrial-risk-assessment/docview/2167709366/se-2

Desmarais, S. L., Monahan, J., & Austin, J. (2022). The empirical case for pretrial risk assessment instruments. *Criminal Justice and Behavior*, *49*(6), 807–816. https://doi.org/10.1177/00938548211041651

Desmarais, S. L., Zottola, S. A., Duhart Clarke, S. E., & Lowder, E. M. (2021). Predictive validity of pretrial risk assessments: A systematic review of the literature. *Criminal Justice and Behavior*, *48*(4), 398–420. https://doi.org/10.1177/0093854820932959

Kleinberg, J., Lakkaraju, H., Leskovec, J., Ludwig, J., & Mullainathan, S. (2017). Human decisions and machine predictions. *The Quarterly Journal of Economics, President and Fellows of Harvard College*, 133(1), 237-293.

Laura & John Arnold Foundation. (2014). Developing a National Model for Pretrial Risk Assessment. https://craftmediabucket.s3.amazonaws.com/uploads/PDFs/LJAF-research-summary_PSA-Court_4_1.pdf

Lowder, E. M., Diaz, C. L., Grommon, E., et al. (2023). Differential prediction and disparate impact of pretrial risk assessments in practice: a multi-site evaluation. *J Exp Criminol* 19, 561–594. https://doi.org/10.1007/s11292-021-09492-9

Lowder, E. M., & Foudray, C. M. A. (2021). Use of risk assessments in pretrial supervision decision-making and associated outcomes. *Crime & Delinquency, 67*(11), 1765-1791. https://doi.org/10.1177/00111287211022642

Lowenkamp, C. T., Pratt, T. C., & Holsinger, A. M. (2023). Do office reviews in the federal probation and pretrial services system do what they were intended to do? Not yet. *Federal Probation Journal, 87*(2), 3-6. https://www.uscourts.gov/sites/default/

files/87_2_1.pdf

Lowenkamp, C. T., Lemke, R., & Latessa, E. (2008). The development and validation of a pretrial screening tool. *Federal Probation Journal, 72*(3), 1-16. https://www.uscourts.gov/sites/default/files/fed_probation_dec_2008.pdf

Lowenkamp, C. T., & Whetzel, J. (2009). The development of an actuarial risk assessment instrument for U.S. pretrial services. *Federal Probation, 73*(2), 33-36,56. Retrieved from https://www.proquest.com/trade-journals/development-actuarial-risk-assessment-instrument/docview/213979977/se-2

McCoy, C. (2007). Caleb was right: Pretrial decisions determine mostly everything. *Berkeley Journal of Criminal Law, 12*(2): 135-150.

Montoya, L. M., Skeem, J. L., & Lowenkamp, C. T. (2024). A pretrial policy based on risk assessment would reduce unnecessary incarceration, increase racial fairness, and save money. Unpublished manuscript. UNC, Chapel Hill.

Oleson, J. C., Lowenkamp, C. T., Cadigan, T. P., VanNostrand, M., & Wooldredge, J. (2014). The effect of pretrial detention on sentencing in two federal districts. *Justice Quarterly*, *33*(6), 1103–1122. https://doi.org/10.1080/07418825.2014.959035

Oleson, J. C., Lowenkamp, C. T., Wooldredge, J., VanNostrand, M., & Cadigan, T. P. (2017). The sentencing consequences of federal pretrial supervision. *Crime & Delinquency, 63*(3), 313-333. https://doi.org/10.1177/0011128714551406

Rowland, M. G. (2018). The rising federal pretrial detention rate, in context. *Federal Probation, 82*(2), 13-22,56. Retrieved from https://www.proquest.com/trade-journals/rising-federal-pretrial-detention-rate-context/docview/2167704746/se-2

Skeem, J., Montoya, L., & Lowenkamp, C. (2023). Understanding racial disparities in pretrial detention recommendations to shape policy reform. *Criminology & Public Policy, 22*(2), 233-262. https://doi.org/10.1111/1745-9133.12620

St. Louis, S. (2023). The pretrial detention penalty: A systematic review and meta-analysis of pretrial detention and case outcomes, *Justice Quarterly*, DOI: 10.1080/07418825.2023.219362

Valdez Hoffer, S. (2018). Federal pretrial release and the detention reduction outreach program. *Federal Probation, 82*(2), 46-49,56. https://www.proquest.com/trade-journals/federal-pretrial-release-detention-reduction/docview/2167697522/se-2

VanNostrand, M., & Keebler, G. (2009). Pretrial risk assessment in the federal court. *Federal Probation, 73*(2), 3-29. https://www.uscourts.gov/sites/default/files/73_2_1_0.pdf

Wanger, B. K. (1987). Limiting preventative detention through conditional release: The unfulfilled promise of the 1982 Pretrial Services Act. *Yale Law Journal, 97*(2), 320-340. https://openyls.law.yale.edu/bitstream/handle/20.500.13051/16519/22_97YaleLJ320_December1987_.pdf?sequence=2&isAllowed=y

Whetzel, J., & Lowenkamp, C. T. (2009). The development of an actuarial risk assessment for U.S. pretrial services. *Federal Probation 73*(2). https://www.uscourts.gov/federal-probation-journal/2009/09/development-actuarial-risk-assessment-us-pretrial-services

Zettler, H. R., & Martin, K. D. (2022). Technical violations and their effects on pretrial/bond supervision outcomes. *Criminal Justice and Behavior, 49*(12), 1763-1778. https://doi.org/10.1177/00938548221104021

Zottola, S. A., Duhart Clarke, S. E., & Desmarais, S. L. (2021). Bail reform in the United States: The what, why, and how of third wave efforts. In *Handbook of issues in criminal justice reform in the United States* (pp. 143–169). Springer, https://doi.org/10.1007/978-3-030-77565-0_9

Racial Disparity in Federal Pretrial Detention Recommendations: Trends Over Two Decades and Association with Risk Assessment Implementation[1]

Christopher Lowenkamp[2]
Jennifer Skeem[3]
Lina Montoya[4]

PRETRIAL REFORM HAS become an urgent matter in the U.S. Jails have become a "modern epicenter of incarceration" in this country, largely because of stunning growth in the population of unconvicted people who are held in jail while awaiting their trial (Garrett, 2022). The federal pretrial detention rate has grown at a steady but staggering pace over the past several decades—so that over two-thirds of all federal defendants are now detained (Administrative Office of the U.S. Courts, 2024; Rowland, 2018). As Judge Carr (2017) observed, pretrial detention "really matters" in the federal system because the pretrial period is uniquely lengthy, often lasting twelve months or more. There is evidence that pretrial detention causes worse outcomes for defendants and society, including higher chances of a guilty plea, a carceral sentence, future unemployment, and future offending (Dobbie et al., 2018; Gupta et al., 2016; Koppel et al., 2022; Lowenkamp, 2022). These burdens disproportionately fall upon Black defendants and disadvantaged communities (Grossman et al., 2022; Skeem et al., 2023).

Role of Risk Assessment in Pretrial Reform

Over recent years, the federal judiciary has undertaken efforts "to ensure that defendants are not unnecessarily detained" (Administrative Office of the U.S. Courts, 2024). These efforts include greater use of risk assessment instruments (RAIs) in pretrial decision-making, to prioritize lower risk defendants for release. RAIs are data-based tools that assign scores to risk factors like age and criminal history to estimate the likelihood that the defendant will (re)offend or abscond before their case disposition. In the federal system, an RAI called the Pretrial Risk Assessment (PTRA; Lowenkamp & Whetzel, 2009) was developed for probation and pretrial officers to use when making recommendations about pretrial detention to magistrate judges. Whether magistrate judges consider the PTRA or not, they must evaluate the defendant's threat to public safety and chances of returning to court, because these are fundamental components of the pretrial decision (18 U.S. Code § 3142). Given substantial evidence that RAIs predict these outcomes more accurately than unaided human judgment (Goel et al., 2018), some scholars have argued that careful implementation of RAIs is key to achieving the elusive goal of reducing pretrial detention without compromising public safety (Desmarais et al., 2021; Reitz, 2020).

Concern that Risk Assessment Worsens Racial Disparities

However, there has been resistance to using RAIs as a foundation for pretrial reform. Some stakeholders oppose RAIs entirely, largely based on fears that they will worsen racial disparities in incarceration. The Pretrial Justice Institute (2020) even called for the abolition of all pretrial RAIs, arguing that they "are derived from data reflecting structural racism and institutional inequity" and that their use further "deepens the inequity."

Research has increasingly addressed this important concern, and produced no compelling evidence that using RAIs in pretrial decision-making would increase racial disparities in detention—particularly compared to the status quo of relying on unaided human judgment. Under the status quo, racial disparities in federal officers' decision-making are well-documented and strongly associated with practitioners' heavy reliance on criminal history (Skeem et al., 2023). Moreover, the results of a recent policy simulation suggest that replacing status quo federal pretrial decision-making with a PTRA-based release policy would substantially improve outcomes, *particularly* for Black defendants—who would experience a 39 percent reduction in detention, compared to 27.3 percent for White defendants (Montoya et al., 2024). Results of these federal

[1] Note: Views expressed in this article are those of the authors alone and do not reflect the official position of the Administrative Office of the U.S. Courts.

[2] Administrative Office of the U.S. Courts, Probation and Pretrial Services Office; and Center for Justice and Communities, School of Criminal Justice, University of Cincinnati.

[3] Goldman School of Public Policy, University of California, Berkeley.

[4] School of Data Science and Society & Gillings School of Global Public Health, University of North Carolina, Chapel Hill.

studies are consistent with the conclusions that Lawson et al. (2024) reached, based on their systematic review of 21 studies of the association between using RAIs and disparate impact by race or ethnicity. Although more rigorous research is needed, they said, the weight of the evidence indicated that using RAIs "can contribute to reductions in disparities" (p. 1).

Open Questions and Study Aims

RAIs like the PTRA continue to be widely used, even if they are controversial and officers or judges may "freely ignore" them when making pretrial decisions (Reitz, 2020). According to one advocacy group, 60 percent of the U.S. population lives in a jurisdiction that has adopted a pretrial RAI (Movement Alliance Project, 2024). Alongside wide use of RAIs in a variety of criminal justice contexts, evidence has begun to emerge that disparities in imprisonment between Black and White people have been *decreasing* over time—falling by an estimated 40 percent over the past two decades (Sabol & Johnson, 2022).

This raises important questions that can be addressed through analysis of federal pretrial data. How have racial disparities in pretrial decision-making changed over the past two decades? How has the implementation of the PTRA—which was first introduced in 2009—affected those trends in racial disparities over time? In the present study, we address such questions. We focus on federal pretrial and probation officers, who are responsible for implementing the PTRA and recommending that magistrate judges detain or release defendants. Officers' detention recommendations for detention strongly predict judicial detention decisions, with 87 percent rates of agreement (Skeem et al., 2022). Our study has two major aims:

1. To estimate the extent to which racial disparities in officers' pretrial detention recommendations decreased from 2004 to 2024.
2. To explore the extent to which two PTRA implementation events were associated with changes in the level and trend of racial disparities in officers' detention recommendations from 2004 to 2024. The implementation events were in (a) 2011, when the system-wide rate of completing PTRAs *before* defendant's hearings first surpassed 50 percent, and (b) 2014, when a new policy made PTRA completion part of officers' official workload credits and annual reporting.

This study is meant to characterize how racial bias in pretrial decision-making has shifted over time—and how those shifts relate to the use of an RAI. Does PTRA implementation "bake in bias," selectively worsening outcomes for Black defendants, as those who reject risk assessment claim? Or does PTRA implementation reduce bias, perhaps by structuring human decision-making, as advocates of risk assessment claim?

Method

Sample

The sample for this study comprises pretrial criminal case activations in the United States federal court system from fiscal year 2005 through the first half of fiscal year 2024. To permit comparison with prior results in this series (Montoya et al., 2024; Skeem et al., 2022, 2023), the dataset is restricted to non-Hispanic White and Black defendants. Observations were included only when a recommendation by pretrial services was present. These inclusion criteria yield a total of 653,643 observations. Data were aggregated based on the month of case activation to generate the requisite variables for further analyses.

Measures

Defendants' race was drawn from the Probation and Pretrial Services Automated Case Tracking System (PACTS), which combines official records and the defendant's self-report to record race. The official records include but are not limited to what is recorded in criminal history records provided by law enforcement agencies. When defendants reported a race that differed from official records, officers entered the defendant's self-reported race (see Skeem et al., 2023). For this study, race is categorized as non-Hispanic Black or non-Hispanic White.

The pretrial officer's recommendation for pretrial release or detention was also extracted from PACTS. Officers' recommendations are recorded in PACTS as "detain," "release," or "release with conditions." The two options for release were collapsed into one category, creating a binary variable with a release (with or without conditions) coded as 0 and detention coded as 1.

Additional data drawn from PACTS for supplemental analyses included binary variables that indicated whether the defendant was charged with a violent, firearms, or property offense, whether charges included a presumptive detention offense or possible presumptive detention offense, and whether the defendant was released or detained (for details, see Skeem et al., 2023). All measures were used to create measures representing the percentage of cases for each period (month).

Relative Risk Ratios

To operationalize racial disparities in pretrial detention recommendations, we calculated relative risk ratios—which are easily interpretable, with a value of 1.0 indicating parity in recommendation rates across racial groups, values less than 1.0 indicating that Black defendants are less likely than White defendants to be recommended for detention, and values greater than 1.0 indicating that Black defendants are more likely to be recommended for detention than their White counterparts. These ratios were calculated by dividing the proportion of Black defendants recommended for detention by the proportion of White defendants recommended for detention. After aggregating the data series at monthly intervals, risk ratios were generated for 234 total monthly observations. The average number of observations within months is 2793.34 (*SD* = 500.45, range 777-4024).

PTRA Implementation Events

The PTRA was first introduced in the federal system in 2009. We modeled two PTRA implementation events or "interventions"—one that marked the attainment of full pre-hearing implementation of the PTRA, and one that indicated when PTRA completion became part of officers' official workload. The first intervention was in October 2011, when rates of PTRA completion *before* a defendant's initial or detention hearing first exceeded 50 percent system-wide. We chose this benchmark based on the National Implementation Research Network's (2015) suggestion that a marker that full implementation has been achieved is when 50 percent or more of the staff use an innovation with fidelity. Because data on the proportion of staff reliably using the PTRA over time are unavailable, we used the rate at which the instrument was being administered *before* a defendant's initial or detention hearing. The proxy is reasonable, as it indicates the PTRA was available as a basis for pretrial decision-making at the defendant's hearing.

The second intervention we modeled was in July 2014, when administration of the PTRA became an official component of officers' workload reporting systemwide. Specifically, officers were instructed to begin reporting the time they spent completing the

PTRA as part of their workload credits, starting in July 2014 to calculate proper workload estimates for 2015. Officers have been recording their time and efforts spent in completing the PTRA annually since then.

Analytic Strategy

To estimate the historical trend of racial disparities in officers' pretrial detention recommendations (Aim 1), we employed a regression model, adjusting for autocorrelation using Newey-West standard errors, where the dependent variable was the bivariate risk ratio and the independent variable was time. To address Aim 2, we used interrupted time series analysis (ITSA). ITSA, a quasi-experimental research design, is particularly appropriate in cases where the effective sample size is one (N=1) and sufficient pre- and post-event or "intervention" observations are available (Linden, 2015). Our ITSA analyses included both PTRA implementation events or "interventions."

Results

Descriptive Statistics

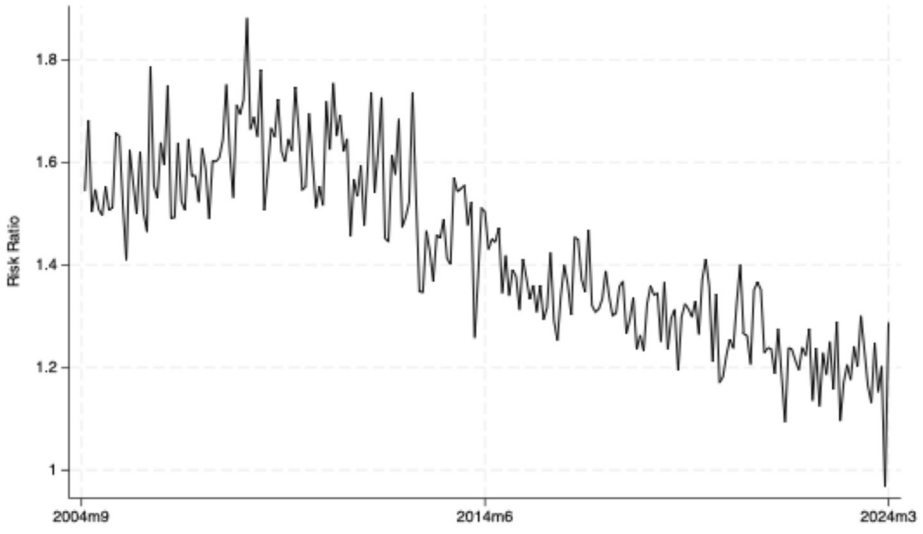
The final dataset includes 653,643 observations spread across 93 federal districts and almost 20 full years (from October 2004 through March 2024). Forty-eight percent of the sample is Black (n = 315,334), while the balance (52 percent or n = 338,309) is White. Defendants' average age is 37.61 years (*SD* = 12.08). Males comprise just over 82 percent of the sample and females just under 18 percent (n = 538,420 and 115,223, respectively). The sample's average PTRA score is 7.09 (*SD* = 2.79; data were available to compute these scores as early as 2004, even though PTRA was introduced in 2009). About 6 percent of the sample (n = 40,063) had charges where the charge could have been eligible for presumption detention.[5] Of the sample's current offenses, 24.0 percent, 18.6 percent, and 6.4 percent included property, firearms, or violent charges, respectively. The average risk ratio over the nearly two-decade study period was 1.43 (SD = 0.17).

[5] We used the percentage of cases that were possibly eligible for presumptive detention based on charge type. Austin (2017) refers to these cases as "wobblers," as the exact presumption status is unknown based on the charge alone. Further, Skeem et al. (2022) found that the percentage of "wobbler" cases was related to disparity while the percentage of confirmed presumption cases was unrelated to disparity.

TABLE 1.
Estimated Monthly Decrease in Racial Disparities in Officers' Pretrial Detention Recommendations, FY 2005-2024

Risk Ratio	Coefficient	Newey West standard error	*t*	*p*	95% CI Lower limit	95% CI Upper limit
Time	-0.0022	0.0002	-9.8200	0.0000	-0.0026	-0.0017
Constant	1.6844	0.0376	44.7800	0.0000	1.6103	1.7585

FIGURE 1.
Monthly Changes in Racial Disparities in Officers' Pretrial Detention Recommendations, FY 2005-2024



Aim 1: To What Extent Have Racial Disparities in Pretrial Detention Recommendations Decreased Over the Past Two Decades?

In Figure 1, monthly risk ratios are plotted across the observation period from 2004 to 2024. As shown there, racial disparities in officers' pretrial detention recommendations generally decreased.

To characterize this historical trend, we regressed time on risk ratios (see Analyses, above). As shown in Table 1, the starting point for the risk ratio in October 2004 is 1.68. This indicates that, in 2004, the probability of a detention recommendation was 68 percent higher for Black defendants than White defendants. Over the next two decades, the risk ratio decreased at an estimated rate of -0.002 per month. This translates to an estimated drop in the risk ratio of 0.026 (or 3.85 percent) per year and 0.5148 (or 75 percent) over the nearly two-decades-long series. By the end of the series in 2024, the estimated risk ratio was 1.17, or roughly one-quarter the size of the observed risk ratio in 2004.

As shown in Figure 1, the trend of racial disparities in officers' detention recommendations seems to shift around the middle of the time series—a period in which the PTRA was introduced to U.S. Probation and Pretrial Services. This leads to the next study aim, which focuses on the association between trends in racial disparities and PTRA implementation events.

Aim 2: To What Extent Are PTRA Implementation Events Associated with Changes in the Level and Trend of Racial Disparities in Officers' Detention Recommendations?

To address Aim 2, we completed an Interrupted Time Series Analysis (ITSA; see Analyses above). Table 2 reports the coefficients from the ITSA model investigating the impact of PTRA implementation events in (1) October 2011, when the system reached a 50 percent pre-hearing PTRA completion rate, and (2) July 2014, when the PTRA became part of the pretrial workload formula.

The model in Table 2 specifies an estimated starting risk ratio of 1.56. This indicates that at the beginning of the series in 2004, the probability of a detention recommendation was 56 percent higher for Black defendants than White defendants. The coefficient for Time

indicates that risk ratios slightly increased from the start of the series through the first PTRA implementation event.

The coefficient labeled "Impact at 2011m10" indicates there was a sizeable (-0.079) and statistically significant ($p<.05$) reduction in disparity at the first implementation event in October 2011, when PTRA completion prior to defendants' hearings reached 50 percent. After that event, the risk ratio continues to drop at the statistically significant rate of -0.005 per month (coefficient "Time after 2011m10").

The coefficient labeled "Impact at 2014m7" indicates that there was no significant additional reduction in disparity at the second implementation event in July 2014, when PTRA became part of officers' official reportable workload. The coefficient in the last row of Table 2 indicates that, after the second event, there is no significant additional monthly reduction in disparity.

These results are shown visually in Figure 2, which presents the observed or "actual" risk ratio values (dots) and the estimated or "predicted" risk ratios based on the ITSA analyses (solid black lines). Time is plotted by month and year along the x-axis, while racial disparity or the value of the risk ratio is plotted on the y-axis. The two vertical dashed lines mark the dates of the two PTRA implementation events (in 2011 and 2014).

Again, the estimated risk ratio is 1.56 at the beginning of our series. The solid black line from the beginning of the series to the first vertical dashed line represents the increase in disparity during this period that corresponds to the positive coefficient for "Time." The break between the first and second solid black line represents the first intervention's coefficient, "Impact at 2011m10" (-0.079). The second segment of the solid black line between the first and second vertical dashed lines represents the decrease in disparity between 2011 and 2014 associated with the coefficient "Time after 2011m10" (-0.005). The third segment of the solid black line from the second vertical dashed line to the end of the series represents the second intervention's nonsignificant drop in disparity and nonsignificant slope after that event.

In summary, ITSA results suggest that the first PTRA Implementation event in 2011 was associated with both a significant drop in racial disparities in officers' detention recommendations—and a significant rate of decrease in disparity through the second PTRA implementation event in 2014, when no additional significant changes were observed.

Supplemental Analyses

To ensure that ITSA results were robust, we analyzed the data using alternative models. First, we estimated an additional ITSA model that controlled for potential confounds, including the detention rate (which is inversely associated with racial disparities; see Skeem et al., 2023) and the proportion of cases with a violent charge, a firearms charge, a presumptive detention charge, and a possible presumptive detention charge. Although this adjusted model showed a slightly better fit to the data (AIC difference = 5.833), the parameter estimates for the variables of interest were substantively similar to those in the original model, and there were no differences between the two models in terms of statistical significance for implementation event coefficients.

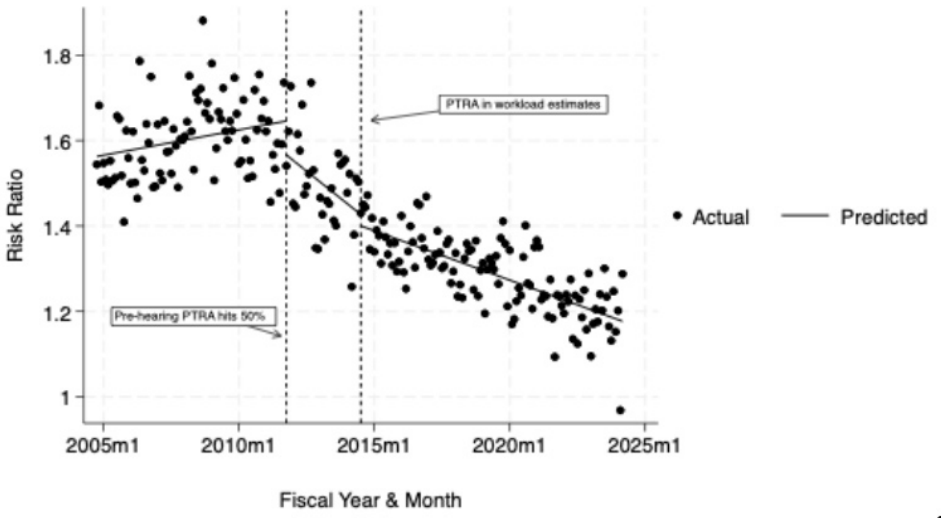
Second, we estimated causal ARIMA models using the CausalArima library in R (see Menchetti, Cipollini, & Meali, 2021). Because the CausalArima library does not allow for multiple "interventions," we analyzed each of the two implementation events separately (one model used October 2011; the other used July 2014 instead). Before analyzing the second implementation event in 2014, we truncated the dataset to include only those data points after the first intervention event in 2011. While estimating ARIMA models, we controlled for the detention rate and the proportion of cases charged with each of the four charges listed above.

Results for the first implementation event in October 2011, i.e., reaching a 50 percent pre-hearing PTRA completion rate, yielded a temporal average association of -0.303 (SE = 0.007; $p < 0.05$). This effect is generally consistent with the total reduction in estimated starting and ending risk ratios from the ITSA model (1.562 to 1.177; total reduction 0.385). Results for this second event, i.e., making the

TABLE 2.
Estimated Impact of PTRA Implementation Events in 2011 and 2014 on Trends in Racial Disparities in Officers' Pretrial Detention Recommendations, FY 2005-2024

Risk Ratio	Coefficient	Newey West standard error	z	p	95% CI Lower limit	95% CI Upper limit
Time	0.001	0.000	2.570	0.010	0.000	0.002
Impact at 2011m10	-0.079	0.040	-2.010	0.045	-0.157	-0.002
Time after 2011m10	-0.005	0.002	-2.900	0.004	-0.009	-0.002
Impact at 2014m7	-0.027	0.034	-0.770	0.442	-0.094	0.041
Time after 2014m7	0.002	0.002	1.300	0.193	-0.001	0.006
Constant	1.563	0.018	87.930	0.000	1.528	1.597

FIGURE 2.
Estimated Association between 2011 & 2014 PTRA Implementation Events, and Trends in Racial Disparities for Officers' Pretrial Detention Recommendations from FY 2005 to FY 2024



PTRA part of officers' workload, indicated that there was no significant effect at the time of that event (July 2014), but there was a significant temporal average decrease of -0.163 (SE = 0.009; $p < 0.05$) during the 2011-2014 observation period. Together, this set of supplemental analyses lend confidence in the main set of results for Aim 2 presented earlier.

Discussion

Pretrial reform is crucial, given the human and fiscal cost of holding an enormous number of unconvicted people in jail while they await trial. Reform is particularly essential in the federal system, where over two-thirds of defendants are detained and the average length of pretrial detention is just short of one year (Administrative Office of the U.S. Courts, 2023). Although risk assessment instruments like the PTRA can help reduce unnecessary detention by prioritizing lower-risk defendants for release, policymakers and practitioners often perceive them as biased and fear their use will exacerbate racial disparities in incarceration. In the present study, we used federal data on over 650,000 cases to examine changes in racial disparities in pretrial detention recommendations from 2004 to 2024—focusing on the potential impact of key PTRA implementation events in 2011 and 2014.

Our findings may be organized into two major points. First, racial disparities in officers' detention recommendations have decreased significantly over the past two decades, i.e., by 75 percent. It is important to recognize that the magnitude of racial disparities varies substantially, from district to district (Skeem et al., 2022). Nevertheless, system-wide, the relative risk ratio dropped from 1.68 in 2004, to 1.17 in 2024. Today, the overall probability of a detention recommendation is 17 percent (not 68 percent) higher for Black defendants than White defendants. This finding is consistent with results of the Council on Criminal Justice's recent analyses (Sabol & Johnson, 2022), which indicate that the disparity between Black and White state imprisonment rates fell by 40 percent between 2000 and 2020. The overall imprisonment disparity ratio decreased from 8.2 to 4.9, while the prison admission disparity decreased from 7.4 to 3.2 (Sabol & Johnson, 2022). Although racial disparity remains a concern, these decreases over recent decades are welcome news.

Second, we found that PTRA implementation predicted a significant decrease in the level and trend of racial disparities in officers' detention recommendations over time. The PTRA reached a marker of full pre-hearing implementation in 2011, and then became part of officers' official reported workload in 2014. As shown in Figure 2, the marker of full pre-hearing PTRA implementation in 2011 was associated with a significant drop in the level of racial disparities in officers' detention recommendations, followed by an accelerated rate of decrease after that drop. The estimated risk ratio in the month prior to October, 2011, was 1.643 and dropped by 12 percent to 1.561 the following month. The accelerated rate of decrease across the span of the time series ended with a risk ratio of 1.176, a decrease of roughly 68 percent from the risk ratio in October 2011 (1.561). There were no additional significant changes in the level or slope of racial disparities when the PTRA became part of officers' workload reporting in 2014.

The association between the marker for achieving full pre-hearing PTRA implementation and the subsequent drop in racial disparities was robust across supplemental analyses that controlled for potential confounds like detention rates. Detention rates have increased over time in the federal system and are inversely associated with racial disparities in detention (see Skeem et al., 2023). Nevertheless, after controlling for detention rates and other key variables like "presumptive detention" offenses, the PTRA full implementation marker was meaningfully associated with a reduction in the level and slope of racial disparities.

Although this association is robust across analytic approaches, it should not be taken as evidence that PTRA implementation *caused* racial disparities in officers' detention recommendations to drop. The association *might* signal a causal effect: perhaps PTRA implementation reduced racial disparities in officers' detention recommendations by structuring their decision-making in a manner that reduced heavy reliance on criminal history and the influence of implicit bias (see Skeem et al., 2023). But we cannot draw causal inferences from this study. Racial disparities in detention are determined both by decision-making biases throughout the criminal justice system (differential selection), and by differential participation in criminal behavior (see Sabol & Johnson, 2022). Although we controlled for offense characteristics in our supplemental analyses, this study focuses on a single decision-point and is observational. Because the PTRA was rolled out system-wide, there is no control group. We could not identify districts that matched one another well enough to compare "PTRA high implementation" versus "PTRA low implementation" groups, so we cannot draw conclusions about the causal effect of PTRA implementation on racial disparities in officers' detention recommendations.

Nevertheless, this study indicates that a marker of achieving full pre-hearing PTRA implementation in October 2011 robustly predicted both a drop in racial disparities in detention recommendations and a subsequent decrease over time. This finding is broadly consistent with results of our recent policy simulation, which suggested that replacing status quo pretrial detention decisions with a PTRA-based release policy would improve outcomes, *particularly* for Black defendants (Montoya et al., 2024). But the present study's results are grounded in practice—they indicate that PTRA implementation was associated with reduced bias in status quo human decision-making, or greater racial parity in officers' detention recommendations over time. Given that officers and magistrate judges make pretrial decisions (not the PTRA), these results are encouraging.

These results are also consistent with the results of most other studies that have examined whether risk assessment instruments (RAIs) increase disparate impact by comparing outcomes before and after RAIs have been adopted (Lawson et al., 2024). The consistency of this finding across jurisdictions and across methodological approaches should mitigate concerns about relying on risk assessment as a foundation for pretrial reform.

Over the past two decades, racial disparity in officers' detention recommendations has been decreasing. But intensified efforts are needed to slow the ever-increasing rate of pretrial detention in the federal system. The PTRA can help prioritize low-risk defendants for release, so detention rates can be decreased without compromising community safety.

References

18 U.S. Code § 3142—Release or detention of a defendant pending trial. (n.d.). LII / Legal Information Institute. Retrieved January 18, 2024, from https://www.law.cornell.edu/uscode/text/18/3142

Administrative Office of the U.S. Courts. (2023). Table H9 - Pretrial Services Detention Summary. https://www.uscourts.gov/sites/default/files/data_tables/jb_h9a_0930.2023.pdf.

Administrative Office of the U.S. Courts. (2024). *Pretrial Release and Detention in the Federal*

Judiciary | United States Courts. https://www.uscourts.gov/services-forms/probation-and-pretrial-services/pretrial-services/pretrial-release-and-detention

Carr, J. G. (2017). Why pretrial release really matters. *Federal Sentencing Reporter*, *29*(4), 217–220.

Desmarais, S. L., Monahan, J., & Austin, J. (2021). The empirical case for pretrial risk assessment instruments. *Criminal Justice and Behavior*, 009385482110416. https://doi.org/10.1177/00938548211041651

Dobbie, W., Goldin, J., & Yang, C. S. (2018). The effects of pretrial detention on conviction, future crime, and employment: Evidence from randomly assigned judges. *American Economic Review*, *108*(2), 201–240. https://doi.org/10.1257/aer.20161503

Garrett, B. L. (2022). Models of bail reform. *Fla. L. Rev.*, *74*, 879.

Goel, S., Shroff, R., Skeem, J. L., & Slobogin, C. (2018). *The accuracy, equity, and jurisprudence of criminal risk assessment* (SSRN Scholarly Paper 3306723). https://doi.org/10.2139/ssrn.3306723

Grossman, J., Nyarko, J., & Goel, S. (2022). *Racial bias as a multi-stage, multi-actor problem: An analysis of pretrial detention* (SSRN Scholarly Paper ID 4049370). Social Science Research Network. https://papers.ssrn.com/abstract=4049370

Gupta, A., Hansman, C., & Frenchman, E. (2016). The heavy costs of high bail: Evidence from judge randomization. *The Journal of Legal Studies*, *45*(2), 471–505. https://doi.org/10.1086/688907

Koppel, S., Bergin, T., Ropac, R., Randolph, I., & Joseph, H. (2022). Examining the causal effect of pretrial detention on case outcomes: A judge fixed effect instrumental variable approach. *Journal of Experimental Criminology*. https://doi.org/10.1007/s11292-022-09542-w

Lawson, S. G., Narkewicz, E. L., & Vincent, G. M. (2024). Disparate impact of risk assessment instruments: A systematic review. *Law and Human Behavior*. https://doi.org/10.1037/lhb0000582

Linden, A. (2015). Conducting interrupted time-series analysis for single and multiple group comparisons. *The Stata Journal, 15,* 480-500.

Lowenkamp, C. (2022). *The hidden costs of pretrial detention revisited*. Arnold Ventures. https://craftmediabucket.s3.amazonaws.com/uploads/HiddenCosts.pdf

Lowenkamp, C. T., & Whetzel, J. (2009). The development of an actuarial risk assessment instrument for U.S. pretrial services. *Federal Probation*, *73*(2), 33–36.

Menchetti, F., Cipollini, F., & Meali, F. (2021). *Estimating the causal effect of an intervention in a time series setting: the C-ARIMA approach.* University of Florence.

Montoya, L., Skeem, J., & Lowenkamp, C. (2024). *A pretrial release policy based on risk assessment would reduce unnecessary incarceration, increase racial fairness, and save money*. Unpublished manuscript in preparation.

Movement Alliance Project. (2024). Where are risk assessments being used? *Mapping Pretrial Risk*. https://pretrialrisk.com/national-landscape/where-are-prai-being-used/

Pretrial Justice Institute. (2020). *Updated position on pretrial risk assessment tools | resources | Pretrial Justice Institute*. https://www.pretrial.org/resources/updated-position-on-pretrial-risk-assessment-tools

Reitz, K. R. (2020). The compelling case for low-violence-risk preclusion in American prison policy. *Behavioral Sciences & the Law*, *38*(3), 207–217. https://doi.org/10.1002/bsl.2461

Rowland, M. G. (2018). The rising federal pretrial detention rate, in context special issue on pretrial services: Front-end justice. *Federal Probation*, *82*(2), 13–22.

Sabol, W., & Johnson, T. (2022). *Justice system disparities: Black-white national imprisonment trends, 2000-2020.* Council on Criminal Justice. https://counciloncj.foleon.com/reports/racial-disparities/national-trends

Skeem, J., Montoya, L., & Lowenkamp, C. (2022). Place matters: Racial disparities in pretrial detention recommendations across the US. *Federal Probation*, *86*, 5.

Skeem, J., Montoya, L., & Lowenkamp, C. (2023). Understanding racial disparities in pretrial detention recommendations to shape policy reform. *Criminology & Public Policy*, *22*(2), 233–262. https://doi.org/10.1111/1745-9133.12620

Introduction to Pretrial Research in Action: Four Articles From RTI International

By Matthew DeMichele
RTI International

THE PRETRIAL PHASE is often said to be the most consequential in the criminal process, because it is related to several legal (e.g., conviction, incarceration) and personal (e.g., lost jobs, family conflicts) outcomes for defendants. During pretrial, individuals are legally innocent and have a right to be released, but jails are filled with pretrial detainees. For the most part, pretrial release decisions are based on the seriousness of the crime and prior criminal history, but these decisions are often made quickly and with limited information to make the most effective decisions. Pretrial release decisions are especially challenging because judges grapple with balancing public safety and the inherent rights of the accused.

RTI partnered with Arnold Ventures and multiple county-level criminal legal system agencies to conduct a series of studies to document effective implementation processes, develop validation tools, and investigate potential improvements to pretrial decisions. These activities were complemented by a comprehensive dissemination strategy to promote an evidence base that identifies ways to develop, implement, and use pretrial risk assessments that maximize validity, minimize bias, and increase fairness in decision making. RTI completed three main tasks for this six-year study. We assessed local implementation of various pretrial reforms and conducted simulation studies to estimate the potential effect of policy interventions (DeMichele et al., 2024a). RTI conducted a series of validations and tests of predictive bias of local release models (DeMichele et al., 2024b). In addition, RTI conducted a series of analyses of local administrative data to understand the effects of pretrial detention and whether there are interventions that can reduce racial disparity in the use of detention (Silver et al., 2024). The APPR research resulted in a deeper understanding of the challenges local systems actors face when implementing a risk assessment or making other policy changes (Grodensky et al., in press). RTI's research efforts have impacted thousands of people involved with criminal legal systems across these counties.

We are excited to partner with *Federal Probation* to share the results of four new APPR studies. The research reported in this set of articles contributes to a growing pretrial knowledge base across four main areas. First, Inkpen et al. provide an understanding of a persistent policy challenge facing pretrial scholars in understanding the frequency of rearrests and the types of charges people released pretrial commit. This study explores the relationship between a person's initial charge, resulting in their admission to jail, and any subsequent pretrial arrest. The central concern here is to understand arrest patterns for violent crimes. The key takeaways are that three-quarters of people admitted to jail do not have a pretrial arrest, and that new arrests are more likely to be for misdemeanors (not felonies). Inkpen et al. show that one-third of admissions are for a violent crime (the most common crime type). Despite violent admissions being prevalent, property crimes are the most common type of rearrest (31 percent of new arrests) and those admitted to jail on an initial property crime were the most likely to be rearrested. This research highlights the need for improved systems to assess risks and needs for individuals released pretrial. Although Inkpen et al. did not explore the mechanisms underlying the rearrest patterns, it is possible that individuals with high frequency of property crimes may be involved with drugs and looking for ways to support their addiction.

In a second APPR research study, Janda et al. contribute to a major gap in research related to the use of risk assessments with domestic violence cases. Drawing on data from two APPR jurisdictions, Janda et al. show that nearly a quarter of jail admissions were for a violent charge, and domestic violence cases accounted for just over three-quarters of these admissions. Clearly, domestic violence charges are a major issue for local decision makers. The study provides several descriptive characteristics of those admitted to jail for domestic violence, with the main purpose of the article bring to determine how a pretrial risk assessment, the Public Safety Assessment (PSA), can assist pretrial release decisions for individuals accused of domestic violence. Individuals not admitted for a domestic violence charge have lower average risk scores despite the fact that those admitted for a domestic violence charge have a lengthier violent crime history. Janda et al. provide a thorough comparison of those admitted on a domestic violence charge and those not; a key finding is that individuals admitted for a domestic violence charge are 22 percent more likely to be arrested for a new violent crime, 35 percent more likely to be arrested for a new domestic violence crime, and 32 percent more likely to be arrested for a new violent domestic violent crime. However, being admitted for a domestic violence crime

is not statistically associated with a new failure to appear or any new crime.

In a third APPR study, Bechtel et al. provide research on the adherence of judicial release decisions to the release recommendations made by a pretrial services agency and to explore the relationship of adherence on pretrial and case outcomes. The county recently adopted the PSA, and a central element of PSA implementation is the development of a local Release Conditions Matrix (RCM) to match supervision levels and release conditions with PSA scores. The pretrial world has changed dramatically over the past 10 years, as more than half of pretrial agencies now use an assessment (Lattimore et al., 2020). Research demonstrates that actuarial tools improve decisions (Ægisdóttir, White, Spengler et al., 2006), and validation studies have demonstrated that the PSA is a valid tool (DeMichele et al., 2024b). In recent years, however, some research questions whether judges consider assessment-based recommendations when making pretrial decisions (Stevenson, 2018). Bechtel et al. found that of the 8,486 cases, 22 percent were recommended for release, and 78 percent were recommended for detention. Judges agreed with the recommendation in slightly over half of the cases, and ultimately released 61 percent of the individuals. Factors such as presence of the risk assessment violence flag, charge type, and severity all predicted adherence.

In the fourth APPR study, Silver et al. offer essential policy-relevant research on the effects of pretrial conditions. There is little research on the effects of pretrial conditions. Research on probation and parole have long supported the risk principle in noting that lower risk individuals need few (if any) conditions, and that resources are better used to supervise medium and higher risk individuals. Further, although there is an intuitive belief that more or stricter conditions will reduce recidivism, that is not necessarily the case, as more intensive forms of probation supervision tend to worsen outcomes. Silver et al. consider these questions for pretrial as they demonstrate the effects of using different combinations of pretrial conditions. The findings demonstrate the need for nuance when studying conditions, as not all conditions or combinations of conditions will have the same effects. For example, regular check-ins, electronic monitoring, or treatment reduced the probability that someone would be arrested during pretrial release compared to those not being supervised. However, when individuals are assigned employment and education requirements, location restrictions, or weekly reporting, the probability of a new arrest increases compared to the probability for those not being supervised. The largest decreases in the probability of a new arrest were observed when treatment was combined with regular check-ins, electronic monitoring, or bi-weekly reporting. Silver et al. emphasize that combining treatment with another pretrial condition generally resulted in reductions in the probability of a new arrest compared to not being supervised.

The four new APPR studies contribute to a pretrial knowledge base, and we are indebted to the local officials that were willing to partner with us on APPR. The studies, of course, are only the beginning of what is needed to understand pretrial recidivism patterns—especially new violent crimes (Inkpen et al.)—and how best to support victims and families involved with domestic violence crimes (Janda et al.). Pretrial assessments have been the focus of many pretrial reforms, but we are just beginning to learn if, when, and how judges use the information and recommendations provided by assessments (Bechtel et al.). Last, Silver et al. provide contemporary evidence demonstrating the need for research to disentangle the heterogeneous effects of different conditions and combinations of conditions. The pretrial field is ripe for conducting additional studies like these four as well as others to continue to build a knowledge base of effective policies and practices that ensure public safety and civil rights.

Examining the Patterns of Pretrial Rearrest in a Large Southeastern County

Christopher Inkpen
Ian A. Silver
Kristin Bechtel
Matthew DeMichele[1]
Center for Legal Systems Research, RTI International

INDIVIDUALS INVOLVED IN the criminal legal system are often subject to a period where they have been charged, but not proven guilty of a crime (that is, the pretrial period). The pretrial period for any case can be as short as the same day (case dismissal) or last up to several days, weeks, or even years (Dobbie & Yang, 2021). The pretrial period can differ for a variety of reasons, including immediate dismissal, plea deals, bench trials, and jury trials. Judicial officials have a substantive amount of discretion when it comes to deciding if an individual is eligible for pretrial release or should be detained until the trial (Copp et al., 2022). This decision process is difficult not only because of the limited time frame, but because it requires judges to consider the due process rights of the individual while accounting for the risk the individual poses to both the victims and the broader community as well as the risk of the charged individual not returning for the court appearance(s). This decision must be made using only the information available to judges and other legal actors, which typically includes the current charge information, prior criminal history record, and the details about the case (Dhami, 2005). To help inform pretrial release decisions, pretrial assessment instruments are used to estimate the likelihood of being arrested for a new charge or failing to appear for future court appearances. Notably, however, there is a gap in the research on offending generalization or specialization for pretrial populations.

There is a lot of research on the factors associated with a defendant being arrested or missing court during the pretrial stage (Desmarais et al., 2022). For example, research on the Public Safety Assessment (PSA) pretrial risk assessment tool has been used to assess its validity and predictive bias when estimating the likelihood of whether an individual on pretrial release will miss court, be arrested, or be arrested for a violent criminal arrest (DeMichele et al., 2024b). The PSA, used in many jurisdictions, is unique in that it uses criminal history information along with details of the charges associated with the jail booking to develop scale scores associated with new criminal activity (NCA), new violent criminal activity (NVCA),[2] and failure to appear (FTA). Additionally, research suggests that longer periods in pretrial detention result in an increased likelihood of new criminal activity (NCA) and new violent criminal activity (NVCA) during the pretrial period (DeMichele et al., 2024a; Silver et al., 2024). Although the prior research on the pretrial phase is valuable, little is known about the offense patterns for individuals at pretrial. The current study addresses this gap in research by assessing whether individuals rearrested during pretrial release specialize or generalize in their offense patterns. This information can be beneficial for pretrial services and court officials tasked with assessing the risk of someone who is released committing a serious or violent offense during the pretrial period. This study linked jail admission data from 2017-2018 from a large county in the Southeast with statewide criminal history data from 2017-2019 to observe the unique rearrest patterns of individuals released from jail during the pretrial period. The results of the current study may provide useful information for jurisdictions interested in pretrial system reforms, including the implementation of a pretrial assessment instrument.

Pretrial in the United States

The pretrial phase is often said to be the most consequential part of case processing. Despite the presumption of innocence and the deleterious effect of pretrial detention, judges are in the challenging position of needing to quickly assess whether to release someone and determine what release conditions to apply (e.g., bond, supervision). Judges are essentially tasked with intuitively estimating an individual's likelihood of being rearrested or missing court. Judicial officials have various techniques

[1] Denotes Corresponding Author. Email: mdemichele@rti.org

[2] New violent criminal activity accounts for specific charges that are considered violent by either (1) the instrument developers or (2) a specific list of designated violent crimes provided by the jurisdiction. This analysis uses the site's violent crime list, although there is substantial overlap between this list and that selected by the original PSA tool developers.

at their disposal to manage the behaviors of defendants (Lowenkamp & VanNostrand, 2013; Wiseman, 2013). Depending upon the jurisdiction, these include release on recognizance, cash bail, and the denial of bail (Hatton & Smith, 2020). The most recent national estimate available suggests there are over 450,000 people detained pretrial on any given day (Zeng, 2023). Furthermore, upon release into the community, judges may order pretrial supervision along with release conditions. For instance, judges might recommend electronic monitoring for specific types of defendants (e.g., those facing violent charges). The process of managing defendants on pretrial is highly discretionary, often requiring judicial officials to make decisions, with limited information and within a limited time frame, about the risk an individual poses to the community. However, efforts have been made by various jurisdictions across the United States to implement a more systematic process for assessing if a defendant poses a risk to other individuals or public safety.

Predicting Pretrial Outcomes

Actuarial assessment instruments have been used to support criminal legal system decisions for the past 100 years (Burgess, 1936) and were first used to support pretrial decisions in the 1960s (Ares et al., 1963). Briefly, the RNR model argues that services during supervision and confinement should appropriately match the risks and needs of an individual, while also addressing general and specific responsivity factors (Bonta & Andrews, 2016). In the context of the RNR model, risks are the static and dynamic factors contributing to an increased likelihood of experiencing a negative outcome, needs are the criminogenic dynamic factors that can be addressed with treatment, general responsivity is the mode of implementing the treatment, and specific responsivity concerns the strategies used to address the barriers to treatment (Bonta & Andrews, 2016). For example, an individual with high risk and needs in substance use might receive cognitive behavioral therapy focused on addressing substance use problems. Similar to the post-conviction use of the RNR model, pretrial supervision techniques or the use of pretrial detention needs to appropriately match the risks of an individual (Lowder & Foudray, 2021). This adaptation has led to the widespread implementation of pretrial assessment instruments to estimate the risk an individual poses to public safety and to assist judges with setting appropriate supervision conditions (Desmarais et al., 2022). For example, the PSA and the Release Conditions Matrix (RCM) provide judicial officials with an understanding of how likely an individual is to experience a failure to appear or a new criminal arrest. The RCM is a tool individualized to a jurisdiction's available pretrial supervision conditions, designed with the intention of helping guide pretrial supervision decisions and limiting the number of individuals detained during the pretrial period. The RCM informs release recommendations, such as pretrial supervision, court reminders, electronic monitoring, and drug testing (Labrecque et al., 2024).

Pretrial assessment research has largely demonstrated that pretrial assessment instruments are predictive of pretrial outcomes, provide beneficial information to judicial officials, and could be used to better balance public safety and individuals' rights when implemented properly (Desmarais et al., 2022). For example, recent research on the PSA suggests that use of a pretrial assessment instrument to make release decisions has the potential to increase the number of individuals released into the community without increasing the number of new crimes committed by individuals on pretrial (DeMichele et al., 2023; Lowenkamp et al., 2020). Moreover, the existing evidence highlights that the indicators captured on the PSA are good predictors of failure to appear, new criminal arrest, and new violent criminal arrest, albeit the magnitude of the prediction varies across jurisdictions (DeMichele et al., 2024b). This pattern of findings is consistent with the broader literature on pretrial assessment instruments, suggesting that these tools can be extremely beneficial when judicial officials are making decisions surrounding pretrial release and pretrial detention (Desmarais et al., 2021). Nonetheless, we know little about what charges individuals are arrested for while on pretrial release.

The Current Study

Recent research on pretrial assessment instruments largely focuses on creating instruments that predict if an individual will experience a failure to appear or new criminal arrest (Desmarais et al., 2021). The types of new offenses individuals are arrested for during the pretrial period, however, is not well understood. No research exists evaluating if pretrial arrests are similar to or distinct from the initial charging offense. For example, if an individual was on pretrial release for an aggravated assault, is that individual more likely to be arrested for an aggravated assault or is there no discernible pattern in the new arrests? Considering the importance of maintaining public safety, it could be beneficial to understand if there is specialization or generalization in the association between the initial offense and new pretrial arrests (Eker & Mus, 2016). In the current context, specialization is defined as being arrested for a crime similar to the initial offense, while generalization means being arrested for a crime different from the initial offense (Mazerolle & McPhedran, 2018).

Exploring the generalization or specialization of offending in pretrial populations is important for judicial officials and practitioners, as it can provide additional information to guide the decisions surrounding release and conditions. For example, research on offending specialization has been used to guide strategies for community supervision among those convicted of sex offenses (Alexander, 2010). This includes the creation of specialized caseloads, unique treatment plans, and strategies to mitigate risk among individuals who have an increased likelihood of engaging in behaviors similar to the initial offense (Turner et al., 1992). Yet no research on offending generalization or specialization has been conducted with pretrial populations. For example, supervision strategies could be implemented to mitigate drug arrests and violent arrests during pretrial if it is discovered that individuals tend to specialize in a certain type of behavior during the pretrial stage.

The current study seeks to address this gap in the literature on pretrial arrest patterns by assessing the correspondence between initial offenses and new arrests within a large Southeastern county. Five research questions guide the current study: (RQ1) How often are released individuals rearrested? (RQ2) What are the rearrest patterns for those released pretrial? (RQ3) What types of crimes are individuals most frequently rearrested for on pretrial? (RQ4) How do the rearrest charges vary from the initial charge type? Last: (RQ5) Is the nature of the charge type at booking associated with the pretrial arrest charge type?

Data and Methods

To address these research questions, this study uses data on jail admissions from a large Southeastern county between 2017 and 2018 to capture information on (1) the charges associated with the jail booking, (2) the court case and disposition of those charges (if pertinent), and (3) the nature of an individual's

jail booking (i.e., pretrial or not) and release. Details on arrests during the pretrial period are captured using statewide criminal history data from the state criminal history repository through 2019.

Measures of Interest: This study examines patterns of rearrest by classifying charges associated with the jail bookings and charges that occur during the pretrial period to the National Corrections Reporting Program (NCRP) broad charge categories of (1) violent, (2) property, (3) drug, (4) public order, or (5) other offenses. In addition, we capture detail on the severity of the charges associated with the booking and charge severity for any arrests during the pretrial period. To determine the most serious charge associated with a booking and with a pretrial arrest, we first privilege felony charges over misdemeanor charges and rank those charges hierarchically by NCRP category following the order described above. For these analyses, we look only at the charges associated with the first pretrial arrest during an individual's pretrial period.

To answer our research questions, we provide a series of descriptive and inferential statistics. To assess if significant relationships are present in our measures of interest, we use chi-square statistical tests, which test if the distribution of one measure (e.g., new arrest charge type) significantly differs between two or more groups (e.g., most serious charge at booking). Additionally, we use multinomial logistic regression to model the relationship between most serious charge at booking and the most serious charge type for pretrial arrests, controlling for other criminal history factors from the PSA's NCA scale score and the age of an individual. From this multinomial logistic regression model, we derive outcome-specific predicted probabilities, which are the probability between 0 and 100 that an individual has a certain outcome (e.g., pretrial arrest for a property crime) compared to all other possible outcomes (i.e., no pretrial arrest or any other type of pretrial arrest charge type).

Results

This analysis begins by providing a descriptive picture of the analytical sample of jail bookings between 2017 and 2018. As shown in Table 1, roughly 60 percent of the bookings (N = 33,910) were released from jail (released N = 20,214) prior to case disposition. Approximately 25 percent (N = 4,948) of the released individuals were rearrested during pretrial. Thus, to answer RQ1, roughly a quarter of those released pretrial are rearrested. Looking at all jail bookings, we can see that the individuals in this sample are predominantly Non-White (85 percent) and mostly male (78 percent). When exploring the characteristics of the sample by whether an individual was detained or released, we find substantial variation. White individuals were more likely to be released (63 percent) compared to Non-White individuals (59 percent). Similarly, females (72 percent) had substantially higher release rates compared to males (56 percent). When examining release by the most serious charge at booking, 60 percent of those booked on violent charges were released pretrial compared to those booked on drug (63 percent), property (55 percent), or public order (55 percent) charges.

To answer RQ2 regarding rearrest patterns for those released pretrial, the bottom half of Table 1 describes the distribution of the characteristics of the released sample by whether they experienced an arrest during the pretrial period. In this sample, Non-White individuals (25 percent) have a higher rate of pretrial arrest than White individuals (20 percent). Furthermore, males (27 percent) are more likely to be arrested during the pretrial period than females (18 percent). When examining the overall released population by most serious charge type at booking, it is notable that the modal category of charge type is violent, comprising 33 percent of all released bookings. This is followed by property charges (29 percent) and drug charges (20 percent), with these three charge types making up more than four fifths of all released jail bookings. Finally, both public order offenses and other arrest offenses represent 9 percent of the released jail bookings.[3] However, the pretrial arrest rates by charge type vary substantially. For those booked on violent charges, only 23 percent of these individuals had an arrest during the pretrial period. This same arrest rate was observed for both those originally booked on drug charges and those charged with public order offenses as their most serious charge. In contrast, roughly 30 percent of individuals booked on property charges experienced a pretrial arrest, while those booked on "other" charges had the lowest pretrial arrest rate (16 percent). Thus, at first glance, we do not observe a higher rate of reoffending during the pretrial period for those booked on violent charges compared to other common charge types, and those booked on property charges have significantly higher rearrest rates.

It is worth highlighting that most pretrial arrests (58 percent) are for misdemeanors, regardless of the severity of the initial charge. Table 2 shows the distribution of the severity of charges at booking compared to the severity of the pretrial arrest for those who were arrested. Specifically, for those who were booked on a felony charge and were arrested during the pretrial period, 52 percent of those pretrial arrests are for misdemeanors only. For individuals who were initially booked on a misdemeanor charge and who are arrested during the pretrial period, 64 percent of those pretrial arrests are for new misdemeanors as opposed to felonies.

It should also be noted that most individuals who are booked and released pretrial do not experience an arrest during the pretrial period. Importantly, 76 percent of all individuals released pretrial do not experience a pretrial arrest (N = 15,266). To answer RQ3 regarding the most common pretrial arrest types, Table 3 shows the distribution of pretrial arrest charge types for all individuals released pretrial. When looking at jail bookings with a pretrial arrest observed, the most common charge type is a property charge, representing 31 percent of all pretrial arrests (N = 1,532) and 8 percent of all pretrial release bookings. This is followed by drug and public order offenses, which both make up 24 percent of pretrial arrest charges (Ns = 1,189 and 1,194 respectively) and 6 percent of pretrial release bookings. Violent arrests during the pretrial period, however, are the lowest represented of the major charge categories, comprising 21 percent of all pretrial arrests (N = 1,024) and only 5 percent of all pretrial release bookings.

To answer RQ4, Figure 1 shows a plot that describes how the original broad charge categories correspond with the broad pretrial arrest charge types, displayed as possible combinations. Here, it is evident that the overall largest category of pretrial arrests is for property charges, and within that grouping, the combination of "Property Booking Charge → Property Pretrial Arrest" is the modal combination, comprising 17 percent of all Booking Charge → Pretrial Arrest charge combinations. Similarly, the "Violent Booking Charge → Violent Pretrial Arrest" is the modal combination within all violent bookings that had an arrest during the pretrial period, representing 10 percent of all charge

[3] Public order offenses include charges like traffic offenses, public drunkenness, weapons offenses, and others. "Other" offenses include unspecified felonies or misdemeanors and court-related offenses.

combinations. This pattern is repeated for drug charges (9 percent) and public order charges (3 percent) where, within booking charges that have an arrest during the pretrial period, specialization is the most common arrest type. However, having the same booking charge and pretrial arrest charge type only represents 39 percent of all booking/pretrial arrest charge type combinations. Yet, as shown in Table 4 (which shows the distribution of pretrial arrest charge types by booking charge type) specialization (e.g., *X* Booking Charge → *X* Pretrial Arrest Charge) is the norm and modal response within each charge type, with the exception of "other offenses," which was rarely observed during pretrial arrest. Here, we can see that for individuals booked on drug charges who had a pretrial arrest, 50 percent of those arrests were for drug charges. Similarly, for those booked on property charges who had a pretrial arrest, 48 percent of those

TABLE 1.
Sample Descriptives by Released Status and New Arrest Rates in Southeastern County Jail Bookings (2017-2018)

	Detained		Released - No Arrest		Released - Arrested		Total	
	N	%	N	%	N	%	N	%
All Jail Bookings	13,696	40.4	15,266	45.0	4,948	14.6	33,910	100.0
Released Jail Bookings	--	--	15,266	75.5	4,948	24.5	20,214	100.0
All Jail Bookings								
	Detained		**Released**				**Total**	
	N	%	N	%			N	%
Non-White	11,811	40.9	17,042	59.1			28,853	85.1
White	1,885	37.3	3,172	62.7			5,057	14.9
Female	2,067	27.8	5,377	72.2			7,444	22.0
Male	11,628	43.9	14,834	56.1			26,462	78.0
Most Serious Offense								
Violent	4,413	39.5	6,762	60.5			11,175	33.0
Drug	2,345	37.1	3,980	62.9			6,325	18.7
Property	4,742	45.1	5,763	54.9			10,505	31.0
Public Order	1,515	45.5	1,816	54.5			3,331	9.8
Arrested - Other	681	26.5	1,893	73.5			2,575	7.6
	Mean	**Median**	**Mean**	**Median**	**Mean**	**Median**	**Mean**	**Median**
Age at Booking	36.4	34	34.0	31	32.6	30	34.8	32
Released Jail Bookings								
			Released - No Arrest		**Released - Arrested**		**Total**	
			N	%	N	%	N	%
Non-White			12,742	74.8	4,300	25.2	17,042	84.3
White			2,524	79.6	648	20.4	3,172	15.7
Female			4,388	81.6	989	18.4	5,377	26.6
Male			10,876	73.3	3,958	26.7	14,834	73.4
Most Serious Offense								
Violent			5,199	76.9	1,563	23.1	6,762	33.5
Drug			3,075	77.3	905	22.7	3,980	19.7
Property			4,013	69.6	1,750	30.4	5,763	28.5
Public Order			1,396	76.9	420	23.1	1,816	9.0
Arrested - Other			1,583	83.6	310	16.4	1,893	9.4

Source: Southeastern County jail bookings (2017-18). Individuals released are determined to be released and at risk for pretrial new criminal activity. 4 individuals omitted from sex cross-tabulation due to missingness. Percentages in the "Detained", "Released (NCA/No NCA)" columns show row percentages. Percentages in the "Total" columns show column percentages.

TABLE 2.
Distribution of Charge Severity by Booking Charges and New Pretrial Arrest Charges

	Pretrial Arrest Severity					
	Felony Pretrial Arrest		Misdemeanor Pretrial Arrest		Total	
Booking Charge Severity	N	%	N	%	N	%
Felony	1120	48.3%	1200	51.7%	2320	47%
Misdemeanor	949	36.2%	1676	63.8%	2625	53%
Total	2069	41.8%	2876	58.2%	4945	100%

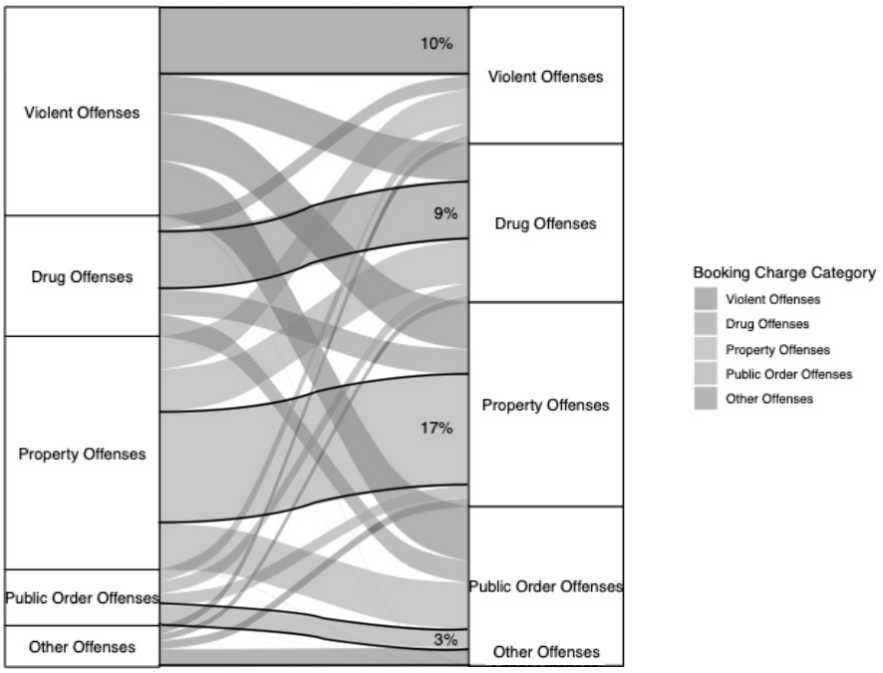
Source: Southeastern County Jail Bookings from 2017-2018. New arrest data come from Statewide Criminal History Database from 2017-2019. 3 charges omitted due to lack of charge severity detail

TABLE 3.
Distribution of NCA Charge Types

	All Bookings		Pretrial Arrest Only	
Pretrial Arrest Charge Category	N	%	N	%
No Pretrial Arrest	15266	76	0	0
Violent Offenses	1024	5	1024	21
Drug Offenses	1189	6	1189	24
Property Offenses	1532	8	1532	31
Public Order Offenses	1194	6	1194	24
Other Offenses	9	0	9	0
Total	20214	100	4948	100

Source: Southeastern County Jail Bookings from 2017-2018. New arrest data come from Statewide Criminal History Database from 2017-2019. Total Sample N = 20214 of individuals released from jail during the pretrial period and determined to be at risk for a new arrest during the pretrial period. Pretrial arrest coded as arrest between the release date from jail and the date of disposition of the original charges. Charges coded to the National Corrections Reporting Program broad categories.

FIGURE 1.
Jail Booking Charge and NCA Charge Combinations



arrests were for property charges. This pattern is repeated with public order charges (35 percent) and violent offenses (33 percent), although it should be noted that the contrast between "specialization" and "generalization" is least stark for those booked on violent charges.

Table 5 shows the top five most common specific charge types of pretrial arrest within each broad charge category type at the time of jail booking. Looking at those who were booked on violent charges and who experienced a pretrial arrest, 12 percent were arrested for assault and battery. However, this is followed by 11 percent arrested during the pretrial period for operating a motor vehicle without a license. Similarly, shoplifting and possessing marijuana are within the top charge types for those booked on violent charges who experience an arrest during the pretrial period. For individuals booked on property charges who are arrested pretrial, 16 percent are arrested again for shoplifting, followed by 9 percent arrested for criminal trespass against property (i.e., damaging property up to a certain value). In this table, specialization is more apparent for those booked on drug charges, as four of the top five pretrial arrest charges (37 percent) are associated with a new arrest on drug charges. This points to evidence of differences in the rate of specialization within each booking charge type.

To test the specialization or generalization relationship empirically and answer RQ5, we ran a multinomial logistic regression model of the different pretrial arrest charge types as outcomes. Figure 2 shows the predicted probabilities of each response category (i.e., each arrest charge type) by jail booking charge type, controlling for the criminal history factors captured in the PSA's NCA scale score. Here again, it is evident that not being arrested for new charges is the most common outcome. However, within booking charge types, even when controlling for criminal history factors included in the NCA scale, having a specific booking charge type can be associated with having a higher predicted probability of that same pretrial arrest charge type occurring compared to other charge types. This pattern is most clear for property, violent, and drug charges, where the corresponding jail booking charge type is significantly associated with a greater probability of having that pretrial arrest charge type compared to all other arrest-specific outcomes.

Net of criminal history factors, for those booked on property charges, their predicted

probability of being arrested for a property charge during the pretrial period is 11 percent compared to a new violent (4 percent) or drug (5 percent) arrest. Similarly, those who are booked on drug charges have a 9 percent probability of being arrested on new drug charges during the pretrial period. This is more than the total probability that they are arrested for a new violent, property, or public order charge combined. In contrast, for individuals booked on a violent charge, the predicted probability that they experience a new arrest for a violent charge is 7 percent compared to 4 percent each for a new drug or property arrest or 6 percent for a new public order arrest. This suggests that, while there is still evidence of specialization for those booked on violent charges, it is less pronounced compared to those who are booked on property or drug charges. Taken as a whole, this contributes to a broader finding; although not being arrested for a new charge pretrial is the norm and true for most individuals, for those who are booked on a specific type of charge *and end up being arrested for new charges*, they are most likely to be arrested for the same type of charge they were booked on.

Discussion

The decision to release an individual during the pretrial period is vital to maintaining public safety and ensuring due process while seeking to limit the potentially harmful impacts of pretrial detention. Yet little is known about the characteristics of rearrest during the pretrial period. This study provides key insights into the rearrest patterns for those released during the pretrial period of their court case in one Southeastern jurisdiction. First, most individuals (76 percent) who are released pretrial are not arrested for a new charge during the pretrial period. Yet, second, for those who are arrested, they are more likely to be arrested for a new misdemeanor charge, even if they were originally booked on a felony charge. Both findings dispel myths surrounding pretrial release—as most people do not commit new crimes while their current case is pending, and if they are arrested, the new charge is often a misdemeanor. When exploring this pattern by booking charge type, the pattern becomes more nuanced. Looking at the types of charges that people are originally booked on, violent charges are the most common (33 percent) for those who are eventually released. However, when exploring patterns of arrests during the pretrial period, although the most common outcome is no

TABLE 4.
Distribution of Pretrial Arrest Charge Types by Booking Charge Type

	Pretrial Arrest Charge Types					
Booking Charge Types	Violent Offenses	Drug Offenses	Property Offenses	Public Order Offenses	Other Offenses	Total
Violent Offenses	33%	18%	23%	26%	0%	100%
Drug Offenses	12%	50%	21%	18%	0%	100%
Property Offenses	14%	18%	48%	20%	0%	100%
Public Order Offenses	21%	22%	22%	35%	0%	100%
Other Offenses	20%	16%	20%	43%	0%	99%
Total	21%	24%	31%	24%	0%	100%

Source: Southeastern County Jail Bookings from 2017-2018. New arrest data come from Statewide Criminal History Database from 2017-2019. Total Sample N = 20214 of individuals released from jail during the pretrial period and determined to be at risk for a new arrest during the pretrial period. Table N = 4,948 individuals who experienced a pretrial arrest. Table shows charge combinations of the most serious charge type at booking and the pretrial arrest charge type.

TABLE 5.
Top Five Pretrial Charge Types by Jail Booking Charge Type

Most Serious Charge for Jail Booking	Specific Pretrial Arrest Charge Type	N	%
Violent Offense at Jail Booking	Assault and Battery	192	12.3
	Operating a Motor Vehicle Without a License	164	10.5
	Aggravated Assault	111	7.1
	Shoplifting, Value Unknown	101	6.5
	Possession/Use, Marijuana or Hashish	86	5.5
Property Offense at Jail Booking	Shoplifting, Value Unknown	287	16.4
	Criminal Trespass (Against Property)	160	9.1
	Operating a Motor Vehicle Without a License	159	9.1
	Possession of Controlled Substance or Enumerated Drug	96	5.5
	Assault and Battery	94	5.4
Drug Offense at Jail Booking	Possession of Controlled Substance or Enumerated Drug	106	11.7
	Operating a Motor Vehicle Without a License	78	8.6
	Possession/Use, Marijuana or Hashish	77	8.5
	Sale of Marijuana or Hashish	75	8.3
	Possession of Drug Paraphernalia	72	8.0
Public Order Offense at Jail Booking	Operating a Motor Vehicle Without a License	59	14.1
	Possession/Use, Marijuana or Hashish	33	7.9
	Assault and Battery	29	6.9
	Shoplifting, Value Unknown	23	5.5
	Possession of Controlled Substance or Enumerated Drug	21	5.0
Other Offenses at Jail Booking	Operating a Motor Vehicle Without a License	73	23.6
	Assault and Battery	25	8.1
	Possession/Use, Marijuana or Hashish	22	7.1
	Shoplifting, Value Unknown	20	6.5
	Driving Under the Influence of Alcohol	16	5.2

Source: Southeastern County Jail Bookings from 2017-2018. New arrest data come from Statewide Criminal History Database from 2017-2019. Total Sample N = 20214 of individuals released from jail during the pretrial period and determined to be at risk for a new arrest during the pretrial period. 4,948 individuals who experienced a pretrial arrest. Table shows charge combinations of the most serious charge type at booking and the pretrial arrest charge type. This table shows the top 5 specific charge categories for pretrial arrests within the broad charge types at booking.

arrest, the most common pretrial arrest type is for new property charges (31 percent). In fact, those who were originally arrested on property charges are also more likely to be arrested again during the pretrial period (30 percent), compared to other booking charge types (~23 percent). When testing for the presence of specialization vs. generalization, most pretrial arrests (61 percent) are for different charge types than the one an individual was booked on. Yet, within each booking charge type (e.g., originally booked on drug charges), individuals who had a pretrial arrest were more likely to have an arrest of that same type compared to other charge types. This supports specialization, although there is substantial variation within charge types, as those originally booked on drug or property charges have higher likelihoods of being arrested for those same charge types than individuals initially booked on violent charges.

While this research is informative and sets the stage for future research, it should be noted that the patterns observed here are broad and do not account for repeat victimization that varies by charge type (e.g., new trespassing charges associated with prior violent charges). In addition, this study only looks at the charge types of the first event of pretrial arrest and does not examine trajectories of arrests or account for offending patterns observed prior to the jail booking relevant to the study period, outside of accounting for criminal history in the NCA scale scores. Future studies should test this pattern with more granularity and by specific charge type, especially as it relates to individuals released on violent charges.

Research and Policy Recommendations

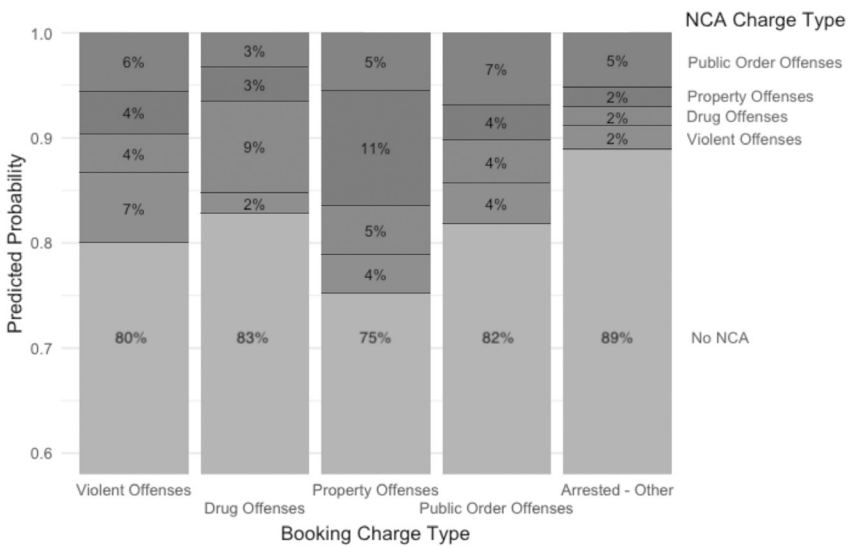
Given these results, this study yields several pertinent and actionable research and policy recommendations.

Researchers should expand pretrial assessment research agendas and be responsive to the needs of policy makers and system stakeholders. The research field plays a critical role in the development and validation of pretrial assessment instruments. The concerns expressed by policy makers and system actors about the likelihood of a released individual committing offenses during the pretrial period that are more serious or are possibly violent are not novel. Pretrial services and judicial officials have limited information and time available to inform release recommendations and decisions—so research using local data that directly speaks to the likelihood of an increase in offense severity or change in charge type may be beneficial not only in challenging assumptions about risk, but in building greater awareness of the probability of success during the pretrial period. As a result, there may be more opportunities to refine system recommendations and responses to mitigating pretrial failure.

Policy makers and system stakeholders should seek to collect detailed data on charge type and severity to determine if new charges during the pretrial period align with those at the original jail booking for performance measures and to inform validation studies. Research on the prevalence and type of arrests that occur can only take place if jurisdictions capture these data. To better inform decision-makers on the risks of specific types and severity of rearrests during the pretrial period, it is essential to gather data that allow researchers to examine these patterns. Along with having performance measures on court appearance and avoiding pretrial arrest, jurisdictions will have the ability to track and report these specific outcomes and possibly refine local pretrial policies and practice.

Rigorous evaluations of pretrial release recommendations and decisions examining these specific pretrial arrest outcomes should be undertaken. Research on release outcomes and pretrial conditions is rather limited, but the results from the current study continue to support that most people are successful during the pretrial period. Further, pretrial arrests do not typically lead to more serious or violent charges—rather, even for those with initial felony charges, pretrial arrests are often less serious. For those booked on property, drug, or violent charges, there is some limited support for specialization in rearrest patterns, but this should be explored within a larger pretrial research agenda that aims to build the evidence on whether specific services should be made available for individuals during the pretrial period (e.g., substance abuse treatment for those arrested on drug charges, anger management for those arrested on violent charges, etc.). Coupled with a validated pretrial risk assessment instrument and pretrial supervision practices, incorporating information on the original booking charge to inform pretrial services provision and supervision plans may provide targeted assistance to those awaiting the resolution of their case and serve to increase public safety, but further research is needed before such efforts become widespread.

FIGURE 2.
Predicted Probabilities of NCA Charge Type by Most Serious Booking Charge Type



References

Alexander, R. (2010). Collaborative supervision strategies for sex offender community management. *Federal Probation, 74*, 16.

Ares, C. E., Rankin, A., & Sturz, H. (1963). The Manhattan Bail Project: An interim report on the use of pre-trial parole. *New York University Law Review 38*(1), 67-95.

Baker, T., Metcalfe, Falco Metcalfe, C., & Jennings, W. G. (2013). What are the odds? Predicting specialization in offending over the life course. *Criminal Justice and Behavior, 40*(8), 909-932.

Bonta, J., & Andrews, D. A. (2016). The psychology of criminal conduct. Routledge.

Burgess, E. W. (1936). Protecting the public by parole and by parole prediction. *Am. Inst. Crim. L. & Criminology, 27*, 491.

Copp, J. E., Casey, W., Blomberg, T. G., & Pesta,

G. (2022). Pretrial risk assessment instruments in practice: The role of judicial discretion in pretrial reform. *Criminology & Public Policy, 21*(2), 329-358.

DeMichele, M., Silver, I. A., & Labrecque, R. M. (2024a). Locked up and awaiting trial: Testing the criminogenic and punitive effects of spending a week or more in pretrial detention. *Criminology & Public Policy*, 1-23.

DeMichele, M., Silver, I. A., Labrecque, R. M., Dawes, D., Lattimore, P. K., & Tueller, S. (2024b). Testing predictive biases at the intersection of race-ethnicity and sex: A multi-site evaluation of a pretrial risk assessment tool. *Criminal Justice and Behavior, 51*(6), 850-875.

DeMichele, M., Silver, I., & Labrecque, R. (2023). Smart decarceration: Are pretrial assessments an effective strategy to detain fewer people and reduce arrests? Available at SSRN 4503667.

Desmarais, S. L., Monahan, J., & Austin, J. (2022). The empirical case for pretrial risk assessment instruments. *Criminal Justice and Behavior, 49*(6), 807-816.

Desmarais, S. L., Zottola, S. A., Duhart Clarke, S. E., & Lowder, E. M. (2021). Predictive validity of pretrial risk assessments: A systematic review of the literature. *Criminal Justice and Behavior, 48*(4), 398-420.

Dhami, M. K. (2005). From discretion to disagreement: Explaining disparities in judges' pretrial decisions. *Behavioral Sciences & the Law, 23*(3), 367-386.

Dobbie, W., & Yang, C. S. (2021). The US pretrial system: Balancing individual rights and public interests. *Journal of Economic Perspectives, 35*(4), 49-70.

Eker, A., & Mus, E. (2016). Specialization in offending: A comprehensive review of criminological theories and empirical studies. *Journal of Human Sciences, 13*(1), 2295-2322.

Hatton, R., & Smith, J. (2020). Research on the effectiveness of pretrial support and supervision services: A guide for pretrial services programs. UNC School of Government Criminal Justice Innovation Lab.

Labrecque, R. M., DeMichele, M., Walker, J., & Silver, I. A. (2024). Sensible pretrial reform: The importance of accounting for risk of violence in judicial release decisions. *Crime & Delinquency*, 00111287241231741.

Lowenkamp, C., DeMichele, M., & Klein Warren, L. (2020). Replication and extension of the Lucas County PSA Project. *Advancing Pretrial Policy and Research, 2020*. Available at SSRN: https://ssrn.com/abstract=3727443

Lowenkamp, C. T., & VanNostrand, M. (2013). Exploring the impact of supervision on pretrial outcomes. Houston, TX: Laura and John Arnold Foundation.

Lowder, E. M., & Foudray, C. M. (2021). Use of risk assessments in pretrial supervision decision-making and associated outcomes. *Crime & Delinquency, 67*(11), 1765-1791.

Mazerolle, P., & McPhedran, S. (2018). Specialization and versatility in offending. *The Oxford handbook of developmental and life-course criminology*, 49-69.

Ostrom, B. J., Strickland, S. M., & Hannaford-Agor, P. L. (2004). Examining trial trends in state courts: 1976–2002. *Journal of Empirical Legal Studies, 1*(3), 755-782.

Sawyer, W., & Wagner, P. (2024) Mass incarceration: The whole pie 2024. Press Release. Accessed on 10/9/24. Retrieved from: https://www.prisonpolicy.org/reports/pie2024.html#datasection.

Silver, I. A., Walker, J., DeMichele, M., Dole, J. L., & Labrecque, R. M. (2024). Does pretrial detention influence time until reinvolvement with the criminal legal system? *Journal of Criminal Justice, 94*, 102234.

Turner, S., Petersilia, J., & Deschenes, E. P. (1992). Evaluating intensive supervision probation/parole (ISP) for drug offenders. *Crime & Delinquency, 38*(4), 539-556.

Wiseman, S. R. (2013). Pretrial detention and the right to be monitored. *Yale Law Journal, 123,* 1344.

Zeng, Z. (2023). *Jail Inmates in 2022 - Statistical Tables.* Bureau of Justice Statistics.

Exploring the Relationship of Domestic Violence Charges on Release and Detention Decision-Making and Pretrial Outcomes

Kim Janda
Kristin Bechtel
Debbie Dawes
Matthew DeMichele[1]
Center for Legal Systems Research, RTI International

DOMESTIC VIOLENCE CASES are arguably among the most challenging to respond to in the criminal legal system. Given the pervasiveness of DV, there is a paramount concern that survivors, children, and other family members be kept safe from further violence and abuse, and that the people who are facing DV charges and have caused harm[2] be held accountable and provided with treatment and resources to address their behavior (Duane & Vasquez-Noriega, 2018). Estimates on the prevalence of DV suggest that one in four women and one in five men will experience DV at some point in their lifetime (Desmarais et al., 2012). In a recent Bureau of Justice Assistance publication, DV rates were reported to have decreased from 2022 to 2023, from 53.8 percent to 47.7 percent (Tapp & Coen, 2024). Despite this one-year decline, current numbers are comparable to 2019, when there were 1,164,450 DV victimizations compared to the 1,165,890 for 2023. Further, the rate of reporting DV victimization to the police has declined from 2022 to 2023, from 2.6 to 2.0 per 1,000 persons. Underreporting and concerns about criminal legal system responses further complicates developing a clear understanding of DV and properly responding to the unique needs of survivors, families, communities, and those facing DV charges (Reaves, 2017; Herman, 2010; Sadusky, 2020).

The relationship between the criminal legal system and survivors is both dynamic and complex, and survivor's experiences and preferences on system involvement will vary (Sadusky, 2020). In a recent qualitative study, many survivors reported that they did not experience justice when cases were processed through the criminal legal system, that their partners were unlikely to take responsibility for the harm they caused, and that the path to safety was uncertain and distinct for each individual, and often required relying on both formal and informal support systems, such as the courts, advocacy organizations, and family and friends (Dusenberry et al., 2024). Criminal legal system actors' perceptions of DV cases primarily focus on accountability and survivor, children, family, and community safety. The concerns about continued violence and victimization if the person facing DV charges is released are frequently acknowledged as the driver for system decision-making (Duane & Vasquez-Noriega, 2018). While there is misalignment surrounding the criminal legal system and survivor perspectives on justice, accountability, and fairness and how to achieve each in response to DV crimes, there does appear to be some agreement that survivors should define what justice is for themselves (Dusenberry et al., 2024). However, the ability of survivors to have a voice in the process is complicated by state statutes that require specific responses (e.g., mandatory arrest), bias, the time frames in which system decisions are to be made, and the tools and resources available to courts and the community to respond to DV (Sadusky, 2020). Should law enforcement intervene and make an arrest, the next critical decision focuses on release or detention of the individual and, if released, setting appropriate conditions to increase the likelihood that the person will make all scheduled court appearances and (importantly) not inflict more harm.

Given the limited amount of time and information a judge has available to make the release decision, it is understandable that a high priority in making release decisions is to balance maintaining survivor and community safety with the due process rights for the individual facing DV charges (Sadusky, 2006).

[1] Corresponding Author. Email: mdemichele@rti.org

[2] The terms, "people who have caused harm" and "people facing DV charges" will be used interchangeably in this paper to describe individuals who have been charged with a DV crime. Additionally, we use the term "survivor" to describe individuals who experience DV. We recognize that "intimate partner violence" is another familiar term to describe violence among known individuals; however, we are using the term "domestic violence."

Judges, pretrial services officers, and policy makers are interested in understanding the odds of a released person being arrested for a more serious or violent DV charge, and jurisdictions may adopt pretrial assessments, both general and DV-specific, to inform the release decision (Nicholls et al., 2013). While general pretrial assessments have become more widely adopted, these tools were not developed to predict DV (Messing & Thaller, 2012); some pretrial assessments, however, like the Public Safety Assessment (PSA), were developed to predict new violent criminal arrest (NVCA) during the pretrial period (LJAF, 2013). Yet, research is fairly limited regarding how well these general pretrial assessments, such as the PSA, will perform in predicting a new pretrial DV arrest.

By leveraging the historical validation of the PSA in two jurisdictions, this study intends to address this gap and answer the following questions:

- RQ1. Are the characteristics of individuals booked on DV charges different from those of others?
- RQ2. Do individuals with a DV pretrial booking experience pretrial outcomes at different rates than others?
- RQ3. Are individuals with a DV pretrial booking more likely to experience pretrial failure or a new DV violent arrest during the pretrial period?

Pretrial and Domestic Violence Risk Assessments

Since the development of the first pretrial assessment by the Vera Institute in the early 1960s (Ares, Rankin, & Sturz, 1963; Eskridge, 1983), which was intended to predict the likelihood of court appearance, there has been substantial growth in the development and adoption of pretrial assessments across the United States (Pretrial Justice Institute, 2019). Some pretrial assessments are county-specific; others are state-specific and were developed using state data (e.g., Colorado, Florida, Minnesota), while some pretrial assessments have been developed and implemented more broadly, including the Public Safety Assessment (PSA), the Virginia Pretrial Risk Assessment (VPRAI), the Ohio Risk Assessment System – Pretrial Assessment Tool (ORAS - PAT), and the Federal Pretrial Risk Assessment (PTRA) (Desmarais et al., 2021).

Most of these pretrial assessments were developed to predict failure to appear (FTA) and new criminal arrest (NCA) (Bechtel et al., 2011, 2017). However, a few tools (e.g., VPRAI, PTRA) were developed to predict additional outcomes (VanNostrand, 2003; Lowenkamp & Whetzel, 2009), such as pretrial violations or pretrial revocation, and new violent criminal arrest (PSA, PTRA) (LJAF, 2013; Lowenkamp & Whetzel, 2009). One of the criticisms of some pretrial risk assessments is that they are single-scale tools, which comprise risk factors that may predict a specific outcome, but not multiple outcomes. There are two potentially negative implications from this. First, this may influence the assessment's predictive validity to predict multiple outcomes with factors not significantly associated with each. Second, without being able to distinguish if the risk is for missing court or new pretrial arrest or both, ordered release conditions may be inappropriate, unnecessary, or possibly not the least restrictive (Bechtel et al., 2017; LJAF, 2013).

Over the past 15 years, a substantial amount of pretrial risk assessment research has been produced examining the utility and predictive validity of these assessments, most of which demonstrate the benefit of actuarial assessments being introduced at the pretrial stage. (Bechtel et al., 2011, 2017; Cadigan & Lowenkamp, 2011; Desmarais et al., 2021; Desmarais, Monahan, & Austin, 2022; Goldkamp & Vilcia, 2009; Mamalian, 2011; Picard-Fritsche, Rempel, Tallon, Adler, & Reyes, 2017; Pretrial Justice Institute, 2019; Summers & Willis, 2010). Several meta-analyses have been conducted on the predictive validity of pretrial assessments. The first meta-analysis of pretrial risk assessments included 13 studies and examined the relationship between risk factors and assessments with multiple pretrial outcomes (failure to appear, rearrest, new crime, and a composite measure of any pretrial failure). The association of risk factors and pretrial outcomes was relatively low, but static factors (e.g., prior criminal history) had stronger correlations than dynamic. Overall effect sizes for the assessments revealed correlations moderate in size with failure to appear, rearrest, and any failure, but not new crime (Bechtel et al., 2011). In 2017, another meta-analysis was conducted on 16 studies and found the predictive validity across pretrial instruments was considered "fair" for failure to appear and "good" for rearrest and any pretrial failure (Bechtel et al., 2017). A recent systematic review of pretrial risk assessments demonstrated that the predictive validity of pretrial risk assessments could be classified as "good" to "excellent" (Desmarais et al., 2021). While many validation studies have focused on new criminal arrest and failure to appear, pretrial risk assessments have also been shown to predict new violent criminal arrest prior to case disposition—despite the short time frame with which to measure pretrial outcomes and given the low base rates for pretrial violence (Brittain et al., 2021; DeMichele et al., 2020; Desmarais et al., 2021; Lowder et al., 2020; Lowenkamp, DeMichele, & Warren, 2020; Marlowe et al., 2020).

While the research indicates that general pretrial risk assessments can predict the likelihood of pretrial violence, their ability to predict a pretrial arrest for domestic violence is relatively unknown. General pretrial risk assessments typically do not contain risk factors associated with DV and that are more commonly found on DV-specific assessments, such as prior DV incidents with partners or family members, escalation in severity of DV assaults, and threats to kill a partner (Messing & Thaller, 2012; 2015), as a result, they are unable to provide judges with this relevant information to inform the release decision with DV cases (Picard-Fritsche et al., 2017).

To address this challenge, criminal legal systems across multiple jurisdictions have developed or adopted DV-specific risk assessments. DV-specific tools can (1) address survivor needs by providing information about the likelihood of further and possibly more severe or imminent harm and therefore direct resources aimed to support the survivor, children, and family; and (2) be used to inform decision-making with system actors (e.g., law enforcement, courts, prosecution, probation) and case planning with treatment providers based on an individual's risk for DV recidivism and lethality. While some assessments can address both objectives, there are a few DV-specific assessments that are appropriate for judicial decision-making at the pretrial stage, including the Arizona Intimate Partner Risk Assessment Instrument System (APRAIS), the Brief Spousal Assault Form for the Evaluation of Risk (B-SAFER), the DA Bench Guide (DA-BG), and the Ontario Domestic Assault Risk Assessment (ODARA). Each of these instruments has requirements regarding those the tool is appropriate for and those who should administer the assessment. For example, the ODARA should not be administered for individuals in same-sex partnerships, and typically law enforcement conducts the ODARA, but provides the information to the courts. Perhaps the most well-studied of these

assessments is the ODARA, with multiple validation studies having been conducted. One meta-analysis concluded that the ODARA produced a medium effect size in predicting future assault; however, other assessments were found to have small effect sizes (Messing & Thaller, 2012). These results were replicated in a subsequent meta-analysis of DV-specific assessments (Nicholls et al., 2013). While there is promise in the use of DV-specific assessments during the pretrial stage, the use of "proxy" assessments in lieu of a DV-specific instrument is commonly observed (Messing & Thaller, 2012).

Methods

Data Sources and Sample

The data for this study came from two midsized counties that participated in a six-year multisite project, Advancing Pretrial Policy and Research (APPR). APPR jurisdictions received intensive training and technical assistance and participated in research to understand the local pretrial policies and practices and their impact, conducted historical Public Safety Assessment (PSA) validations prior to implementation and prospective validations post-implementation,[3] described the pretrial population in the local jail along with booking and release rates,[4] and examined release recommendations, conditions, and decisions.

To address each of the current study's research questions, data were requested from multiple sources including county jails, courts, and the state criminal history repository.[5] The sampling time frame was January 1, 2017, through December 31, 2018. Within these two counties' administrative data systems, the combination of specific arrest and booking data attaches a DV flag to specific charges that meet state statutory guidelines for DV. The DV flag was used to distinguish cases booked with at least one DV charge from non-DV bookings.

As illustrated in Figure 1, the total sample of pretrial bookings during January 1, 2017, through December 31, 2018, was 20,188, which comprised 5,188 DV flag bookings and 15,070 non-DV flag bookings. The total number of individuals released pretrial was 14,370. Of the 5,188 DV flag bookings, nearly 68% were released pretrial, and of the 15,070 non-DV flag bookings, 72 percent were released.

Measures

Pretrial Outcomes. There were six dependent variables examined in the current study. These pretrial outcomes were release, failure to appear, new criminal arrest, new criminal violent arrest, new criminal arrest for domestic violence, and new violent criminal arrest for domestic violence. *Release* was measured as an individual being released from jail pending case disposition. *Failure to appear* (FTA) was measured as a bench warrant issued for missing a scheduled predisposition court date. *New criminal arrest* (NCA) was measured as an arrest for a criminal or traffic offense that is eligible for a sentence to incarceration while on pretrial release. *New violent criminal arrest* (NVCA) was measured as an arrest for a violent criminal offense that is eligible for a sentence to incarceration while on pretrial release. *New criminal arrest for domestic violence* (NCA-DV) was measured as any new arrest for domestic violence based on state statute. *New violent criminal arrest for domestic violence* (NVCA-DV) was measured as an arrest for a domestic violence offense that also satisfied the PSA's definition of a violent charge based on the violent offense lists developed by the two participating counties. All bivariate outcome measures were coded similarly, 0 = outcome did not occur and 1 = outcome occurred.

Demographics. Demographic measures included biological sex (male, female), age at booking, and race (Asian/Pacific Islander, Black, Hispanic,[6] White, Other).

PSA Risk Factors. The PSA comprises the following risk factors: (1) age at current arrest, (2) current violent offense, (3) pending charge at the time of the current offense, (4) prior misdemeanor conviction, (5) prior felony conviction, (6) prior violent conviction, (7) prior failure to appear in the past two years, (8) prior failure to appear older than two years, and (9) prior sentence to incarceration of 14 days or more. Based on the scale, several PSA risk factors are combined into a specific factor, including: (1) any prior conviction (which is scored when a prior misdemeanor and/or felony conviction is present), (2) current violent offense and 20 years old or younger (which is scored from the current age and current violent offense risk factors). As part of the historical PSA validation study for these two counties, criminal history and court data were used to create PSA risk factor scores for the FTA, NCA, and NVCA scales.[7]

[3] All historical validation studies have included predictive bias testing. Post-implementation validations are limited to sites that implemented the PSA early in the study period to ensure sufficient sample size and follow-up to examine pretrial outcomes.

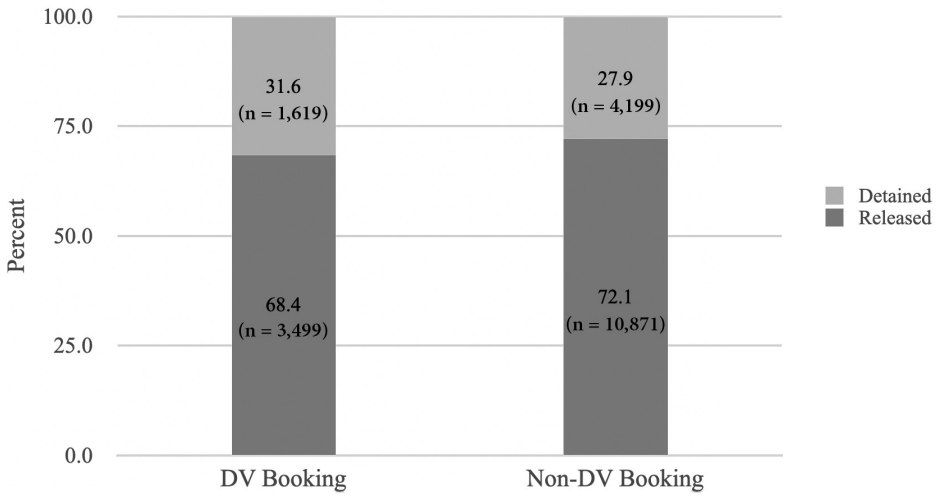
[4] Jail data dashboards were created for APPR jurisdictions to allow for ongoing review of the overall jail population, pretrial population, booking and release rates, lengths of stay, charge information, and demographics.

[5] These data were originally obtained for the historical PSA validation studies. As such, the decision to release or detain individuals in this study was made without the PSA, and we are reporting out on the judicial decision without assessment information available to the court.

[6] Hispanic was included as a race category within the administrative data sources. As such, we were unable to disaggregate Hispanic to examine ethnicity.

[7] More information about the PSA factors, scales, and weights can be found here: https://advancingpretrial.org/psa/factors/

FIGURE 1.
Bookings by Release and DV Status



Analytical Strategy

Descriptive statistics were calculated to examine and compare the characteristics of the DV and Non-DV groups based on demographics, charge type, PSA risk factors and scores, and pretrial outcomes. Additionally, bivariate logistic regression models were conducted for each dichotomous outcome measure, while controlling for the PSA and demographic measures, to identify significant predictors of these outcomes, as well as to describe the likelihood (using odds ratios) of the outcome occurring. Table 1 presents each research question and the analytical strategy followed.

Results

The results section presents the findings by research question along with corresponding tables and figures.

RQ1. Are the characteristics of individuals booked on DV charges different than others?

Table 2 presents the descriptive statistics by release status for the total sample, and by DV and non-DV bookings. The average age for all booked individuals, as well as disaggregated by DV and Non-DV bookings and release status, was 35 years. In terms of race, the composition of the total sample was 61.3 percent White people, 20.2 percent Black people, 8.7 percent Hispanic people, 6.7 percent Asian or Pacific Islander people, and 3.1 percent identified as "Other." When comparing the DV and Non-DV booked samples, significant differences were observed for Black and White individuals. Over 19 pecent of non-DV bookings included Black individuals, compared to 23.0 percent of DV bookings. Nearly 62 percent of non-DV bookings included White people, while 58.6 percent were in the DV booking group. Significant results for Black and White people were also observed when comparing DV and Non-DV samples within the released group; however, within the detained sample, significant differences for Black people, but not White people, were found. When examining biological sex, statistically significant differences were noted, as the total sample primarily comprised males. These results were observed regardless of DV booking or release status.

Table 3 shows the charge types by release status for the total sample and by DV and non-DV bookings. For the total sample, 24 percent of bookings were for a current violent charge.[8] Additionally, 57 percent of the DV bookings and 12.7 percent of non-DV bookings were for a current violent charge. There was a significantly higher percentage of DV bookings where the most serious charge was for a violent offense compared to non-DV bookings, with nearly 78 percent of DV admissions booked for violent offense as the most serious charge[9] compared to almost 19 percent of non-DV bookings. When comparing the most serious charge types by DV and non-DV bookings, statistically significant differences were observed for each charge type for both the released and detained groups. For released cases with a current violent charge (N=3,069), approximately 10 percent were non-DV, while 56 percent were DV. When comparing the most serious charges among DV and non-DV bookings for the released group (N=4,438) for violence, 78 percent were DV bookings and nearly 16 percent were non-DV. For property offenses (N=4,069), 11 percent were DV bookings and almost 34 percent were non-DV. For drug offenses (N=1,508), less than 1 percent were DV bookings and 14 percent were non-DV. Of the 4,341 public order offenses, 10 percent were DV bookings and almost 37 percent were for non-DV. For the detained group, 77 percent of the DV bookings had a violent offense as the most serious charge; however, for the non-DV bookings, nearly 41 percent had a property offense identified as the most serious charge. DV bookings that had a violent offense as the most serious charge had similar release and detention rates, with less than a 2-percentage point difference. For non-DV bookings that had a violent offense as the most serious charge there was nearly an 11-percentage point difference between the release and detention rates.

Based on these results, DV bookings were most frequently detained when the most serious charge was a violent offense, compared to non-DV bookings, which were most commonly detained for a property offense. Further, when examining current violent charges for the detained group, DV bookings had a significantly higher pretrial detention rate than non-DV.

Table 4 presents a breakdown of the PSA risk factors for the total sample by release status. Apart from current violent offense and 20 years old or younger, the detained and released groups are significantly different. Overall, the detained group is higher risk than the released group. The detained group is older (>23 years of age) than the released group and has a larger percentage of the risk factors present. Nearly 39 percent of the detained group and 27 percent of the released group have a pending charge. Nearly 75 percent of the detained group have a prior misdemeanor compared to 55 percent of the released group. Almost 56 percent of the detained group have a prior felony conviction, while 32 percent of the released group have the risk factor present. Almost 85 percent of the detained group and 70 percent of the released group have any prior conviction. Nearly 41 percent of the detained group and 22 percent of the released group have a prior violent conviction, with 13 percent of the detained group having 3 or more. For prior failures to appear in the past two years, approximately 60 percent of the detained group have missed at least one scheduled court date, compared to nearly 40 percent of the released group; and for FTAs older than two years, 72 percent of the detained group had an older FTA, while over half of the released group had an older FTA. For the prior sentence to incarceration more than 14 days risk factor, there was a 26-percentage

[8] To implement the PSA, jurisdictions develop a list of violent charges. To complete the historical validation, these two counties identified a violent charges list that was used to score two of the PSA's risk factors: (1) current violent offense and (2) prior violent conviction. The violent offense list was also used to code the outcome measure, NVCA.

[9] The National Corrections Reporting Program (NCRP) was used to categorize charges for the most serious offense measure (e.g., violent, drug, property, public order) in Table 3.

TABLE 1.
Research Question and Analytical Strategy

Research Question	Measures	Analytical Strategy
Are characteristics of individuals booked on DV charges different than others?	Demographics, PSA risk factors, PSA scale scores, Release status	Frequencies, means
Do individuals with a DV pretrial booking experience pretrial outcomes at different rates than others?	Release status, FTA, NCA, NVCA, NCA-DV, NVCA-DV	Frequencies, crosstabulations
Are individuals with a DV pretrial booking more likely to experience pretrial failure or a new DV violent arrest during the pretrial period?	FTA, NCA, NVCA, NCA-DV, NVCA-DV	Bivariate logistic regression Odds ratios

point difference, with more than two-thirds of the detained group having a prior carceral sentence.

Tables 5 and 6 examine the PSA risk factors by DV booking type and release status. Table 5 presents the PSA risk factors for DV bookings. Except for two risk factors, current violent offense and current violent offense and 20 years old or younger, there are significant differences by release status. The detained group are older than the released group, have a larger proportion of bookings with a pending charge, have more prior convictions (misdemeanor, felony, and violent) and more failures to appear, and there is nearly a 30-percentage point difference for these that experienced a prior sentence to incarceration of 14 days or more. Table 6, which presents the PSA risk factors for the non-DV group, is similar to the total sample results found in Table 4, with significant differences observed between the detained and released group for most PSA risk factors, except for current violent offense and 20 years old or younger. When comparing the proportion of risk factors present for the detained DV group and the non-DV, the DV group had a larger percentage of violent risk factors present, including current violent offense, current violent offense and 20 years old or younger, and prior violent conviction. The detained non-DV group had a larger percentage of all other PSA risk factors present.

Table 7 presents the average PSA scale scores by release and DV booking status. Statistically significant differences were observed when comparing average scores by DV and non-DV bookings, regardless of release status. Specifically, non-DV bookings had higher average FTA scores, with 3.51 overall, 3.29 for released, and 4.110 for detained. For NCA scores, similar results were observed. The non-DV group had higher average NCA scale scores than the DV group. For all pretrial bookings, the non-DV group had an average score of 3.34 compared to 3.00 for the DV group. The released non-DV group had an average NCA scale score of 3.10, while the DV group's average NCA score was 2.64. The detained DV group had an average NCA scale score of 3.79, and the non-DV group had an average NCA scale score of 3.97.

TABLE 2.
Demographics by Release Status for DV and Non-DV Bookings

Release status/Demographics	Overall (n=20,188)	DV Booking (n=5,118)	Non-DV Booking (n=15,070)	p-value
All Pretrial Bookings				
Age at Booking	34.82 (11.24)	35.29 (11.63)	34.66 (11.11)	<0.001
Race				
Asian/ Pacific Islander	1,343 (6.7%)	325 (6.4%)	1,018 (6.8%)	0.331
Black	4,083 (20.2%)	1,176 (23.0%)	2,907 (19.3%)	<0.001
Hispanic	1,766 (8.7%)	492 (9.6%)	1,274 (8.5%)	0.012
White	12,377 (61.3%)	3,000 (58.6%)	9,377 (62.2%)	<0.001
Other/ Unknown	619 (3.1%)	125. (2.4%)	494 (3.3%)	--
Sex				
Male	15,031 (74.5%)	4,003 (78.2%)	11,028 (73.2%)	<0.001
Female	5,157 (25.5%)	1,115 (21.8%)	4,042 (26.8%)	--
Released Pretrial				
Age at Booking	34.63 (11.43)	35.18 (11.91)	34.45 (11.27)	0.002
Race				
Asian/ Pacific Islander	990 (6.9%)	235 (6.7%)	755 (6.9%)	0.770
Black	2,807 (19.5%)	764 (21.8%)	2,043 (18.8%)	<0.001
Hispanic	1,276 (8.9%)	341 (9.7%)	935 (8.6%)	0.042
White	8,887 (61.8%)	2,076 (59.3%)	6,811 (62.7%)	<0.001
Other/ Unknown	410 (2.9%)	83 (2.4%)	327 (3.0%)	--
Sex				
Male	10,309 (71.7%)	2,613 (74.7%)	7,696 (70.8%)	<0.001
Female	4,061 (28.3%)	886 (25.3%)	3,175 (29.2%)	--
Detained Pretrial				
Age at Booking	35.28 (10.75)	35.50 (10.99)	35.19 (10.66)	0.324
Race				
Asian/ Pacific Islander	353. (6.1%)	90 (5.6%)	263 (6.3%)	0.344
Black	1,276 (21.9%)	412 (25.4%)	864 (20.6%)	<0.001
Hispanic	490 (8.4%)	151 (9.3%)	339 (8.1%)	0.136
White	3,490 (60.0%)	924 (57.1%)	2,566 (61.1%)	0.005
Other/ Unknown	209 (3.6%)	42 (2.6%)	167 (4.0%)	--
Sex				
Male	4,722 (81.2%)	1,390 (85.9%)	3,332 (79.4%)	<0.001
Female	1,096 (18.8%)	229 (14.1%)	867 (20.6%)	--

These results might have been expected—as the findings indicated that the detained group is higher risk compared to the released group based on the presence of more PSA risk factors and higher average scale scores. Further, the detained DV group had a higher percentage of violent risk factors present than the non-DV group. The next research question takes a closer look at the six pretrial outcomes by DV and non-DV bookings.

RQ2. Do individuals with a DV pretrial booking experience pretrial outcomes at different rates than others?

This next research question aims to determine if there are differences in the rates of release, including the average lengths of stay, as well as FTA, NCA, NVCA, NCA-DV, and NVCA-DV between the DV and non-DV groups.

Release. As depicted in Figure 1 above, 68 percent of the 5,188 DV bookings were released and 72 percent of the 15,070 non-DV bookings were released. Additionally, in Table 8, we looked at the average length of stay (ALOS) in days by release and DV booking type. The ALOS for all pretrial bookings was about 26 days, with the released group averaging about a week and the detained group nearly 76 days. The DV and non-DV groups averaged about 26 and 27 days respectively. For cases released pretrial, the ALOS was almost 6 days for the DV group and 7 days for non-DV. Detained DV cases had an ALOS of 71 days, while non-DV averaged nearly 78 days. No results were statistically significant.

Pretrial Failure. Table 9 presents the percentage of released cases that experienced a pretrial failure outcome overall and by DV booking status. FTA was the most common outcome, with nearly 26 percent of cases missing a scheduled court date, followed by 15 percent that had an NCA. When comparing the DV and non-DV bookings, we found that non-DV bookings had significantly more FTAs (19.2 percent v. 27.6 percent) and NCAs (11.2 percent v. 16.4 percent), but DV bookings had significantly higher rates of NVCA (6.9 percent v. 3.7), NCA-DV (4.2 percent v. 1.4 percent), and NVCA-DV (2.5 percent v. 0.8 percent) than non-DV.

Overall, the DV booking group had lower release rates than the non-DV group, with no statistically significant differences in ALOS. When examining pretrial outcomes, the non-DV group had significantly higher FTA and NCA rates, but the DV group had significantly higher rates of violent pretrial outcomes (NVCA, NCA-DV, and NVCA-DV). The next section examines the probability of DV bookings experiencing a pretrial failure.

TABLE 3.
Charge Type by Release Status for DV and Non-DV Bookings

	Overall (n=20,188)	DV Booking (n=5,118)	Non-DV Booking (n=15,070)	p-value
All Pretrial Bookings				
Current Violent Charge*	4,837 (24.0%)	2,919 (57.0%)	1,918 (12.7%)	<0.001
Most Serious Charge (NCRP)				
Violent Offenses	6,804 (33.7%)	3,982 (77.8%)	2,822 (18.7%)	<0.001
Property Offenses	5,961 (29.5%)	567 (11.1%)	5,394 (35.8%)	<0.001
Drug Offenses	2,050 (10.2%)	44 (0.9%)	2,006 (13.3%)	<0.001
Public Order Offenses	5,356 (26.5%)	525 (10.3%)	4,831 (32.1%)	<0.001
Other Offenses	17 (0.1%)	0 (0.0%)	17 (0.1%)	--
Released Pretrial				
Current Violent Charge*	3,069 (21.4%)	1,965 (56.2%)	1,104 (10.2 %)	<0.001
Most Serious Charge (NCRP)				
Violent Offenses	4,438 (30.9%)	2,739 (78.3%)	1,699 (15.6%)	<0.001
Property Offenses	4,069 (28.3%)	384 (11.0%)	3,685 (33.9%)	<0.001
Drug Offenses	1,508 (10.5%)	23 (0.7%)	1,485 (13.7%)	<0.001
Public Order Offenses	4,341 (30.2%)	353 (10.1%)	3,988 (36.7%)	<0.001
Other Offenses	14 (0.1%)	0 (0.0%)	14 (0.1%)	--
Detained Pretrial				
Current Violent Charge*	1,768 (30.4%)	954 (58.9%)	814 (19.4%)	<0.001
Most Serious Charge (NCRP)				
Violent Offenses	2,366 (40.7%)	1,243 (76.8%)	1,123 (26.7%)	<0.001
Property Offenses	1,892 (32.5%)	183 (11.3%)	1,709 (40.7%)	<0.001
Drug Offenses	542 (9.3%)	21 (1.3%)	521 (12.4%)	<0.001
Public Order Offenses	1,015 (17.4%)	172 (10.6%)	843 (20.1%)	<0.001
Other Offenses	3 (0.1%)	0 (0.0%)	3 (0.1%)	--

* Based on county defined list of violent charges

RQ3. Are individuals with a DV pretrial booking more likely to experience pretrial failure or a new DV violent arrest during the pretrial period?

Tables 10 through 14 present the results of the bivariate logistic regression models. Table 10 demonstrates that non-DV bookings, having a pending charge at the time of booking, prior felony conviction, and being younger at the time of booking are all significantly related to experiencing FTA. When interpreting the odds ratios above 1, having a pending charge is associated with a 17 percent increase in the likelihood of FTA, while having a prior felony conviction is associated with a 13 percent increase in the odds of FTA.

Table 11 presents the regression model predicting NCA. Based on these results, non-DV bookings, having a pending charge at the time of the current offense, having one FTA in the past two years or having 2 or more FTAs in the past two years, and being young at booking, are all significantly associated with NCA. The odds of a NCA increases 40 percent with a pending charge at the time of booking and 37 percent with a prior felony conviction. The likelihood of a NCA increases 1.5 times with one prior FTA in the past two years and 1.7 times with each additional prior FTA in the past two years.

Table 12 presents the bivariate logistic regression model findings predicting NVCA. Being booked on a DV charge, having 1 to 2 prior violent convictions or 3 or more, being young, and male, were all significant predictors of NVCA. The odds of an NVCA occurring are nearly 67 percent with 1 to 2 prior violent convictions and increase to 80 percent with 3 or more prior violent convictions. Further, being male is associated with a 34 percent increase in the likelihood of an NVCA.

Table 13 examines the predictors of NCA-DV. Being booked on a DV charge, having a pending charge at the time of booking, having 3 or more prior violent convictions, and being young were all significantly associated with experiencing a NCA-DV. The likelihood of NCA-DV increases 3.5 times for being booked on a DV charge, 1.9 times for having a pending charge at booking, and 4.3 times for having 3 or more prior violent convictions.

Table 14 presents the findings from the bivariate logistic regression model predicting NVCA-DV. Being booked on a DV charge, having 3 or more prior violent convictions, and having two or more FTAs in the past two years are all significantly associated with

TABLE 4.
Total Sample: PSA Risk Factors by Release Status

PSA Factor	Factor Labels	Overall % (N)	Detained % (N)	Released % (N)	p-value
Current Age	>=23	88.8 (17,927)	91.42 (5,319)	87.74 (12,608)	<0.001
	<23	11.2 (2,261)	8.58 (499)	12.26 (1,762)	
Current Violent Offense	No	76.04 (15,351)	69.61 (4,050)	78.64 (11,301)	<0.001
	Yes	23.96 (4,837)	30.39 (1,768)	21.36 (3,069)	
Current Violent Offense & <=20 Years Old	No	98.12 (19,809)	98.04 (5,704)	98.16 (14,105)	0.624
	Yes	1.88 (379)	1.96 (114)	1.84 (265)	
Pending Charge	No	69.6 (14,050)	61.16 (3,558)	73.01 (10,492)	<0.001
	Yes	30.4 (6,138)	38.84 (2,260)	26.99 (3,878)	
Prior Misdemeanor Conviction	No	39.25 (7,924)	25.18 (1,465)	44.95 (6,459)	<0.001
	Yes	60.75 (12,264)	74.82 (4,353)	55.05 (7,911)	
Prior Felony Conviction	No	60.76 (12,267)	43.83 (2,550)	67.62 (9,717)	<0.001
	Yes	39.24 (7,921)	56.17 (3,268)	32.38 (4,653)	
Prior Felony or Misdemeanor Conviction	No	26.04 (5,257)	15.33 (892)	30.38 (4,365)	<0.001
	Yes	73.96 (14,931)	84.67 (4,926)	69.62 (10,005)	
Prior Violent Conviction	No	72.35 (14,607)	59.16 (3,442)	77.7 (11,165)	<0.001
	Yes, 1 or 2	19.83 (4,003)	28.22 (1,642)	16.43 (2,361)	
	Yes, 3 or more	7.82 (1,578)	12.62 (734)	5.87 (844)	
Prior FTA in Past 2 Years	No	55.2 (11,144)	39.96 (2,325)	61.37 (8,819)	<0.001
	Yes, just 1	20.79 (4,198)	24.17 (1,406)	19.43 (2,792)	
	Yes, 2 or more	24 (4,846)	35.87 (2,087)	19.2 (2,759)	
Prior FTA Older than 2 Years	No	41.89 (8,456)	27.81 (1,618)	47.59 (6,838)	<0.001
	Yes	58.11 (11,732)	72.19 (4,200)	52.41 (7,532)	
Prior Sentence to Incarceration > 14 days	No	50.64 (10,223)	31.9 (1,856)	58.23 (8,367)	<0.001
	Yes	49.36 (9,965)	68.1 (3,962)	41.77 (6,003)	

NVCA-DV. The likelihood of a NVCA-DV occurring increases 3.2 times with DV bookings, 3.0 times with 3 or more prior violent convictions, and 2.1 times with two or more FTAs in the past two years.

Based on these results, DV bookings are significantly more likely to experience an NVCA by 22 percent, NCA-DV by 35 percent, and NVCA-DV by 32 percent. However, DV bookings were not found to be significant predictors of FTA and NCA.

Discussion

The use of pretrial risk assessments to inform a release decision has become a more widespread practice (Desmarais & Lowder, 2019); however, these tools lack specific factors that research has demonstrated are associated with future DV (Messing & Thaller, 2015). Further, some DV-specific tools were developed to inform the urgent needs for survivors, children, and family members, and while some assessments have criminal legal system application, many were not created to guide the pretrial release decision (Messing & Thaller, 2012; 2015; Northcott, 2012). DV-specific assessments may also require an interview with the survivor, which may not be possible to complete in the required time that a release decision is to be made by the court, and the interview could perpetuate additional trauma. Since courts often have limited time and information to make the release decision, and DV charges are considered one of the most serious to address, jurisdictions have been requesting more information and resources to properly assess and respond to DV (Dutton & Kropp, 2000; Roehl, 2005; van der Put et al., 2019).

The current study set out to answer three research questions. First, we wanted to compare individual characteristics for those booked on DV and non-DV charges. Based on these data, we found that there was a larger proportion of males in the overall sample, and relatedly, this finding was consistently observed regardless of DV or release status. DV bookings were more frequently detained pretrial when the most serious charge was for a violent offense, whereas for non-DV bookings, there were higher pretrial detention rates for property offenses. We also found that among the overall sample, the detained group was higher risk compared to the released group, with more PSA risk factors present and higher average scale scores. Relatedly, the detained DV group had significantly higher proportions of PSA violent risk factors present than the non-DV. Second, we explored if there were significant differences in pretrial outcomes between the DV and non-DV groups. We found that DV bookings had significantly lower release rates than the non-DV group, and interestingly, the ALOS did not significantly vary by DV status. For pretrial failure, non-DV bookings experienced significantly higher rates of FTA and NCA, but the DV group had significantly higher rates of violent pretrial outcomes (NVCA, NCA-DV, and NVCA-DV). Finally, we examined if the likelihood of these pretrial outcomes varied by DV status and found that the results closely mirrored the RQ2 results. Specifically, DV

TABLE 5.
DV Bookings: PSA Risk Factors by Release Status

PSA Factor	Factor Labels	Overall % (N)	Detained % (N)	Released % (N)	p-value
Current Age	>=23	88.12 (4,510)	90.98 (1,473)	86.8 (3,037)	<0.001
	<23	11.88 (608)	9.02 (146)	13.2 (462)	
Current Violent Offense	No	42.97 (2,199)	41.07 (665)	43.84 (1,534)	0.067
	Yes	57.03 (2,919)	58.93 (954)	56.16 (1,965)	
Current Violent Offense & <=20 Years Old	No	96.37 (4,932)	96.79 (1,567)	96.17 (3,365)	0.309
	Yes	3.63 (186)	3.21 (52)	3.83 (134)	
Pending Charge	No	74.52 (3,814)	64.92 (1,051)	78.97 (2,763)	<0.001
	Yes	25.48 (1,304)	35.08 (568)	21.03 (736)	
Prior Misdemeanor Conviction	No	43.65 (2,234)	25.69 (416)	51.96 (1,818)	<0.001
	Yes	56.35 (2,884)	74.31 (1,203)	48.04 (1,681)	
Prior Felony Conviction	No	68.44 (3,503)	51.08 (827)	76.48 (2,676)	<0.001
	Yes	31.56 (1,615)	48.92 (792)	23.52 (823)	
Prior Felony or Misdemeanor Conviction	No	32.28 (1,652)	18.04 (292)	38.87 (1,360)	<0.001
	Yes	67.72 (3,466)	81.96 (1,327)	61.13 (2,139)	
Prior Violent Conviction	No	68.05 (3,483)	49.23 (797)	76.76 (2,686)	<0.001
	Yes, 1 or 2	22.51 (1,152)	34.34 (556)	17.03 (596)	
	Yes, 3 or more	9.44 (483)	16.43 (266)	6.2 (217)	
Prior FTA in Past 2 Years	No	64.32 (3,292)	47.37 (767)	72.16 (2,525)	<0.001
	Yes, just 1	17.06 (873)	21.8 (353)	14.86 (520)	
	Yes, 2 or more	18.62 (953)	30.82 (499)	12.98 (454)	
Prior FTA Older than 2 Years	No	48.81 (2,498)	31.87 (516)	56.64 (1,982)	<0.001
	Yes	51.19 (2,620)	68.13 (1,103)	43.36 (1,517)	
Prior Sentence to Incarceration > 14 days	No	56.45 (2,889)	34.84 (564)	66.45 (2,325)	<0.001
	Yes	43.55 (2,229)	65.16 (1,055)	33.55 (1,174)	

bookings were significantly more likely to experience a violent pretrial outcome, but not an FTA or NCA.

Limitations. There are several notable limitations with the current study that prompt the need for future research. First, the sample was drawn from two jurisdictions in the same state. Given this, the results are not generalizable to a larger population. Further, these jurisdictions had not yet adopted a DV-specific risk assessment or the PSA at the time of the study. Recognizing there are multiple factors associated with the increased likelihood of a DV crime occurring that were not available in the data (or the PSA), we are aware that different results might have been produced had such measures been included and analyzed. Relatedly, we were unable to compare the predictive validity of a DV-specific tool to a general pretrial assessment to determine which instrument would be a better predictor of DV pretrial outcomes. Last, this was a descriptive study, so the results are not causal.

Research and Policy Implications

We have considerable progress to make in terms of building knowledge to develop and implement valid actuarial DV-specific and general risk assessments during the pretrial period. While data collection and research are needed to inform DV-specific policies and practices across the criminal legal system, to do this work well, we must deliberately start with fully integrating survivor voices.

Elevate Survivor Input. First, survivors and advocates should be directly and continuously engaged in the adoption, implementation, and evaluation of assessments and policies that inform criminal legal system decision-making with DV cases, and to identify or expand upon the needed community resources to address DV and ensure that policies and interventions are responsive to a survivor's unique needs.

Establish a DV Indicator in Local Data Systems. Second, jurisdictions will need to integrate a DV charge indicator in their case management systems to flag DV cases. This flag will inform local pretrial system stakeholders (law enforcement, prosecutors, courts, jail, pretrial services) that the case includes DV charges, that a DV-specific assessment should be completed (if available) or relevant DV-specific risk factors should be collected, and that survivor input should be prioritized. Additionally, the DV charge indicator should be used to establish a baseline to measure pretrial DV outcomes and to track and report on these outcomes regularly.

Identify DV Predictors, Validate Assessments, and Aim for Rigor. Third, in terms of future research, examining the predictors of NVCA, NCA-DV, and NVCA-DV should be considered across multiple jurisdictions. For jurisdictions that have adopted the PSA or other general pretrial tools and DV-specific assessments, validations on these tools should be routinely conducted and include tests for predictive bias. Relatedly, rigorous research that evaluates the causal impact of implementing DV-specific and general pretrial assessments on individual, case, system,

TABLE 6.
Non-DV Bookings: PSA Risk Factors by Release Status

PSA Factor	Factor Labels	Overall % (N)	Detained % (N)	Released % (N)	p-value
Current Age	>=23	89.03 (13,417)	91.59 (3,846)	88.04 (9,571)	<0.001
	<23	10.97 (1,653)	8.41 (353)	11.96 (1,300)	
Current Violent Offense	No	87.27 (13,152)	80.61 (3,385)	89.84 (9,767)	<0.001
	Yes	12.73 (1,918)	19.39 (814)	10.16 (1,104)	
Current Violent Offense & <=20 Years Old	No	98.72 (14,877)	98.52 (4,137)	98.79 (10,740)	0.212
	Yes	1.28 (193)	1.48 (62)	1.21 (131)	
Pending Charge	No	67.92 (10,236)	59.7 (2,507)	71.1 (7,729)	<0.001
	Yes	32.08 (4,834)	40.3 (1,692)	28.9 (3,142)	
Prior Misdemeanor Conviction	No	37.76 (5,690)	24.98 (1,049)	42.69 (4,641)	<0.001
	Yes	62.24 (9,380)	75.02 (3,150)	57.31 (6,230)	
Prior Felony Conviction	No	58.16 (8,764)	41.03 (1,723)	64.77 (7,041)	<0.001
	Yes	41.84 (6,306)	58.97 (2,476)	35.23 (3,830)	
Prior Felony or Misdemeanor Conviction	No	23.92 (3,605)	14.29 (600)	27.64 (3,005)	<0.001
	Yes	76.08 (11,465)	85.71 (3,599)	72.36 (7,866)	
Prior Violent Conviction	No	73.82 (11,124)	62.99 (2,645)	78 (8,479)	<0.001
	Yes, 1 or 2	18.92 (2,851)	25.86 (1,086)	16.24 (1,765)	
	Yes, 3 or more	7.27 (1,095)	11.15 (468)	5.77 (627)	
Prior FTA in Past 2 Years	No	52.1 (7,852)	37.1 (1,558)	57.9 (6,294)	<0.001
	Yes, just 1	22.06 (3,325)	25.08 (1,053)	20.9 (2,272)	
	Yes, 2 or more	25.83 (3,893)	37.82 (1,588)	21.2 (2,305)	
Prior FTA Older than 2 Years	No	39.54 (5,958)	26.24 (1,102)	44.67 (4,856)	<0.001
	Yes	60.46 (9,112)	73.76 (3,097)	55.33 (6,015)	
Prior Sentence to Incarceration > 14 days	No	48.67 (7,334)	30.77 (1,292)	55.58 (6,042)	<0.001
	Yes	51.33 (7,736)	69.23 (2,907)	44.42 (4,829)	

and cost outcomes should be conducted.

Create and Disseminate Clear Policies. Fourth, jurisdictions that have the PSA or other general pretrial assessments will need policies to inform the proper use of DV-specific assessments along with these other general tools. These policies should include guidance (beyond the use of overrides) for how pretrial services should account for survivor's voice and input, as well as information from the pretrial and DV-specific assessments, to make release conditions recommendations to the court.

Expand Education. Finally, the criminal legal system will need training on the use of risk assessments (both general and DV-specific) and what they do and do not indicate, how to meaningfully incorporate survivor feedback into the release decision, and education on local resources available for survivors as well as those charged with DV crimes.[10]

References

Ares, C., Rankin, A., & Sturz, H. (1963). The Manhattan Bail Project: An interim report on the pre-trial use of pre-trial parole. *New York University Law Review, 38*, 67–95.

Bechtel, K., Holsinger, A. M., Lowenkamp, C. T., & Warren, M. J. (2017). A meta-analytic review of pretrial research: Risk assessment, bond type, and interventions. *American Journal of Criminal Justice, 42*, 443–467. https://doi.org/10.1007/s12103-016-9367-1.

Bechtel, K., Lowenkamp, C. T., & Holsinger, A. (2011). Identifying the predictors of pretrial failure: A meta-analysis. *Federal Probation, 75*, 78–87.

Brittain, B. J., Georges, L., & Martin, J. (2021). Examining the predictive validity of the Public Safety Assessment. *Criminal Justice and Behavior*. https://doi.org/10.1177/00938548211005836.

Cadigan, T. P., & Lowenkamp, C. T. (2011). Implementing risk assessment in the federal pretrial system. *Federal Probation, 75*(2), 30-34.

DeMichele, M., Baumgartner, P., Wenger, M., Barrick, K., & Comfort, M. (2020). Public Safety Assessment. *Criminology & Public Policy, 19*, 2, 409–431. https://doi.org/10.1111/1745-9133.12481.

Desmarais, S., & Lowder, E. (February 2019). Pretrial risk assessment tools: A primer for judges, prosecutors, and defense attorneys. Safety and Justice Challenge.

Desmarais, S. L., Monahan, J., & Austin, J. (2022). The empirical case for pretrial risk assessment instruments. *Criminal Justice and Behavior, 49*(6), 807-816. https://doi.org/10.1177/00938548211041651.

Desmarais, S. L., Reeves, K. A., Nicholls, T. L., Telford, R., & Fiebert, M. S. (2012). Prevalence of physical violence in intimate relationships, part 1: Rates of male and female victimization. *Partner Abuse, 3*(2), 140–169. https://doi.org/10.1891/1946-6560.3.2.140.

Desmarais, S. L., Zottola, S. A., Duhart Clarke, S. E., & Lowder, E. M. (2021). Predictive validity of pretrial risk assessments: A systematic review of the literature. *Criminal Justice and Behavior, 48*(4), 398-420. https://doi.org/10.1177/0093854820932959.

Duane, M., & Vasquez-Noriega, C. (May 2018). Pretrial strategy for handling intimate partner violence cases: An Innovation Fund case study from Buncombe County, North Carolina. Urban Institute.

Dusenberry, M., Matei, A., Nmai, C., Nembhard, S., & Duane, M. (May 2024). Striving toward justice: Diverse domestic violence survivors' and practitioners' perceptions of justice, accountability, and safety. Urban Institute.

Dutton, D. G., & Kropp, P. R. (2000). A review of domestic violence risk instruments. *Trauma, Violence, & Abuse, 1*(2), 171-181. https://doi.org/10.1177/1524838000001002004.

Eskridge, C. W. (1983). Pretrial release programming: Issues and trends. New York, NY: Clark Boardman Company.

[10] The Association of Prosecuting Attorneys (APA) has a position statement on processing DV cases during the pretrial period that includes recommendations for system stakeholders. See here: APA DV Position Statement.

TABLE 7.
Average (Mean) PSA Scale Scores by Release and DV Booking Status

	Overall (N=20,188) Mean (SD[1])	DV Booking (N=5,118) Mean (SD)	Non-DV Booking (N=15,070) Mean (SD)	p-value
FTA				
All pretrial bookings	3.40 (1.61)	3.06 (1.60)	3.51 (1.60)	≤.001
Released	3.15 (1.61)	2.73 (1.54)	3.29 (1.60)	≤.001
Detained	4.01 (1.47)	3.76 (1.51)	4.10 (1.44)	≤.001
NCA				
All pretrial bookings	3.26 (1.58)	3.00 (1.59)	3.34 (1.57)	≤.001
Released	2.99 (1.55)	2.64 (1.50)	3.10 (1.55)	≤.001
Detained	3.92 (1.46)	3.79 (1.51)	3.97 (1.44)	≤.001
NVCA				
All pretrial bookings	1.96 (1.03)	2.52 (1.17)	1.77 (0.91)	≤.001
Released	1.81 (0.96)	2.33 (1.11)	1.64 (0.84)	≤.001
Detained	2.32 (1.13)	2.92 (1.20)	2.10 (1.01)	≤.001

[1] SD represents the standard deviation.

TABLE 8.
Average Length of Stay by Release Status and DV Booking Status

	Overall (n=20,188)			DV Booking (n=5,118)			Non-DV Booking (n=15,070)			p-value
	Mean (SD)	Minimum	Maximum	Mean (SD)	Minimum	Maximum	Mean (SD)	Minimum	Maximum	
All Pretrial Bookings	26.49 (63.70)	0	882	26.41 (59.46)	0	646	26.52 (65.09)	0	882	0.914
Released Pretrial	6.58 (23.55)	0	514	5.97 (18.33)	0	283	6.77 (24.99)	0	514	0.004
Detained Pretrial	75.67 (96.51)	0	882	70.59 (87.16)	0	646	77.63 (99.83)	0	882	0.008

Goldkamp, J. S., & Vilcica, E. R. (2009). Judicial discretion and the unfinished agenda of American bail reform: Lessons from Philadelphia's evidence-based judicial strategy. In Sarat, A. (Ed). Special issue: New perspectives on crime and criminal justice. *Studies in Law, Politics, and Society*, Vol. 47 (pp. 115-157).

Herman, S. (2010). Parallel justice for victims of crime. Washington, DC: National Center for Victims of Crime.

Laura and John Arnold Foundation (LJAF). (November 2013). Developing a national model for pretrial risk assessment. See: LJAF-research-summary_PSA-Court_4_1.pdf (craftmediabucket.s3.amazonaws.com).

Lowder, E. M., Lawson, S. G., Grommon, E., & Ray, B. R. (2020). Five-county validation of the Indiana Risk Assessment System—Pretrial Assessment Tool (IRAS-PAT) using a local validation approach. *Justice Quarterly, 37*(7), 1241–1260. https://doi.org/10.1080/07418825.2020.1829006.

Lowenkamp, C. T., DeMichele, M., & Klein Warren, L. (2020). Replication and extension of the Lucas County PSA Project. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3727443.

Lowenkamp, C. T., & Whetzel, J. (September 2009). The development of an actuarial risk assessment instrument for U.S. Pretrial Services. *Federal Probation*, p. 33–36.

Mamalian, C. A. (2011). State of the science of pretrial risk assessment. Washington, D.C.: Bureau of Justice Assistance.

Marlowe, D. B., Ho, T., Carey, S. M., & Chadick, C. D. (2020). Employing standardized risk assessment in pretrial release decisions: Association with criminal justice outcomes and racial equity. *Law and Human Behavior, 44*(5), 361–376. https://doi.org/10.1037/lhb0000413.

Messing, J., & Thaller, J. (2015). Intimate partner violence risk assessment: A primer for social workers. *British Journal of Social Work, 45*, 1804–1820.

Messing, J., & Thaller, J. (2012). The average predictive validity of intimate partner violence risk assessment instruments. *Journal of Interpersonal Violence, 28*, 7, 1537 – 58.

Nicholls, T., Pritchard, M., Reeves, K., & Hilterman, E. (2013). Risk assessment in intimate partner violence: A systematic review of contemporary approaches. *Partner Abuse, 4*, 76-168.

Northcott, M. (2012). Intimate partner violence risk assessment tools: A review. Research and Statistics Division. Department of Justice Canada. Intimate Partner Violence Risk Assessment Tools: A Review (justice.gc.ca).

Picard-Fritsche, S., Rempel, M., Tallon, J., Adler, J., & Reyes, N. (2017). Demystifying risk assessment: Key principles and controversies. Center for Court Innovation.

Pretrial Justice Institute. (2019). Scan of pretrial practices 2019. https://university.pretrial.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=24bb2bc4-84ed-7324-929c-d0637db43c9a&forceDialog=0

Reaves, B. (2017). Police response to domestic violence, 2006-2015. Special Report. Washington, DC: Bureau of Justice Statistics.

Roehl, J., O'Sullivan, C., Webster, D., & Campbell, J. (May 2005). Intimate partner violence risk assessment validation study: The RAVE study practitioner summary and recommendations: Validation of tools for assessing risk from violent intimate partners. U.S. Department of Justice.

Sadusky, J. (February 2020). The criminal legal system response to domestic violence: Questions and debate. National Clearinghouse for the Defense of Battered Women. The Criminal Legal System Response to Domestic Violence: Questions and Debate (bwjp.org).

TABLE 9.
Pretrial Outcomes by DV and Non-DV Bookings

	Overall (n=14,370)	DV Booking (n=3,499)	Non-DV Booking (n=10,871)	p-value
	Mean	Mean	Mean	
Dependent Variables				
Failure to Appear	3,677 (25.6%)	672 (19.2%)	3,005 (27.6%)	<0.001
New Criminal Arrest	3,051 (15.1%)	573 (11.2%)	2,478 (16.4%)	<0.001
New Violent Criminal Arrest	900 (4.5%)	347 (6.9%)	553 (3.7%)	<0.001
New DV Criminal Arrest	297 (2.1%)	148 (4.2%)	149 (1.4%)	<0.001
New DV Violent Criminal Arrest	173 (1.2%)	87 (2.5%)	86 (0.8%)	<0.001

TABLE 10:
Predicting Failure to Appear During Pretrial Release

	Failure to Appear					
	b	SE	p-value	Odds Ratio	LOR 95% CI	UOR 95% CI
Independent Variable of Interest						
Booked on a Domestic Violence Charge	-0.3387	0.052	<0.001	0.713	0.643	0.789
Covariates						
Pending Charge at Time of Booking	0.5154	0.049	<0.001	1.674	1.522	1.842
Prior Misdemeanor Conviction	0.1294	0.056	0.0201	1.138	1.020	1.269
Prior Felony Conviction	0.2879	0.062	<0.001	1.334	1.181	1.506
Prior Violent Conviction – 1 - 2	0.0360	0.062	0.560	1.037	0.918	1.170
Prior Violent Conviction – 3 or more	0.2951	0.089	0.001	1.343	1.128	1.598
Prior FTA in the Past 2 Years – Just 1	0.1478	0.055	0.007	1.159	1.041	1.291
Prior FTA in the Past 2 Years – 2 or more	0.1100	0.060	0.066	1.116	0.992	1.255
Prior Sentence to Incarceration of 14 or More Days	0.1546	0.066	0.019	1.167	1.026	1.328
Age at Booking	-0.0160	0.002	<0.001	0.984	0.980	0.988
Black	-0.0057	0.091	0.951	0.994	0.832	1.191
Hispanic	-0.0541	0.105	0.607	0.947	0.771	1.165
White	-0.0389	0.083	0.640	0.962	0.819	1.134
Other/Unknown	-0.0718	0.144	0.618	0.931	0.700	1.231
Male	-0.1302	0.046	0.005	0.878	0.802	0.962
AIC	14,198					
N Observations	14,370					
N Individuals	14,370					

Sadusky, J. (2006). Pretrial release conditions in domestic violence cases: Issues and context. Battered Women's Justice Project. https://bwjp.org/assets/documents/pdfs/pretrial_release_conditions_domestic_violence_cases.pdf.

Summers, C., & Willis, T. (2010). Pretrial risk assessment: Research summary. Washington, D.C.: Bureau of Justice Assistance.

Tapp, S., & Coen, E. (September 2024). Criminal victimization, 2023. Bureau of Justice Statistics. Washington, D.C., https://bjs.ojp.gov/document/cv23.pdf.

van der Put, C., Gubbels, J., & Assink, M. (2019). Predicting domestic violence: A meta-analysis on the predictive validity of risk assessment tools. *Aggression and Violent Behavior, 47*, 100-116.

VanNostrand, M. (2003). Assessing risk among pretrial defendants in Virginia: The Virginia Pretrial Risk Assessment Instrument.

TABLE 11.
Predicting New Criminal Arrest During Pretrial Release

	New Criminal Arrest					
	b	SE	p-value	Odds Ratio	LOR 95% CI	UOR 95% CI
Independent Variable of Interest						
Booked on a Domestic Violence Charge	-0.233	0.056	<0.001	0.792	0.710	0.884
Covariates						
Pending Charge at Time of Booking	0.333	0.052	<0.001	1.395	1.260	1.543
Prior Misdemeanor Conviction	0.086	0.060	0.152	1.090	0.968	1.227
Prior Felony Conviction	0.318	0.065	<0.001	1.374	1.210	1.561
Prior Violent Conviction – 1 - 2	0.087	0.064	0.175	1.091	0.962	1.237
Prior Violent Conviction – 3 or more	0.267	0.092	0.004	1.306	1.090	1.562
Prior FTA in the Past 2 Years – Just 1	0.388	0.058	<0.001	1.474	1.315	1.652
Prior FTA in the Past 2 Years – 2 or more	0.525	0.062	<0.001	1.690	1.496	1.909
Prior Sentence to Incarceration of 14 or More Days	0.226	0.070	0.001	1.254	1.093	1.439
Age at Booking	-0.017	0.002	<0.001	0.983	0.979	0.987
Black	0.032	0.100	0.749	1.032	0.851	1.257
Hispanic	-0.001	0.115	0.994	0.999	0.798	1.252
White	0.039	0.091	0.671	1.039	0.872	1.245
Other/Unknown	0.233	0.150	0.119	1.263	0.939	1.691
Male	0.092	0.051	0.072	1.096	0.992	1.212
AIC				12,763		
N Observations				14,370		
N Individuals				14,370		

TABLE 12.
Predicting New Violent Criminal Arrest During Pretrial Release

	New Violent Criminal Arrest					
	b	SE	p-value	Odds Ratio	LOR 95% CI	UOR 95% CI
Independent Variable of Interest						
Booked on a Domestic Violence Charge	0.789	0.078	<0.001	2.200	1.888	2.561
Covariates						
Pending Charge at Time of Booking	0.126	0.089	0.158	1.134	0.951	1.350
Prior Misdemeanor Conviction	-0.059	0.101	0.561	0.943	0.772	1.149
Prior Felony Conviction	0.035	0.113	0.755	1.036	0.830	1.295
Prior Violent Conviction – 1 - 2	0.507	0.108	<0.001	1.660	1.342	2.049
Prior Violent Conviction – 3 or more	0.585	0.153	<0.001	1.795	1.323	2.415
Prior FTA in the Past 2 Years – Just 1	0.279	0.097	0.004	1.321	1.090	1.596
Prior FTA in the Past 2 Years – 2 or more	0.177	0.110	0.107	1.194	0.961	1.479
Prior Sentence to Incarceration of 14 or More Days	0.003	0.120	0.982	1.003	0.792	1.268
Age at Booking	-0.013	0.004	<0.001	0.987	0.980	0.994
Black	-0.131	0.156	0.403	0.877	0.649	1.200
Hispanic	-0.076	0.179	0.673	0.927	0.654	1.320
White	-0.167	0.143	0.242	0.846	0.645	1.129
Other/Unknown	0.033	0.245	0.892	1.034	0.630	1.653
Male	0.289	0.090	0.001	1.335	1.121	1.597
AIC				5,858.7		
N Observations				14,370		
N Individuals				14,370		

TABLE 13.
Predicting New DV Criminal Arrest During Pretrial Release

	DV-New Criminal Arrest					
	b	SE	p-value	Odds Ratio	LOR 95% CI	UOR 95% CI
Independent Variable of Interest						
Booked on a Domestic Violence Charge	1.267	0.129	0.000	3.549	2.757	4.567
Covariates						
Pending Charge at Time of Booking	0.654	0.141	0.000	1.922	1.457	2.532
Prior Misdemeanor Conviction	0.411	0.180	0.023	1.508	1.059	2.147
Prior Felony Conviction	-0.108	0.183	0.556	0.898	0.627	1.288
Prior Violent Conviction – 1 - 2	0.163	0.191	0.392	1.177	0.805	1.704
Prior Violent Conviction – 3 or more	1.456	0.202	0.000	4.290	2.885	6.372
Prior FTA in the Past 2 Years – Just 1	0.384	0.166	0.021	1.468	1.056	2.028
Prior FTA in the Past 2 Years – 2 or more	0.389	0.173	0.025	1.476	1.049	2.072
Prior Sentence to Incarceration of 14 or More Days	0.024	0.195	0.902	1.024	0.699	1.501
Age at Booking	-0.023	0.007	0.000	0.977	0.964	0.990
Black	0.162	0.304	0.593	1.176	0.667	2.219
Hispanic	0.367	0.333	0.271	1.443	0.764	2.852
White	0.191	0.284	0.502	1.210	0.719	2.209
Other/Unknown	-0.503	0.576	0.382	0.604	0.169	1.719
Male	0.217	0.155	0.163	1.242	0.922	1.697
AIC				2,407.6		
N Observations				14,370		
N Individuals				14,370		

TABLE 14.
Predicting New DV Violent Criminal Arrest during Pretrial Release

	New DV Violent Criminal Arrest					
	b	SE	p-value	Odds Ratio	LOR 95% CI	UOR 95% CI
Independent Variable of Interest						
Booked on a Domestic Violence Charge	1.166	0.168	<0.001	3.210	2.305	4.466
Covariates						
Pending Charge at Time of Booking	0.246	0.189	0.192	1.279	0.880	1.847
Prior Misdemeanor Conviction	0.483	0.227	0.033	1.621	1.037	2.529
Prior Felony Conviction	-0.235	0.243	0.333	0.790	0.491	1.275
Prior Violent Conviction – 1 - 2	0.015	0.257	0.954	1.015	0.605	1.661
Prior Violent Conviction – 3 or more	1.105	0.282	<0.001	3.018	1.719	5.221
Prior FTA in the Past 2 Years – Just 1	0.505	0.223	0.023	1.657	1.062	2.549
Prior FTA in the Past 2 Years – 2 or more	0.739	0.229	<0.001	2.095	1.335	3.280
Prior Sentence to Incarceration of 14 or More Days	-0.151	0.249	0.545	0.860	0.526	1.401
Age at Booking	-0.027	0.009	0.003	0.974	0.956	0.990
Black	0.254	0.398	0.523	1.290	0.622	3.020
Hispanic	0.410	0.434	0.345	1.506	0.663	3.725
White	0.180	0.373	0.629	1.198	0.614	2.700
Other/Unknown	-0.196	0.683	0.775	0.822	0.178	2.883
Male	0.142	0.196	0.469	1.153	0.793	1.716
AIC				1,578.2		
N Observations				14,370		
N Individuals				14,370		

Examining Adherence to the Public Safety Assessment and Release Conditions Matrix on Individual, Case, and System Outcomes

Kristin Bechtel
Catherine Grodensky
Christopher Inkpen
Matthew DeMichele
RTI International

NEARLY 70 PERCENT of individuals held in city and county jails in the U.S. are being detained pretrial, meaning they have not yet been convicted of a crime (Zeng, 2023). Individuals who have been charged with crimes but not yet convicted pose a unique challenge to courts and law enforcement agencies. Although individuals are legally presumed innocent of criminal charges until they plead guilty or are convicted at trial, if they are not detained pretrial there is a chance that they could commit a crime while awaiting adjudication or not show up for court. However, those who are detained pretrial can face negative consequences, including being separated from their families and communities, losing jobs or housing, and facing greater likelihood of conviction and active sentences than those who are released (Baughman, 2017; Bishop, Hopkins, Obiofuma, & Owusu, 2020; Dobbie, Goldin, & Yang, 2018; Donnelly & MacDonald, 2018; Wakefield & Andersen, 2020). Specifically, studies have found that detained individuals were more likely to plead guilty and pled guilty faster than those who were released; they also had a higher likelihood of conviction and lower likelihood of having their cases diverted out of the criminal legal system entirely (Petersen, 2020; Lee, 2019; Goldkamp, 1980; Heaton, 2017). Individuals detained pretrial were also more likely to receive longer prison sentences than those who were released (Goldkamp, 1980; Sacks & Ackerman, 2014; Heaton, Mayson, & Stevenson, 2017). Pretrial detention has also been found to increase individuals' likelihood of missing court and being arrested for new crimes (DeMichele, Silver, & Labrecque, 2024).

Past research has also demonstrated that racial and economic disparities exist in pretrial detention (Arnold, Dobbie, & Yang, 2018; Dobbie, Hull, & Arnold, 2022; Katz & Spohn, 1995), suggesting that the practice is used inequitably. Black individuals are not only detained pretrial more often than White individuals, but pretrial detention has been found to be more strongly related to adverse sentencing outcomes for Black individuals. In one large study examining pretrial detention and sentencing across 75 urban counties, Black individuals detained pretrial were 26 percent more likely to go to prison than detained White individuals (Sutton, 2013). Jurisdictions across the country are working to reduce rates of pretrial detention as well as increase fairness in its use.

Pretrial assessments have been presented as tools to help systems make data-informed decisions regarding pretrial release to improve outcomes and minimize unwanted effects and disparities. The use of actuarial risk assessment instruments during pretrial and at other points in the criminal legal system has been controversial due to concerns that they may perpetuate racial biases and fail to accurately predict pretrial outcomes; however, numerous systems have viewed the use of valid pretrial instruments as preferable to relying on the discretion of legal actors, which may lead to biased decisions and the overuse of detention (Pretrial Justice Institute, 2019).

The Public Safety Assessment (PSA) is a pretrial assessment instrument that provides objective information about an individual's likelihood of remaining arrest-free and showing up in court during the pretrial period (Arnold Ventures, 2023; VanNostrand & Lowenkamp, 2013). When jurisdictions implement the PSA to inform pretrial release decision-making, they must also develop a Release Conditions Matrix (RCM), which is a six-by-six matrix that matches FTA and NCA scores. The RCM recommends supervision levels and corresponding release conditions based on the PSA score. Conditions and supervision levels are determined by the jurisdiction. Those administering the assessment will score the PSA and then review the RCM matrix and make release recommendations to the judicial officer based on these locally derived RCM policies and practices. Importantly, judicial officers have this

objective information to guide their release decision but are not bound to it, as there are other factors outside the PSA that courts must consider when making a release decision, such as statutory requirements.

Pretrial assessment instruments are typically adopted to increase objectivity and fairness in pretrial release decisions and to improve pretrial outcomes (attending court, remaining arrest-free) by basing release conditions on statistical formulas estimating individual risk (Desmarais, Monahan, & Austin, 2022; Ludwig & Mullainathan, 2021). An analysis of data on all jail bookings before and after the PSA was adopted in Lucas County, Ohio, found that adoption was associated with improvements in pretrial outcomes, including decreases in rates of failure to appear in court (FTAs), new criminal arrests (NCAs), and new violent criminal arrests (NVCAs) during the pretrial period (Lowenkamp, DeMichele, & Warren, 2020).

However, even in court systems where the PSA is used, judges and magistrates still have discretion to determine supervision levels and release conditions at arraignment and may choose different ones than are indicated by the PSA and RCM. Because legal actors retain discretion to override these recommendations, a jurisdiction's adoption of pretrial assessment instruments could have limited impact on release decisions. Little is known about how pretrial release decisions are influenced by the use of the PSA in a district. Understanding such influences is critical for jurisdictions considering whether to adopt the PSA—knowing whether judges will actually use the instrument and predicting changes in the number of individuals assigned different pretrial release conditions can suggest whether a pretrial instrument would increase objectivity in decision-making as well as inform resource allocation within court systems.

The limited research on judges' adherence to the PSA suggests that judges do not always follow RCM recommendations based on PSA scores. A qualitative study conducted with judges using the PSA in a diverse set of courts found that they did not have a complete understanding of the PSA instrument and felt they needed more information about individuals' extra-legal and personal factors to inform their release decisions (DeMichele, Comfort, Barrick, & Baumgartner, 2021). Web surveys were conducted in another study with 171 judges, prosecutors, defense attorneys, and pretrial staff in 30 jurisdictions that implemented the PSA, and found that 80 percent of judges reported that the PSA "always" or "often" informs their release decision and more than half of judges indicated it had been useful when making a release decision; however, 33 percent of judges viewed the loss of their discretion as a weakness of the PSA (DeMichele et al., 2019).

Research is limited on how pretrial assessments impact release conditions, and the existing research is mixed. In a study of the Indiana Risk Assessment System – Pretrial Assessment Tool (IRAS-PAT), Lowder and colleagues compared individuals who received a risk assessment with those who did not within the same year and found that those with assessments were more likely to receive nonfinancial release. Additionally, they found that "when risk assessment-guided decisions adhered to structured guidelines, defendants with risk assessments had higher rates of pretrial release and spent less time in pretrial detention" (Lowder, Diaz, Grommon, & Ray, 2021). Shaefer et al. found that "possessing a moderate or high qualitative risk score (failing to appear and committing a new offense) and possessing a high risk of committing a new violent offense increases the likelihood of receiving a financial bond requirement for release" (Schaefer & Hughes, 2019).

A study examining the implementation of the Virginia Pretrial Risk Assessment Instrument (VPRAI) in a large southeastern judicial district found that the instrument did not produce decreases in the length of pretrial detention or increases in the nonfinancial release. Judicial decisions did not typically adhere to the pretrial recommendations based on the VPRAI. Specifically, concurrence between the VPRAI recommendation and the judicial decision was observed in less than half of the cases. As a result, release decisions frequently included more restrictive and financial conditions, which appeared to impact Black and Latino individuals (Copp, Casey, Blomberg, & Pesta, 2022). The authors concluded that "*the extent and nature of judicial overrides disregards the spirit of [pretrial risk assessment] tools, as judges not only favored more restrictive release decisions, but made decisions in ways that largely overlooked the risk-based estimates provided by the tool. This suggests that buy-in from these key decision makers was limited, which immediately diminishes the prospect of meaningfully altering pretrial practices*" (Copp et al., 2022).

When legal system actors "override" or depart from recommendations based on risk assessment instruments in favor of their own discretion, typically they assign more restrictive conditions than those recommended through the assessments (Cohen, Lowenkamp, Bechtel, & Flores, 2020; Copp et al., 2022). If overrides significantly change the population that is placed under supervision, they have the potential to deteriorate the risk assessments' predictive capacities (Cohen et al., 2020). Therefore, it is critical to understand users' adherence to risk assessment tools and use of overrides. Arguably, the same issue may exist with "underrides," when judicial officers make a less restrictive release decision than the one that is recommended.

The current study analyzes administrative pretrial data from a large district in the southeastern United States that recently adopted the PSA to understand the extent to which the PSA and RCM informed pretrial supervision decisions, and the factors associated with judges deciding to override or underride the recommendations of the RCM in favor of their own discretion. By leveraging these data, this study describes the role of the PSA and RCM in informing release recommendations and release decisions, and examines their impact on case and pretrial outcomes, and will answer the following questions:

RQ1. What is the concurrence rate after implementing the PSA-RCM?

RQ2. Is adherence to the PSA-RCM associated with case disposition?

RQ3. What factors, if any, are related to RCM overrides and underrides?

RQ4. Is adherence to the PSA-RCM associated with pretrial outcomes?

Methods

Data Sources and Sample

The study leverages jail admissions and pretrial services data from a large southeastern county in the United States. The sampling time frame was January 1, 2017, through December 31, 2018. The jurisdiction provided data as part of a six-year multi-site research and training and technical assistance project, Advancing Pretrial Policy and Research (APPR). APPR jurisdictions partnered with researchers and TTA providers to understand the local pretrial policies and practices and their impact, conduct historical Public Safety Assessment (PSA) validations prior to implementation and prospective validations post-implementation,[1] describe the pretrial

[1] All historical validation studies have included predictive bias testing. Post-implementation validations are limited to sites that implemented the PSA early in the study period to ensure sufficient sample

population in the local jail along with booking and release rates,[2] and examine release recommendations, conditions, and decisions.

Measures

Outcomes of Interest. There were seven dependent variables examined in the current study. These outcomes included: release recommendation, release decision, concurrence, case disposition, failure to appear, new criminal arrest, and new violent criminal arrest. *Release recommendation* was defined as the pretrial services officer's recommendation to the court to release or not release the individual.[3] *Release decision* was measured as the judicial officer's decision to release or detain the individual. *Concurrence* was measured as adherence to the release recommendation from pretrial services. *Case disposition* was defined as whether a case resulted in a conviction or no conviction. *Failure to appear* (FTA) was defined as a bench warrant issued for missing a scheduled predisposition court date. *New criminal arrest* (NCA) was measured as an arrest for a criminal or traffic offense that is eligible for a sentence to incarceration while on pretrial release. *New violent criminal arrest* (NVCA) was measured as an arrest for a violent criminal offense that is eligible for a sentence to incarceration while on pretrial release. All dichotomous outcome measures were coded similarly, 0 = outcome did not occur and 1 = outcome occurred.

PSA Risk Factors. The PSA comprises three scales: Failure to Appear (FTA), New Criminal Activity (NCA), and New Violent Criminal Activity (NVCA), each of which produces separate scores that are intended to predict the probability of these distinct outcomes occurring. There are nine risk factors scored across the PSA (with some factors being included on more than one scale): (1) age at current arrest, (2) current violent offense, (3) pending charge at the time of the current offense, (4) prior misdemeanor conviction, (5) prior felony conviction, (6) prior violent conviction, (7) prior failure to appear in the past two years, (8) prior failure to appear older than two years, and (9) prior sentence to incarceration of 14 days or more. Based on the scale, several PSA risk factors are combined into a specific factor, including: (1) any prior conviction (which is scored when a prior misdemeanor and/or felony conviction is present), (2) current violent offense and 20 years old or younger (which is scored from the current age and current violent offense risk factors). Raw scores from the three PSA scales (FTA: 0 – 7 points, NCA: 0 – 13 points, NVCA: 0 – 7 points) are collapsed into scores from 1 to 6 points, with lower scores representing a greater likelihood of pretrial success (e.g., attending scheduled court dates, avoiding arrests). The NVCA scale is unique, in that scores of 4 and above suggest an elevated likelihood of violence during the pretrial period.[4]

Demographics. Demographic measures included biological sex (male, female), age at jail admission, and race, which was collapsed into two categories (White; and Black, Indigenous, People of Color - BIPOC).

Analytical Strategy

Descriptive statistics were calculated to examine the demographic characteristics, charge type, PSA risk factors and scores, release recommendation and decision, and pretrial outcomes. Further, bivariate logistic regression models were conducted for each dichotomous outcome measure, while controlling for the PSA and demographic measures, to identify significant predictors of these outcomes, as well as to describe the likelihood (using odds ratios) of the outcome occurring. Table 1 presents each research question, and the analytical strategy followed.

Sample Description

The sample comprises 8,486 individuals who received a PSA assessment and had both a release recommendation and judicial decision. Table 2 provides a breakdown of the sample demographics, average PSA scores, charge type, and severity. The sample comprises 85 percent Black, Indigenous, and People of Color (BIPOC); 77 percent are males, with an average age of 35 years at the time of jail admission on the current booking. The average PSA scale scores are 2.55 for FTA, 3.18 for NCA, and 2.63 for NVCA. When looking at charge severity, nearly 65 percent of the sample was booked on a felony, compared to 33 percent on a misdemeanor, and almost 2 percent on a serious felony. For charge type, over 51 percent of the bookings had a violent charge, 26 percent had a property charge, almost 13 percent had a public order charge, and 10 percent had a drug charge.

Table 3 presents the breakdown of the PSA scores for the FTA, NCA, and NVCA scales. For FTA, nearly 76 percent of the sample fell into the lower range of scores (1-3 points), while the remaining 24 percent scored in the higher range of scores (4-6 points). For NCA, approximately 55 percent of the cases scored between 1 to 3 points, and 45 percent scored between 4-6 points. NVCA followed a similar pattern to NVCA, about 75 percent of the cases scored 1 to 3 points, while 25 percent had scores 4 and above. Collectively, the sample primarily comprises lower risk cases across the three scales.

Results

RQ1. What is the concurrence rate after implementing the PSA-RCM?

We examined concurrence for the total

size and follow-up to examine pretrial outcomes.

[2] Jail data dashboards were created for APPR jurisdictions to allow for ongoing review of the overall jail population, pretrial population, booking and release rates, lengths of stay, charge information, and demographics. Not all jurisdictions made their jail dashboard public.

[3] The Release Conditions Matrix (RCM) does not include a recommendation to detain. However, pretrial services is able to make this recommendation and record it in the data system.

[4] More information about the PSA factors, scales, and weights can be found here: https://advancingpretrial.org/psa/factors/

TABLE 1.
Research Questions and Analytical Strategy

Research Question	Measures	Analytical Strategy
What is the concurrence rate after implementing the PSA-RCM?	Release recommendation, Release decision, Concurrence	Frequencies, crosstabulations
Is adherence to the PSA-RCM associated with case disposition?	Concurrence, Release decision, Case disposition	Frequencies, crosstabulations, Bivariate logistic regression1 Odds ratios
What factors, if any, are related to RCM overrides and underrides?	Concurrence, PSA score, Charge severity, Violent Charge	Bivariate logistic regression Odds ratios
Is adherence to the PSA-RCM associated with pretrial outcomes?	Concurrence, Release decision, FTA, NCA, NVCA	Frequencies, crosstabulations, Bivariate logistic regression Odds ratios

[1] For all regression models, when examining statistical significance, p values were set at .001.

sample and disaggregated by demographics, PSA scores, and the presence of the violence flag,[5] as well as by charge type and severity. Concurrence was measured as the proportion of cases in which we observed judicial adherence to the release recommendation from pretrial services. Based on the data available, we also examined the release outcome. In Table 4, more individuals were recommended for detention (n=6,619, 78 percent) than release (n=1,867, 22 percent), but ultimately judicial officers released more individuals (n=5,150, 61 percent) than they detained (n=3,336, 39 percent). Of the 8,486 cases, nearly 53 percent of the judicial release decisions adhered to the release recommendation from pretrial services, while 47 percent did not.

Table 5 provides the breakdown of the release recommendation, concurrence, and release rates by biological sex and race. Starting with the pretrial services release recommendation, a larger percentage of males (81 percent) were recommended for detention than females (68 percent), and a larger percentage of BIPOC individuals (80 percent) were recommended for detention than White individuals (66 percent) or those of unknown race (57 percent). The highest concurrence rates were found among males and individuals of unknown race. A greater percentage of judges' decisions adhered to recommendations for males (55 percent) than females (47 percent), while a roughly equal percentage of judges' decisions were adherent for White and BIPOC individuals (54 percent vs. 53 percent, respectively). Despite the relatively small sample size, the largest proportion of decisions that adhered to the release recommendation were for individuals of unknown race (71 percent). When examining release rates, a greater percentage of individuals were released than detained in all categories. Males were detained at higher rates than females (44 percent vs. 25 percent, respectively), and BIPOC individuals were detained at higher rates than individuals of White or unknown race (28 percent and 29 percent, respectively).

Tables 6 through 8 describe the release recommendation, concurrence rates, and release rates by PSA scores. As seen in Table 6, when comparing within scores, the majority of individuals at all risk scores except one were recommended for detention rather than release; 45 percent of those with an NVCA score of 1 were recommended for detention and 55 percent were recommended for release. In general, the percentage of individuals recommended for detention increased as each of the three PSA scale scores increased, although those with NCA and NVCA scores of 6 had slightly lower detention recommendation rates than those scoring 5, which for NVCA may be due to few such people with NVCA scores of 6.

Table 7 takes a closer look at how judicial officers responded to the predominant recommendation to detain observed in Table 6. When examining adherence patterns across PSA scores, in general, rates of judicial adherence to release recommendations were lowest for individuals with PSA scores of 2 or 3. For example, adherence rates were around 7 percentage points higher for individuals with an FTA score of 1 than for those with a score of 2, and were over 20 percentage points higher for those with an NVCA score of 1 than for those with a score of 2. Adherence rates were highest overall for those with higher scores

[5] The violence flag is present when scores on the NVCA scale are 4 and above.

TABLE 2.
Sample Description (N=8,486)

	N	%	Average
Biological sex			
Male	6564	77.4	
Female	1922	22.7	
Race			
BIPOC	7167	84.5	
White	1305	15.4	
Unknown	14	0.2	
Age at admission	Minimum = 18 years	Maximum = 83 years	35.26 years
PSA scale scores			
FTA	-	-	2.55
NCA	-	-	3.18
NVCA	-	-	2.63
Charge severity			
Misdemeanor	2824	33.3	
Felony	5505	64.9	
Serious Felony	157	1.9	
Charge type			
Violent	4368	51.5	
Property	2165	25.6	
Drug	851	10.0	
Public order	1079	12.7	
Other	23	0.3	

TABLE 3.
PSA Scale Scores (N=8,486)

PSA	FTA		NCA		NVCA	
Score	N	%	N	%	N	%
1	2124	25.0	1623	19.1	1932	22.8
2	2197	25.9	1425	16.8	2336	27.5
3	2149	25.3	1643	19.4	2055	24.2
4	1498	17.7	1760	20.7	1316	15.5
5	397	4.7	1674	19.7	830	9.8
6	121	1.4	361	4.3	17	0.2

TABLE 4.
Release Recommendations and Concurrence by Release Type (N=8.486)

Release Recommendation	N	%
Detain	6619	78.0
Release	1867	22.0
Adhered		
Detained	2984	35.2
Released	1515	17.9
Not Adhered		
Detained	352	4.2
Released	3635	42.8

on each scale; the highest rates of adherence occurred with individuals scoring 6 on FTA (70 percent) and NVCA (71 percent) scales. For individuals with a violence flag (NVCA 4-6), judicial officers adhered to recommendations in a majority of those decisions.

Table 8 presents the release rates by PSA score. The percentage of individuals detained increased as each of the three PSA scale scores increased. The majority of individuals scoring 3-6 on FTA and 4-6 on NVCA or NCA were detained. Those with FTA and NCA scores of 1 experienced the lowest rates of detention (14-15 percent), and those with FTA and NCA scores of 6 experienced the highest rates of detention (71 percent). When examining the NVCA scale, we see a similar pattern, with release rates highest for lower scores, with nearly 78 percent of those with a score of 1 being released compared to 22 percent being detained. Of the 2,163 individuals with a violence flag (NVCA scores 4-6), the majority were detained.

Table 9 examines the release recommendations, concurrence, and release rates by charge type (most serious charge) and severity (misdemeanor, felony, serious felony). Those charged with violent crimes as the most serious charge were most frequently recommended for detention (84 percent), followed by those with drug (77 percent) and property crimes (74 percent); and those charged with public order (62 percent) and other crimes (48 percent) were the least likely to be recommended for detention. In terms of charge severity, 74 percent of those charged with misdemeanors were recommended for detention, followed by 79 percent of serious felonies, and 85 pecent of felonies. When examining concurrence within charge types, we found adherence to the release recommendation in 50 percent or more of the cases involving drug, public order, property, and other charges; however, judicial officers agreed with the release recommendation in slightly fewer of the cases involving violent charges (48 percent). For charge severity and concurrence, adherence rates were 63 percent and nearly 82 percent respectively for felony and serious felony charges, but were found to be much lower for misdemeanors, at 47 percent. Turning to release rates, release rates were all above 55 percent for each charge type, with almost 62 percent of the cases involving violent charges being released. For charge severity, 71 percent of misdemeanors were released, followed by 42 percent of felonies and 37 percent of serious felonies.

The next set of results focuses on the relationship between concurrence and case disposition.

RQ2. Is adherence to the PSA-RCM associated with case disposition?

Table 10 presents the case disposition type for the full sample. About half of the court cases

TABLE 5.
Release Recommendation, Concurrence, and Release Rates by Biological Sex and Race (N=8.486)

	Recommend – Detain		Recommend - Release	
	N	%	N	%
Biological Sex				
Male	5314	81.0	1250	19.0
Female	1305	67.9	617	32.1
Race				
BIPOC	5751	80.2	1416	19.8
White	860	65.9	445	34.1
Unknown	8	57.1	6	42.9
	Adhered		**Not Adhered**	
	N	%	N	%
Biological sex				
Male	3604	54.9	2960	45.1
Female	895	46.6	1027	53.4
Race				
BIPOC	3783	52.8	3384	47.2
White	706	54.1	599	45.9
Unknown	10	71.4	4	28.6
	Detained		**Released**	
	N	%	N	%
Biological Sex				
Male	2858	43.5	3706	56.5
Female	478	24.9	1444	75.1
Race				
BIPOC	2971	41.5	4196	58.5
White	361	27.7	944	72.3
Unknown	4	28.6	10	71.4

TABLE 6.
Release Recommendations by PSA Scores (N=8,486)

PSA Scale	Recommend – Detain		Recommend – Release	
FTA	N	%	N	%
1	1112	52.4	1012	47.6
2	1684	76.6	513	23.4
3	1954	90.9	195	9.1
4	1388	92.7	110	7.3
5	367	92.4	30	7.6
6	114	94.2	7	5.8
NCA				
1	856	52.7	767	47.3
2	869	61.0	556	39.0
3	1367	83.2	276	16.8
4	1612	91.6	148	8.4
5	1583	94.6	91	5.4
6	332	92.0	29	8.0
NVCA				
1	875	45.3	1057	54.7
2	1895	81.1	441	18.9
3	4588	88.5	237	11.5
4	1228	93.3	88	6.7
5	787	94.8	43	5.2
6	16	94.1	1	5.9

in the study sample were still open (n=4,320, 51 percent). Of those that had been disposed, a greater proportion were not convicted than were convicted. Note, for some of the analyses we will examine in forthcoming tables, we will focus on cases that reached a final disposition, so the sample size will be n=4,166.

Table 11 examines the case disposition type (convicted or not convicted) by concurrence and release types. For cases in which the judicial officers adhered to the recommendation to detain, there were nearly 45 percent not convicted and 55 percent that were convicted. For those cases in which there was adherence to release, 84 percent of the cases were not convicted and 16 percent resulted in convictions. When examining the cases where there was not adherence to the release recommendation, for those where the individuals were detained, nearly 73 percent were not convicted, while 27 percent were. For the released cases where the judicial officers did not adhere to the release recommendation, 76 percent were not convicted and 24 percent resulted in a conviction. Looking at all detained cases (n=2,591), nearly 53 percent resulted in a conviction and 47 percent were not convicted. When looking at all released cases (n=1,575), almost 22 percent ended with a conviction, while 78 percent of the cases did not receive a conviction.

Table 12 presents the results from the logistic regression model predicting the odds of a case ending with a conviction. This model is looking at the sample of cases that reached a final disposition (N=4,166). The dependent variable, conviction, was coded as 0 = not convicted and 1 = convicted. The results demonstrate that there are several statistically significant associations (p<.001) with being convicted, including biological sex (male = 0, 1 = female), NCA score, NVCA (violence) flag (0 = no flag, 1 = flag), release status (0 = detained, 1 = released), concurrence (0 = adhered, 1 = not adhered[6]), and days in jail. When examining the direction of these relationships and the corresponding odds ratios, these relationships suggest that being female, being released, judicial officers not adhering to the release recommendation, and fewer days in jail are predicted to have a smaller likelihood of a conviction occurring. For the NCA score and the NVCA flag, we find that increases in NCA scores and the presence of the NVCA flag are predicted to have a greater likelihood for a conviction. These results mean that for every one-point increase on the NCA scale, the odds of a conviction increase 18 percent. Further, those that have the NVCA flag present are 2.13 times more likely to have a conviction.[7]

RQ3. What factors, if any, are related to RCM overrides and underrides?

We conducted several logistic regression analyses to describe the predictors of adherence, as well as RCM overrides and underrides. Before we identify factors that may be associated with overrides or underrides, we wanted to take a closer look at what measures may be related to the judicial decision to concur with the release recommendation.

[6] "Not adhered" is operationalized as the judicial decision departed from the release recommendation. As such, if the recommendation was to detain, but the decision was to release, this would be considered non-adherence. Likewise, if the recommendation was to release, but the decision was to detain, this would also be considered non-adherence.

[7] To assess the impact of criminal history potentially confounding the results from the model of conviction as a disposition outcome, the authors also ran models omitting the NCA and FTA scores as well as the NVCA flags and instead using the individual PSA factors. The coefficients for the measures that were included in both models were largely the same in direction, magnitude, and significance.

TABLE 7.
Concurrence Rates by PSA Scores (N=8,486)

PSA Scale	Adhered		Not Adhered	
FTA	N	%	N	%
1	1121	52.8	1003	47.2
2	999	45.5	1198	54.5
3	1126	52.4	1023	47.6
4	913	60.9	585	39.1
5	255	64.2	142	35.8
6	85	70.2	36	29.8
NCA				
1	834	51.4	789	48.6
2	726	50.9	699	49.1
3	719	43.8	924	56.2
4	924	52.5	836	47.5
5	1054	63.0	620	37.0
6	242	67.0	119	33.0
NVCA				
1	1249	64.6	683	35.4
2	1010	43.2	1326	56.8
3	995	48.4	1060	51.6
4	686	52.1	630	47.9
5	547	65.9	283	34.1
6	12	70.6	5	29.4

TABLE 8.
Release Rates by PSA Scores (N=8,486)

PSA Scale	Detained		Released	
FTA	N	%	N	%
1	307	14.5	1817	85.5
2	666	30.3	1531	69.7
3	1093	50.9	1056	49.1
4	923	61.6	575	38.4
5	261	65.7	136	34.3
6	86	71.1	35	28.9
NCA				
1	231	14.2	1392	85.8
2	286	20.1	1139	79.9
3	571	34.8	1072	65.2
4	908	51.6	852	48.4
5	1083	64.7	591	35.3
6	257	71.2	104	28.8
NVCA				
1	428	22.2	1504	77.8
2	769	32.9	1567	67.1
3	894	43.5	1161	56.5
4	668	50.8	648	49.2
5	564	68.0	266	32.0
6	13	76.5	4	23.5

Table 13 presents the results of the logistic regression model predicting the outcome adherence. Adherence was coded as 0 = judicial officer did not adhere to the release recommendation and 1 = judicial officer adhered to the release recommendation. Note, this outcome does not distinguish as to whether the judicial officer agreed to detain or release; it is examining the decision to follow the release recommendation from pretrial services. Several covariates had a statistically significant relationship (p<.001) with adherence, including the NVCA flag, charge severity (misdemeanor, serious felony), and charge type (property, public order). Misdemeanor charges are predicted to have a smaller likelihood of judicial adherence with the release recommendation. In comparison, we observed that the presence of the NVCA flag, serious felony charges, property offenses, and public order offenses were predicted to have an increased likelihood of judicial adherence with the release recommendation. People who have the NVCA flag present are 2.32 times more likely for the judicial officer to adhere to the release recommendation. Individuals facing serious felony charges are 2.66 times more likely for the judicial officer to adhere to the release recommendation. Similarly, the odds of a judicial officer adhering to the release recommendation increases 2.06 times for property offenses and 2.38 times for public order offenses.

Tables 14 and 15 focus on identifying the significant predictors of overrides and underrides. Both of these outcome measures were coded as 0 = no override or 1 = override for Table 14 and similarly for Table 15, the dependent variable was coded as 0 = no underride and 1 = underride.

Starting with Table 14, we see that there are multiple covariates significantly (p<.001) associated with overrides. The sample size of 1,866 cases was drawn from all cases in which the recommendation from pretrial services

TABLE 9.
Release Recommendations, Concurrence & Release Rates by Charge Type and Severity (N=8,486)

	Recommend – Detain		Recommend – Release	
Type				
Drug	655	77.0	196	23.0
Public Order	667	61.8	412	38.2
Property	1602	74.0	563	26.0
Violent	3684	84.3	684	15.7
Other	11	47.8	12	52.2
Severity				
Misdemeanor	4094	74.4	1411	25.6
Felony	2401	85.0	423	15.0
Serious Felony	124	79.0	33	21.0
	Adhered		Not Adhered	
Type				
Drug	422	49.6	429	50.4
Public Order	683	63.3	396	36.7
Property	1283	59.3	882	40.7
Violent	2094	47.9	2274	52.1
Other	17	73.9	6	26.1
Severity				
Misdemeanor	2591	47.1	2914	52.9
Felony	1780	63.0	1044	37.0
Serious Felony	128	81.5	3987	47.0
	Not Released		Released	
Type				
Drug	280	32.9	571	67.1
Public Order	405	37.5	674	62.5
Property	968	44.7	1197	55.3
Violent	1676	38.4	2692	61.6
Other	7	30.4	16	69.6
Severity				
Misdemeanor	1596	29.0	3909	71.0
Felony	1641	58.1	1183	41.9
Serious Felony	99	63.1	5150	36.9

TABLE 10.
Case Disposition Type (N=8,486)

Case Disposition Type	N	%
Court Case Open	4320	50.9%
Not Convicted *	2452	28.9%
Convicted	1714	20.2%

* Not convicted status includes dispositions where the case did not go to trial (e.g., dismissed or nolle prosequi)

TABLE 11.
Final Case Disposition by Concurrence and Release Types (N=4,166)

	Case Disposition			
	Not Convicted*		Convicted	
	N	%	N	%
Adhered - Detained	1058	44.7	1309	55.3
Adhered – Released	344	84.3	64	15.7
Not Adhered - Detained	163	72.8	61	27.2
Not Adhered - Released	887	76.0	280	24.0

* Not convicted status includes dispositions where the case did not go to trial (e.g., dismissed or nolle prosequi)

TABLE 12.
Logistic Regression Model Predicting Conviction (N=4,166)

	Odds Ratio	p-value
Female	0.686	0.000
White (ref: BIPOC)	1.259	0.029
Unknown race (ref: BIPOC)	0.362	0.385
Age at admission	1.007	0.017
FTA score	1.131	0.009
NCA score	1.177	0.000
NVCA flag	2.130	0.000
Released	0.418	0.000
Not adhered	0.682	0.000
Days in jail	0.998	0.000

was to release. As such, an override occurred when pretrial services recommended release, but the judicial officer did not adhere to the recommendation and decided to detain the person. The significant predictors of overrides included NCA score, misdemeanor charges, and charge type. Misdemeanor charges were predicted to have a smaller likelihood of judicial override with the release recommendation. In comparison, we observed that the NCA score, property offenses, public order offenses, and violent offenses were predicted to have an increased likelihood of a judicial override. These results mean that for every one-point increase on the NCA scale, the odds of an override increases 64 percent. The odds of a judicial officer overriding the release recommendation increases 4.05 times for property offenses, 3.67 times for public order offenses, and 3.95 times for violent offenses.

Table 15 comprises multiple covariates significantly (p<.001) associated with underrides. The sample size of 6,619 cases was drawn from all cases in which the recommendation from pretrial services was to detain. Underrides occurred when pretrial services recommended detention, but the judicial officer did not adhere to the recommendation and decided to release the person. The significant predictors of underrides are FTA score, NCA score, NVCA flag, misdemeanor charges, serious felony charges, and charge type (property, public order, violent). Except for females—who were 16 percent more likely to have an underride—the other significant covariates were predicted to have a smaller likelihood of a judicial underride.

RQ4. Is adherence to the PSA-RCM associated with pretrial outcomes?

To respond to this final research question, we start by describing FTA, NCA, and NVCA rates by judicial officer concurrence for individuals who were released during the pretrial period and had their cases disposed, which results in a sample size of 1,575 cases. Table 16 presents these results. Considerably lower proportions of individuals experienced FTA, NCA, and NVCA than remained free of those outcomes. Specifically, the FTA and NVCA base rates were 5.1 percent, and the NCA base rate was 14.5 percent. Across all outcome categories, higher proportions of cases where the judge did not adhere to release recommendations experienced poor pretrial outcomes than cases where the judge adhered; these differences were statistically significant (p<0.05) for those who had a new criminal arrest (NCA) during the pretrial period.

Table 17 presents three logistic regression models predicting the odds of individuals experiencing negative pretrial outcomes (FTA, NCA, and NVCA). Judicial adherence to the release recommendation was not significantly associated with any of the pretrial outcomes. Odds of NCA and NVCA were significantly (p<.001) lower for younger individuals and higher for those with higher FTA scores. Those with higher NCA scores trended towards having higher odds of NCA (p<0.1), but otherwise PSA scores did not significantly predict their respective pretrial outcomes.

Discussion

This study produced a complex, but interesting, set of results in terms of reflecting on what we have observed from prior research and practice. Despite the evidence being scant on concurrence to the PSA-RCM, adherence to the release recommendations that stem from a locally developed RCM indicate that judicial officers do not consistently adhere to the release recommendations (DeMichele et al., 2024). This has been attributed to the courts having limited knowledge about the PSA, and an interest in having more information about an individual, such as extra-legal factors. While this study was unable to elucidate all the potential reasons why judicial officers use their discretion rather than align with the release recommendation, we did find that 53 percent of the release decisions matched the release recommendation from pretrial services. Over three-quarters of the cases were recommended for detention, but judicial officers were less inclined to detain, with just 39 percent of individuals being held. Across demographic categories, males and BIPOC experienced higher rates of recommendations to detain—each over 80 percent, but the detention rates were almost 44 percent for males and 42 percent for BIPOC.

TABLE 13.
Logistic Regression Model Predicting Adherence (N=8,468)

	Odds Ratio	p-value
Female	0.839	0.002
White (ref: BIPOC)	1.138	0.045
Unknown race (ref: BIPOC)	2.722	0.097
Age at admission	1.002	0.438
FTA score	1.034	0.313
NCA score	0.973	0.344
NVCA flag	2.320	0.000
Misdemeanor (ref felony)	0.506	0.000
Serious felony (ref felony)	2.660	0.000
Charge type: Other offenses (ref drug offenses)	4.525	0.002
Property offenses (ref drug offenses)	2.056	0.000
Public order offenses (ref drug offenses)	2.380	0.000
Violent offenses (ref drug offenses)	1.093	0.295

TABLE 14.
Logistic Regression Model Predicting RCM Overrides* (N=1,867)

	Odds Ratio	p-value
Female	1.158	0.326
White (ref: BIPOC)	0.850	0.379
Unknown race (ref: BIPOC)	0.000	0.968
Age at admission	0.997	0.618
FTA score	1.292	0.013
NCA score	1.639	0.000
NVCA flag	1.703	0.059
Misdemeanor (ref felony)	0.242	0.000
Serious felony (ref felony)	0.092	0.002
Charge type: Other offenses (ref drug offenses)	1.281	0.835
Property offenses (ref drug offenses)	4.055	0.000
Public order offenses (ref drug offenses)	3.668	0.000
Violent offenses (ref drug offenses)	3.947	0.000

*Sample includes only individuals who were recommended for release (N=1,867)

Considering that the release recommendation, which serves as a starting point for the judicial release decision, may be more conservative than expected in the current study, these results suggest that judicial officers were tempering these restrictive recommendations and releasing individuals. While this study was unable to explore concurrence to release conditions, for judicial officers in this jurisdiction, we observed a less restrictive approach than prior research has noted (Cohen, Lowenkamp, Bechtel, & Flores, 2020; Copp et al., 2022).

Across PSA scale scores, as expected, recommendations for detention and actual detention rates increased as PSA scores increased. Judicial adherence to release recommendations was highest for those scoring 1 and 4-6. Adherence rates were around 70 percent for scores of 6 on the FTA and NVCA scales. Individuals with a violence flag were over 20 percentage points more likely to be recommended for detention and detained than those without the flag, and we observed high rates of adherence when the flag was present versus not present (59 percent vs. 51 percent, respectively). However, based on what was observed from the regression analyses, these results did not consistently hold up. While the NVCA flag was a strong and statistically significant predictor of the odds of adherence (2.32 times more likely), FTA and NCA scores were not significantly associated with adherence. When examining overrides and underrides, the NCA score had an increased likelihood of a judicial override—where the odds of an override increased 64 percent with every one-point increase on the NCA scale. For underrides, the FTA and NCA scores as well as the NVCA flag were significant predictors, all with a smaller likelihood of an underride.

Charge type and severity seemed to play a role in adherence to the release recommendation. Specifically, misdemeanors were predicted to have a smaller likelihood of adherence. This may be attributed to 74 percent of the misdemeanor cases being recommended for detention, but the actual

TABLE 15.
Logistic Regression Model Predicting RCM Underrides (N=6,619)

	Odds Ratio	p-value
Female	1.421	0.000
White (ref: BIPOC)	1.080	0.371
Unknown race (ref: BIPOC)	0.431	0.290
Age at admission	0.996	0.143
FTA score	0.813	0.000
NCA score	0.747	0.000
NVCA flag	0.471	0.000
Misdemeanor (ref felony)	3.494	0.000
Serious felony (ref felony)	0.339	0.000
Charge type: Other offenses (ref drug offenses)	0.175	0.008
Property offenses (ref drug offenses)	0.338	0.000
Public order offenses (ref drug offenses)	0.377	0.000
Violent offenses (ref drug offenses)	0.436	0.000

*Sample includes only individuals who were recommended for detention (N=6,619)

TABLE 16.
Pretrial Outcomes by Concurrence (N=1,575)

	Pretrial Outcomes			
	No FTA		FTA[1]	
	N	%	N	%
Adhered	394	96.6	14	3.4
Not Adhered	1100	94.3	67	5.7
	No NCA		NCA[2]	
Adhered	379	92.9	29	7.1
Not Adhered	967	82.9	200	17.1
	No NVCA		NVCA[3]	
Adhered	397	97.3	11	2.7
Not Adhered	1096	93.9	71	6.1

[1] FTA: $\chi 2$ =2.8498, df = 1, p = .0914
[2] NCA: $\chi 2$ =23.6756, df = 1, p = .0000
[3] NVCA: $\chi 2$ =6.3610, df = 1, p = .0117

TABLE 17.
Logistic Regression Model Predicting Pretrial Outcomes (N=1,575)

	FTA		NCA		NVCA	
	Odds Ratio	p-value	Odds Ratio	p-value	Odds Ratio	p-value
Female	0.939	0.833	0.497	0.002	0.695	0.291
Race: White (ref: BIPOC)	1.064	0.851	0.823	0.415	0.707	0.400
Race: Unknown (ref: BIPOC)	0.000	0.985	0.000	0.976	0.000	0.986
Age at admission	1.012	0.246	0.974	0.000	0.959	0.001
FTA score	1.220	0.242	1.481	0.000	1.682	0.001
NCA score	1.129	0.408	1.174	0.083	1.059	0.691
NVCA flag	1.351	0.436	1.133	0.625	1.713	0.114
Not adhered	1.105	0.763	1.335	0.209	1.093	0.807

*Sample includes only individuals who were released and had their cases disposed.

release rate for misdemeanors was 71 percent. Serious felonies, property offenses, and public order offenses were also predicted to have an increased likelihood of adherence, which supports what we observed from the cross-tabulations. Adherence to the release recommendations was 82 percent for serious felonies and approximately 60 percent for property and public order offenses. Interestingly, violent offenses were not significantly associated with adherence, but violent offenses were found to be a significant predictor of overrides and underrides. The odds of a judicial officer overriding the release recommendation increases 3.95 times for violent offenses, but the odds of an underride were significantly less likely.

Prior research has found that people who are detained pretrial were more likely to plead guilty and pled faster than those who were released; they also had a higher likelihood of conviction and lower likelihood of having their cases diverted (Petersen, 2020; Lee, 2019; Goldkamp, 1980; Heaton, 2017). The current research appears to align with these results. In our study, nearly 47 percent of detained cases were not convicted, compared to 78 percent of released cases. This was further supported in the regression analyses, where being released and fewer days in jail were predicted to have a smaller likelihood of a conviction occurring.

Overall, when we examined pretrial outcomes for the released sample who had cases that reached final disposition, we observed that most of the individuals were successful during the pretrial period and avoided FTA, NCA and NVCA outcomes. The FTA and NVCA base rates were both 5 percent, and the NCA base rate was almost 15 percent. However, when we conducted the regression analyses, we found that the PSA scales scores were not significantly associated with their respective outcomes, FTA, NCA, and NVCA.

There are several limitations worth noting. First, the results are not generalizable beyond this sample. This was a jurisdiction that had recently implemented the PSA and developed an RCM. As is often the case with introducing new policies and practices, early implementation efforts are not without challenges, and require collaboration, time, and refinement to systematize a process and ensure its efficacy. Second, the release conditions data were poor, so we were unable to evaluate various release condition recommendations and the judicial decision. As such, we could not describe if, for example, detention was recommended, but the judicial officer decided to release the person on a higher intensity pretrial supervision. Third, there were no data available related to scoring the PSA and following the guidance of the local RCM with fidelity. Given that a majority of cases had detention recommended, we were unable to explore whether there were issues with fidelity with completing the PSA-RCM and if this also had an impact on the final regression model that did not find the scale scores to be significantly related to FTA, NCA, and NVCA. This was further complicated because the RCM typically does not include recommendations to detain; however, this recommendation was available for this jurisdiction's pretrial services. Finally, this is a descriptive study, so we are unable to make statements about causation and, relatedly, there may be unobserved data that we did not have access to that could explain some of these results.

Research and Policy Recommendations

Based on these findings, several recommendations should be raised for researchers and practitioners.

- Jurisdictions that adopt pretrial risk assessments should establish performance measures and consistently collect data on these metrics. These measures should include the release recommendation from pretrial services and the corresponding judicial decision. Since examining concurrence rates requires having data on both the recommendation and the decision, the data from pretrial services and the courts need to be matched to the correct person and case, so ensuring that jurisdictions can do this accurately is an important step to take before implementing an assessment.
- Release recommendation and judicial decision performance measures should include information on supervision levels and conditions, including those that are for monitoring as well as for treatment.
- Jurisdictions should develop and systematize a quality assurance process for scoring pretrial assessments and following release recommendation policies.
- Jurisdictions should regularly review performance measurement data to understand concurrence, release and detention rates, pretrial supervision caseload sizes and supervision levels, the outcomes of supervision and the pretrial period.
- As needed, additional training that targets any performance measurement concerns should be rolled out.
- When issues with concurrence rates and other performance measures are observed, pretrial services and the courts should collaborate to identify the source of these challenges and if they are related to the pretrial risk assessment or release recommendations and decisions or if more information is needed to guide system actors.

References

Ægisdóttir S., White, M. J., Spengler, P. M., et al. (2006). The meta-analysis of clinical judgment project: Fifty-six years of accumulated research on clinical versus statistical prediction. *Counseling Psychologist, 34*, 341-382.

Andrews, D. A., Bonta, J., & Wormith, S. J. (2006). The recent past and near future of risk and/or need assessment. *Crime and Delinquency, 52*, 7-27

Arnold, D., Dobbie, W., & Yang, C. S. (2018). Racial bias in bail decisions. *The Quarterly Journal of Economics, 133*(4), 1885-1932.

Arnold Ventures. (2023). About the Public Safety Assessment. *Advancing Pretrial Policy and Research.* Baughman, S. B. (2017). Costs of pretrial detention. *BUL Rev., 97*, 1.

Bishop, E. T., Hopkins, B., Obiofuma, C., & Owusu, F. (2020). Racial disparities in the Massachusetts criminal system. *Criminal Justice Policy Program, Harvard Law School.*

Cohen, T. H., Lowenkamp, C. T., Bechtel, K., & Flores, A. W. (2020). Risk assessment overrides: Shuffling the risk deck without any improvements in prediction. *Criminal Justice and Behavior, 47*(12), 1609-1629.

Copp, J. E., Casey, W., Blomberg, T. G., & Pesta, G. (2022). Pretrial risk assessment instruments in practice: The role of judicial discretion in pretrial reform. *Criminology & Public Policy, 21*(2), 329-358.

DeMichele, M., Baumgartner, P., Barrick, K., Comfort, M., Scaggs, S., & Misra, S. (2019). What do criminal justice professionals think about risk assessment at pretrial. *Federal Probation, 83*, 32.

DeMichele, M., Comfort, M., Barrick, K., & Baumgartner, P. (2021). The intuitive-override model: Nudging judges toward pretrial risk assessment instruments. *Federal Probation, 85*, 22.

DeMichele, M., Silver, I., Labrecque, R. (2024). Locked up and awaiting trial: Testing the criminogenic and punitive effects of spending a week or more in pretrial detention. *Criminology & Public Policy,* Online First. https://doi.org/10.1111/1745-9133.12685.

Desmarais, S. L., Monahan, J., & Austin, J. (2022). The empirical case for pretrial risk assessment instruments. *Criminal Justice and Behavior, 49*(6), 807-816.

Dobbie, W., Goldin, J., & Yang, C. S. (2018). The effects of pre-trial detention on conviction,

future crime, and employment: Evidence from randomly assigned judges. *American Economic Review, 108*(2), 201-240.

Dobbie, W., Hull, P., & Arnold, D. (2022). Measuring racial discrimination in bail decisions. *American Economic Review, 112*(9).

Donnelly, E. A., & MacDonald, J. M. (2018). The downstream effects of bail and pretrial detention on racial disparities in incarceration. *J. Crim. L. & Criminology, 108*, 775.

Goldkamp, J. S. (1980). The effects of detention on judicial decisions: A closer look. *Justice System Journal, 5*: 234-257.

Grove, W. M., Zald, D. H., Lebow, B. S., Snitz, B. E., & Nelson, C. (2000). Clinical versus mechanical prediction: A meta-analysis. *Psychological Assessment, 12,* 19-30.

Heaton, P., Mayson, S., & Stevenson, M. (2017). The downstream consequences of misdemeanor pretrial detention. *Stan. L. Rev., 69*, 711.

Katz, C. M., & Spohn, C. C. (1995). The effect of race and gender on bail outcomes: A test of an interactive model. *American Journal of Criminal Justice, 19*, 161-184.

Latessa, E. J., & Lovins, B. (2010). The role of offender risk assessment: A policymaker guide. *Victims and Offenders, 5(3)*, 203-219.

Lee, J. G. (2019). To detain or not to detain? Using propensity scores to examine the relationship between pretrial detention and conviction. *Criminal Justice Policy Review*, *30*, 128–152.

Lowder, E. M., Diaz, C. L., Grommon, E., & Ray, B. R. (2021). Effects of pretrial risk assessments on release decisions and misconduct outcomes relative to practice as usual. *Journal of Criminal Justice, 73*, 101754.

Lowenkamp, C., DeMichele, M., Warren, L. K. (2020). *Replication and extension of the Lucas County PSA Project*. Retrieved from RTI International:

Ludwig, J., & Mullainathan, S. (2021). Fragile algorithms and fallible decision-makers: Lessons from the justice system. *Journal of Economic Perspectives, 35*(4), 71-96.

Meehl, P. E. (1954). *Clinical versus statistical prediction*. Minneapolis: University of Minnesota Press.

Petersen, N. (2020). Do detainees plead guilty faster? A survival analysis of pretrial detention and the timing of guilty pleas. *Criminal Justice Policy Review, 31*, 1015–1035.

Pretrial Justice Institute. (2019). *Scan of Pretrial Practices*. Retrieved from https://www.pretrial.org/resources/scan-of-pretrial-practices

Sacks, M., & Ackerman, A. R. (2014). Bail and sentencing: Does pretrial detention lead to harsher punishment? *Criminal Justice Policy Review, 25,* 59–77.

Schaefer, B. P., & Hughes, T. (2019). Examining judicial pretrial release decisions: The influence of risk assessments and race. *Criminology, Crim. Just. L & Soc'y, 20*, 47.

Sutton, John. (2013). Structural bias in the sentencing of felony defendants. *Social Science Research, 42*: 1207–1221.

VanNostrand, M., & Lowenkamp, C. T. (2013). Assessing pretrial risk without a defendant interview. *Laura and John Arnold Foundation*.

Wakefield, S., & Andersen, L. H. (2020). Pretrial detention and the costs of system overreach for employment and family life. *Sociological Science, 7*, 342-366.

Zeng, Z. (December 2023). Jail inmates in 2022 – Statistical Tables. Washington D.C.: Bureau of Justice Statistics. https://bjs.ojp.gov/document/ji22st.pdf

The Potential Effects of Combining Pretrial Supervision Conditions

Ian A. Silver
Matthew DeMichele
Kristin Bechtel
Pamela K. Lattimore
Center for Legal Systems Research, RTI International

COURTS AND LEGISLATIVE bodies across the United States have implemented strategies to increase the use of community supervision and decrease the use of detention during pretrial (e.g., Scott-Hayward & Ireland, 2022). While reducing the overreliance on pretrial detention is likely to provide some benefits, appropriately supervising individuals in the community represents a substantive challenge (Lowder & Foudray, 2021). Pretrial supervision agencies must assess the public safety risk an individual poses to the community and develop a plan that can best address the risks and needs of the individual on supervision. Pretrial supervision agencies have tools at their disposal to achieve both requirements, but do not have the empirical evidence to guide the development of effective supervision plans for individuals during pretrial (Collaborative, 2023; Danner et al., 2015). It is important to understand how combinations of supervision requirements affect the likelihood of an individual experiencing a new arrest—a proxy for community safety—as this information could be used to develop more effective pretrial supervision plans (Hatton & Smith, 2020).

Pretrial supervision plans are often developed under the belief that assigning individuals to multiple conditions will increase compliance and reduce new arrests (Bechtel et al., 2022; Collaborative, 2023). This belief, nonetheless, has limited empirical support. It could be the case that assigning multiple conditions to individuals increases compliance and reduces new arrests or, alternatively, multiple conditions could have no effect or decrease compliance and increase new arrests. It should be noted that this process is not highly individualized, with departments relying on preexisting recommendations for conditions based upon the current offense and the risk individuals pose to the broader community (Collaborative, 2023). For example, combining treatment and electronic monitoring could prove effective, or the restrictiveness of electronic monitoring could offset the benefits of treatment. Given these empirical questions, the current study employed a sample of individuals on pretrial supervision with varying conditions to forecast the potential effects on individuals experiencing a new criminal arrest during pretrial.

Pretrial Supervision Conditions

Individuals released into the community during pretrial often must satisfy a host of pretrial conditions including, but not limited to, mandated check-ins, employment/education mandates, location restrictions, sobriety requirements, and treatment (Skemer & Brennan, 2024). While the supervision techniques at the disposal of pretrial officers differ across the country, it is common for them to rely on multiple conditions when supervising clientele (Skemer & Brennan, 2024). For example, a person on pretrial supervision might be mandated by the court or pretrial officer to attend biweekly reporting and maintain employment up to 30 hours per week. The conditions set for an individual are designed to serve multiple purposes, with the primary purpose being to maintain public safety (Skemer & Foudray, 2021). That is, if an individual is accused of committing a crime, the court and pretrial services agency want to ensure that the individual does not commit a new crime while awaiting trial within the community. In addition to maintaining public safety, pretrial conditions could increase the likelihood of an individual's appearance at trial, as well as provide preliminary treatment activities (e.g., complete Alcoholics Anonymous; Bechtel et al., 2022; Miyashiro, 2008).

While the process of assigning conditions varies substantively across agencies, pretrial agencies commonly try to assign more conditions to individuals that pose a greater risk to the safety of the community or the safety of another individual. For instance, an individual who is accused of committing a domestic violence offense will commonly receive more restrictive conditions than an individual who is accused of committing a drug possession offense (if they have similar criminal histories; Levin, 2016). Greater risk, in the context of assigning pretrial conditions, could be determined by the severity of the offense the individual is accused of committing, the criminal history of the individual, or a pretrial assessment tool (Levin, 2016; Lowder & Foudray, 2021). Nonetheless, more conditions

might not always benefit public safety.

While initially developed for post-conviction populations, the Risk-Needs-Responsivity (RNR) model could be adapted to apply to pretrial populations (Bonta & Andrews, 2016). The principle of the RNR model most easily adaptable to pretrial populations is the Risk principle. The Risk principle argues that supervision techniques for pretrial populations should *match* the criminogenic risks of an individual. Here, criminogenic risk refers to the factors increasing the likelihood of an individual engaging in a new criminal activity or failing to appear for court. These factors include static items, such as the criminal history of an individual and the current offense information, but could also include dynamic items like substance use/misuse and current employment (Bonta & Andrews, 2016). In general, evidence on the Risk principle has demonstrated that low-risk individuals should receive less restrictive conditions and high-risk individuals should receive more restrictive conditions (DeMichele et al., 2019). In addition to the Risk principle, the Need principle would argue that the treatment received by individuals on pretrial should match the criminogenic needs of an individual. In general, evidence suggests that this is the best strategy for mitigating the risk of individuals on supervision, but assigning pretrial conditions to match the risks and needs of an individual is more difficult in practice (Bechtel et al., 2022).

While it is commonly assumed that more pretrial conditions will restrict the ability of an individual to engage in activities that increase the likelihood for someone to be rearrested (Levin, 2016), different combinations of pretrial conditions could have different effects on the likelihood of an individual engaging in new criminal activities. In comparison to no pretrial supervision, some combinations of pretrial conditions might reduce the likelihood of an individual engaging in new criminal activities, while other combinations might have limited effects or increase the likelihood of an individual engaging in new criminal activities. For example, requiring an individual to report to the supervision office weekly and restricting the person's movement around the community could increase the likelihood of engaging in a new criminal activity. This increase could occur for a variety of reasons including, but not limited to, restricting employment/educational opportunities, placing strain on the individual and their family, limiting their ability to engage in prosocial activities, or not matching the pretrial supervision conditions to the risks and needs of the individual. Nonetheless, no studies have directly examined the effects of combinations of pretrial conditions on outcomes during pretrial. This lack of research is not due to limited interest, but rather to the infrequent assignment of combinations of conditions across pretrial populations. That is, only a limited number of individuals on pretrial supervision receive the same combination of conditions, making it difficult to study. Research, however, does suggest that some conditions are beneficial, and some conditions could be ineffective for individuals on pretrial supervision (Bechtel et al., 2017; Pretrial Justice Institute, 2019).

Nevertheless, no research to date has examined how the combination of pretrial services conditions influences public safety (Levin, 2016). As such, we asked three research questions: 1) What are the potential effects of various conditions on hypothetical high-risk individuals serving on pretrial supervision vs. no pretrial supervision or no special conditions? 2) What are the potential effects of receiving treatment and another condition on hypothetical high-risk individuals serving on pretrial supervision? 3) What are the potential effects of having weekly check-ins and another condition on hypothetical high-risk individuals serving on pretrial supervision? Briefly, these research questions focus on the *potential effects* or *forecasted effects* of combining pretrial conditions together, because the number of individuals that receive each condition combination is limited in practice. Furthermore, research questions 2 and 3 focused on forecasting the effects of combining treatment or weekly check-ins with another pretrial condition, as treatment and weekly check-ins are considered some of the foremost strategies for reducing new criminal arrests during pretrial (Bechtel et al., 2017; DeMichele et al., 2019). We, however, forecasted the effects of combining all other pretrial conditions together, which are provided at https://github.com/ianasilver/Pretrial-Conditions/tree/main.

Methods

The data for the current study come from one large county that participated in the Advancing Pretrial Policy and Research (APPR) project. Briefly, APPR was a multi-year, multi-county project focused on conducting pre-implementation validations of the Public Safety Assessment (PSA) and producing pretrial research informative for practice and policy within the jurisdictions. The counties that participated in the research were selected through a competitive application process, where the only requirement was that they had not implemented a pretrial assessment but were interested in implemented the PSA. The project has yielded a number of important findings for pretrial research and practice (e.g., DeMichele et al., 2024), and has also produced research guiding the implementation of the PSA in various jurisdictions across the United States. For the current study, we relied on a sample of individuals that were released into the community during pretrial and had complete pretrial supervision information (N = 17,824). The sample includes individuals on pretrial supervision from January 1, 2017, to December 31, 2018 (DeMichele et al., 2024).

Pretrial Conditions. Twelve pretrial conditions were measured for the current study. Individuals could be assigned to multiple special conditions, but not *no special conditions* or *not supervised* and a special condition (Pretrial Justice Institute, 2019). *No special conditions* captured the individuals who received no special conditions as part of their pretrial supervision but were on a pretrial supervision caseload while in the community. *Regular check-in* included individuals who had to check in with their officer on a regular basis via remote communication. *Employment and Education* indicated the individuals who had to maintain employment or educational participation, the hours of which could vary across individuals (Pretrial Justice Institute, 2019). *Electronic monitoring* denoted the individuals assigned a Global Positioning System (GPS) monitor or an electronic house monitoring device that tracks their location or if the individual exited their current residence (respectively; Cooprider & Kerby, 1990). *Location Restrictions* identified the individuals who were required to avoid certain locations in the community during their pretrial period, such as the business where the crime occurred or the known location of a victim. *Treatment* included the individuals who were mandated to participate in or complete some form of treatment (e.g., Cognitive Behavioral Therapy, Alcoholics Anonymous; Pretrial Justice Institute, 2019). *Sobriety* indicated that the individual was mandated not to use any alcohol or drugs and to submit to a random drug test. Stay Away Orders indicated the individuals were required to have no communication or contact with a specified individual during pretrial. *Monthly Reporting*, *Bi-Weekly Reporting*, and *Weekly Reporting* were used to capture the individuals who had to

report to their pretrial supervision office—for an in-person meeting—at monthly intervals, bi-weekly intervals, or weekly intervals (respectively; Pretrial Justice Institute, 2019). *Other Requirements* were used to capture the individuals who had other pretrial supervision conditions that could not be correctly categorized into the previously identified conditions.

Demographics and Criminal History. Demographics and criminal history data were included to increase the accuracy of the forecasted effects of pretrial supervision condition combinations. These included the age at current arrest, racial/ethnic heritage (American Indian, Asian/Pacific Islander, Black, Hispanic, Multiple Races, Other, Unknown, White), and biological sex (male, female). Additionally, dichotomous measures were used to identify if the current offense was defined as a violent offense by the jurisdiction, was defined as a felony offense by the jurisdiction, and if the current offense was defined as a drug offense, other offense, property offense, public order offense, or violent offense by the National Corrections Reporting Program (NCRP) standard. Finally, three dichotomous variables were created to capture if the individual had experienced a misdemeanor conviction, felony conviction, or a period of incarceration before the current offense.

Analysis. A three-step analytical strategy was used to answer the research questions. First, descriptive statistics were produced. Second, a Bayesian logistic regression model was estimated to forecast the effects of pretrial condition combinations on new criminal arrest (Silver et al., 2023). Briefly, the primary difference between a Bayesian logistic regression model and a traditional logistic regression model is the estimation procedure (Gelman et al., 2020). Traditional logistic regression models rely on maximum likelihood estimation to calculate the slope coefficients and standard errors that best explain the observed relationships in the variance covariance matrix.

Bayesian logistic regression models rely on Markov Chain Monte Carlo (Gelman et al., 2020)—a bounded randomization technique—to calculate the slope coefficients and standard errors that best fit the observed data within the context of the priors. Here, a prior is a distribution of values where we believe the slope coefficient to exist, specified with the mean and standard deviation. The estimation technique employed by the Bayesian logistic regression models allows us to generate predictions about the potential effects of conditions within the population of individuals on pretrial supervision, as opposed to the predictions only generalizing to the observed sample (Gelman et al., 2020). The model used weakly informative priors (normally distributed priors with a mean of 0 and a standard deviation of 2.5) and Markov Chain Monte Carlo, with 4 chains and 10,000 iterations to produce the posterior distribution (Silver et al., 2023). Finally, the posterior distributions produced by the Bayesian logistic regression model were then used to forecast the potential effects of each pretrial condition and the potential effect of combining two pretrial supervision conditions.

The forecasts were generated for 1,600 hypothetical high-risk individuals on pretrial supervision. All of the forecasts were produced with the *same 1,600 hypothetical high-risk individuals*, meaning that only the pretrial condition(s) varied across the forecasts (Gelman et al., 2020). This strategy permits the direct comparison of the forecasted effects of the pretrial condition(s) for the 1,600 hypothetical high-risk individuals to the forecasted effects of not being placed on pretrial supervision or receiving no special conditions for the 1,600 hypothetical high-risk individuals. The 1600 hypothetical individuals included males of average age who were charged with a felony violent offense and extensive criminal histories (prior incarceration, prior misdemeanor conviction, prior felony and violent convictions, and prior failures to appear within the past 2 years and more than 2 years ago). If the 1600 hypothetical individuals were scored using the Public Safety Assessment, they would receive a designation of high risk for failure to appear, new criminal arrest, and new violent criminal arrest. Of the 1600 individuals, 200 were specified to be American Indian/Native Alaskan, 200 were Asian/Pacific Islander, 200 were Black, 200 were Hispanic, 200 were multiple races, 200 were other, 200 were unknown, and 200 were White. We focus on the forecasted effects of treatment and another specified condition, as well as weekly reporting and another specified condition.

Results

Table 1 presents the descriptive statistics for the analytical sample. Stay away orders were assigned to about 16 percent of the cases, while monthly reporting was assigned to about 5 percent. Approximately 72 percent of the sample (N = 12,834) was not supervised by the pretrial services agency. Electronic monitoring was the least assigned condition of pretrial supervision, with approximately .25 percent of individuals having to wear a GPS or house arrest device.

Figure 1 provides the forecasted probability of a new criminal arrest for hypothetical individuals who were not supervised by the pretrial department, received no special conditions, or were assigned only the specified pretrial condition. In particular, this provides the distribution of the probability of experiencing a new criminal arrest (y-axis) for the 1600 hypothetical individuals if they only received the specified pretrial conditions on the x- axis. The gray middle area shows the 25th to 75th percentiles, while the outside black areas show the 10th to 90th percentiles. To provide an example, it can be expected that 90 percent of high-risk individuals would experience a new criminal arrest between 15 percent and 52 percent of the time they are not supervised during pretrial, with approximately 50 percent of high-risk individuals experiencing a new criminal arrest between 24 percent and 41 percent of the time they are not supervised during pretrial. The vertical gray rectangle from top to bottom shows the ability to compare the forecasted probability of the remaining pretrial conditions to the 25th to 75th probability of a new criminal arrest for those individuals not supervised during pretrial.

Regular check-ins, electronic monitoring, or treatment appeared to reduce the forecasted probability of a new criminal arrest compared to not being supervised by the pretrial department or receiving no special conditions. Alternatively, assigning to individuals employment and education requirements, location restrictions, or weekly reporting appeared to increase the forecasted probability of a new criminal arrest compared to not being supervised by the pretrial department or receiving no special conditions. The remaining conditions of pretrial supervision appeared to result in slight increases in the forecasted probability of a new criminal arrest compared to not being supervised by the pretrial department or receiving no special conditions.

Figure 2 provides the forecasted probability of an individual experiencing a new criminal arrest if provided with treatment and having to complete one additional condition of pretrial supervision compared to not being supervised by the pretrial department or receiving no-special conditions. Combining treatment with another pretrial condition generally resulted in reductions in the forecasted probability of a new criminal arrest when compared to not being supervised by the pretrial department or receiving no special conditions. The largest

TABLE 1.
Descriptive Statistics for Analytical Sample.

	Mean	SD	Min	Max
Dependent Variable				
New Criminal Arrest	21.72%		0	1
Supervision Conditions				
Not Supervised	72.39%		0	1
No Special Conditions	3.94%		0	1
Regular Check-In	0.50%		0	1
Employment and Education	0.40%		0	1
Electronic Monitoring	0.25%		0	1
Location Restrictions	2.74%		0	1
Treatment	0.64%		0	1
Sobriety	2.55%		0	1
Stay Away Orders	15.75%		0	1
Other Requirements	4.30%		0	1
Monthly Reporting	5.09%		0	1
Bi-Weekly Reporting	2.19%		0	1
Weekly Reporting	1.20%		0	1
Criminal History				
Prior Misdemeanor Conviction	43.26%		0	1
Prior Felony Conviction	25.49%		0	1
Prior Violent Conviction	0.79	2.23	0	49
Prior Failure to Appear (≤ 2 Years)	0.35	0.78	0	12
Prior Failure to Appear (> 2 Years)	0.63	1.59	0	19
Prior Incarceration	18.35%		0	1
Current Offense Information				
Violent Charge (Jurisdiction)	33.45%		0	1
Current Offense Felony	50.97%		0	1
Current Offense Drug (Ref; NPRP)	18.78%		0	1
Current Offense Other (NPRP)	10.21%		0	1
Current Offense Property (NPRP)	27.60%		0	1
Current Offense Public Order (NPRP)	9.11%		0	1
Current Offense Violent (NPRP)	34.30%		0	1
Demographics				
Age at Current Arrest	33.67	11.64	18	84
American Indian	0.24%		0	1
Asian Pacific Islander	0.47%		0	1
Black	82.01%		0	1
Hispanic	0.31%		0	1
Multiple Races	0.13%		0	1
Other	0.20%		0	1
Unknown	0.07%		0	1
White	16.57%		0	1
Male (Ref)	72.07%		0	1
Female	27.93%		0	1
N				17,824

Notes: Mean differences across the key covariates for those supervised and not supervised during pretrial are presented in Table A1 of Appendix A.

decreases in the forecasted probability of a new criminal arrest were observed when treatment was combined with regular check-ins, electronic monitoring, or bi-weekly reporting. Slight increases in the forecasted probability of a new criminal arrest were observed when treatment was combined with employment and education mandates or weekly reporting.

Figure 3 provides the forecasted probability of an individual experiencing a new criminal arrest if mandated to report weekly to the pretrial supervision office and to complete one additional condition of pretrial supervision compared to not being supervised by the pretrial department or receiving no special conditions. The forecasts suggest that being assigned to weekly reporting and another pretrial condition was predicted to result in large increases in the probability of experiencing a new criminal arrest when compared to not being supervised by the pretrial department or receiving no-special conditions. The largest increase was forecasted for individuals who were mandated to report weekly and required to maintain employment and education participation. Notably, weekly reporting and regular check-ins, electronic monitoring, or treatment was forecasted to only result in negligible or small increases in the probability of experiencing a new criminal arrest when compared to not being supervised by the pretrial department or receiving no special conditions.

Discussion

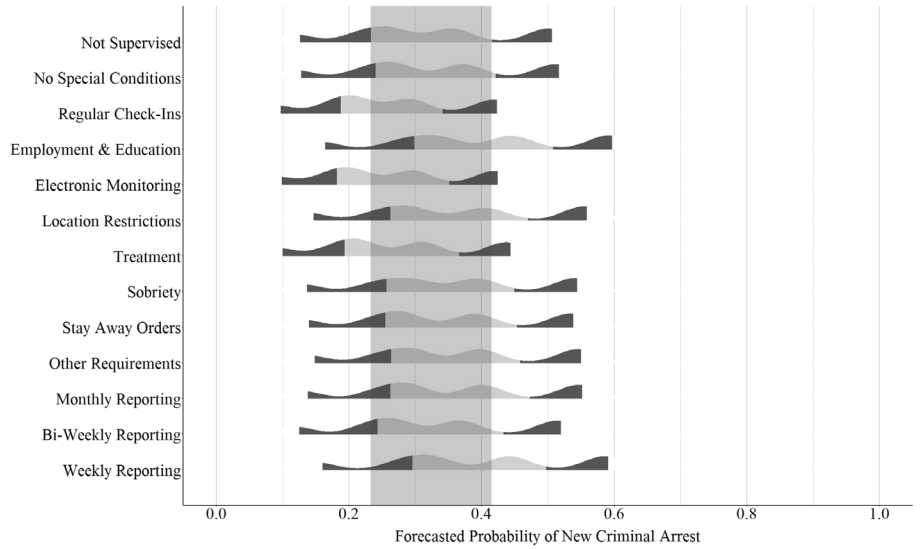
The results of the current study suggest that pretrial conditions and, more importantly, the combination of pretrial conditions could differentially affect new criminal arrests during pretrial. Some combinations of pretrial conditions were forecasted to increase the probability of an individual experiencing a new criminal arrest, while other combinations of pretrial conditions were forecasted to decrease the probability of an individual experiencing a new criminal arrest in comparison to not being supervised during pretrial release and not having any special conditions during pretrial release. For example, assigning individuals to treatment and regular check-ins resulted in a reduction in the forecasted probability of a new criminal arrest in comparison to not being supervised during pretrial release and not having any special conditions during pretrial release. In opposition, assigning individuals to weekly reporting and employment and education mandate resulted in a notable increase in the forecasted probability of a new

criminal arrest in comparison to not being supervised during pretrial release and not having any special conditions during pretrial release. Overall, these findings suggest that the proper assignment of pretrial conditions to individuals could be extremely important for public safety.

Given the results of the forecasts, strategies should be employed to match conditions to the risks and needs of individuals on pretrial supervision and, if possible, expand access to pretrial treatment. Although more research is needed, these strategies could center around developing and implementing individualized pretrial supervision case plans (e.g., Lerman et al., 2024). In the context of pretrial supervision, a case plan could be used to ensure that the conditions assigned to an individual suit their risks and needs and, in turn, reduce the likelihood of an individual engaging in new criminal behaviors. Although case plans are not new for pretrial supervision (Hatton & Smith, 2020), assigning to high-risk individuals combinations of highly restrictive conditions might not be effective for maintaining public safety. Rather, the forecasted results seem to suggest that mixing pretrial treatment with restrictive conditions could provide the best opportunity for reducing the likelihood of these individuals experiencing a new criminal arrest.

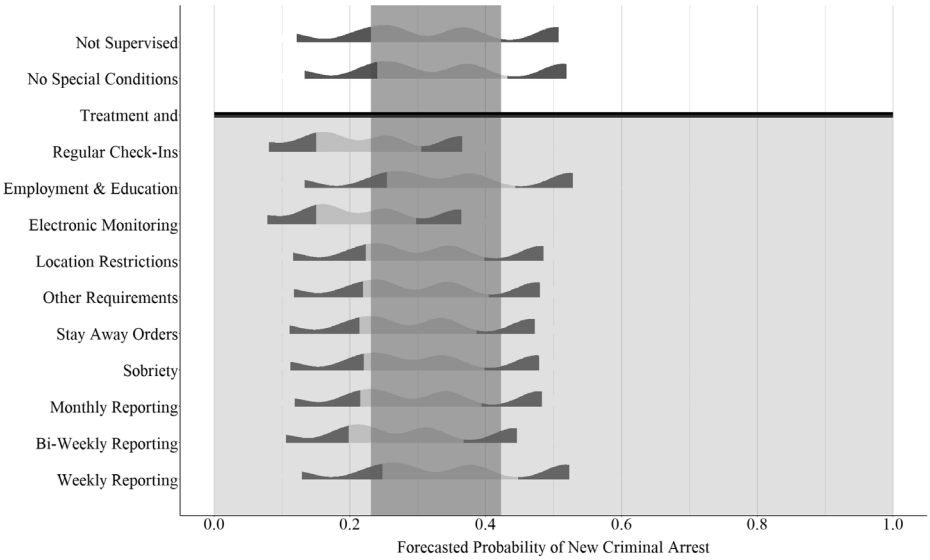
In addition to highlighting the need for strategically developing pretrial case plans, the results of the current study suggest that assigning more conditions during pretrial supervision does not always result in more favorable outcomes for individuals. In particular, the forecasted probability of new criminal arrests suggests that having no special conditions could result in more favorable outcomes than requiring an individual to report to the pretrial supervision office weekly and mandate employment and education participation. These findings coincide with other research in probation and parole (Phelps & Curry, 2017), which suggests that the proper selection of supervision conditions is more beneficial than just assigning individuals to pretrial conditions to restrict their participation in the general community. Largely, it appears that judges and pretrial supervision officers should avoid assigning more conditions for the sake of control and strategically assign conditions to address the risks and needs of the individuals on pretrial supervision (Bechtel et al., 2011). Future research should develop evidence-based strategies that can guide the assignment of conditions to pretrial

FIGURE 1.
Predicted Probability of Experiencing a New Criminal Arrest if Assigned Only the Specified Pretrial Condition



Notes: The predictions are derived from a Bayesian Logistic Regression model, which was estimated using normally distributed priors with a mean of 0 and standard deviation of 2.5, 10,000 iterations and four Monte Carlo Markov Chains. The forecasts are based on a hypothetical set of 1600 high-risk male individuals with identical criminal history and current offense information. Of the 1600 individuals, 200 were specified to be American Indian/Native Alaskan, 200 were Asian/Pacific Islander, 200 were Black, 200 were Hispanic, 200 were multiple races, 200 were other, 200 were unknown, and 200 were White.

FIGURE 2.
Predicted Probability of Experiencing a New Criminal Arrest if Assigned Treatment and the Specified Pretrial Condition



Notes: Results are in comparison to individuals who were not supervised during their pretrial period and individuals that received no conditions during their pretrial period. The predictions are derived from a Bayesian Logistic Regression model, which was estimated using normally distributed priors with a mean of 0 and standard deviation of 2.5, 10,000 iterations and four Monte Carlo Markov Chains. The forecasts are based on a hypothetical set of 1600 high-risk male individuals with identical criminal history and current offense information. Of the 1600 individuals, 200 were specified to be American Indian/Native Alaskan, 200 were Asian/Pacific Islander, 200 were Black, 200 were Hispanic, 200 were multiple races, 200 were other, 200 were unknown, and 200 were White.

populations and, in turn, assess if the proper assignment of supervision conditions to pretrial populations reduces new criminal arrests during the pretrial period.

References

Bechtel, K., Connor, T., & Lowenkamp, C. (2022). Pretrial supervision: Race and revocation. *Federal Probation*, *86*(1), 35.

Bechtel, K., Holsinger, A. M., Lowenkamp, C. T., & Warren, M. J. (2017). A meta-analytic review of pretrial research: Risk assessment, bond type, and interventions. *American Journal of Criminal Justice, 42*, 443-467.

Bechtel, K., Lowenkamp, C. T., & Holsinger, A. (2011). Identifying the predictors of pretrial failure: A meta-analysis. *Federal Probation, 75*(2), 78.

Bonta, J., & Andrews, D. A. (2016). *The psychology of criminal conduct*. Routledge.

Collaborative, P. J. (2023). Assessing the effectiveness of varying intensities of pretrial supervision. Retrieved from: https://nocache.mdrc.org/sites/default/files/PJC_Pretrial_Supervision.pdf

Cooprider, K. W., & Kerby, J. (1990). A practical application of electronic monitoring at the pretrial stage. *Federal Probation, 54*(1), 28–35.

Danner, M. J. E., VanNostrand, M., & Spruance, L. M. (2015). Risk-based pretrial release recommendation and supervision guidelines. Luminosity, Inc. Retrieved from: https://digitalcommons.odu.edu/cgi/viewcontent.cgi?article=1064&context=sociology_criminaljustice_fac_pubs

DeMichele, M., Baumgartner, P., Barrick, K., Comfort, M., Scaggs, S., & Misra, S. (2019). What do criminal justice professionals think about risk assessment at pretrial? *Federal Probation, 83*(1), 32.

DeMichele, M., Silver, I. A., Labrecque, R. M., Dawes, D., Lattimore, P. K., & Tueller, S. (2024). Testing predictive biases at the intersection of race-ethnicity and sex: A multisite evaluation of a pretrial risk assessment tool. *Criminal Justice and Behavior, 51*(6), 850-875.

Gelman, A., Carlin, J. B., Stern, H. S., Dunson, D, B., Vehtari, A., Rubin, D. B., (2020). *Bayesian Data Analysis* (3rd Ed). Chapman & Hall/CRC Texts.

Hatton, R., & Smith, J. (2020). Research on the effectiveness of pretrial support and supervision services: A guide for pretrial services programs. UNC School of Government Criminal Justice Innovation Lab.

Lerman, A. E., Sadin, M., Morrison, W., & Wieselthier, J. (2024). The effects of post-release community supervision reform. *Journal of Experimental Criminology, 20*(1), 23-48.

Levin, D. (2016). Examining the efficacy of pretrial release conditions, sanctions and screening with the state co. Retrieved from: https://biblioteca.cejamericas.org/bitstream/handle/2015/2033/PJI_Efficacy_of_Pretrial_Conditions_Levin_ASC_07.pdf?sequence=1&isAllowed=y

Lowder, E. M., & Foudray, C. M. (2021). Use of risk assessments in pretrial supervision decision-making and associated outcomes. *Crime & Delinquency, 67*(11), 1765-1791.

Miyashiro, C. M. (2008). Research 2 Results (R2R)-The Pretrial Services Experience. *Federal Probation, 72*(2), 80.

Phelps, M., & Curry, C. (2017). Supervision in the Community: Probation and Parole. *Oxford Research Encyclopedia of Criminology.* Retrieved 19 Jul. 2024, from https://oxfordre.com/criminology/view/10.1093/acrefore/9780190264079.001.0001/acrefore-9780190264079-e-239.

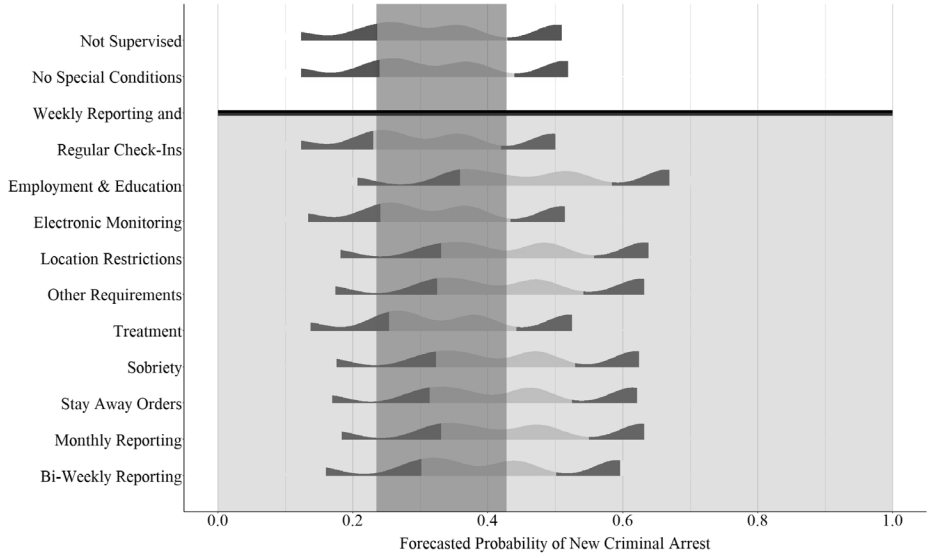
Pretrial Justice Institute. (2019). Scan of pretrial practices 2019. Retrieved from: https://www.pretrial.org/files/resources/scanofpretrialpractices.pdf

Scott-Hayward, C. S., & Ireland, C. (2022). Reducing the federal prison population: The role of pretrial community supervision. *Federal Sentencing Reporter, 34*(5), 327-333.

Silver, I. A., D'Amato, C., Newsome, J., Johnson, S., & Rubenstein, B. (2023). Forecasting the potential effects of programming combinations for justice-involved youths. *Journal of Criminal Justice, 88*, 102093.

Skemer, M., & Brennan, E. (2024). Comparing Pretrial Supervision Modes. Retrieved from: https://www.mdrc.org/sites/default/files/PJC_Comparing_Supervision_Modes.pdf

FIGURE 3.
Predicted Probability of Experiencing a New Criminal Arrest if Assigned Weekly Reporting and the Specified Pretrial Condition



Notes: Results are in comparison to individuals who were not supervised during their pretrial period and individuals that received no conditions during their pretrial period. The predictions are derived from a Bayesian Logistic Regression model, which was estimated using normally distributed priors with a mean of 0 and standard deviation of 2.5, 10,000 iterations and four Monte Carlo Markov Chains. The forecasts are based on a hypothetical set of 1600 high-risk male individuals with identical criminal history and current offense information. Of the 1600 individuals, 200 were specified to be American Indian/Native Alaskan, 200 were Asian/Pacific Islander, 200 were Black, 200 were Hispanic, 200 were multiple races, 200 were other, 200 were unknown, and 200 were White.

APPENDIX A.
Mean Difference Calculations

Mean Differences Across Key Covariates for those Individuals Supervised and those Individuals Not Supervised During Pretrial				
	Supervised	Not Supervised		
	Mean	Mean	t-test	Cohen's d
Criminal History				
Prior Misdemeanor Conviction	0.35	0.46	-14.07	-0.23
Prior Felony Conviction	0.18	0.28	-15.33	-0.24
Prior Violent Conviction	0.55	0.88	-9.85	-0.15
Prior Failure to Appear (≤ 2 Years)	0.11	0.45	-33.96	-0.44
Prior Failure to Appear (> 2 Years)	0.44	0.70	-10.75	-0.16
Prior Incarceration	0.14	0.20	-9.34	-0.15
Current Offense Information				
Violent Charge (Jurisdiction)	0.36	0.32	5.04	0.09
Current Offense Felony	0.69	0.44	30.60	0.50
Current Offense Drug (Ref; NPRP)	0.25	0.16	12.94	0.23
Current Offense Other (NPRP)	0.01	0.14	-38.79	-0.43
Current Offense Property (NPRP)	0.34	0.25	11.63	0.20
Current Offense Public Order (NPRP)	0.03	0.11	-20.78	-0.28
Current Offense Violent (NPRP)	0.36	0.34	3.33	0.06
Demographics				
Age at Current Arrest	32.35	34.18	-9.34	-0.16
American Indian	0.00	0.00	0.78	0.01
Asian Pacific Islander	0.01	0.00	0.89	0.02
Black	0.81	0.82	-1.51	-0.03
Hispanic	0.00	0.00	1.07	0.02
Multiple Races	0.00	0.00	0.29	0.01
Other	0.00	0.00	0.49	0.01
Unknown	0.00	0.00	0.25	0.00
White	0.17	0.16	1.00	0.02
Male (Ref)	0.68	0.74	-7.81	-0.13
Female	0.32	0.26	7.81	0.13
N	4,921	12,903		

CONTRIBUTORS
To This Issue

Amaryllis Austin
Deputy Chief, United States Pretrial Services, Northern District of California. Master's in Criminology, Law and Society, University of California, Irvine.

Kristin Bechtel
Principal Scientist, RTI International. Ph.D., University of Cincinnati. Co-author of "Pretrial supervision: Race and revocation," *Federal Probation, 86*(3), (2022).

Thomas H. Cohen
Chief of the Data Branch, Probation and Pretrial Services Office, Administrative Office of the United States Courts. Ph.D. in criminal justice, University of Rutgers School of Criminal Justice; J.D., University of Maryland School of Law.

Debbie Dawes
Director, Court Systems Research Program. M.P.A., North Carolina State University. Co-author of "Justice involvement prediction as individuals age: An age-graded evaluation of the public safety assessment," *Law and Human Behavior*, *48*(2) (April 2024).

Matthew DeMichele
Senior Director, RTI International. Ph.D., University of Kentucky. Co-author of "Locked up and awaiting trial: Testing the criminogenic and punitive effects of spending a week or more in pretrial detention" (2024).

Catherine Grodensky
Justice Researcher, RTI International. Ph.D., Duke University. Author of "The Effect of the Elected Chief Prosecutor on Punitiveness in Local Courtrooms," *Criminal Justice Review* (May 7, 2024).

Sara J. Valdez Hoffer
Probation Administrator, Probation and Pretrial Services Office, Administrative Office of the U.S. Courts. Previously, Supervisory U.S. Probation Officer, District of Kansas. Ph.D. in Public Administration, Liberty University.

Alexander M. Holsinger
Professor, University of Missouri – Kansas City, Department of Criminology & Criminal Justice. Ph.D., University of Cincinnati. Co-author of "Is pretrial detention an effective deterrent? An analysis of failure-to-appear and re-arrest says 'no.'" *Federal Probation*, 87(1) (2023).

Christopher Inkpen
Research Sociologist and Demographer, RTI International. Ph.D., The Pennsylvania State University. Author of *Differences in Time to Reported First Arrest by Race, National Origin, and Immigrant Generation: A Test of Assimilation Theories* (2024).

Kim Janda
Research Data Scientist, RTI International. M.S., Northwestern University. Co-author of *The Utility of Drug Testing for Probation Risk Classification* (2024).

Pamela K. Lattimore
Senior Director and Chief Scientist, Division for Applied Justice Research, RTI International. Ph.D., University of North Carolina at Chapel Hill. Author of "Considering reentry program evaluation: Thoughts from the SVORI (and other) evaluations." In B. Orrell (Ed.), *Rethinking reentry: An AEI working group summary* (pp. 7–38) (2020).

Christopher Lowenkamp
Social Science Analyst, Probation and Pretrial Services Office, Administrative Office of the U.S. Courts; and Center for Justice and Communities, School of Criminal Justice, University of Cincinnati. Ph.D., University of Cincinnati. Co-author of "Is Pretrial Detention an Effective Deterrent? An Analysis of Failure to Appear and Rearrest Says 'No,'" *Federal Probation* (June 2023).

Lina Montoya
School of Data Science and Society & Gillings School of Global Public Health, University of North Carolina, Chapel Hill.

Charles R. Robinson
Deputy Chief, Probation and Pretrial Services Office, Administrative Office of the U.S. Courts. B.S. in Criminal Justice, Grambling State University, LA. Co-author of "Towards an Empirical and Theoretical Understanding of Offender Reinforcement and Punishment," *Federal Probation* (June 2015).

Ian A. Silver
Quantitative Criminologist, RTI International. Ph.D., University of Cincinnati. Co-author of "Incarceration of youths in an adult correctional facility and risk of premature death," *JAMA Network Open*, *6*(7) (June 2023).

Jennifer Skeem
Professor of Public Policy and Social Welfare, Goldman School of Public Policy, University of California, Berkeley. Co-author of "Understanding racial disparities in pretrial detention recommendations to shape policy reform," *Criminology & Public Policy* (in press).

Federal Probation Style Sheet

A Journal of Correctional Philosophy and Practice

Federal Probation—published three times a year by the Probation and Pretrial Services Office, Administrative Office of the U.S. Courts—has been in print for more than 80 years. Articles published in the journal reflect current thought, practice, and research in the community supervision, corrections, and criminal justice fields. Authors include criminologists, academicians, researchers, and legal specialists, but also "front-line" probation, pretrial services, and corrections officers.

U.S. probation and pretrial services officers constitute the bulk of the approximately 5,500 recipients of *Federal Probation* in hard copy. Other readers include federal judges; correctional and criminal justice practitioners at the federal, state, and local levels; and educators and students. Most of our outside subscriptions are for university libraries; in addition, *Federal Probation* is available and widely accessed online at www.uscourts.gov.

The editors seek material that is either directly related to the work and professional interests of the readers or of significant peripheral interest. Articles of interest include those that describe or evaluate a new or innovative program or approach, discuss how a policy evolved, offer insight into an issue, propose a change, or provide historical perspective. The journal publishes articles on a wide spectrum of topics; articles in recent issues have focused on topics as diverse as risk assessment, evidence-based practices in community supervision, pretrial detention, disparity, prisoner reentry, location monitoring, officer safety training, and program implementation.

The editors of *Federal Probation* are looking for original material. Manuscripts submitted to *Federal Probation* should not be previously published or under simultaneous consideration elsewhere.

Authors preparing and submitting manuscripts should:

- In general, keep manuscript length at about 3500–4500 words, although we do publish longer articles, depending on the topic and treatment.
- Double-space manuscripts, allowing standard margins.
- Submit two or three title suggestions, and a brief abstract of your article.
- Type all quoted matter of more than three lines single-spaced and indented on both sides.
- Keep explanatory notes to a minimum. For non-legal articles, *Federal Probation* accepts manuscripts prepared either in common citation style or in American Psychological Association style.
- Use tables and figures intentionally, and cite them in the text. That is, they should be used to support, illuminate, or substantiate the author's narrative argument or presentation.
- Avoid unusual keyboarding codes.

Email to: Ellen Wilson Fielding, Editor, *Federal Probation* (email: Ellen_Fielding@ao.uscourts.gov), Administrative Office of the U.S. Courts, One Columbus Circle NE, Washington, DC 20544 (ph: 202-502-1651).

United States Government

INFORMATION

Order Processing Code

***5876**

Federal PROBATION

a journal of correctional philosophy and practice

Please send me _____ subscription(s) to *Federal Probation* at $16.50 each ($22.40 foreign) per year. The total cost of my order is $_____.

Price includes shipping and handling and is subject to change.

(PLEASE TYPE OR PRINT) NAME OR TITLE

COMPANY NAME ROOM, FLOOR, OR SUITE

STREET ADDRESS

CITY STATE ZIP CODE + 4

DAYTIME PHONE INCLUDING AREA CODE

PURCHASE ORDER NUMBER (OPTIONAL)

Method of Payment

❑ Check payable to: Superintendent of Documents

❑ GPO Deposit Account _____

❑ Credit Card ❑ Visa ❑ MasterCard ❑ Discover

CARD NUMBER EXPIRATION DATE

AUTHORIZED SIGNATURE

ORDER ONLINE FROM
http://bookstore.gpo.gov

FAX YOUR ORDER TO
202-512-2104

PHONE YOUR ORDER TO
202-512-1800 or
866-512-1800

MAIL YOUR ORDER TO
Superintendent of Documents
P.O. Box 979050
St. Louis, MO 63197-9000

IMPORTANT!
Please include your completed order form with your remittance

thank you for your order!

FEDERAL PROBATION

Administrative Office
of the United States Courts

Washington, DC 20544