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**BEFORE THE DISPOSITION:
A REVIEW OF PRETRIAL LITERATURE**

**Staying Close and Looking Back: An Examination of Desistance in a
Maryland Community Corrections Population Project**

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INTRODUCTION

The pretrial stage of a criminal case process is the time between an individual's arrest and case disposition. This time period can impact aspects of a defendant's life from their immediate freedom, to their case disposition, the sentence they receive, and even life after their time in the criminal justice system is over. However, this stage has historically been the subject of limited research and attention from both scholars and policymakers. According to the most recent measurements by the Bureau of Justice Statistics (BJS), United States county and city jails held 738,400 inmates at midyear in 2018. Of these inmates, about 66 percent were defendants awaiting court action on a current charge, up from 56 percent in 2000 (Zeng, 2018; Zeng, 2020).¹ This equates to 490,000 pretrial defendants detained in jails across the United States on any given day, as compared to 248,500 convicted inmates (34 percent) (Zeng, 2020). As demonstrated by these statistics, the majority of individuals detained in United States' jails have not been convicted of a crime. While some of these individuals may eventually be convicted, others may be charged with a crime, held in jail, and later found not guilty or have their case dismissed.² This population, as well as those released into communities while awaiting trial, make up the pretrial population across the United States.

Researchers and criminal justice stakeholders have taken action to develop a more evidence-based, effective pretrial system to reduce the high number of pretrial detainees across the country. While the literature surrounding the pretrial stage has expanded in recent years, it has developed with distinct myopic focuses. The purpose of this review is to summarize the current state of the literature, bridging together academic, policy, and technical works to provide a comprehensive overview of the complex and consequential elements of pretrial practices. Through this we aim to highlight critical issues and gaps in our current understanding of the pretrial stage which must be addressed in order create a just and effective pretrial system.

Three main goals characterize today's pretrial advancements: maximize the release of defendants, minimize failure to appear (FTA) in court, and reduce the threat of released individuals to public safety (American Bar Association [ABA], 2007; Lowenkamp, VanNostrand, & Holsinger, 2013b; National Association of Pretrial Services Agencies [NAPSA], 2020). To maximize efficiency, the system aims to detain only the highest-risk defendants prior to trial and release others under the lowest level of supervision required to ensure their appearance in court and prevent new criminal activity prior to trial. For this system to be successful, judges and pretrial officers must determine a defendant's risk to reoffend prior to trial and/or abscond from court, and apply the appropriate level of supervision to prevent potential negative consequences to the defendant and the community.

¹ Over the same time period, the average daily jail population increased from 618,300 to 738,400 (Zeng, 2018; Zeng, 2020).

² Figure 1 displays the many potential paths a defendant can take from the time of arrest through case disposition.

Risk is determined on a predictive basis, and scholars and criminal justice stakeholders have long sought to develop and implement tools that are successful in predicting defendant behavior. Much of the research on risk assessments is focused on the factors that should be considered when determining risk, the weight placed on each factor, the manner in which stakeholders implement and utilize these tools, and the potentially disparate impact of these assessments on disadvantaged populations (Desmarais & Lowder, 2019). One key topic of interest in regard to risk assessment is the reliance on static versus dynamic factors. Static predictors are factors that cannot be changed and may include age, past offenses, and prior failures to appear. Dynamic factors may be more amenable to change and may include substance use, residential stability, and social support (Bechtel, Lowenkamp, & Holsinger, 2011; Holsinger, Lurigio, & Latessa, 2001; Latessa, 2005). This review will discuss the inclusion of certain factors and the effectiveness of these tools.

No matter what the assessment of risk entails or who makes the release or detention decision, every defendant is classified through some determination of risk (whether formal or informal) and assigned a level of supervision prior to trial. The legislation, local policies, and resources available in each jurisdiction can affect the release and detention options available to defendants. The variation by jurisdiction creates a need for this review, which will focus on pretrial policies and practices across the country, explore their effectiveness, and how they impact different populations.

Due to the difficulty of obtaining national-level pretrial data, many pretrial studies utilize the Bureau of Justice Statistics' (BJS) State Court Processing Statistics (SCPS) data to study pretrial trends. The BJS collected SCPS data biennially from 1988-2006 and in 2009 and studied felony defendants from a sample of 40 of the country's 75 largest urban counties (Reaves, 2013). They discontinued this data collection effort in 2009 due to various limitations³ of the data obtained (Cohen & Kyckelhan, 2010). The BJS plans to supplement or replace the SCPS data collection program in the future to collect data on pretrial defendants across the United States. To begin this process, the Urban Institute and Pretrial Justice Institute (PJI) developed a prototype, known as the Jurisdictional Capacity Survey as part of the National Pretrial Reporting Program. The results of this survey demonstrate the difficulty of collecting aggregate data on case processing due to jurisdictional capacity to collect data, logistical difficulties in contacting organizations, and the overlapping of multiple agencies handling pretrial defendant case processing (Kim et al., 2019). Therefore, there is currently no newer, large-scale data on pretrial defendants than the SCPS data.

The SCPS data from 1990 to 2009 reveals that the United States increasingly relied on a system of monetary bail, in which individuals post a financial bond as collateral in order to assure the

³ In 2010, BJS released the State Court Processing Statistics Data Limitations. The limitations are as follows and must be considered when discussing all studies in this review that utilize this dataset. (1) Data are insufficient to explain causal association for the patterns reported; (2) SCPS data should not be used to make statements about the effectiveness of a particular program; and (3) SCPS data cannot be used to evaluate the factors used to develop and implement local pretrial release policies (Cohen & Kyckelhan, 2010).

court that they will appear in court upon release (Reaves, 2013). Today, there are three primary release options used by courts across the country in addition to detention.

- **Release on Personal Recognizance (ROR)** occurs when an individual is released, pending trial, without financial or non-financial conditions. The individual is expected to appear in court based on his or her own character. According to the SCPS data available from 2009, 23 percent of releases of felony defendants from the largest 75 urban counties in the United States were released on their own recognizance (Reaves, 2013).
- **Release on Financial Conditions** involves the exchange of money for a defendant's release. According to this 2009 SCPS data, release on secured financial conditions was the most common release method, constituting just over 60 percent of pretrial releases. A secured financial release requires the bond be paid prior to the release of the defendant pending trial. There are three main types of secured financial release. (1) *Commercial surety bonds*, which accounted for 49 percent of all releases, refer to a commercial bail bondsman posting a defendant's full bond to the court. In turn, the defendant pays a non-refundable percentage to the bail bond company. If the defendant appears in court, the bail bond company receives their full deposit back. (2) *Deposit bonds*, which made up 7 percent of all releases, allow a defendant to post a percentage of their bond to the court in order to secure release. If the defendant fails to appear, they must post the rest of the bond amount to the court. (3) *Full cash bonds*, which constituted 5 percent of all releases, require a defendant to pay 100 percent of their bond amount in order to secure release. Payment is returned to the individual upon appearance in court. In addition to secured financial release, *unsecured financial* release requires that an individual only pay their bond if they abscond from their court appearance. If they appear, no money is exchanged. In 2009, these accounted for 5 percent of all releases (Reaves, 2013).
- **Conditional Release** refers to the release of an individual given only certain non-monetary conditions. Conditional releases in 2009 accounted for 10 percent of all releases (Reaves, 2013). This is the most diverse type of pretrial release. According to the National Conference of State Legislatures (NSCL), conditional releases may include any combination of the following: supervision, electronic monitoring, partial confinement, crime prohibition, movement restrictions, change of address notice, residence restrictions, association restrictions, protection/no contact order, weapons prohibition, domestic violence threats prohibition, attorney contact, employment/education, change of employment notice, controlled substances prohibition, substance monitoring or treatment, other treatment, DNA submission, and extradition waiver agreement (NSCL, 2016).
- **Detention:** Individuals are detained prior to trial because they (1) cannot post the monetary bail set for their release on financial conditions, (2) are denied any type of bail or release conditions, or (3) fail to comply with their release conditions through conditional release. For these reasons, length of time in detention can vary greatly by defendant. In 2009, approximately 38 percent of defendants were detained until case

disposition and approximately 4 percent of all defendants were denied bail. Of those detained for the full length of time prior to trial, approximately 90 percent were given the option to be released on financial conditions but could not afford to post their monetary bail (Reaves, 2013).

The research on these release options, as well as implications of pretrial detention, will be explored throughout this review, through an examination of the latest research and recommendations in the pretrial field. The review will open with a brief overview of trends and consequences in pretrial release and detention and explore the role of pretrial services agencies. The review will then discuss research surrounding current issues in pretrial including the use of monetary bail and disparities in decision-making processes. Further, the efficacy of pretrial risk assessment instruments will be explored. This will focus on current tools available, the research available on certain factors and their potential for exacerbating disparities, and the validation, implementation, and fidelity of risk assessment tools in jurisdictions across the country. The review will end with a conclusion of the available literature and recommendations for further research.

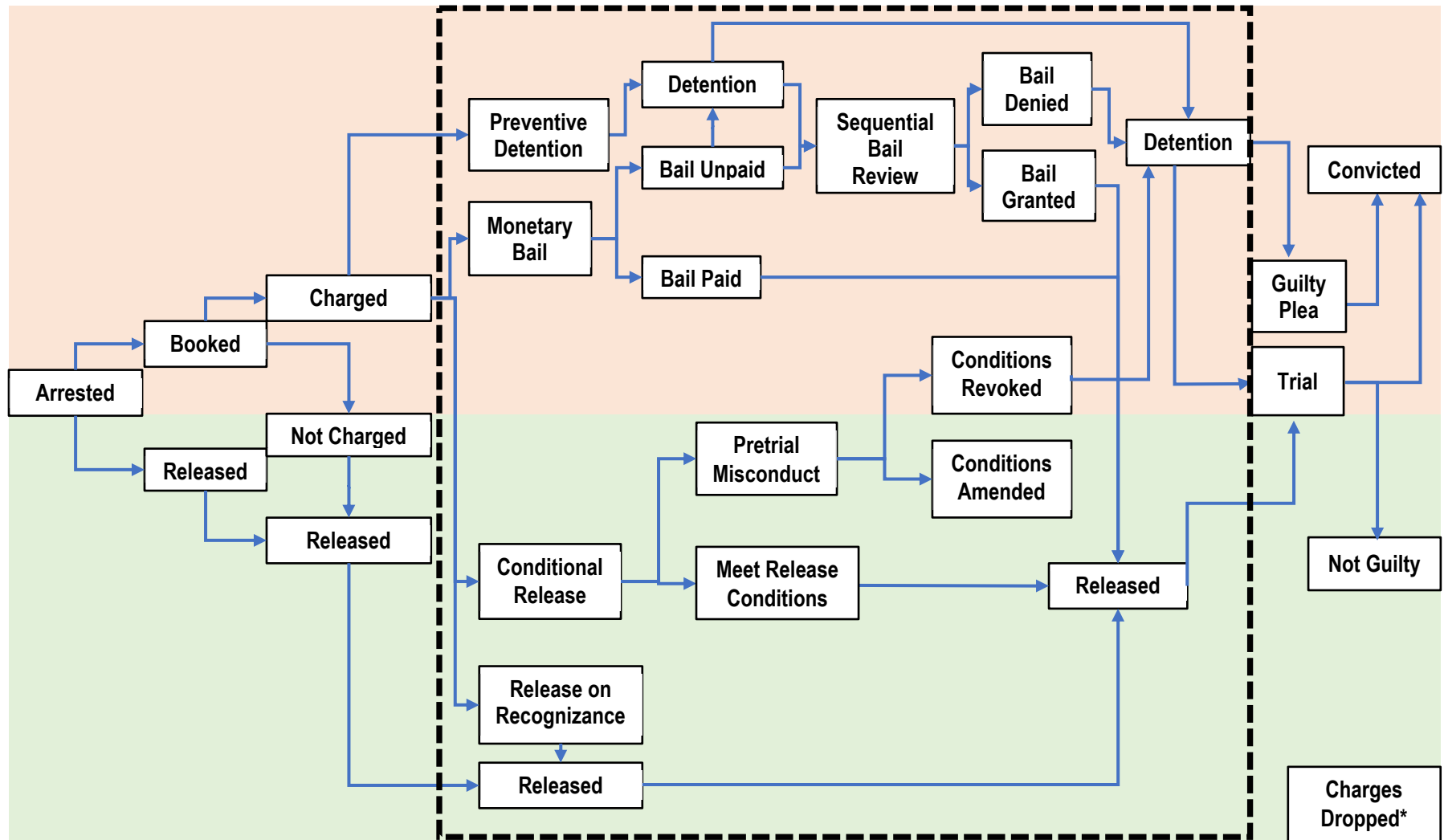


Figure 1: The Pretrial Process

*= Charges may be dropped at any time in the criminal case process

PRETRIAL RELEASE

Pretrial Release Trends

The majority (62 percent) of felony defendants are released prior to case disposition, as demonstrated by the most recently available national statistics on pretrial release (Reaves, 2013). A 2007 BJS Special Report examined the trends in pretrial release using SCPS data from 1990-2004 (Cohen & Reaves, 2007). See Figure 2 for a summary of these trends.

Released defendants have a variety of characteristics, criminal histories, and current offenses, which creates a different level of risk for each defendant. Different risk levels require different release conditions for defendants to appear in court and to prevent any new criminal activity prior to case disposition. To successfully supervise a diverse population, both the American Bar Association (ABA) and the National Association of Pretrial Services Agencies (NAPSA) Standards call for the creation of a pretrial services agency or program in every jurisdiction (ABA, 2007; NAPSA, 2020).

Pretrial Release Standards

The ABA and NAPSA published standards on pretrial release in 2007 and 2020, respectively. Each organization developed these standards to reflect the advancements in the field of pretrial at the time of their creation, and to provide a framework for jurisdictions to adopt best practices and implement them in a manner that is successful for their jurisdiction (ABA, 2007; NAPSA, 2020). These standards remain the most current standards on pretrial release. For more information on these standards, see the and the ABA Standards for Criminal Justice (3rd Ed.) Pretrial Release⁴ NAPSA Standards on Pretrial Release: Revised 2020.⁵

Pretrial Release Trends (1990-2004)

- 62 percent of felony defendants were released prior to case disposition
- 33 percent of those released were charged with one or more types of pretrial misconduct
- 25 percent of those released had a bench warrant issued for failure to appear
- 16.6 percent had a new arrest while on release, and half of those new arrests were for a felony
- The main characteristics of those rearrested were: under age 21, prior arrest record, prior felony, being released on an unsecured bond, and being part of an emergency release to relieve jail overcrowding
- Defendants released on financial release were more likely to make all scheduled court appearances than those released on their own recognizance
- Failure to appear was more common for black defendants, Hispanic defendants, and those with an active criminal justice status or prior incident of failure to appear
- As the bail amount increased, the probability of pretrial release decreased
- On average, released defendants waited three times longer than detainees for adjudication
- As time on pretrial release increased, incidents of pretrial misconduct increased

Figure 2: (Cohen & Reaves, 2007)

⁴https://www.americanbar.org/content/dam/aba/publications/criminal_justice_standards/pretrial_release.pdf

⁵<https://drive.google.com/file/d/1edS2bltwfNROieGeu1A6qKluTfzqop92/view>

Pretrial Services

The main tasks of pretrial services agencies (PSAs) are to gather information for judicial officers to consider when making pretrial release and detention decisions and to supervise released defendants until their court appearance. The NAPSA and ABA standards recommend PSAs conduct a screening of all arrested defendants before their initial appearance, then verify the data provided in the interview (Clark, 2014). They also conduct risk assessments (when available), provide supervision of those released into the community, and collect and report outcome and performance measures of defendants under their supervision (Clark, 2014). Funding and operation of most PSAs occur at the jurisdictional or county level, however six states (Colorado, Hawaii, Nevada, New Jersey, Vermont, and West Virginia) operate on the state level (Widgery, 2015).

According to the National Institute of Corrections (NIC) (2017), the elements of a “high functioning pretrial services agency” are having an operationalized mission, universal screening, pretrial risk assessment, sequential bail review, risk-based supervision, and performance measurement and feedback (p. 2). Pretrial services agencies containing these elements operate under evidence-based practices that increase court appearance and public safety while encouraging fair bail practices for defendants.

See Table 1 for a detailed discussion of these evidence-based elements.

Table 1: (NIC, 2017)

Element	Definition	Importance
<i>Operationalized Mission</i>	Clarify the PSA's goals, responsibilities, and principles.	Communicates the purpose to agency staff and stakeholders and guides the organization's actions.
<i>Universal Screening</i>	All defendants eligible for release should be screened prior to initial appearance. These screenings may include interview, investigation of criminal history, verification of this information, and/or screening via validated pretrial risk assessment.	Allows PSAs to collect information and verify that information to inform defendant risk upon release.
<i>Validated Pretrial Risk Assessment</i>	The use of calculating a defendant's risk upon release using empirically tested and weighted items to make pretrial release decisions.	Assist in making release and detention decisions based on an accurate calculation of defendant risk.
<i>Sequential Bail Review</i>	Review of the release/detention decision at scheduled court appearances to ensure that the defendant's risk continues to match the decision.	Addresses increases or decreases in risk so release and detention decisions can appropriately reflect detention status throughout the pretrial process.
<i>Risk-Based Supervision</i>	The level of supervision of defendants must match their level of risk.	Levels of supervision can directly impact the likelihood pretrial failure and must be appropriately applied based on defendant risk.
<i>Performance Measurement and Feedback</i>	Agencies define and measure the success of their organization based on successful and unsuccessful practices.	Continuous measurement of performance allows organizations to identify which practices enhance and decrease program effectiveness.

Pretrial supervision is a broad term, and each jurisdiction varies both in the forms of supervision used by their pretrial services agencies as well as available resources. Overall, 85 percent of counties from the Pretrial Justice Institute’s *2019 Scan of Pretrial Practices (Scan)*, which surveyed 89 counties and 2 cities⁶ across the United States, reported having some form of pretrial services (PJI, 2019). While research does support the use of conditional pretrial release over monetary bail (for example, see Austin, Krisberg, and Litsky, 1985; Lam, 2014; Lowenkamp & VanNostrand, 2013b), most jurisdictions throughout the country still use monetary bail, and many rely primarily on monetary bail for pretrial release (Reaves, 2013). Further research on each pretrial release condition and its effect on pretrial crime and failure to appear is needed (Hatton & Smith, 2020; VanNostrand, Rose, & Weibrecht, 2011).

Conditional Release

Conditional release is defined as “an unsecured bond agreement that authorizes the release of a defendant on a promise to appear in combination with other nonmonetary conditions” (NCSL, 2016). According to the 2020 NAPSA Standards, judges and pretrial officers should impose the least restrictive conditions on a defendant when one’s release on their own recognizance is insufficient to ensure appearance in court and public safety. Some examples of conditional release include: electronic monitoring, court date reminder systems, substance abuse counseling, urinalysis screening, face-to-face contact with case manager (varying frequency based on risk), curfew, maintaining or seeking employment or education, refrain from possessing a firearm or other dangerous weapon, and no contact with victims or potential witnesses (Lowenkamp & VanNostrand, 2013b; Payne & Gainey, 2004).

Those assigning release conditions should also consider defendant risk to determine the appropriate levels of supervision to released defendants. While evidence suggests that supervision by pretrial services agencies may reduce the likelihood of failure to appear, supervised conditional release may be more effective for defendants at higher risk levels (Hatton & Smith, 2020). For example, a study of a sample of 3,925 defendants in one western state in 2005 and one eastern state in 2008-2009 found that those supervised by pretrial services agencies are overall more likely to appear in court than those unsupervised when controlling for gender, age race, time at risk in the community, and defendant risk. This study also found that this supervision is most effective at ensuring court appearance for moderate-to-high-risk defendants (Lowenkamp & VanNostrand, 2013b).

An advantage of conditional release through a pretrial services agency is that defendants have the opportunity to maintain established community ties, continue employment or educational efforts without disruption, and engage in community-based counseling services for substance abuse or mental health issues that may not be available in jails (Lowenkamp & VanNostrand, 2013b). Jails are designed for short term incarceration, and therefore may lack the ability to provide services to all inmates. For example, 26 percent of jail inmates in a 2011-2012 self-report survey

⁶ Counties included in the *Scan* were selected with a mix of random and convenience sampling to select an equal number of counties at various population densities. The original survey was sent to a random sample of 150 counties (50 high density, 50 medium density, and 50 low density, based on the 2010 Census). The original selection resulted in 46 responses, which were then randomly supplemented by 104 new counties and elicited 16 additional responses. The remaining 35 counties were selected using a convenience sampling method.

met the threshold for having serious psychological distress (SPD)⁷ in the thirty days prior to the survey. However, just 35 percent of these individuals reported receiving mental health treatment since their jail admission (Bronson & Berzofsky, 2017). Released defendants can rely on available social and community supports, receive services provided by pretrial services agencies, and avoid facing the negative consequences of short-term jail incarceration (Lowenkamp, VanNostrand, & Holsinger, 2013b). Conditional release can be a successful tool for defendants deemed too risky to be released on their own recognizance or those who may be negatively impacted by pretrial detention. However, research remains limited on the amount and type of supervision most successful for defendants at various risk levels (Hatton & Smith, 2020).

Court Reminder Systems

Court reminders systems are in place in some jurisdictions to notify defendants of an upcoming court date to promote court appearance. These court date reminders can take the form of a letter, postcard, automated phone call, personal phone call, text message, or check-in reminder (Schnake, Jones, & Wilderman, 2012). According to many studies, court date reminder systems are the most successful pretrial release condition for improving court appearance (Borenstein et al., 2013; Cooke et al., 2018; Schnake, Jones, & Wilderman, 2012). The current literature on court reminder systems explores their overall ability to reduce failure to appear in court and examines which forms of reminder are most successful.

In 2005, Multnomah County Oregon implemented a Court Appearance Notification System (CANS), in which defendants received one computer automated call an average of 3.6 days prior to any hearing date. Calls were attempted up to three times (every two hours following the original call at 8 A.M. on a weekday) or until the defendant answered the call. This intervention reduced FTA rates by 37 percent overall and by 45 percent for those who successfully received court notification. Further, there were substantial cost savings in a six-month pilot program (projected up to \$264,000) (Nice, 2006). Although the evaluation was unable to control for unobserved characteristics between individuals who owned phones and those who did not, the increased availability of phones suggests that this type of court date reminder system may be more effective and applicable today. Schnake, Jones, and Wilderman (2012) found that utilizing a live phone caller (in this case, a part-time employee hired to make calls to defendants) is the most effective method for enhancing court appearance rates.

However, a more recent randomized experiment by Lowenkamp, Holsinger, and Dierks (2017) found no relationship between court notification strategies of telephone calls and text messages and rates of failure to appear in court. In this sample of 10,228 defendants in Louisville, Kentucky, defendants were randomly assigned to one of five interventions (call, call plus warning about the consequences of failing to appear, text message, text message with warning about the consequences of failing to appear, or none). Overall, each group, including those that received no court reminder notification, had a failure to appear rate of about 12 percent and no single group was statistically significantly different from another. The authors note that randomization prevented defendants from selecting their preferred notification method, which may have affected the ability of the notification to prevent FTA. Since notification is relatively

⁷ The threshold for SPD was measured using the K6 Screening Scale. For more information on this scale, see Kessler et al. (2003). Available at: <https://www.ncbi.nlm.nih.gov/pubmed/12578436>

cheap and most prior studies have supported the use of these notification methods, they suggest courts continue to utilize them and evaluate their effectiveness (Lowenkamp, Holsinger, & Dierks, 2017).

PRETRIAL DETENTION

As noted in the introduction, there are over 490,000 pretrial detainees in custody in the United States on any given day, either because they are unable to afford their financial release, fail a condition of their release, or are denied any release options (Zeng, 2020). Pretrial detainees make up the majority (approximately 66 percent) of all jail inmates across the 3,163 local jails in the country, demonstrating a need for both research and legislation on the scope and practice of pretrial detention (Wagner & Sawyer, 2018; Zeng 2020). Detention, even for short periods of time, can influence detainees' cases and lives beyond their criminal justice system involvement. This section will discuss the prevalence and outcomes of pretrial detention, including pretrial criminal activity, failure to appear in court, violations of pretrial release, case processing, and recidivism.

Pretrial Detention Trends

Between 1990-2004, 38 percent of felony defendants were detained until case disposition. Thirty-two percent of defendants were unable to afford their financial release, and 6 percent were denied bail (Cohen & Reaves, 2007). Since 2000, jail populations in the United States have grown tremendously, and the BJS estimates that up to 95 percent of this growth was due to the increase of defendants held prior to trial (Minton & Zeng, 2015). The high prevalence of pretrial detention in the United States is a concern for the criminal justice system, taxpayers, detainees, and their families.

Consequences of Pretrial Detention

Economic, Family, and Social Consequences of Pretrial Detention

Although pretrial detention researchers focus much of their attention on criminal justice system outcomes, pretrial detention can affect defendants' lives beyond criminal case processing. Jail incarceration removes an individual from their community and employment, which can lead to economic hardship and social isolation by distancing individuals from their friends and family and increasing stigmatization upon return to the community (Katz & Spohn, 1995). This stigmatization can result in difficulty reintegrating with the community and retaining or obtaining employment.

Stable employment, a key criminogenic risk factor, reduces the likelihood of engagement in criminal behavior (Laub & Sampson, 2001). Therefore, retaining employment prior to detention may prevent crime while out on release, which can lead to more favorable outcomes during case processing, and increase the likelihood of maintaining this employment and reducing recidivism following disposition. Dobbie, Goldin, and Yang (2018) investigated the impact of pretrial detention on forgone earnings, and social benefits, among other criminal justice system outcomes using court data from quasi-randomly assigned bail judges in Philadelphia and Miami-Dade

County for over 420,000 felony and misdemeanor defendants linked with tax records. The results suggest that those released prior to trial have a higher likelihood of retaining employment in the legitimate labor market. This is notable because maintaining employment can affect future case processing and have greater effects on life outside of the criminal justice system. Employment outcomes of pretrial detention also extend beyond the individual defendant's life, with potential for broad societal impacts. Dobbie, Goldin, and Yang (2018) estimate a cost-benefit analysis of a net benefit of between \$55,000 and \$99,000 per defendant released prior to trial based on the costs of pretrial detention, failure to appear, future crime (pre- and post-disposition), and the defendant's labor market participation and social benefit use.⁸

These outcomes may be affected by the length of time an individual is detained prior to trial. According to a self-report survey, defendants held for three or more days perceived worse outcomes in their personal lives, including struggles in employment, housing, finances, and caring for dependents (Holsinger, 2016). The survey asked pretrial defendants that were released under supervision conditions questions regarding their case, employment, financial situation, residential situation, family situation, any help they received from family and friends, and how their life would have been affected with harsher bail and detention characteristics (e.g., more time in jail, higher bond amount, etc.) and examined the impact of length of detention (less than three days vs. three days or more). While the results of this study indicate a negative impact of pretrial detention for all defendants in the sample, it is important to note that there were significant differences between those held for less than three days and those held for three days or more, with those held for longer periods of time having more negative self-reports of these effects. The study did not include individuals detained for the entire time pending trial or those released without supervision and only used limited controls (e.g. demographics, criminal history, and bail amount). Therefore, remaining unmeasured differences between those detained for different lengths of time may have impacted defendants' reported outcomes (Holsinger, 2016). Overall, the literature explored in this section demonstrates the importance of an efficient and effective pretrial system that detains only the riskiest defendants to minimize the negative economic and social impact for defendants while maintaining public safety.

Criminal Justice System Outcomes

Research supports that pretrial detention is related to negative outcomes in various case processing and decision-making points throughout the criminal justice system (e.g., Arnold, Dobbie, & Yang, 2018; Dobbie, Goldin, & Yang, 2018; Leslie & Pope, 2017; Lowenkamp, VanNostrand, & Holsinger 2013a; Sacks & Ackerman, 2012; Toman, Cochran, & Cochran, 2018). Pretrial detention may impact decisions in plea bargaining, trial, and sentencing stages of a case process. Additionally, among those convicted and sentenced to incarceration, pretrial detainees may have increased institutional misconduct and recidivism following release. Detention prior to trial for any period of time may directly impact subsequent decisions in the criminal case, and these decisions may also have cumulative impacts on subsequent case and life

⁸ The authors (Dobbie, Goldin, and Yang (2018) note the significance of these findings stating the "large net benefit of pretrial release is driven by both the significant collateral consequences of having a criminal conviction on labor market outcomes and the relatively low costs of apprehending defendants who fail to appear in court. The results from this exercise suggest that unless there are large general deterrence effects of detaining individuals before trial, releasing more defendants will likely increase social welfare" (p. 204).

outcomes for defendants. This section will explore the various decision-making points in a criminal case process and discuss the impact that pretrial detention has on each.

PLEA BARGAINING AND TRIAL Plea bargaining is an arrangement between a prosecutor and a defendant where the defendant agrees to plead guilty to a charge, which can result in a more lenient sentence than going to trial (Cornell Law School, n.d.). Those released prior to trial may have a better bargaining position during plea negotiations because they have more opportunity to meet with their lawyer than pretrial detainees who face the added stress and pressure of jail confinement (Dobbie, Goldin, & Yang, 2018). Entering a plea agreement can be an attractive option to those detained prior to trial since prosecutors may offer a non-custodial sentence in exchange for a guilty plea or offer the ability to begin their custodial sentence at the time of the guilty plea. For this reason, scholars suggest that prosecutors may use pretrial detention as a tool to coerce defendants into pleading guilty and forfeiting their right to trial (Petersen, 2019).

Research suggests that those detained prior to trial plead guilty faster than those released (Petersen, 2019; Sacks & Ackerman, 2012). According to 2009 SCPS data, the median time between arrest and adjudication was 68 days for detained defendants and 163 days for those released (Reaves, 2013). A study by Sacks and Ackerman (2012), using a sample of 634 cases collected by New Jersey’s Criminal Disposition Commission during one week from October 18, 2004 to October 24, 2004, found that individuals held in pretrial detention pled guilty faster than those who were released in the community while awaiting their trial. Those held in jail had shorter times to case disposition (occurring more often pre-indictment, as opposed to the majority of post-indictment guilty pleas occurring among those released prior to trial) than those released in the community. The authors state that “pretrial detention had the strongest impact on when defendants plead guilty,” and those detained while awaiting trial had faster case dispositions than released defendants (Sacks & Ackerman, 2012, p. 275). These results are notable because the majority of cases are now settled by plea bargains (in this sample only 11 cases went to trial). Those detained prior to trial due to their inability to afford bail have a greater incentive to plead guilty to restore their freedom.

In addition to pleading guilty faster, research suggests that pretrial detainees also accept harsher plea deals than those released. An examination of all felony and misdemeanor cases from New York City between 2009 and 2013, which consisted of almost one million cases, determined that pretrial detainees are more likely to plead guilty and to accept a harsher plea deal than those released pending trial after controlling for defendant demographics, criminal history, time and courtroom fixed effects. Results of this study did not separate out length of time detained prior to trial (i.e., those released at any time prior to trial were considered “released” during analysis, no matter the length of detention beforehand) and therefore the study cannot isolate the effect of some detention versus no detention (Leslie & Pope, 2017).

PRETRIAL FAILURE Defendants may be held for a period of time before being released prior to trial. Defendants can secure pretrial release after paying their monetary bail amount, receiving a reduction of their bail amount, or if a judge decides to release the defendant after a period of time spent in detention. The length of time spent in detention can shape behavior following release. A study from Arnold Ventures explored the relationship between the length of time held in pretrial detention and pretrial failure (i.e. failure to appear in court or arrest prior to trial) and

post-disposition recidivism. The sample consisted of 153,407 defendants arrested and booked between July 1, 2009 and June 30, 2010 from one Kentucky jail. Those held for 24 hours or more were more likely to commit a new crime, violate, or abscond on their court date net of legal factors, risk level, supervision status, offense type, offense level, time at risk in the community, and demographics (Lowenkamp, VanNostrand, & Holsinger, 2013b). The researchers found that those detained for 2-3 days were more likely to abscond from court than those held for one day prior to trial. This finding was especially salient for low-risk defendants, who were 1.22 times more likely to fail to appear if held 2-3 days compared to those held for 1 day. Additionally, the likelihood of committing a new crime while on release prior to trial increased with time spent in jail up to 31 days, then the impact was no longer significant.⁹

SENTENCING Pretrial detention may also impact sentencing outcomes including the type of sentence a defendant receives and the severity of this sentence. An Arnold Ventures study¹⁰ concluded that defendants detained for the whole pretrial period are more than four times more likely to be sentenced to jail and over three times more likely to be sentenced to prison than those released prior to trial when controlling for legal factors, risk level, supervision status, offense type, offense level, time at risk in the community, and demographics (Lowenkamp, VanNostrand, & Holsinger, 2013a). In addition, they receive jail sentences that are three times longer and prison sentences twice as long as those not detained pretrial (Lowenkamp, VanNostrand, & Holsinger, 2013a).

Sacks and Ackerman (2014), using the same sample of 634 cases from New Jersey as their 2012 examination of pretrial detention and plea bargaining, did not find the same relationship between pretrial detention and the decision to incarcerate at case disposition. Whether or not a defendant received a custodial sentence at disposition was not significantly related to whether the defendant had been detained prior to trial. However, they did find the same relationship between pretrial detention and receiving a longer sentence length as the Arnold Ventures study. Those detained prior to trial received sentences with longer periods of incarceration when the defendant received a custodial sentence. The researchers note a limitation of the study was the lack of data collected on individual's community ties or the characteristics of the court. Similarly, Arnold, Dobbie, and Yang (2018) found that those detained prior to trial were not significantly more likely to receive a sentence of incarceration. Leslie and Pope (2017) also found that detainees served longer sentences following disposition. Overall, while there is mixed evidence on the effect of pretrial detention on receiving a sentence of incarceration, the current literature supports that pretrial detainees who receive a sentence of incarceration receive longer sentences than those released prior to trial.

INSTITUTIONAL MISCONDUCT AND RECIDIVISM In addition to research supporting that pretrial detainees plead guilty faster and more often, and accept harsher and longer sentences of incarceration, pretrial detention may also increase institutional misconduct. In a study of pretrial detention and future behavior in prison, researchers concluded that pretrial detainees sentenced to incarceration following conviction have an increased likelihood of institutional misconduct

⁹ These findings are based on the number of bookings rather than individuals throughout the sampled time period.

¹⁰ Lowenkamp, VanNostrand, and Holsinger (2013a) and (2013b) utilized the same sample of 153,407 bookings from Kentucky.

(Toman, Cochran, & Cochran, 2018). This study utilized survey responses from 13,784 inmates incarcerated in state prisons. Overall, individuals detained for longer periods of time prior to trial had both a greater risk of misconduct and more serious misconduct. Pretrial detention had the strongest impact on misconduct for younger inmates, female inmates, and those with mental illnesses (Toman, Cochran, & Cochran, 2018).

Additionally, defendants detained prior to trial have an increased rate of recidivism within two years after case disposition. Lowenkamp, VanNostrand, and Holsinger (2013b) found that being detained for the entire period of time prior to trial results in a defendant being 1.3 times more likely to recidivate after their case disposition, even after controlling for age, gender, race, ethnicity, marital status, risk level, supervision status, offense type, offense class, and incarceration history. The impact of pretrial detention on recidivism following case disposition is important to consider because research suggests the potential benefit of the reduction in new criminal activity when detaining a risky defendant prior to trial may be mitigated by the increase in rearrest rates within 2 years following disposition (Leslie & Pope 2017).

CURRENT ISSUES IN PRETRIAL DECISIONS

Monetary Bail

As discussed in the introduction, financial bail involves the exchange of money for a defendant's release. Financial release consists of secured bonds including commercial surety bonds, deposit bonds, and full cash bonds, as well as unsecured bonds that only require a defendant to forfeit the cost of bail if they fail to appear in court (Reaves, 2013). While financial release has become increasingly popular in recent decades, there are concerns regarding the fairness of this practice, as well as the ability of monetary bail to meet the goals of maintaining public safety, maximizing release, and reducing failure to appear for trial. Additionally, monetary bail has a large economic cost to society. Liu, Nun, and Shambaugh (2018) estimated that annual cost of the use of monetary bail is \$15.26 billion, when considering the number of inmates detained, the cost of incarceration per prisoner, and the annual lost economic output per prisoner. This section of the review will discuss the fairness and implications of financial bonds, explore the recent abolition of monetary bail in some jurisdictions, and discuss early research from states that have banned this practice.

Fairness and Implications of Monetary Bail

Concerns surrounding the fairness of monetary bail include the decision-making structures under which judges assign bail, the impact monetary bail may have on increasing pretrial detention, and the exchange of money for freedom with no basis in public safety. The use of financial bail is linked to increased pretrial detention, which is associated with a host of negative outcomes (i.e. higher likelihood of conviction and longer sentence length) disproportionately impacting poorer defendants who cannot afford their bail amount (Clark, 2010; Dobbie, Goldin, & Yang, 2018; Leslie & Pope, 2017; Stevenson & Mayson, 2018). The American Bar Association's pretrial standards state that financial conditions play no role in reducing a released defendant's risk to public safety (ABA, 2007). For this reason, bail researchers focus particular interest on determining the efficacy of financial release. The use of monetary bail can result in the release of

dangerous defendants and the detention of less dangerous defendants, based on their financial status (Community Resources for Justice, 2017; Schnake, 2014). Hypothetically, a riskier defendant should receive a higher monetary bail than a lower-risk defendant. If such a defendant is wealthy enough to afford their bail, and the lower-risk defendant cannot, the system releases a riskier individual into the community pending trial.

Despite the assumption that higher-risk defendants should receive higher bail amounts, in practice judges do not consistently assign bail amounts. A study by Gupta, Hansman, and Frenchman (2016) found that discretion inherent in the bail amount decision led to subjective bail amounts, and judges “varied widely in assessing bail amounts for similar defendants” in both Philadelphia and Pittsburgh, even when risk assessments were used (Gupta, Hansman, & Frenchman, 2016, p. 5). They also determined that the “imposition of money bail and therefore pretrial detention is a function of the judge one receives,” because being assigned a more “severe” judge increased a defendant’s likelihood of being assigned monetary bail compared to non-financial release (p. 16).

Another reason for concern surrounding monetary bail is that while the outcomes of the bail decisions are public, the judges’ decision-making *process* is often not public (Human Rights Watch, 2010). One suggestion to increase the transparency of bail decisions is the use of bail schedules. Bail schedules assign a fixed monetary amount based on the charge of the alleged crime. However, bail schedules neglect to account for any circumstances beyond the individual’s alleged offense, including their ability to pay (Texas Fair Defense Project, 2014). Because of this, the National Task Force on Fines, Fees, and Bail Practices (2018) recommends that “fixed monetary bail schedules should be eliminated, and their use prohibited” (p. 6). Nonetheless, 54 percent of counties from the 2019 *Scan* report using a bail schedule (PJI, 2019). Evidence suggests that simply lowering the cost of monetary bail will not eliminate harm on defendants. According to the New York Civil Liberties Union (2018), the majority of New Yorkers held on financial bail in eight New York counties were charged with either a misdemeanor or violation, and 20 percent of the 45,651 pretrial detainees who were held on bail for at least a week were held for \$500 or less.

Another issue with monetary bail is the practice of “sub rosa preventive detention,” which occurs when bail amounts are set to amounts that make it impossible for a defendant to obtain pretrial release (Human Rights Watch, 2010, p. 26). To avoid this practice, the ABA suggests that the decision to detain a defendant should be based on “clear and convincing evidence that no condition or combination of conditions of release will reasonably ensure the defendant’s appearance in court or protect the safety of the community or any person,” not based on an amount of money the defendant cannot afford to pay (ABA, 2007, p. 21). With these considerations of fairness in mind, the 2020 NAPSA Standards state that “financial conditions of bail should be prohibited” because requiring money in exchange for freedom prior to trial perpetuates inequalities (p. 9). Monetary bail creates a system where detention outcomes are essentially based on one’s socioeconomic status.

Commercial Sureties

Commercial sureties are of particular interest in the discussion on the fairness of monetary bail. A commercial surety bond involves a defendant paying a portion of their bail to a bail bond company and the company promising to pay the full bail amount to the court if the defendant fails to appear (Reaves, 2013). Surety bonds became increasingly popular between 1990-2004, according to SCPS, and surpassed release on recognizance as the most common method of pretrial release (Cohen & Reaves, 2007). By 2009, commercial sureties constituted 49 percent of all releases (Reaves, 2013). The Justice Policy Institute (JPI) utilized the 1992-2006 SCPS data and found that nonfinancial bail decreased by 32 percent among individuals released pretrial in those years. At the same time, financial release increased by 32 percent, primarily due to an increase in commercial bail bonding. In addition, the average amount of bail “nearly doubled” in this time period (Neal, 2012, p. 10). According to the ACLU of Washington, the bail bond industry yields profits of \$2 billion annually (Hawk, 2016).

Although this form of release is both extremely profitable and popular, the impact of commercial bail bonds and the bail bondsman industry is not widely studied. However, a few exploratory studies provide information about how the industry works and its effectiveness, compared to other manners of release. The National Conference of State Legislatures (NCSL) defines a bail recovery agent, also known as a bounty hunter, as “a person who is lawfully authorized to apprehend bail fugitives and surrender them to court (NCSL, 2014, p.2). The most important precedent for bounty hunters was set in *Taylor v. Taintor* (1872) and still applies today. This standard essentially grants total power to bail recovery agents (i.e., bounty hunters) to apprehend a fugitive and return him to the state.

Certain states, like Kentucky, have entirely banned the commercial bail bonding industry (*KRS 431.510*)¹¹. Others have different measures of regulation and control on this industry. According to legislative data, before October 30, 2011, eight states prohibited the use of bail recovery agents, eighteen states required bail recovery agents to be licensed, six required them to be regulated, and eighteen states had no restrictions on bail recovery agents (Johnson & Stevens, 2013). Securing release with commercial sureties raises concerns of fairness due to their potential impact on increasing monetary bail amounts, the potential for exploitative bail recovery processes, and the lack of research on the efficacy of these practices to improve court appearance and public safety.

Reduction and Abolition of Monetary Bail

As further research surrounding the fairness and effectiveness of bail emerges, jurisdictions are increasingly moving away from relying on monetary bail toward other release options at both state and more localized levels. Washington, D.C.’s pretrial system is an example of a successful pretrial system without reliance on monetary bail. Since the 1960s, Washington, D.C. has operated with minimal use of monetary bail, and their court appearance rates and arrest rates are more successful than the national average (Stevenson & Mayson, 2018). Washington, D.C. may be able to operate with such success without widespread use of monetary bail because of the

¹¹ <https://casetext.com/statute/kentucky-revised-statutes/title-40-crimes-and-punishments/chapter-431-general-provisions-concerning-crimes-and-punishments/bail-bonds/section-431510-prohibitions>

large amount of funding granted to its pretrial services agency. Therefore, researchers suggest jurisdictions considering eliminating the use of monetary bail should consider supplementing resources for better pretrial services or court notification systems. Another state leading bail reform in the United States is New Jersey, which outlawed the use of monetary bail in 2017 with its implementation of the Criminal Justice Reform Act. In 2012, almost three quarters (73.3 percent) of New Jersey’s jail population consisted of pretrial defendants (VanNostrand, 2013). While it is still too early to determine the full impact of this change, early pretrial detention rates are promising. From 2015-2018, the pretrial jail population decreased by 35 percent. Nineteen percent of this decrease occurred in the first year following implementation of the Criminal Justice Reform Act (from 7,058 to 5,718 defendants) and in the second year it decreased by another 13 percent (to 4,995 defendants) (Grant, 2018).

Another innovative practice in reducing the use of monetary bail is taking place in Philadelphia, Pennsylvania. While the state still allows monetary bail as a release option, the Philadelphia district attorney created a “No Cash Bail” policy in 2018 and announced that the district attorney’s office would no longer request cash bail for defendants charged with misdemeanors and some non-violent felonies, which make up about two-thirds of cases in Philadelphia (Ouss & Stevenson, 2020). In an early evaluation of this policy, researchers found a 22 percent increase in defendants released on their own recognizance and no significant increase in pretrial misconduct and failure to appear, but also no reduction in pretrial detention. The researchers suggest that the discretion of prosecutors to override the presumption of ROR and grant monetary bail, which occurred in 19 percent of eligible cases, may have mitigated the impact of the reform (Ouss & Stevenson, 2020).

The concern that fuels debate around the use of monetary bail is the fairness of assigning a monetary value to someone’s freedom when not all individuals have the same economic capacity to secure this freedom prior to trial. As systems like Washington, D.C., New Jersey, and Philadelphia continue to see promising outcomes for defendants and communities, other jurisdictions around the country are working to develop decision-making structures that ensure public safety, appearance in court, and reduced pretrial detention populations without disadvantaging certain populations.

Disparities in Pretrial Decision-Making and Case-Processing

Male and minority defendants are disproportionately represented in the pretrial detention population in the United States. While no recent national-level data has been collected in almost two decades, the pretrial population in 2002¹² was approximately 90 percent male and 10 percent female, with almost 70 percent racial and ethnic minorities. Thirty-one percent of the pretrial

¹² The most recent national-level data collected on the demographics of pretrial detainees was in 2002 (James, 2004). At this time, the total jail population was 665,745 and the pretrial population made up 182,754 of inmates in these jails. Unfortunately, this outdated data is the most recent available on the demographics of pretrial detainees. As of 2018, the total jail population rose to 738,400 and pretrial detainees make up 490,000 of these inmates (Zeng, 2020).

detainees were white, 43 percent were black, and 19.6 percent were Hispanic¹³ (James, 2004). According to the 2000 Census, the United States population was 49.1 percent male, 50.9 percent female, 75.1 percent white, 12.3 percent black, and 12.5 percent Hispanic (U.S. Census Bureau, 2004). As demonstrated by these national statistics, there are large variations in the representation of each demographic in the pretrial detention population versus their representation in the total United States population. While the overrepresentation of certain groups in pretrial detention is apparent, the mechanisms that contribute to these differences are unclear. Furthermore, the overall dramatic increase in pretrial detainees between 2002 and 2018 suggests a greater need for the collection of national-level demographic data on pretrial populations to explore the potential overrepresentation of certain groups and further understand the contributors to these disparities.

Judges and pretrial officers make pretrial decisions quickly and with considerable discretion (Dhami, 2005), and these decisions have significant potential to influence subsequent case outcomes. Disparities evident in national statistics may be a result of disparities in release and detention decisions, monetary bail amounts, and supervision conditions. While research suggests that legal factors, such as criminal history and offense seriousness, may explain some of these disparities, unexplained disparities remain in pretrial decision-making. It is important to note that a growing body of literature demonstrates that legally relevant factors such as criminal history also worsen racial and socioeconomic disparities (e.g. Tonry, 2019). Therefore, studies which control for such factors may not capture the impact of race which operates through these controls. This section will examine the available literature on the interaction of legal and extralegal factors (e.g., defendant race, ethnicity, gender, and socioeconomic status) that may affect pretrial decision-making and result in disparate outcomes.

Detention or Release Type (Financial versus Non-financial)

The first pretrial decision following arrest is the decision to detain or release a defendant prior to trial. These release options include release on a defendant's own recognizance, financial release, or release under conditional supervision. There is evidence that the decision to detain or release a defendant prior to trial, as well as the type of release a defendant is assigned, may be influenced by characteristics beyond legal factors such as the race, ethnicity, gender, age, or socioeconomic status of defendants.

Research suggests that race and ethnicity are contributing factors in the decision to detain or release individuals, as well as the release type. Much of the literature on pretrial disparities focuses on the differential outcomes of black and Hispanic defendants compared to white defendants (Demuth 2003; Schlesinger 2005). Two key studies suggest that black and Hispanic defendants are more likely to be detained than white defendants. Demuth (2003) found that black and Hispanic defendants were 1.21 and 1.23 times more likely to be held on preventive detention than white defendants, respectively. In addition to the disparity between white and minority

¹³ Criminal justice data is often severely limited in including information on ethnicity. According to a 2016 report by the Urban Institute, only 15 states collected data on Hispanic individuals in arrest records, and these individuals are often placed into the white category when the Hispanic/Latino option is unavailable (Eppler-Epstein, Gurvis, & King, 2016). The grouping of Hispanic defendants in with other races/ethnicities, makes inferences about racial and ethnic disparities difficult (Turner & Johnson, 2005).

defendants, when black and Hispanic defendants are similarly situated with similar legal characteristics, research suggests Hispanic defendants receive harsher treatment (Schlesinger, 2005). Schlesinger's analysis found that judges are more likely to deny bail for Hispanic defendants than other racial and ethnic groups and less likely to assign Hispanic defendants a non-financial release. Similarly, Demuth (2003) found that Hispanic defendants were more disadvantaged in financial versus non-financial release decisions, as judges assigned financial release options to Hispanic defendants 39 percent more often than to black and white defendants when controlling for extralegal, legal, and contextual factors.

However, some research suggests that other characteristics explain the differential outcomes of defendants. In an examination of SCPS data from 1990-2006, McIntyre and Baradaran (2012) found that rates of pretrial detention are 34.4 percent for white defendants and 41.6 percent for black defendants. While these percentages demonstrate that rates are different for white and black defendants, they do not isolate the effect of race on pretrial detention. After McIntyre and Baradaran (2012) controlled for observed characteristics of defendants and unobserved characteristics like county and time differences including bail practices and crime rates across the data collection period, black defendants were still over 9 percent more likely to be held prior to trial. However, the difference was no longer statistically significant once accounting for the probability of defendants' future rearrest.

A small body of research has emerged suggesting that gender may also influence pretrial decision-making, especially in combination with race and ethnicity. Ball and Bostaph (2009), examined all female defendants and a random sample of 10,439 male defendants (taken to equal the number of all female defendants sampled¹⁴) in the SCPS data from 1990-2000 and determined that gender differences in pretrial release were only significant for defendants charged with property crimes. Males charged with a property offense were more likely to be denied bail, detained prior to trial, and receive a financial release compared to a non-financial release than female defendants charged with property crimes. While the impact of gender alone may not consistently be significant, the effect of extralegal factors like race, ethnicity, and gender can also interact, with combinations of factors having a greater influence on decision making. Katz and Spohn (1995) found that race and gender both impact the likelihood of pretrial release, with black males being the least likely to secure release when controlling for other variables that typically impact pretrial release and bail decisions.

Monetary Bail Amounts

Judges must determine the lowest bail amount that will ensure a defendant's appearance in court when releasing a defendant on financial conditions (Bail Reform Act, 1984¹⁵). Therefore, similarly situated defendants should receive similar monetary bail amounts to ensure their appearance in court. However, research suggests that this is not necessarily the case.

¹⁴ This sampling technique is known as a "disproportionate stratified sample" (Ball & Bostaph, 2009). In this case, the entire female population sampled is utilized in the analysis, and the male sample, which was originally 53,372 cases, is randomly sampled to equal the female sample size.

¹⁵ <https://www.fjc.gov/sites/default/files/2012/BailAct3.pdf>

While the literature is mixed on whether monetary bail amounts systematically vary by gender alone, most research indicates that Hispanic and black defendants receive higher average bail amounts than white defendants, and the intersection of race and gender may further increase this disparity (Ball & Bostaph, 2009; Gelbach & Bushway, 2010; Demuth 2003; Turner & Johnson, 2005). Monetary bail amount decisions may particularly disadvantage Hispanic defendants. Turner and Johnson (2005) found that Hispanic defendants received the highest bail amounts compared to white and black defendants. Additionally, the seriousness of the current offense did not have an effect on the bail decisions for Hispanic defendants, but it was a significant influence in the bail decision for white and black defendants. Similarly, Schlesinger (2005) found that Hispanic defendants received bail amounts that were significantly (8 percent) higher than white defendants.

Studies are less consistent about the influence of race in bail amount decisions. In 2010, Gelbach and Bushway used SPCS data from five counties between 2000 and 2002 and determined that black defendants receive higher bail amounts than white defendants, and are therefore more likely to be detained prior to trial. They created an econometric model that showed that when judges set bail amounts, they value black defendants' lost freedom during pretrial detention at about \$60-\$80 less per day than white defendants'. Contrarily, Schlesinger (2005) and McIntyre and Baradaran (2012) did not observe significant differences in bail amounts between black and white defendants. McIntyre and Baradaran (2012) found no evidence that black defendants receive higher bail amounts than white defendants after controlling for the probability of rearrest. However, defendants' likelihood of obtaining pretrial release can vary even when bail amounts are consistent across subgroups. Demuth (2003) found that when controlling for extralegal factors, black and Hispanic defendants were less likely to secure release than white defendants even when judges assigned similar bail amounts. The driver of this disparity was Hispanic and black defendants' inability to pay the bail amount set, not the difference in bail amount by race or ethnicity.

The few studies that examine disparities in monetary bail amounts suggest that gender interacts with both race and ethnicity to disadvantage certain defendants, rather than having a direct main effect. Turner and Johnson (2006) examined bail amounts among female and male defendants from one Midwestern district court and found that after controlling for all legal and extralegal factors, there was no difference in bail amount by gender. Ball and Bostaph (2009) found that while male defendants had higher average bail amounts than women, this difference was only significant when the current charge was a violent offense. However, Katz and Spohn (1995) found the intersection of gender and race can affect bail amounts, with black females receiving lower bail amounts for more serious crimes than black males for less serious crimes.

There is evidence that age may also interact with race and gender in determining monetary bail amounts. Wooldredge (2012) analyzed over 5,000 cases of all black and white felony defendants in one urban county in Ohio in 2005 to explore the effect of legal and extralegal factors on case processing. While this study did not find significant effects of race on case processing, when examining the interaction between sex, race, and age, younger black males (ages 18-29) were more disadvantaged than any other group and received higher bond amounts, among other negative case outcomes (Wooldredge, 2012).

The research discussed in this section presents mixed results explaining disparities in monetary bail amounts across subgroups of race, ethnicity, and gender. However, this research reveals the importance of examining all legal, extralegal, and contextual factors to fully understand the disparate impacts of monetary bail across populations. This is especially salient when considering that the ultimate release or detention of defendants may still differ even when bail amounts are similar.

Cumulative Disadvantage

The research discussed in the previous sections examined disparities at single decision points. Given the interdependent nature of the criminal justice system and impact of earlier case processing decisions on subsequent outcomes, there is reason to believe that disadvantage faced by certain populations in earlier stages can accumulate, generating greater disparities at later stages in the case process which may be missed by studies focused on a single outcome. A small but growing body of literature suggests that disparities in pretrial release, detention, monetary bail, and plea bargaining can have implications for conviction and sentencing decisions and these disparities can be amplified (Donnelly & MacDonald, 2018; Kutateladze et al., 2014; Schlesinger, 2007; Sutton, 2013; Wooldredge et al., 2015).

As discussed previously in this review, the assignment of monetary bail may increase the likelihood of pretrial detention, which may subsequently increase the likelihood a defendant will plead guilty, be convicted, and receive a sentence of incarceration (Clark, 2010; Dobbie, Goldin, & Yang, 2018; Leslie & Pope, 2017; Stevenson & Mayson, 2018). The first study of the cumulative effects of disparities in pretrial case processing on subsequent conviction and sentencing decisions was Schlesinger (2007), which used SCPS data from 1990-2002 to explore disparities in case processing between black, Hispanic, and white men charged with felony drug offenses. Black and Hispanic defendants had higher rates of pretrial detention relative to their white counterparts, and this increased likelihood of pretrial detention directly increased their likelihood of being sentenced to incarceration and receive a longer sentence than similar white defendants, even after controlling for offense seriousness, current case characteristics, and prior record (Schlesinger, 2007). Findings from Sutton (2013) echoed these results and referred to these cumulative effects as “systematic and striking” (p. 1218). This study found that black and Hispanic defendants were more likely to be detained prior to trial, and detained defendants were three times more likely to receive a sentence of incarceration in prison if convicted (Sutton, 2013).

Studies of cumulative disadvantage demonstrate the complex and compounding relationship between race, pretrial detention decisions, and sentencing outcomes. Wooldredge et al. (2015) identified various indirect effects of race that led to higher rates of pretrial detention for black defendants including the lack of a hired attorney, prior imprisonment, and higher bond amounts. Additionally, these researchers found the increased likelihood of pretrial detention for black defendants mediates part of the relationship between race and incarceration (Wooldredge et al., 2015). Finally, a study of a sample of 75,912 cases in Delaware from 2012 to 2014 explored the black-white disparities at each stage in the case process from the bail decision through sentencing to determine to what extent these disparities in later stages could be attributed to the early stages of the case process. When controlling for criminal case characteristics, researchers

found that pretrial detention was a significant contributor to black-white disparities at adjudication, but not sentencing, and cash-only bail contributed to black-white disparities in conviction, pleading guilty, sentencing, and average sentence length (Donnelly & MacDonald, 2018).

The growing body of research on cumulative disadvantage suggests that some of the mixed findings by studies focusing on a single decision point may be the result of missing the greater impact of defendant characteristics across multiple decision points both within the pretrial stage and in subsequent case processes.

Mitigating Disparities

Researchers have implicated race and ethnicity, gender, age, socioeconomic status, and region to be potential independent or joint influences in pretrial decision making, suggesting a need for implementation of disparity-mitigating practices in the pretrial stage. To reduce disparities, judges and pretrial officers should make pretrial decisions using an accurate determination of a defendant's threat to public safety and risk of failure to appear in court in a manner that does not rely on indirect effects of defendant characteristics and therefore perpetuate disparities (Cooprider, 2009). Jurisdictions must adapt policies and procedures to address and mitigate these disparities to ensure fair and consistent decision-making. Decision-makers should also receive more feedback, training, and opportunity for risk assessment to reduce these disparities (Arnold, Dobbie, & Yang, 2017). While research in this area is still needed, existing literature provides a foundation for the importance of efficient, effective, and fair pretrial decision-making. The following sections of this literature review will explore these issues in detail.

Risk Assessment

Literature suggests the implementation and use of risk assessment tools as a means of regulating pretrial decision-making. The purpose of the risk assessment is to predict one's likelihood of failing to appear in court or committing a new crime while on pretrial release in order to maximize the release of defendants who pose a minimal risk and detain only the highest-risk defendants. Risk assessments collect data on characteristics of the defendant and their case, assign a risk score, and classify them into a risk category (e.g., low, middle, or high risk). Based on this category, pretrial decision-makers recommend a pretrial detention or release option. Some risk assessments identify which set of release or detention conditions would be optimal for the pretrial success of the defendant, while others solely classify the risk category and leave the decisions in the hands of judges or pretrial officers (PJI, 2019). In 2017, there were up to 60 different risk assessment algorithms used across the United States (Picard-Fritsche et al., 2017).

Pretrial staff and judges deploy pretrial risk assessments in a variety of ways – including based on administrative data and/or an interview with the defendant – and the tools are generally deemed effective irrespective of the method (VanNostrand & Lowenkamp, 2013). These different methods of assessment are often based on two types of factors: static and dynamic predictors. Static predictors are factors that cannot be changed and may include age, past offenses, and prior failures to appear. Dynamic factors may be more amenable to change and may include substance use, residential stability, and social support (Bechtel, Lowenkamp, &

Holsinger, 2011; Holsinger, Lurigio, & Latessa, 2001; Latessa, 2005). One meta-analysis of risk predictors from six pretrial risk assessment tools found that static factors are more successful at predicting pretrial failure than dynamic factors (Bechtel, Lowenkamp, & Holsinger, 2011). This evidence is notable because staff can often identify static factors through administrative records rather than interviews with defendants, which can save jurisdictions time and money by having more efficient risk assessment. It is important to note that while risk assessment tools often use similar factors to predict risk, differences in the way factors are defined and weighed may affect the accuracy of risk prediction.

Although risk assessments offer a promising step to regulate pretrial decision-making, many studies demonstrate mixed results on both the reliability and validity of pretrial risk assessment tools. When a risk assessment is reliable, there is consistency between the risk classification made for similar defendants, no matter who is administering the tool (Latessa & Lovins, 2010). The term validated means the jurisdiction evaluated the risk assessment tool on the population in that jurisdiction, and it successfully predicts risk outcomes for pretrial defendants (Lowenkamp, Lemke, & Latessa 2008). Successful prediction indicates the tool is able to accurately predict both who is at high risk for a certain outcome, and who is at low risk for a certain outcome by comparing the tool's predicted outcomes with actual outcomes. Ideal risk assessment tools will have minimal rates of false positives (e.g., predicting someone will recidivate when they actually will not), and false negatives (e.g., predicting someone will not recidivate when they actually will). Evaluations of risk assessment tools often include examination by subgroups (e.g. risk category) to determine whether the instrument is better at predicting risk for certain types of populations.

The PJI 2019 *Scan* indicates that approximately two-thirds of counties sampled use a pretrial risk assessment to make decisions. Of these, less than half (45 percent) reported conducting continuous validation studies. With an increasing reliance on risk assessments, jurisdictions must ensure that their assessments accurately classify defendant risk by periodically validating these tools on their populations, and ensuring fidelity when implementing the tool.

The following section will discuss support for these tools by exploring validation studies of the most commonly used pretrial risk assessment tools across the United States, research on individual risk and protective factors, and their ability to predict risk of pretrial failure including failure to appear in court and new criminal activity. This review will then discuss remaining issues surrounding the use of pretrial risk assessment tools including methods of validation, implementation and fidelity, and the implications of these tools on certain populations.

Support for Risk Assessment

While the use of risk assessment remains controversial, scholars have developed a body of literature that demonstrates promise for pretrial risk assessments with proper validation, implementation, and utilization. The 2020 NAPSA Standards express “support for empirically developed and validated pretrial risk assessments to help predict the likelihood of return to court and arrest-free pretrial behavior and to assist in identifying conditions appropriate to specified risk factors” and note this as one of their key revisions from the previous 2004 version of the Standards (NAPSA, 2020, p. 1). This section will examine validations of some of the most

common pretrial risk assessment tools¹⁶ used across the United States today, as well as explore the support for risk and protective factors commonly included in pretrial risk assessments.

PUBLIC SAFETY ASSESSMENT (PSA) The *Scan* (2019) identified about one-third (31 percent) of counties surveyed that use a risk assessment tool use the Public Safety Assessment (PSA). VanNostrand and Lowenkamp developed the PSA¹⁷ with Arnold Ventures in 2013 and first implemented it statewide in Kentucky. Pretrial officers or court personnel complete the PSA using administrative data and criminal history records (DeMichele et al., 2018a). They then assign the defendant a raw score based on the number of points in each category. The PSA is a “decision-making tool for judges” that is “not intended to, nor does it functionally, replace judicial discretion” (Laura and John Arnold Foundation [LJAF], 2016, p. 4). The risk assessment items and weights are publicly available through LJAF publications in order to increase transparency. The tool consists of 9 items.

PSA Factors (LJAF, 2016)
1. Age at current offense
2. Current violent offense a. Current violent offense & 20 years old or younger*
3. Pending charge at the time of the offense
4. Prior misdemeanor conviction
5. Prior felony conviction a. Prior conviction (misdemeanor or felony)*
6. Prior violent conviction
7. Prior failure to appear in the last two years
8. Prior failure to appear older than two years
9. Prior sentence to incarceration

*additional risk point(s) added for main risk category in combination with subcategory

In 2018, researchers from the Research Triangle Institute (RTI) conducted a validation study of the PSA using 164,597 cases from Kentucky jails. The results of this study concluded that the PSA was generally predictive of new arrest, failure to appear, and new violent arrest. This validation study examined the predictive ability of the tool across subgroups, and found the tool more accurately predictive of FTA outcomes for white defendants than for black defendants but there was no significant variation in predictive ability in new arrest or new violent arrest (DeMichele et al., 2018a). However, there was significant variation found in the ability of the

¹⁶ The *Scan* (2019) identified some of the most common risk assessment tools used across the United States. Additionally, the Stanford Pretrial Risk Assessment Tools Factsheet Project from the Stanford Law School Policy Lab identified commonly used risk assessment tools across the United States and developed a key set of questions to collect information on to assist stakeholders in making decisions about the use and implementation of risk assessments in their jurisdiction (Stanford Law School Policy Lab, 2019a, 2019b, 2019c, 2019d, 2019e). To view this Factsheet series, visit <https://law.stanford.edu/pretrial-risk-assessment-tools-factsheet-project/>

¹⁷ View the PSA factors and weights here: <https://advancingpretrial.org/psa/factors/>

tool to predict new violent arrest by gender, with the predictive validity of the tool being higher for male defendants. The study found no variation by gender in the other categories.¹⁸ While the results suggest the PSA is a validated risk assessment tool, it is only generalizable to this population and may not extend to other jurisdictions. Overall, the authors support the tool for informing pretrial decisions, but caution against its use as the final decision-maker (DeMichele et al., 2018a).

VIRGINIA PRETRIAL RISK ASSESSMENT INSTRUMENT (VPRAI) The *Scan* (2019) reveals that 18 percent of counties surveyed that use a risk assessment tool use the VPRAI. VanNostrand originally developed this tool in 2003 and revised it in 2007 and 2016. The VPRAI requires an in-person interview with defendants (Stanford Law School Policy Lab, 2019e). The current version of the VPRAI consists of eight risk factors.

VPRAI Factors (Virginia Department of Criminal Justice Services, 2018)
1. Active community criminal justice supervision
2. The current charge is felony drug, theft or fraud
3. Pending charges
4. Criminal history
5. 2 or more failures to appear
6. 2 or more violent convictions
7. Employed at time of arrest
8. History of drug abuse

These factors are weighted, and defendants are then classified into risk levels (1-6). Staff then determine if the defendant's current charge can be classified in the decision-making structure -- the "Praxis".¹⁹ If the Praxis applies, staff enter the most serious current offense and the risk level determined by the VPRAI. Staff then find where the current offense and risk level intersect on the Praxis matrix. This intersection suggests the release or detention decision, whether the individual will receive pretrial services, as well as level of supervision for those released. If any of the current charges are for Failure to Appear, the recommendation will increase by one level. To ensure fidelity, staff must enter if they followed the recommended decision and agencies must legally maintain a concurrence rate of 85 percent or higher in Virginia (Virginia Department of Criminal Justice Services, 2018).

¹⁸ The differential validity of this tool highlights the need for validation studies to not only examine the overall validity of risk assessment tools, but also examine validity by subpopulations to ensure that tools are equally effective across populations.

¹⁹ All offenses except murder, homicide, manslaughter, or an attempt at any of these crimes, as well as probation violations, contempt of court, and escape are eligible for Praxis classification. For more information on Praxis, see https://www.dcjs.virginia.gov/sites/dcjs.virginia.gov/files/publications/corrections/virginia-pretrial-risk-assessment-instrument-vprai_0.pdf.

The most recent re-validation of the VPRAI, completed by Danner, VanNostrand, and Spruance in 2015, used a sample of 14,382 cases supervised by Pretrial Services with a VPRAI risk assessment between July 2013 and July 2014. The researchers concluded that the VPRAI was able to predict success or failure of defendants prior to trial (including any failure, FTA, new criminal activity, and technical violations on release) but removed the factor that considered residential stability since it was not a strong predictor of pretrial failure. Additionally, the new version of the VPRAI developed through this revalidation predicts risk levels similarly across gender and race (Danner, VanNostrand, & Spruance, 2015). The success of the updated VPRAI as a result of revalidation studies highlights the importance of continued re-validation of risk assessment tools.

OHIO RISK ASSESSMENT TOOL (ORAS-PAT) The *Scan* (2019) indicates that 8 percent of counties surveyed that use a risk assessment tool use the ORAS-PAT. Latessa and the University of Cincinnati, with funding from the Ohio Department of Rehabilitation and Correction, developed the tool in 2009. Pretrial officers obtain responses to the risk assessment items through a structured interview and a self-report questionnaire. The tool consists of 7 items and predicts pretrial misconduct, which includes failure to appear and new criminal offense prior to trial (Latessa et al., 2009). While the factors are not publicly available without request, the domains and number of items in each domain are:

ORAS-PAT Domains (Latessa et al., 2009)
1. Criminal history (3 items)
2. Employment (1 item)
3. Residential stability (1 item)
4. Substance Abuse (2 items)

The tool assigns defendants a risk score and categorizes them into one of three risk categories (low, medium, high). Latessa et al. (2009) validated the tool on a sample of 452 defendants on pretrial supervision and determined that the tool effectively assigns defendants to these three risk categories. This validation study did not focus on the predictive ability of the tool for subgroups like race, ethnicity, and gender.

COLORADO PRETRIAL ASSESSMENT TOOL (CPAT) The Colorado Association of Pretrial Services (CAPS), with the JFA Institute and PJI, developed the CPAT in 2012 and use it in 22 counties in the state of Colorado (Stanford Law School Policy Lab, 2019a). Staff collect information on the tool through administrative criminal justice records and face-to-face interviews with defendants (CAPS, 2015). This assessment tool is based on 12 factors that seek to predict any pretrial failure, which includes failure to appear and new criminal activity. The tool places defendants into a risk category (1-4). These risk categories are associated with different rates of public safety, court appearance, and overall combined success. According to the Colorado Pretrial Assessment Tool: Administration, Scoring, and Reporting Manual - Version 2 (CAPS, 2015) the 12 scoring factors are:

CPAT Factors (CAPS, 2015)
1. Having a home or cell phone
2. Owning or renting one's residence
3. Contributing to residential payments
4. Past or current problems with alcohol
5. Past or current mental health treatment
6. Age at first arrest
7. Past jail sentence
8. Past prison sentence
9. Having active warrants
10. Having other pending cases
11. Currently on supervision
12. History of revoked bond or supervision

PJI and JFA validated the tool using data from 10 Colorado counties. The validation, which used data from 2,000 defendants booked in county jails, concluded that the 12 factors with their associated weights were statistically significantly related to pretrial failures. However, CPAT did not examine differential validity by race/ethnicity or gender (PJI, 2012).²⁰

CORRECTIONAL OFFENDER MANAGEMENT PROFILING FOR ALTERNATIVE SANCTIONS (COMPAS) PRETRIAL RELEASE RISK SCALE (PRRS-II) Northpointe, Inc. developed the COMPAS Pretrial Release Risk Scale (PRRS-II) in 2009-2010. The tool includes 8 risk factors, but the weights of each item are not publicly available.

COMPAS PRRS-II Factors (Northpointe Inc., 2010)
1. Number of pending charges or holds
2. Which offense category represents the most serious current offense
3. Number of times sentenced to jail for more than 30 days
4. Number of times failed to appear for scheduled court hearing
5. Number of times arrested/charged with a new crime while on pretrial release
6. History of drug abuse (dichotomous variable)
7. Length of time in current community or neighborhood
8. Employment Status (Full Time, Part Time, Unemployed, Not in labor force)

²⁰ CPAT is the only validated risk assessment tool in Colorado and therefore, since its overall ability to predict pretrial failure is known, it is deemed preferable and intended to replace other pretrial assessments in the state. Other assessments are both unvalidated and often utilize factors that were shown to be not as significantly related to pretrial outcomes in the validation study (PJI, 2012).

Pretrial staff obtain information through official records, standardized interviews, and a self-report questionnaire (Blomberg et al., 2010, p. 13). Defendants receive a risk score (1-10) for each category (recidivism: any arrest post-release from pretrial detention; violence: any arrest for a violent offense post-release from pretrial detention; and FTA for any court offense post-release from pretrial detention), and then are classified as low, medium, or high risk in each category (Blomberg et al., 2010).

The validation study used data from 9,408 COMPAS assessments that occurred in Broward County, Florida in 2009. While the tool was most successful at predicting rearrest for *any* offense prior to trial, it was least successful at predicting rearrest for a *violent* crime prior to trial. The study found some variation in the predictive validity of the tool by gender, race and ethnicity, and age, but caution the generalizability of the results specific to these subgroups because the number of cases for each was small (Blomberg et al., 2010).²¹

Research on Risk and Protective Factors

The risk and protective factors included in pretrial risk assessment tools, the way they are defined and measured, as well as the weights and combinations of these factors vary by tool and jurisdiction. For this reason, there is a mixed body of research on the factors that successfully predict defendant risk of pretrial failure (failure to appear, pretrial violation, and new criminal activity). Importantly, factors included in risk assessment instruments must be clearly defined and understood by staff utilizing the tool (Coopridner, 2009). Various risk assessment tools measure risk factors differently. For example, some risk assessment tools consider criminal history generally as a risk factor. Other tools differentially weight a prior conviction for a felony versus a prior conviction for a misdemeanor, and/or consider the age of the defendant at the time of the conviction. These tools are intentionally structured, weighted, and defined to predict defendant risk of failure, and those conducting the assessment must do so in a way that accurately measures this risk (Coopridner, 2009).

Table 2 depicts common risk and protective factors used in pretrial risk assessment tools and their ability to predict pretrial outcomes in various validation studies. The row below the researcher's names ("Outcomes(s) Examined") indicates which outcomes were examined in the validation study, followed by rows of factors (legal and extralegal) examined. If a factor significantly predicted an outcome(s) in the study(ies), the outcome is illustrated in the adjacent columns. Note this table is not an exhaustive list of all studies of pretrial risk assessment tools and is meant to demonstrate the variability of individual risk assessment items in predicting pretrial outcomes (i.e. FTA, new criminal activity, new violent criminal activity, pretrial failure). When validating pretrial risk assessments, it is important to note that tools do not consider these factors in isolation. The combination, definition, and weights of these factors are key to determining whether a pretrial risk assessment tool is successful at predicting defendant risk.

²¹ Although the COMPAS tool has been validated, it is the subject of a broader debate surrounding the use of machine learning and risk assessments to predict defendant behavior and bias against minority defendants (Anguin et al., 2016; Flores, Bechtel & Lowenkamp, 2016; Dressel & Farid, 2018). Researchers have sought to re-examine the COMPAS tools' predictive ability, however, the item weights remain undisclosed.

Table 2: Predictions of Assessment Tools Risk and Protective Factors

Tool/Instrument		Nevada Pretrial Risk Assessment	Virginia Pretrial Risk Assessment Instrument	Public Safety Assessment	Santa Clara, CA Pretrial Risk Assessment	Risk Assessment Tool for Riverside County, CA	Hennepin County, MN Pretrial Tool
		Austin & Allen (2016)	Danner, VanNostrand, & Spruance (2015)	DeMichele et al., (2018a)	Levin (2012)	Lovins & Lovins (2016)	Podkopacz & Loynachan (2015)
Outcome(s) Examined		☆✔◇	☆✔◇	☆△◇	☆+◇	✔	☆✔◇
Legal Factors	Current Charge Type		☆✔◇	△	☆+◇	×	☆✔◇
	Criminal History		☆✔◇				
	Prior Adult Arrest(s)	☆✔◇				✔	
	Any Prior Conviction(s)			☆△◇	+	✔	☆✔◇
	Prior Felony(ies)	☆✔◇		☆			
	Prior Misdemeanor(s)			☆	+◇		
	Prior Violent Conviction(s)		☆✔◇	☆△		×	
	Prior FTA(s)	☆✔◇	✔◇	☆◇	+◇	✔	☆✔◇
	Juvenile Arrests/Age at first arrest	☆✔◇		☆		✔	
	Other Pending Charges	☆✔◇	☆✔◇	☆△◇	+☆	✔	
	Prior Sentence to Incarceration			☆			

	Tool/Instrument	Nevada Pretrial Risk Assessment	Virginia Pretrial Risk Assessment Instrument	Public Safety Assessment	Santa Clara, CA Pretrial Risk Assessment	Risk Assessment Tool for Riverside County, CA	Hennepin County, MN Pretrial Tool
Extralegal Factors	History of Substance Abuse	☆✔◇	☆✔		⊕◇	✔	✔◇
	Defendant Age			△*	☆		
	Housing/Residential Stability	☆✔◇	×			✔	☆✔◇
	Employment Stability	☆✔◇	☆✔		⊕◇	×	☆✔◇
	Education				◇	×	
	Family/Peer Relationships				⊕		
	Cell Phone Ownership	☆✔◇					
	Mental Health Problem				◇		

*Defendant age is only predictive of new violent criminal activity if the defendant is age 20 or younger at the time of the current offense and the current offense is violent.

Key:	
◇	Predicts Failure to Appear (FTA)
☆	Predicts New Criminal Activity (NCA)
△	Predicts New Violent Criminal Activity
⊕	Predicts Technical Violation on Release
✔	Predicts Any Pretrial Failure (FTA/NCA)
×	Not a Significant Predictor of Pretrial Failure
	Factor not studied

Remaining Issues

While prediction instruments are useful tools, they are not infallible; thus, utilization of such instruments warrants measured and thoughtful use. Research has uncovered questions concerning the effectiveness, ethics, and fairness of pretrial risk assessment instruments (Arnold, Dobbie, & Yang, 2017; Gupta, Hansman, & Frenchman, 2016; Koepke & Robinson, 2018; Stevenson, 2018). As previously noted, research suggests that risk assessment tools must utilize the correct combination of factors, their optimal definition, and appropriate weights to determine defendant risk, must be validated on the population of the jurisdiction, and judges must implement the use of these tools with fidelity in order to make accurate decisions. However, literature examining risk assessment tools reveals that jurisdictions that implement these risk assessments do not always achieve these ideals.

Although risk assessments are politically and theoretically attractive because of their potential for transparency and seemingly uniform outcomes, scholars and stakeholders continue to challenge the reality of their predictive ability to reduce disparities. One of the primary controversies surrounding the ethics and fairness of risk assessments is their overreliance on prior criminal history as a determining factor for risk. Many argue that these tools still perpetuate disparities since they rely on such factors intimately related to inequality in society (Arnold, Dobbie, & Yang, 2017; Tonry, 2019). Although race is not used as an explicit predictor in these tools, racial disparities in justice system contact and punishment means that the use of factors such as criminal history will only replicate and exacerbate disparities in the criminal justice system. Scholars claim that risk has become a proxy for race (Harcourt, 2015; Hamilton, 2015) and “criminal history is entangled with racial bias and foreseeable disparate racial effects” (Tonry, 2019 p. 461). Furthermore, scholars question the fairness of the multiplicative impact of making detention decisions based on prior conduct for which one has already served their time (Hamilton, 2015).

Research also suggests that there are issues of validity and reliability in the implementation and use of these risk assessment tools. Researchers point to the lack of accuracy of many tools, and the high rates of false positives, thereby wrongly detaining many defendants (Tonry, 2019). Since relatively few tools have been tested on subpopulations, even validated risk assessment tools may be less accurate for some populations, which may potentially contribute to disparities. In addition, judges may stray from risk assessment-based recommendations, including detention, release, bail, and supervision decisions, without measures of accountability (Stevenson, 2018). The following section will discuss the ongoing issues surrounding pretrial risk assessment tools including validation, potential implications for certain populations, and implementation challenges.

Methods of Validation

Pretrial risk assessment tools are most successful at predicting defendant risk when validated on the population in the jurisdiction. These validation studies must occur prior to implementation of the tool and re-validation studies should continue to ensure regular updates to the tool to ensure accurate predictions. As time goes on, policies, crime rates, and populations change. Factors like these can impact defendant characteristics that may make them more or less likely to fail prior to trial, so tools can become outdated. Koepke and Robinson (2018) argue that many current pretrial risk assessments may increase preventive detention in the long-term and are based on outdated data that do not account for the improvements to pretrial systems. For example, the Colorado Pretrial Risk Assessment Tool (CPAT) was last re-validated in 2012 and neglects to account for Colorado's bail reform legislation that took effect in 2013. Jurisdictions must re-validate these tools to incorporate changes to the environment and operations of the justice system and defendants (Koepke & Robinson, 2018). In addition to the need for appropriately timed validation, jurisdictions must validate these tools on the pretrial populations that represent the jurisdiction in which they are used. A tool validated on a heavily populated, urban jurisdiction may not have the same predictive ability in a rural county jail. Risk and protective factors, as well as criminal justice system supports (such as supervision options available) and operations may vary or be expressed differently in different areas (Stevenson, 2018). These can affect a defendant's likelihood to fail to appear in court or commit a new offense prior to trial.

Even among validated risk assessments, there is debate surrounding the efficacy of relying on algorithms and machine learning to determine criminal justice outcomes. Skeptics of these algorithms suggest that they may be no more accurate at predicting defendant risk than humans, and they may in fact amplify the biases against poor and minority defendants that are embedded in the criminal justice system (Dressel & Farid, 2018; Tonry, 2019). There is concern that the overreliance on certain factors may exacerbate current trends of overrepresentation of certain populations in various stages of the criminal justice process. Scholars suggest that risk assessments that utilize certain factors will perpetuate current disparities in arrests, prosecutions, and incarcerations (Barabas et al., 2017). For example, when tools heavily weigh factors like prior arrests/convictions/incarcerations in a pretrial risk assessment, certain populations may be more likely to receive a higher risk classification due to disparities in these prior decisions. As discussed earlier in this review, pretrial detention can continue these accumulating negative consequences through case processing and beyond.

Since certain factors and weights may differentially affect calculations of risk for certain populations, it is important to explore the accuracy of pretrial risk assessment tools to predict risk across subgroups. While some validations of pretrial risk assessment tools, like the VPRAI, COMPAS PRRS-II, and the PSA have examined defendant characteristics like gender and race, others tools like the ORAS-PAT have not (Blomberg et al., 2010; Danner, VanNostrand, & Spruance, 2015; DeMichele et al., 2018a; Latessa et al., 2009). These studies explore the impact of risk assessment tools on subgroups at individual case points (e.g., pretrial detention, monetary

bail amounts). However, current validation studies are unable to account for the cumulative disadvantages that individuals may incur as their case progresses.

The definition of risk is an important decision in developing and utilizing risk assessment tools, as certain combinations, definitions, or weights of factors may better predict failure to appear, new criminal activity, and violence than others. Koepke and Robinson (2018) suggest that jurisdictions “focus on the risks that matter most,” meaning that each community should decide what risks are most important to them (i.e. likelihood of appearing in court vs. risk of new violent crime) and weigh their risk indicators accordingly within the risk assessment (Koepke & Robinson, 2018, p. 52). The legitimacy of these tools is also important, as assessment tools must be public and have oversight from the community. The ability of a transparent risk assessment to reflect the current state of the jurisdiction will improve its legitimacy and validity (Koepke & Robinson, 2018).

Risk Assessment in Practice: Implementation Fidelity

The careful development and validation of risk assessment instruments is imperative to enhance the tools’ predictive abilities, but they cannot be successful without proper implementation. Risk assessment tools should be implemented with fidelity—meaning they should be implemented as intended by the developers of the tool (Proctor et al., 2011). Though risk assessment tools are designed to standardize decision-making to reduce variability of decisions among defendants with similar risk, pretrial staff and judges often maintain discretion to override the tool’s suggested outcome (Stevenson, 2018). For these reasons, training is necessary to increase reliability, and fidelity evaluations should be conducted to promote accountability.

One concern regarding the implementation of pretrial risk assessment tools is inter-rater reliability among pretrial staff. When there is inter-rater reliability, pretrial staff make the same decision for the same defendant, given the same information about the defendant and case (Bechtel, Holsinger, Lowenkamp, & Warren, 2016). Latessa and Lovins (2010) assert that reliability is more difficult to obtain when risk assessments rely on dynamic factors like defendant attitudes than static factors, since these cannot vary based on a person’s perception.

For this reason, scholars suggest initial training on these tools prior to implementation, continuous monitoring and training over time to sustain fidelity, and a reliance on static factors for risk determination. This helps to maintain confidence in these tools and limits unclear decision-making structures. One case study conducted in Lake County, Illinois highlights the county’s process of implementing a pretrial risk assessment tool including the training procedures and successes of the training process (Coopriider, 2009). Prior to the training, twelve staff members were given a case scenario to make a bond recommendation and all twelve officers made different recommendations. The training focused on definitions of the risk and protective factors in the risk assessment tool, information about the state’s bail statutes, the NAPSA standards, and research regarding pretrial risk assessment. Following the training, staff had higher concurrence in their bond recommendations and a better understanding of the risk

factors included in the risk assessment tool (Coopridge, 2009). Pretrial risk assessment scholars echo the findings of this case study, suggesting that training staff prior to implementation, as well as ongoing training and continuous quality assurance, enhances staff's ability to perform risk assessments and encourages accountability (Bechtel et al., 2016; Mamalian, 2011).

Judges and pretrial staff may stray from risk assessment recommendations in favor of their own discretion (Stevenson, 2018). Discretion is a key aspect of the judicial decision-making process, as judges rely on their expertise and experience to aid in making decisions. Relying solely on an actuarial risk assessment without judicial discretion removes this expertise from the decision, which is a concern for many judges (DeMichele et al., 2018b). Therefore, scholars suggest using risk assessment tools as a guide for decision-making rather than the using the result of the tool as the ultimate decision-maker. However, keeping a high rate of concurrence with the tool should ensure more consistent decision-making (VanNostrand, 2015). High rates of inconsistency between the intended and actual use of these instruments during implementation may suggest the need for increased accountability for judges and staff that conduct assessments. Koepke and Robinson (2018) advocate for the need to track agreement between risk assessment suggestions and judicial decisions.

One example of a decision-making structure that encourages balance between fidelity to the risk assessment instrument and staff discretion is the Praxis decision-making structure for the Virginia Pretrial Risk Assessment Instrument (VPRAI). Agencies in Virginia's Department of Criminal Justice Services must maintain an 85 percent concurrence rate between the Praxis recommendation and the pretrial supervision decision. Additionally, when the recommendation is overridden, the pretrial officer must record a justification for the override in the Praxis system, and the decision may only differ from the recommendation by one level of supervision (Virginia Department of Criminal Justice Services, 2018). This example highlights the opportunity for staff and judicial experience to override the mathematical calculation of one's risk, while also encouraging accountability by requiring a justification for the override and ensuring fidelity with a mandatory concurrence rate.

The available literature on pretrial risk assessment demonstrates that these tools show promise to successfully predict risk of pretrial failure but must be validated, implemented appropriately, and administered with fidelity to accurately assess a defendant's risk and assign adequate levels of supervision to mitigate that risk. Researchers should continue to explore the legal and extralegal factors included in risk assessments, the optimal way to define and measure these factors, as well as the weights and interaction between factors to improve the accuracy of these risk assessment tools in local contexts to predict defendants' risk of failure to appear in court and new criminal activity prior to trial. Continued research on the ability of these tools to accurately predict defendant risk and on jurisdictions' abilities to properly implement these practices should seek to answer the remaining uncertainty surrounding the use of risk assessment tools in pretrial decision-making and offer potential alternatives if tools prove unfair and ineffective.

PRETRIAL RESEARCH IN THE UNITED STATES: LOOKING FORWARD

As discussed throughout this review, pretrial policies and practices are constantly evolving. The current focus of the field across the United States is to promote equitable practices in an evidence-based manner to help achieve the goals of ensuring public safety, reducing pretrial detention, and ensuring appearance in court. The research focuses on the ability of certain practices (e.g., monetary bail, conditional release, use of risk assessment tools) to achieve these goals without perpetuating disparities that disadvantage certain populations. Across the country, systems are increasingly adapting policies and practices that align with these goals and existing research.

However, this review identified mixed results in the literature regarding the effectiveness and fairness of many current pretrial practices suggesting a greater need for research to determine best practices. Researchers must focus continued attention on the successes and failures of both long-instituted and newly developed practices that are designed to mitigate defendant risk but also ensure just treatment to those who have not been adjudicated of the charges they currently face. A key feature of pretrial is that the population is diverse and the experience of each defendant in the pretrial process is unique. Scholars must conduct nuanced research that analyzes the impact on outcomes for pretrial populations, sub-groups of pretrial populations, and for society at large. Despite a lack of current, large-scale data on pretrial outcomes, researchers can focus efforts on localized evaluation studies that can target the use of specific practices on specific populations. One emerging area of pretrial research, as discussed earlier in this review, is the increasing implementation of pretrial services agencies and the assignment of supports and services to defendants on release. There is limited research on the effectiveness of these services generally and among certain defendant populations or risk classifications (Hatton & Smith, 2020). As new practices like the assignment of supervision conditions emerge and evolve, researchers must continue to focus on the ability to assign these conditions based on accurate risk predictions to maintain the safety and security of defendants and communities.

Increased research attention to the field of pretrial, and the reliance of policymakers on research, will allow criminal justice systems to understand their populations and the implications of certain practices on diverse populations, the drivers behind pretrial failure, increased detention populations, and recidivism. Enhancing research efforts for front-end criminal justice system practices will promote better practices in the equitable treatment of all defendants while also protecting the community, reducing detention populations, saving and reinvesting economic resources, and achieving more favorable outcomes for those involved in the criminal justice system.

The Future of Pretrial Data Collection

Much of the literature discussed in this review relied on the State Court Processing Statistics data collection series, which is the most recent national-level data on pretrial populations. The Bureau of Justice Statistics ended this data collection effort in 2009, preventing current studies on

nation-wide pretrial populations. To fill this gap, the National Pretrial Reporting Program seeks to implement the Jurisdiction Capacity Survey to collect and analyze agency-level data including number of defendants released by release type and condition, caseload ratios, time from release to the beginning of supervision, time supervised in the community, and pretrial detention rate, as well as outcome data including appearance, safety, concurrence, and success rates and pretrial detainee length of stay. Finally, they seek to collect performance measures including universal screening, recommendation rate, response to defendant conduct, and pretrial intervention rate (Kim et al., 2019). The collection of this data will allow for a new wave of research on nationwide pretrial populations to help advance the field and eliminate the need to rely on outdated data.

CONCLUSION

The vast and diverse literature reviewed in this work depicts the complexities of pretrial research and highlights several important gaps that must be addressed given the national trend toward utilizing and improving pretrial practices. Although this list is not exhaustive and much more remains unanswered, we offer a few directions for future work:

- **Improved data collection and research across multiple jurisdictions and states:** Given the diversity of pretrial practices, it is important to document and understand the current population and operations of pretrial systems across the country. Better data collection will allow policymakers to understand the needs of their jurisdiction and allow future research to evaluate the impact of any reform effort. Furthermore, national level data will allow for a comparison of the effectiveness of pretrial practices and policies across jurisdictions.
- **Better understanding of the cumulative impact of pretrial decisions:** Further research is needed to examine the cumulative impact of both pretrial detention and supervision on case outcomes, subsequent criminal justice trajectories, as well as economic and social outcomes. Although pretrial detention is associated with negative consequences in each single decision point, more research is necessary to understand its full impact.
- **Evaluations of conditions on release on multiple types of outcomes:** Very little is still known about the effectiveness of conditions of release on failure to appear, new offenses, and violation of supervision. Conditions of supervision differ in their philosophy; some conditions are treatment oriented, while others are focused more on monitoring defendant's behaviors. It remains unknown which types of conditions, their frequency, the overall number of conditions, or their combination, are most effective for each type of pretrial outcome.
- **A critical assessment of the efficacy and fairness of risk assessment tools:** The differential predictive ability of risk assessment tools, and their impact on disadvantaged population remains a major unresolved problem in their use. Validation studies must be

explicit about their rates of false positives and false negatives, and must evaluate the tools at minimum on different gender, race, and ethnicity groups. Furthermore, a better understanding of the intersection between judicial decision making and risk assessment is needed to assess both whether risk assessment overall improve pretrial practices and outcomes, and whether there are systematic judicial departures from recommendations.

Current pretrial practices, policies, and resources vary greatly by jurisdiction. While we are beginning to see some effects of pretrial advancements in states and counties leading the way in reform efforts, much work remains in identifying successful strategies for pretrial systems to be more just, efficient, and effective in providing due process to defendants and safety to communities. The pretrial decision is one that can affect every subsequent outcome of a criminal case and can extend beyond justice system involvement, further emphasizing the importance of this research. The key task of those working in the pretrial field is to decide who to release and how to supervise those who are released. To be successful, pretrial systems must minimize the risk defendants face to public safety and maximize court appearance but should do so in a manner that also minimizes pretrial detention and places the lowest level of supervision on defendants to ensure these goals are met. Pretrial risk assessments have been used to guide and simplify these decisions, however, in practice, there are mixed results on the effectiveness of these tools to assign defendant risk in a fair and consistent manner. Future research must focus on mitigating defendant risk while maximizing release and reducing pretrial detention, but also consider the differential impact of pretrial practices on the diverse populations that come into contact with the criminal justice system prior to disposition.

REFERENCES

- American Bar Association. (2007). *Standards relating to pretrial release* (3rd ed.). Washington, D.C.
https://www.americanbar.org/content/dam/aba/publications/criminal_justice_standards/pretrial_release.pdf
- Angwin, J., Larson, J., Mattu, S., & Kirchner, L. (2016). Machine bias: There's software used across the country to predict future criminals and it's biased against blacks.
<https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing>
- Arnold, D., Dobbie, W., & Yang, C. S. (2018). Racial bias in bail decisions. *The Quarterly Journal of Economics*, 133(4), 1885-1932.
- Austin, J., & Allen, R. (2016). Development of the Nevada Pretrial Risk Assessment System final report.
https://nvcourts.gov/AOC/Committees_and_Commissions/Evidence/Documents/Committee_Materials/NPRA_Validation_Report_and_Final_NPRA_Tool/
- Austin, J., Krisberg, B., & Litsky, P. (1985). The effectiveness of supervised pretrial release. *Crime & Delinquency*, 31(4), 519-537.
- Ball, J. D., & Bostaph, L. (2009). He versus she: A gender-specific analysis of legal and extralegal effects on pretrial release for felony defendants. *Women & Criminal Justice*, 19(2), 95-119.
- Barabas, C., Dinakar, K., Virza, J. I., & Zittrain, J. (2017). Interventions over predictions: Reframing the ethical debate for actuarial risk assessment.
<https://arxiv.org/pdf/1712.08238.pdf>
- Bechtel, K., Holsinger, A. M., Lowenkamp, C. T., & Warren, M. J. (2016). A meta-analytic review of pretrial research: Risk assessment, bond type, and interventions. *American Journal of Criminal Justice*, 42(2), 443-467.
- Bechtel, K., Lowenkamp, C. T., & Holsinger, A. (2011). Identifying the predictors of pretrial failure: A meta-analysis. *Federal Probation*, 75(2).
- Blomberg, T., Bales, W., Mann, K., Meldrum, R., & Nedelec, J. (2010). Validation of the COMPAS risk assessment classification instrument. *College of Criminology and Criminal Justice, Florida State University, Tallahassee, FL*.
<http://criminology.fsu.edu/wp-content/uploads/Validation-of-the-COMPAS-Risk-Assessment-Classification-Instrument.pdf>
- Bornstein, B. H., Tomkins, A. J., Neeley, E. M., Herian, M. N., & Hamm, J. A. (2013). Reducing courts' failure-to-appear rate by written reminders. *Psychology, Public Policy, and Law*, 19(1), 70.

- Bronson, J., & Berzofsky, M. (2017). Indicators of Mental Health Problems Reported by Prisoners and Jail Inmates, 2011–12. US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Washington, DC. <https://www.bjs.gov/content/pub/pdf/imhprpji1112.pdf>
- Clark, J. (2010). The impact of money bail on jail bed usage. *American Jails*, (July–August), 47-54.
- Clark, J. (2014). Pretrial services agencies. In J. S. Albanese, Wiley series of encyclopedias in criminology and criminal justice: The encyclopedia of criminology and criminal justice. Hoboken, NJ: Wiley.
- Cohen, T. H., & Reaves, B. (2007). Felony defendants in large urban counties, 2006. Bureau of Justice Statistics Bulletin. US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Washington, DC. <https://www.bjs.gov/content/pub/pdf/fdluc06.pdf>
- Cohen, T.H., & Kyckelhahn, T. (2010). State Court Processing Statistics Data Limitations. US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Washington, DC. https://www.bjs.gov/content/pub/pdf/scpsdl_da.pdf
- Colorado Association of Pretrial Services. (2015). Colorado Pretrial Assessment Tool: Administration, scoring, and reporting manual - version 2. <https://university.pretrial.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=47e978bb-3945-9591-7a4f-77755959c5f5>
- Community Resources for Justice. (2017). The cost of pretrial justice. http://www.crj.org/assets/2017/07/27A_Costs_of_Pretrial_063014_FINAL.pdf
- Cooke, B., Diop, B. Z., Fishbane, A., Hayes, J., Ouss, A., & Shah, A. (2018). Using behavioral science to improve criminal justice outcomes. <https://www.courthousenews.com/wp-content/uploads/2018/01/crim-just-report.pdf>
- Coopriider, K. (2009). Pretrial risk assessment and case classification: A case study. *Federal Probation*, 73, 12.
- Cornell Law School. (n.d.). Plea bargain. https://www.law.cornell.edu/wex/plea_bargain
- Danner, M. J., VanNostrand, M., & Spruance, L. M. (2015). Risk-based pretrial release recommendation and supervision guidelines: Exploring the effect on officer recommendations, judicial decision-making, and pretrial outcome. <https://www.dcjs.virginia.gov/sites/dcjs.virginia.gov/files/publications/corrections/risk-based-pretrial-release-recommendation-and-supervision-guidelines.pdf>

- DeMichele, M., Baumgartner, P., Wenger, M., Barrick, K., Comfort, M., & Misra, S. (2018a). The Public Safety Assessment: A re-validation and assessment of predictive utility and differential prediction by race and gender in Kentucky. Available at SSRN 3168452. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3168452
- DeMichele, M., Comfort, M., Misra, S., Barrick, K., & Baumgartner, P. (2018b). The intuitive-override model: Nudging judges toward pretrial risk assessment instruments. Available at SSRN 3168500. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3168500
- Demuth, S. (2003). Racial and ethnic differences in pretrial release decisions and outcomes: A comparison of Hispanic, black, and white felony arrestees. *Criminology*, 41(3), 873-908.
- Desmarais, S. L., & Lowder, E. M. (2019). Pretrial risk assessment tools: A primer for judges, prosecutors, and defense attorneys. *MacArthur Foundation Safety and Justice Challenge*. <http://www.safetyandjusticechallenge.org/resource/pretrial-risk-assessment-tools-a-primer-for-judges-prosecutors-and-defense-attorneys/>
- Dhami, M. K. (2005). From discretion to disagreement: Explaining disparities in judges' pretrial decisions. *Behavioral Sciences & the Law*, 23(3), 367-386.
- 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.
- 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.
- Dressel, J., & Farid, H. (2018). The accuracy, fairness, and limits of predicting recidivism. *Science advances*, 4(1), eaao5580. <https://advances.sciencemag.org/content/advances/4/1/eaao5580.full.pdf>
- Eppler-Epstein, S., Gurvis, A., & King R. (2016). The Alarming Lack of Data on Latinos in the Criminal Justice System. Washington DC: Urban Institute. Retrieved from <http://apps.urban.org/features/latino-criminal-justice-data/>
- Flores, A. W., Bechtel, K., & Lowenkamp, C. T. (2016). False positives, false negatives, and false analyses: A rejoinder to machine bias: There's software used across the country to predict future criminals. and it's biased against blacks. *Fed. Probation*, 80, 38. <https://www.uscourts.gov/federal-probation-journal/2016/09/false-positives-false-negatives-and-false-analyses-rejoinder>
- Grant, G. (2018). Report to the Governor and the Legislature. New Jersey Courts. <https://www.njcourts.gov/courts/assets/criminal/2018cjrannual.pdf>

- Gelbach, J. & Bushway, S. D. (2010). Testing for Racial Discrimination in Bail Setting Using Nonparametric Estimation of a Parametric Model. *UC Berkeley: Berkeley Program in Law and Economics*. Retrieved from <https://escholarship.org/uc/item/6hjl9g9gh>
- 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.
- Hamilton, M. (2015). Back to the future: The influence of criminal history on risk assessments. *Berkeley Journal of Criminal Law*. 20(1), 75-133.
- Harcourt, B. E. (2015). Risk as a proxy for race: The dangers of risk assessment. *Federal Sentencing Reporter*. 27(4), 237-243.
- Hatton, R. & Smith, J. (2020). Research on the effectiveness of pretrial support and supervision services: a guide for pretrial services programs. <https://cjl.sog.unc.edu/files/2020/05/Research-on-the-Effectiveness-of-Pretrial-Support-Supervision-Services-5.28.2020.pdf>
- Hawk, J. (2016). No money, no freedom: The need for bail reform. <https://www.aclu-wa.org/sites/default/files/media-legacy/attachments/Bail%20Position%20Paper%2C%20Final%20II.pdf>
- Holsinger, A. (2016). Analyzing bond supervision survey data: The effects of pretrial detention on self-reported outcomes. *Boston: Crime and Justice Institute*. <https://www.crj.org/publication/analyzing-bond-supervision-survey-data-effects-pretrial-detention-self-reported-outcomes/>
- Holsinger, A. M., Lurigio, A. J., & Latessa, E. J. (2001). Practitioner's guide to understanding the basis of assessing offender risk, 65 (2) *Federal Probation*, 46, 47.H.R. 5865, 98th Cong., US Congress (1984) (enacted).
- Human Rights Watch. (2010). The price of freedom: bail and pretrial detention of low income nonfelony defendants in New York City. New York, NY. <https://www.refworld.org/pdfid/4cfc8c72.pdf>
- James, D. (2004). Profile of jail inmates, 2002. Special Report. US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Washington, DC. <https://www.bjs.gov/content/pub/pdf/pji02.pdf>
- Johnson, B. R., & Stevens, R. S. (2013). The regulation and control of bail recovery agents: An exploratory study. *Criminal Justice Review*, 38(2), 190-206.
- 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(2), 161-184.

- Kim, K., Santos, R., Adams, B., Gurvis, A., Becker-Cohen, M., & Rao, S. (2019). *National Pretrial Reporting Program, Final Report*. Urban Institute.
<https://www.ncjrs.gov/pdffiles1/bjs/grants/250751.pdf>
- Koepke, J. L., & Robinson, D. G. (2018). Danger ahead: Risk assessment and the future of bail reform. *Washington Law Review*. Available at SSRN 3041622.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3041622
- Kutateladze, B.L., Andiloro, N.R., Johnson, B.D., & Spohn, C.C. (2014). Cumulative disadvantage: Examining racial and ethnic disparity in prosecution and sentencing. *Criminology*, 52(3), 514-551.
- Lam, C. (2014). Pretrial services: an effective alternative to monetary bail. Center on Juvenile and Criminal Justice.
http://www.cjcj.org/uploads/cjcj/documents/cjcj_pretrial_reform_july_2014.pdf
- Latessa, E.J. (2005). The classification and assessment of offenders: The Engine that drives effective correctional practices and interventions. Presentation at the International Conference on Community Corrections, Dalian, China July 2005
- Latessa, E. J., & Lovins, B. (2010). The role of offender risk assessment: A policy maker guide. *Victims and Offenders*, 5(3), 203-219.
- Latessa, E., Smith, P., Lemke, R., Makarios, M., & Lowenkamp, C. (2009). Creation and validation of the Ohio risk assessment system: Final report. *Center for Criminal Justice Research, School of Criminal Justice, University of Cincinnati, Cincinnati, OH*.
http://www.ocjs.ohio.gov/ORAS_FinalReport.pdf.
- Laub, J. H., & Sampson, R. J. (2001). Understanding desistance from crime. *Crime and Justice*, 28, 1-69.
- Laura and John Arnold Foundation. (2016). Public Safety Assessment: Risk factors and formula.
<https://craftmediabucket.s3.amazonaws.com/uploads/PDFs/PSA-Risk-Factors-and-Formula.pdf>
- Leslie, E., & Pope, N. (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. doi:10.1086/695285
- Levin, D. J. (2012). Santa Clara County, California pretrial risk assessment instrument. *Pretrial Justice Institute*.
<https://university.pretrial.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=a955ef37-7d11-4a99-df59-a9dcd0de4a0a>

- Liu, P., Nunn, R., & Shambaugh, J. (2018). The economics of bail and pretrial detention. *Economic analysis*.
http://www.hamiltonproject.org/assets/files/BailFineReform_EA_121818_6PM.pdf
- Lovins, B., & Lovins, L. (2016). Validation of a pretrial risk assessment tool.
https://www.crj.org/assets/2017/07/6_Riverside_Validation_Final_Report_5-3-16.pdf
- Lowenkamp, C. T., Holsinger, A. M., & Dierks, T. (2017). Assessing the effects of court date notifications within pretrial case processing. *American Journal of Criminal Justice*, 43(2), 167-180.
- Lowenkamp, C. T., Lemke, R., & Latessa, E. (2008). The development and validation of a pretrial screening tool. *Federal Probation*, 72, 2.
- Lowenkamp, C.T., VanNostrand, M., & Holsinger, A. M. (2013a). *Investigating the Impact of Pretrial Detention on Sentencing Outcomes*. New York: Laura and John Arnold Foundation.
https://craftmediabucket.s3.amazonaws.com/uploads/PDFs/LJAF_Report_state-sentencing_FNL.pdf
- Lowenkamp, C. T., VanNostrand, M., & Holsinger, A. M. (2013b). *The hidden costs of pretrial detention*. New York: Laura and John Arnold Foundation.
https://craftmediabucket.s3.amazonaws.com/uploads/PDFs/LJAF_Report_hidden-costs_FNL.pdf
- Lowenkamp, C.T., & VanNostrand, M. (2013a). *Assessing Pretrial Risk Without a Defendant Interview*. New York: Laura and John Arnold Foundation.
https://craftmediabucket.s3.amazonaws.com/uploads/PDFs/LJAF_Report_no-interview_FNL.pdf
- Lowenkamp, C.T., & VanNostrand, M. (2013b). *Exploring the Impact on Supervision on Pretrial Outcomes*. New York: Laura and John Arnold Foundation.
https://craftmediabucket.s3.amazonaws.com/uploads/PDFs/LJAF_Report_Supervision_FNL.pdf
- Mamalian, C.A. (2011). *State of the science of pretrial risk assessment*. Pretrial Justice Institute.
https://www.bja.gov/publications/pji_pretrialriskassessment.pdf
- McIntyre, F. & Baradaran, S. (2012). Race, prediction, and pretrial detention. *7th Annual Conference on Empirical Legal Studies Paper*.
- Minton, T. D., & Zeng, Z. (2015). Jail inmates at midyear 2014. *NCJ*, 248629. US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Washington, DC.
<https://www.bjs.gov/content/pub/pdf/jim14.pdf>

- National Association of Pretrial Services Agencies. (2020). Standards on Pretrial Release, Fourth Edition. Washington, D.C.: National Association of Pretrial Services Agencies. <https://drive.google.com/file/d/1edS2bltwfNROieGeu1A6qKIuTfzqop92/view>
- National Conference of State Legislatures. (2014). Recovery Agents. <https://www.ncsl.org/research/civil-and-criminal-justice/recovery-agents.aspx>
- National Conference of State Legislatures. (2016). Pretrial release conditions. <https://www.ncsl.org/research/civil-and-criminal-justice/pretrial-release-conditions.aspx#/>
- National Institute of Corrections. (2017). *A framework for pretrial justice: Essential elements of an effective pretrial system and agency*. Washington, DC. <https://s3.amazonaws.com/static.nicic.gov/Library/032831.pdf>
- National Task Force on Fines, Fees, and Bail Practices. (2018). *Principals on fines, fees, and bail practices*. https://www.ncsc.org/_data/assets/pdf_file/0016/1609/principles-fines-fees.ashx.pdf
- Neal, M. (2012). *Bail fail: Why the US should end the practice of using money for bail*. Washington, DC: Justice Policy Institute. <http://www.justicepolicy.org/uploads/justicepolicy/documents/bailfail.pdf>
- New York Civil Liberties Union. (2018). *Presumed innocent for a price: The impact of cash bail across eight New York counties*. https://www.nyclu.org/sites/default/files/field_documents/bailreport_20180313_final.pdf
- Nice, M. (2006). *Court appearance notification system: Process and outcome evaluation. A Report for the Local Public Safety Coordinating Council and the CANS Oversight Committee*. <https://multco.us/file/26885/download>
- Ouss, A., & Stevenson, M. T. (2020). Bail, jail, and pretrial misconduct: The influence of prosecutors. *George Mason Legal Studies Research Paper No. LS*, 19-08. Available at SSRN 3335138. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3335138
- Payne, B. K., & Gainey, R. R. (2004). The electronic monitoring of offenders released from jail or prison: Safety, control, and comparisons to the incarceration experience. *The Prison Journal*, 84(4), 413-435.
- Petersen, N. (2019). Do detainees plead guilty faster? A survival analysis of pretrial detention and the timing of guilty pleas. *Criminal Justice Policy Review*, 0887403419838020.
- Picard-Fritsche, S., Rempel, M., Tallon, J.A., Adler, J. & Reyes, N. (2017). Demystifying risk assessment. Center for Court Innovation. https://www.courtinnovation.org/sites/default/files/documents/Monograph_March2017_Demystifying%20Risk%20Assessment_1.pdf

- Podkopacz, M. R., & Loynachan, T. (2018). Hennepin County 2015 Adult Pretrial Scale Revalidation. http://www.mncourts.gov/mncourtsgov/media/fourth_district/documents/Research/Hennepin-County-2015-Adult-Pretrial-Scale-Validation.pdf
- Pretrial Justice Institute. (2012). *The Colorado pretrial risk assessment tool (CPAT)*, Washington, DC. <https://university.pretrial.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=64908e23-bf3e-9379-1a1f-f2d5b9e1702f&forceDialog=0>
- Pretrial Justice Institute. (2019). *Scan of pretrial practices*. <https://university.pretrial.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=24bb2bc4-84ed-7324-929c-d0637db43c9a&forceDialog=0>
- Proctor, E., Silmere, H., Raghavan, R., Hovmand, P., Aarons, G., Bunger, A., Griffey, R., & Hensley, M. (2011). Outcomes for implementation research: Conceptual distinctions, measurement challenges, and research agenda. *Administration and Policy in Mental Health and Mental Health Services Research*, 38(2), 65-76.
- Reaves, B. A. (2013). Felony defendants in large urban counties, 2009-statistical tables. Bureau of Justice Statistics Bulletin. US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Washington, DC <https://www.bjs.gov/content/pub/pdf/fdluc09.pdf>
- Sacks, M., & Ackerman, A. R. (2012). Pretrial detention and guilty pleas: If they cannot afford bail, they must be guilty. *Criminal Justice Studies*, 25(3), 265-278.
- Sacks, M., & Ackerman, A. R. (2014). Bail and sentencing: Does pretrial detention lead to harsher punishment?. *Criminal Justice Policy Review*, 25(1), 59-77.
- Schlesinger, T. (2005). Racial and ethnic disparity in pretrial criminal processing. *Justice Quarterly*, 22(2), 170-192.
- Schlesinger, T. (2007). The cumulative effects of racial disparities in criminal processing. *JIIIS*, 7, 261.
- Schnacke, T. R. (2014). Fundamentals of Bail: A resource guide for pretrial practitioners and a framework for American pretrial reform. Washington, DC.: National Institute of Corrections. <https://s3.amazonaws.com/static.nicic.gov/Library/028360.pdf>
- Schnacke, T. R., Jones, M. R., & Wilderman, D. M. (2012). Increasing court-appearance rates and other benefits of live-caller telephone court-date reminders: The Jefferson County, Colorado, FTA Pilot project and resulting court date notification program. *Court Review: The Journal of American Judges Association*, 48, 86. <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1396&context=ajacourtreview>

- Stanford Policy Lab. (2019a). Risk assessment factsheet: Colorado Pretrial Assessment Tool (CPAT). <https://www-cdn.law.stanford.edu/wp-content/uploads/2019/05/Colorado-CPAT-CC-Final-5.10-CC-3.pdf>
- Stanford Policy Lab. (2019b). Risk assessment factsheet: Correctional Offender Management for Alternative Sanctions (COMPAS) Pretrial Release Risk Scale II (PRRS-II). <https://www-cdn.law.stanford.edu/wp-content/uploads/2019/06/COMPAS-PRRS-II-Factsheet-Final-6.20.pdf>
- Stanford Policy Lab. (2019c). Risk assessment factsheet: Ohio Risk Assessment System- Pretrial Assessment Tool (ORAS-PAT). <https://www-cdn.law.stanford.edu/wp-content/uploads/2019/05/ORAS-Sheet-Final-5.10-CC-Upload.pdf>
- Stanford Policy Lab. (2019d). Risk assessment factsheet: Public Safety Assessment. <https://www-cdn.law.stanford.edu/wp-content/uploads/2019/05/PSA-Sheet-CC-Final-5.10-CC-Upload.pdf>
- Stanford Policy Lab. (2019e). Risk assessment factsheet: Virginia Pretrial Risk Assessment Instrument (VPRAI). <https://www-cdn.law.stanford.edu/wp-content/uploads/2019/06/VPRAI-Factsheet-FINAL-6-20.pdf>
- Stevenson, M. (2018). Assessing risk assessment in action. *Minn. L. Rev.*, 103, 303.
- Stevenson, M., & Mayson, S. G. (2018). Pretrial detention and bail. *Reforming Criminal Justice*, 3, 21-47.
- Sutton, J. R. (2013). Structural bias in the sentencing of felony defendants. *Social Science Research*, 42(5), 1207-1221.
- Taylor v. Taintor*, 77 U.S. 366, 21 L. Ed. 287 (Supreme Court).
- Texas Fair Defense Project. (2014). Depenalizing poverty: A proposal for improving Harris County bail policies. <https://university.pretrial.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=6264bd7b-fe35-1c1f-c80b-a932dadb2545&forceDialog=0>
- Toman, E. L., Cochran, J. C., & Cochran, J. K. (2018). Jailhouse blues? The adverse effects of pretrial detention for prison social order. *Criminal Justice and Behavior*, 45(3), 316-339.
- Tonry, M. (2019). Predictions of dangerousness in sentencing: Déjà vu all over again. *Crime and Justice*, 48(1), 439-482.
- Turner, K. B., & Johnson, J. B. (2005). A comparison of bail amounts for Hispanics, Whites, and African Americans: A single county analysis. *American Journal of Criminal Justice*, 30(1), 35-53.

- Turner, K. B., & Johnson, J. B. (2006). The Effect of Gender on the Judicial Pretrial Decision of Bail Amount Set. *Federal Probation*, 70(1), 108-120.
- U.S. Census Bureau, (2004). 2000 Census of population and housing, population and housing unit counts PHC-3-1, United States Summary. Washington, DC.
- VanNostrand, M. (2013). New Jersey jail population analysis: Identifying opportunities to safely and responsibly reduce the jail population. Luminosity in Partnership with the Drug Policy Alliance.
https://www.drugpolicy.org/sites/default/files/New_Jersey_Jail_Population_Analysis_March_2013.pdf
- VanNostrand, M. (2015). *Measuring and managing pretrial risk: Improving public safety, fairness, and cost effectiveness*. California Pretrial Summit.
<http://www.courts.ca.gov/documents/PretrialSummit2015-10MeasuringManagingRisk.pdf>
- VanNostrand, M., & Lowenkamp, C. (2013). Assessing pretrial risk without a defendant interview. https://craftmediabucket.s3.amazonaws.com/uploads/PDFs/LJAF_Report_no-interview_FNL.pdf
- VanNostrand, M., Rose, K., & Weibrecht, K. (2011). State of the science of pretrial release recommendations and supervision. *Pretrial Justice Institute*.
<https://university.pretrial.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=47063a15-8e11-461e-6ee5-cc109b053b08>
- Virginia Department of Criminal Justice Services. (2018). Virginia Pretrial Risk Assessment Instrument (VPRAI) Instruction Manual.
http://www.pacenterofexcellence.pitt.edu/documents/VPRAI_Manual.pdf
- Wagner, P., & Sawyer, W. (2018). Mass incarceration: The whole pie 2018. *Prison Policy Initiative*.
- Widgery, A. (2015). Trends in Pretrial Release: State Legislation.
https://www.ncsl.org/portals/1/ImageLibrary/WebImages/Criminal%20Justice/NCSL%20PretrialTrends_v05.pdf
- Wooldredge, J. (2012). Distinguishing race effects on pre-trial release and sentencing decisions. *Justice Quarterly*, 29(1), 41–75.
- Wooldredge, J., Frank, J., Goulette, N., & Travis, L. (2015). Is the impact of cumulative disadvantage on sentencing greater for black defendants? *Criminology & Public Policy*, 14(2), 187-223.

Zeng, Z. (2018). Jail inmates in 2016. US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Washington, DC
<https://www.bjs.gov/content/pub/pdf/ji16.pdf>

Zeng, Z. (2020). Jail inmates in 2018. US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Washington, DC
<http://www.bjs.gov/index.cfm?ty=pbdetail&iid=6826>