Examining the Efficacy of Pretrial Release Conditions, Sanctions and Screening with the State Court Processing Statistics Dataseries

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Paper Prepared for the Presentation at the Annual Meeting of the American Society of Criminology, Atlanta, GA, November 14-16.

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The efficacy of the implementation of pretrial screening, pretrial release conditions, and pretrial release sanctions has, to date, not been heavily investigated in multi-jurisdictional studies of defendants released to pretrial programs on conditional release. By merging the BJS 1990-2004 State Court Processing Statistics (SCPS) with the 1999 BJA-PSRC Pretrial Release Programming at the Start of the 21st Century Survey, we analyze the impact of variation in availability and type of pretrial release conditions, pretrial release sanctions, and pretrial screening in 27 of the cumulative SCPS 65 counties. Findings suggest that: 1) a pretrial program's use of quantitative or mixed quantitative-qualitative risk assessments lowers a defendant's likelihood of pretrial misconduct; 2) a pretrial misconduct; 3) the more ways pa pretrial program has to follow-up a failure to appear the lower the likelihood of a defendant's pretrial misconduct; 4) a pretrial program's use of targeted mental health screening lowers a defendant's likelihood of pretrial misconduct; and 5) a pretrial program's ability to supervise mentally ill defendants lowers the likelihood of a defendant's rearrest.

Staring Into the Great Unknown - Are Pretrial Supervision Conditions Efficacious?

Since the advent of release on recognizance pretrial programs in the 1960s, there has been a great deal of research invested in investigating the fairness to which pretrial release has been granted to defendants. The same scrutiny has not been imposed on the outcomes of pretrial program supervision. What research exists suggests that pretrial programs have relatively minimal impact on defendant behavior (Goldkamp and White 2006) or even detrimental effects (Helland and Tabarrok 2004). In this study, we attempt the first multi jurisdictional assessment of pretrial program supervision. We merge the Bureau of Justice Statistics 1990-2004 State Court Processing Statistics (SCPS) with the 1999 Bureau of Justice Assistance-Pretrial Services Resource Center Pretrial Release Programming at the Start of the 21st Century Survey. This combination of databases allows us to investigate if the imposition of a condition of release or the potential for imposition of a condition have any effects on defendants' pretrial behaviors.

The pretrial stage is a critically important stage in the criminal justice process. After arrests, it has the largest volume of cases (Goldkamp and White 2006). It is at the pretrial stage when the defendant's personal liberties are first examined by the criminal justice system for restriction. At pretrial, a defendant is either released on promise to return for a court date – with either no conditions of release, some conditions of release, or on monetary bail – or the defendant is held until trial. The release decision itself is fraught with consequences. Defendants who are not released are less likely to obtain good legal counsel (Foote 1954; Holmes, Daudistel and Farrell 1987). Defendants who are not released are also disconnected from family and friends, from health providers, and from opportunities for gainful post-adjudication employment (Irwin 1985, LaFree 1985). Defendants who are not released are also more likely to be convicted and incarcerated after adjudication (Goldkamp 1979; Phillips 2007).

Defendants held in jails during the pretrial stage accounted for a significant proportion of growth in the population of state and local jails during the 1990s. Effective alternatives to pretrial incarceration such as supervised pretrial release have been sought (Pretrial Services Resource Center 2000). Many large counties across the nation have implemented a range of pretrial supervision conditions. The inter-county variation in the implementation of these conditions, the procedures for placing defendants in these conditions and the combinations of conditions of release allow for some natural quasi-experimental research designs. To the outside observer, it seems surprising that given the opportunities for research, very few studies have been effectuated. The reasons are three-fold: 1) the limited information on defendants kept in a standardized manner across counties; 2) the lack of a centralized accounting of pretrial supervision practices; 3) the lack of in-house analytical capability among most pretrial supervision practices; 3) the relationships agencies foster with interested academics.

Compared to probation and parole information systems or police information systems, pretrial programs tend to have very underdeveloped information systems and limited financial resources (Clark and Henry 2003). The lack of the necessary infrastructure at the agency level for recording of defendant characteristics, defendant outcomes and

program policies has been a critical bottleneck in evaluation studies. For example, in New York City, the necessary defendant information and accounting for pretrial practices over time exists for evaluation of pretrial program supervision practices. Ironically, the pretrial program in New York City has no supervision component.

The vacuum in pretrial program supervision evaluations has not gone unnoticed. In 2006, members of the National Association of Pretrial Services Agencies announced their intention to urge member programs to move towards evidence-based practices. This initiative was acted upon in 2007, with the first Pretrial Network Research group meeting sponsored by the National Institute of Justice and the National Institute of Corrections. At the meeting, the need for an assessment of pretrial supervision practices from some time within the last decade was identified as a top priority. In 2007, Van Nostrand authored a Crime and Justice Institute/National Institute of Corrections report calling for evidence based practices in pretrial release. This paper is an attempt to address the gap in the pretrial supervision literature.

From the Crumbs of Our Predecessors - What We Know About Pretrial Supervision

The earliest "modern" studies of the effectiveness of various elements of pretrial supervision date to the 1970s. The District of Columbia Bail Agency (1978) found that the assignation of defendants to one of three levels of supervision had no impact on pretrial failure to appear or pretrial rearrest rates. The study did not feature random assignment or matching on known predictors of failure to appear or rearrest, so it was impossible to tell if the null effect of assignment was due to ineffectiveness of the condition the defendant was assigned to. Austin and Krisberg (1983, 1985) compared supervised release programs in Miami, Milwaukee, and Portland with random assignment of defendants to supervision and supervision with additional support services. Austin and Krisberg found that the additional treatment and other services failed to reduce rates of failures to appear and rearrest. It was unclear if supervision improved pretrial outcomes relative to no supervision at all. Yezer, Trost, Toborg, Bellassai, and Quintos (1987) and Visher (1990) found that failure to comply with urine testing for drugs might be an indicator of later failure to appear and could be utilized by pretrial programs to screen out noncompliant defendants from release to avoid potential failures to appear. Lasley (2003) found that "intensive" pretrial supervision of domestic violence offenders reduced domestic violence reoffending in California jurisdictions. However, this study was confined to defendants release on monetary bail, not pretrial conditional release and as such, not necessarily true of defendants on pretrial program supervision. Defendants out on monetary bail are typically wealthier than defendants out on pretrial supervision and have more to lose from pretrial misconduct. Lasley also found that bond agents are typically more abusive and violent than police, which may serve as a deterrent effect that pretrial programs do not have at their disposal. This abusiveness is not necessarily a good thing – to have the regular criminal justice system become perceived as financially dishonest and violent with those it supervises are not desirable outcomes.

In the most extensive investigation of pretrial supervision programs conditions to date, Goldkamp and White (2006) found via quasi-experimental testing that varying the use of pretrial notification, mode of pretrial notification, and amount of pretrial notifications did not have a significant impact on a defendants likelihood of failure to appear. Goldkamp and White also found limited effects for other components of pretrial supervision. One might be tempted to consider the debate over the efficacy of pretrial supervision conditions to be settled in the negative, except for Goldkamp and White's own forthright statements as to the limited applicability of their findings. The study suffered from 1) a lack of full condition(s) implementation by the pretrial program and 2) was an evaluation of one pretrial program with a history of problems in management. As a result, it remains an open question as to whether a properly fielded quasi-experiment in another jurisdiction or jurisdictions would find similar results.

Theoretical Expectations

Due to the paucity of knowledge concerning pretrial supervision, the impact of conditions and sanctions does not have its own body of theory. In lieu of such theory PJI relies on two approaches to criminal behavior: the rational actor approach to human behavior and the risks/needs assessment approach to probation and parole releases. Under the rational actor approach the defendant is assumed to be generally aware of the relative benefits of pretrial misconduct, costs of pretrial misconduct and risks of being caught for pretrial misconduct. Rational actor theory in criminology is undergoing a revival under the market theory of crime promoted by researchers such as Rosenfeld and Fornango (in press) Levitt (2006) and Levitt and Venkatesh (2000). What makes the recent push in the rational actor/market theory of crime so appealing is its wide applicability to various types of pretrial misconduct. The rational actor approach has been shown to have explanatory leverage for crimes as diverse as homicide (a crime that used to be considered a "crime of passion"), robbery, and drug offenses.

If pretrial defendants generally act rationally in response to incentives presented by pretrial supervision, what can we expect? First of all, we can expect that the use of pretrial notifications of court dates ought to reduce failures to appear. Goldkamp and White (2001, 39) argued that failure to appear rates were best explained by lack of comprehension of the justice system and the requirements of pretrial release. Thus, the more often a defendant could be reminded of a court date, the less likely they are to fail to appear. Second, pretrial restrictive conditions and sanctions are forms of incapacitation and deterrence and as such ought to reduce pretrial misconduct (Goldkamp and White 2006). The number and nature of conditions imposed will serve to increasingly expose the defendant's pretrial activities to criminal justice monitoring. This should increase a defendant's awareness that their actions are being monitored thus partly incapacitate defendants who might otherwise wish to engage in misconduct. A deterrent effect ought to be achieved through meetings with pretrial supervisors who warn/remind defendants that failure to comply will result in sanctions ranging from additional conditions to a return to jail confinement. The more severe the set of sanctions that can be potentially imposed the less likely a defendant should commit pretrial misconduct.

An additional body of theory that pretrial research can borrow from fruitfully is the probation and parole risks/needs approach. Under the risks/needs approach, a client

(pretrial defendant) has known preexisting problems that lead them to need certain services in order to enable them to avoid committing new offenses or violating conditions of release (Andrews, Bonta, and Wormith 2006). The risks needs approach first insists on the proper placement of defendants into conditions as defined by their preexisting levels of risk. According to the risk/needs approach and the American Bar Association's Standards for Criminal Justice: Pretrial Release, the best risk assessments are to be reliable and objective instruments that do not allow for personal judgments by the assessor (ABA 2007, Standard 10-4.2). Thus defendants in a county which utilizes a quantitative risk assessment to inform judges' pretrial release decisions ought to have lower levels of pretrial misconduct than a county which uses a mixed quantitative and qualitative risk assessment, which ought to lave lower levels of pretrial misconduct than a county which utilizes a qualitative risk assessment, which ought to have lower levels of pretrial misconduct than a county which does not utilize pretrial risk assessments at all. The risks/needs logic also suggests that when pretrial programs utilize certain conditions such as mental health screening and mental health courts to match defendants with treatments for preexisting problems, the likelihood of a defendant committing a failure to appear, and especially of being rearrested ought to be lower than when a pretrial program does not do such screening or diversion to treatment.

Not everything is as straightforward as the above discussion would make matters appear. Pretrial practitioners have observed that when pretrial programs acquire the ability to do supervision and monitor conditions, there is a tendency by the criminal justice system to assign defendants to as many of those conditions as possible, even if the defendants are not deemed to need many of those conditions (PSRC 1999). We hypothesize that this overburdening of defendants with conditions of release actually makes them more likely to engage in pretrial misconduct due to the conditions obstructing their ability to function in society during the pretrial period. Thus, if most pretrial programs tend to have defendants assigned to a large number of conditions there may be a positive association between the number of conditions a pretrial program can apply and the likelihood of pretrial misconduct rather than a negative association.

Hypotheses

- 1) Defendants in a county which utilizes quantitative risk assessments will be less likely to commit pretrial misconduct than defendants in counties with a qualitative risk assessment.¹
- 2) Defendants in a county which utilizes mixed quantitative-qualitative risk assessments will be less likely to commit pretrial misconduct than defendants in counties with a qualitative risk assessment.
- 3) The more monitoring conditions of release a county has to impose the more likely a defendant is to commit pretrial misconduct.
- 4) The more pretrial notification opportunities a pretrial program offers, the less likely a defendant is to fail to appear.
- 5) The more follow-up responses a county has to failure to appear the less likely a defendant is to fail to appear.

¹ All counties in this study utilize risk assessments of some variety.

- 6) Defendants in a county which imposes administrative sanctions after a noncompliance with supervision conditions will be less likely to commit pretrial misconduct than defendants in counties which do not impose administrative sanctions after a failure to appear.
- 7) Defendants in a county which requests actions from the court after a noncompliance with supervision conditions will be less likely to commit pretrial misconduct than defendants in counties which do not request actions from a court after a failure to appear.
- 8) The more sanctions a county has for a non-compliance with supervision conditions the less likely a defendant is to commit pretrial misconduct.
- 9) Defendants in a county which screens all defendants for metal health issues will be less likely to commit pretrial misconduct than defendants in counties which do not screen defendants for mental health issues.
- 10) Defendants in a county which screens some defendants for metal health issues will be less likely to commit pretrial misconduct than defendants in counties which do not screen defendants for mental health issues.
- 11) Defendants in a county where the pretrial program runs a mental health supervision program will be less likely to commit pretrial misconduct than defendants in counties which do not run mental health supervision programs.

The Pretrial Justice Institute's Approach to a Multisite Evaluation of Pretrial Supervision Conditions

Spurred by the demand for rigorous multisite evaluations of pretrial supervision conditions expressed by the National Institute of Justice and National Institute of Corrections, Pretrial Justice Institute proposed repurposing existing data collections by the Bureau of Justice Statistics and the Bureau of Justice Assistance to do secondary data analysis to accomplish a preliminary multisite evaluation of modest rigor at low cost in the hopes of establishing the groundwork necessary to spark interest in funding for more rigorous work.

In 2000 and 2002, the Bureau of Justice Statistics fielded the State Court Processing Statistics program in 40 of the nation's 75 largest counties. In 2001, the Bureau of Justice Assistance fielded a survey of over 200 of the nation's pretrial programs. Combining these two datasets allows one to attempt comparing defendants in programs with varying types of supervision conditions after controlling for individual defendant criminogenic and demographic characteristics to examine whether the likelihood of a defendant's pretrial misconduct is associated with the type(s) of supervision the county imposes on those under pretrial supervision.

The merged data sets result in PJI being able to examine over 1,500 defendants on conditional release in 28 counties during 2000 and 2002.² As mentioned earlier, this is a design which only permits a modestly rigorous evaluation. Under this approach, we can be certain that the defendant was 1) screened for pretrial release or not prior to placement

² See Appendix Table 1 for a listing of counties.

on conditional release; 2) eligible for placement on a specific set of conditions; and 3) was eligible for sanctioning for pretrial misconduct with a specified set of sanctions. The limitation of this low-cost approach is that we cannot be certain which conditions and sanctions a pretrial program had at its disposal to supervise a defendant were used. Nevertheless, this low-cost approach can enable us to pinpoint conditions and sanctions for which the potential for imposition is indicated to be associated with reductions in pretrial misconduct.

Clearly, this "partial connection" approach to examining the impact of pretrial program conditions on defendants' behavior suffers from one of the most pernicious forms of data analysis with multilevel data – the ecological inference fallacy. We cannot assume that the conditions that could be imposed by the county's pretrial supervision program are true of all defendants on conditional release within that county. For this reason, we expect the statistical significance of our results to be attenuated. Whatever signal we detect from our analyses will have a large amount of noise, since the defendants may not be aware of the potential conditions they are not required to do but would if pretrial misconduct occurred, or of sanctions that may occur in response to pretrial misconduct. Attenuated does not mean that there will be no signal at all. Goldkamp and White (2006) state that most Philadelphia defendants are able to estimate the likelihood of enforcement of sanctions for pretrial misbehavior. If this is true, then the mere potential for enforced conditions and sanctions should have a modest impact on defendants' behaviors. Thus, in our analysis, we will not only be concerned about levels of statistical significance, but in the direction of the relationship. If the presence of conditions or sanctions has a relationship with pretrial misconduct in a predicted direction, PJI considers this evidence of a potentially more robust relationship that should be investigated in a future study where specific condition imposed can be ascertained. If a relationship is statistically significant, this is likely due to 1) the imposition of the condition(s)/sanction(s) within that county on most defendants; 2) the strong relationship for the subpopulation on which the condition(s)sanction(s) is(are) imposed; or 3) the awareness by most of the defendants of the consequences of the condition(s)/sanction(s).

With the unique research design employed here, a relatively robust form of statistical analysis had to be employed to minimize³ the ecological inference fallacy problems posed by the lack of a direct link between defendants and the conditions/sanctions they actually receive. PJI decided to employ multilevel modeling (MLM) to conduct binary logistic models of failure to appear and pretrial rearrest. Multilevel models allow for separation of county level context effects (e.g., laws, crime rates, demographics, year) from defendant level effects (e.g., criminal history, arrest offense, pretrial release type).⁴ While ordinary binary logistic regressions can also separate out such effects, without being embedded in an MLM analysis they fail to account for the distinct difference in the number of analytical units at each level of analysis. In the merged database PJI is

³ PJI would like to make it clear that it is aware that even MLM cannot get us around the ecological fallacy. It is still present to a degree, but hopefully not a debilitating one.

⁴ Most readers are more likely to be familiar with hierarchical linear models (HLM). These are a subclass of multilevel models – ones that require the assumption of a continuous dependent variable. Raudenbush and Bryk (2002) refer to MLM as hierarchical modeling (HM).

analyzing there are over 1,500 defendant observations, but only 28 county observations.⁵ As a result, treating the accuracy of county level effects as equivalent to the accuracy of defendant level effects would overstate the accuracy at which we estimate county level effects. MLM can adjust its error estimates for each analysis level, which is an advance over ordinary least squares regression and logistic regression. Multilevel models can also provide accurate estimates of relative differences in the effect of defendant characteristics as the measures of geographically distributed properties of the context into which the released defendants vary.

Grand Mean Centering, Group-Mean Centering, or Just Leave it Alone?

Ulmer and Johnson (2004) suggest that grand centering is appropriate when doing multilevel modeling to ensure that county level effects are accurately estimated. Because PJI did not take a random coefficients approach to it multilevel estimation, the need for grand level centering drops out. A grand mean centered z-score approach for the variables will yield the same significance levels as a non grand-mean centered approach, and the interpretation of the coefficients by the reader when z-scores are used in place of the actual scores becomes merely a matter of stylistic preference.

Dependent Variables

Pretrial misconduct will be measured in two ways: pretrial failure to appear and pretrial rearrest. Each measure is a dummy variable indicating the whether the defendant failed to appear or was rearrested. "1" indicates a yes, "0" indicates a no. Because the dependent variables are binary/dummy variables, PJI will employ the logistic option within a multilevel model. Ideally, one would employ a hazards variation on the standard logistic model within a multilevel approach. This option is not available within STATA 10. Therefore, we work with the standard logistic option. Modeling pretrial misconduct with logistic regression is not unheard of – Maxwell (1999), VanNostrand (2003) and Siddiqi (2005 a & b) do so.

Independent Variables

County Level Research Variables.

Following the hypotheses established above, we operationalize the county level variables mostly as a set of dummy variables where the presence of a program attribute is coded as a "1" and the absence of that attribute is coded as "0". Thus there are the following research variables: the pretrial program utilizes a quantitative risk assessment; the pretrial program utilizes a mixed quantitative-qualitative risk assessment; the program can issue an administrative sanction if he/she fails to appear; the program will report to the court with a request for action if the defendant fails to appear; the program tests all defendants

⁵ In actuality the re are thousands more defendant observations and several more county observations if one were not to restrict the sample top only defendants on conditional release. PJI chose to make this restriction as defendants on conditional release are defendants who ought to show the most responsiveness to what conditions and sanctions a pretrial program can impose.

for mental health issues at intake; the program tests only defendants that show obvious symptoms of mental health issues for mental health issues; and the program runs its own mental health supervision unit. There are four interval variables: the number of times a defendant can be notified of their court date prior to appearance date (ranges from 0 to 7); the number of monitoring conditions of release a county can impose (ranges from 0 to 4); the number of ways a county can sanction a defendant for non-compliance with supervision conditions (ranges from 0 to 4); and the number of ways a defendant's failure to appear can be followed up by the pretrial program (ranges from 0 to 9). For those interested, a correlation matrix was run of the county level variables in a separate database aggregated to county. Spearman's tests indicate that none of the variables are correlated at more than .60 for the 20 counties used in the full model. Thus, we run a low risk of multicollinearity in multivariate analysis using the county level data.

Defendant Level Control Variables.

At the defendant level we control for known factors involved in pretrial misconduct. The controls are gender, age, race/ethnicity, most serious current offense charge, total number of current offense charges, criminal justice status at time of arrest, time from pretrial release to adjudication, prior failure to appear, number of prior felony arrests, number of prior felony convictions, number of prior jail sentences, and number of prior prison sentences. Females are less likely to engage in pretrial misconduct than males (Maxwell 1999). Older defendants are less likely to engage in pretrial misconduct than younger defendants (Siddigi 2005a & b). African-Americans, whites, and Latinos are more likely to engage in pretrial misconduct than "other" defendants (Siddigi 2005a). Most serious current offense charge is operationalized as a set of dummy variables for violent. property, drug and public order, per Maxwell (1999) with property offenses as the residual category. Violent offenders and other public order offenders are less likely than drug offenders to engage in pretrial misconduct. Property offenders are more likely than drug offenders to engage in pretrial misconduct. Siddigi (2005) has a similar operationalization with similar findings. Those with a criminal justice status at arrest are more likely to engage in pretrial misconduct than those with out a criminal justice status at arrest (VanNostrand 2003; Siddigi 2005b). The longer the time from release to adjudication the more likely the defendant will engage in pretrial misconduct (Siddiqi 2005 a & b). Defendants with a prior failure to appear are more likely to engage in pretrial misconduct than those without a prior failure to appear (Maxwell 1999; VanNostrand 2003; Siddigi 2005 a & b; Goldkamp and White 2006). The more prior felony arrests, the more likely a defendant will engage in pretrial misconduct (Siddiqi 2005a). The more prior felony convictions the more likely a defendant will engage in pretrial misconduct (Siddigi 2005a). For coding of these variables, see Appendix Table 2.

Results

We present three models of failure to appear and rearrest respectively – county level independent variables only, defendant level independent variables only, and a full model. All of the models shown below are statistically significant. PJI chose to present the

coefficients, the standard errors for the coefficients, and the odds ratios to the readers in the hopes of making the results as user friendly as possible. For those unfamiliar with logistic regression or just needing a quick refresher, the odds ratio is a useful tool by which to understand the impact of a variable. The odds ratio compares the odds of the outcome equaling 1 for a 1 unit change in the independent variable. Thus if a variable has only two values, such as quantitative risk assessment matters are relatively clear. For example, in table 1 the odds of a defendant failing to appear for defendants in counties that utilize quantitative risk assessments are 0.40 times lower than the odds of a defendant failing to appear for defendants in counties that utilize qualitative risk assessments.

Table 1. County Level Models of Failure to Appear and Rearrest						
	Failure to Appear Rearrest					
Fixed Effects						
	В	Std.	Odds	В	Std.	Odds
		Error	Ratio		Error	Ratio
Quantitative Risk Assessment	-0.92 ⁺	0.42	0.40	-1.32**	0.42	0.27
Mixed Risk Assessment	-2.64***	0.52	0.07	-1.34**	0.48	0.26
Number of Potential Supervision	0.22	0.17	1.25	0.23	0.22	1.25
Conditions						
Can Impose Administrative Sanction	1.90***	0.45	6.66	1.85***	0.45	6.36
for Non-compliance						
Can Report to Court and Request Court	-2.03**	0.63	0.13	0.35	0.80	1.42
Action for Non-compliance						
Number of Options Sanctions for Non-	-0.15 ⁺	0.17	0.86	-0.34	0.19	0.71
compliance Available						
Number of Opportunities for	0.21	0.21	1.23	0.39	0.22	1.48
Notification of Court Date						
Number of Follow-up Options to FTA	-0.26**	0.09	0.77	-0.27^{+}	0.10	0.77
Available						
Targeted Use of Metal Health	-1.51**	0.48	0.22	-2.54***	0.55	0.08
Screening						
Universal Use of Mental Health	0.33	0.36	1.38	-0.84*	0.37	0.43
Screening						
Mental Health Supervision Done by	0.71**	0.24	2.04	-1.03***	0.27	0.36
Pretrial Program						
Intercept	0.11	0.92		-1.43	0.89	
Random Effects						
County Intercept	4.75 e-07	0.09		5.32 e-12	0.09	
LR Test vs Logistic Regression X^2	0.00			0.00		
N	1,306			1,304		
Groups	21			21		
*p<.10: *p<.05: **p<.01: ***p<.001						
¹ Residual is property MSO MSO=most serious offense charge						

The county level models indicate that there is surprisingly robust explanatory capacity for the county level variables on failure to appear and rearrest.⁶ For failure to appear, defendants in counties that use quantitative and mixed risk assessments are less likely to

⁶ All relationships discussed in the text are significant at the 95 percent confidence level unless otherwise noted.

fail to appear than defendants in counties which use qualitative risk assessments. A pretrial program's ability to report to a court with a request for action in response to noncompliance with supervision conditions lowers the likelihood of failure to appear. The number of follow-up responses a pretrial program has to failure to appear, the lower the likelihood of a defendant failing to appear. All these indicators behave as expected. On the other hand, a pretrial program's ability to impose administrative sanctions appears to raise the likelihood of failure to appear, the targeted imposition of mental health screening does more to reduce failures to appear than universal screening, and a program's ability to supervise the mentally ill is associated with a greater likelihood of failure to appear. The inter-county variation explained by the random component of the model is not significant. This is because all of the variables in the model operate at the county level and PJI set the covariance structure to identity.

For rearrest, there is a different set of statistically significant relationships. Pretrial programs which use quantitative and mixed quantitative-qualitative risk assessments perform better than programs which use qualitative risk assessments at preventing rearrest. The number of sanctions a pretrial program can impose in response to non-compliance with supervision conditions lowers the likelihood of a defendant's rearrest at the 90 percent confidence level. The number of follow-up responses a pretrial program has to failure to appear, the lower the likelihood of a defendant failing to appear. Both targeted and universal mental health screening by pretrial program's ability to supervise the mentally ill reduces the likelihood of a defendant's rearrest. A pretrial program's ability to impose administrative sanctions appears to raise the likelihood of a defendant's rearrest. The inter-county variation explained by the random component of the model is not significant. This is because all of the variables in the model operate at the county level and PJI set the covariance structure to identity.

Table 2. Defendant Level Models of Failure to Appear and Rearrest						
	Failure to Appear			Rearrest		
Fixed Effects						
	В	Std.	Odds	В	Std.	Odds
		Error	Ratio		Error	Ratio
Gender	0.21	0.16	1.23	-1.24	0.19	0.88
Age	-0.02*	0.01	0.98	-0.03***	0.01	0.97
African-American ¹	0.19	0.18	1.21	-0.07	0.19	0,93
Latino ¹	0.26	0.21	1.30	-0.48^{+}	0.25	0.62
Violent MSO ²	-0.64**	0.24	0.53	-0.57*	0.27	0.56
Drug MSO	0.37*	0.16	1.45	-0.12	0.17	1.13
Public Order MSO	-0.18	0.28	0.84	-0.17	0.32	0.84
Number of Charges at Arrest	0.06^{+}	0.03	1.06	0.01	0.04	0.99
Criminal Justice Status at Arrest	0.01	0.20	1.01	-0.24	0.21	0.78
Time from Release to Adjudication	0.01***	0.00	1.01	0.00***	0.00	1.00
Prior Failure to Appear	0.79***	0.18	2.19	0.39*	0.20	1.48
Number of Prior Felony Arrests	-0.01	0.04	0.99	0.16***	0.04	1.17
Number of Prior Felony Convictions	0.05	0.57	1.05	-0.07	0.57	0.93
Intercept	-2.78***	0.55		-1.06 ⁺	0.56	
Random Effects						
County Intercept	0.86	0.18		0.58	0.13	

LR Test vs Logistic Regression X ²	60.60***	31.78***				
Ν	1,582	1,582				
Groups	28	28				
⁺ p≤.10; *p≤.05; **p≤.01; ***p≤.001						
¹ Residual is almost entirely composed of whites.						
² Residual is property MSO. MSO=most serious offense charge.						

Given that we are modeling individual behavior, it comes as no surprise that nearly all the individual-level variables are statistically significant for both failure to appear and rearrest. It is of some surprise to note that there appear to be no significant gender or African-American vs. white differences in the likelihood of pretrial misconduct. Also, contrary to prior analyses, the number of prior felony convictions is not a significant predictor of pretrial misconduct. The multilevel models show a statistically significant improvement over a regular logistic regression. This indicates that the inter-county variation explained by the random component of the models is significant. Clearly, there is room for the county level variables to operate if combined with the defendant level variables.

Table 3. Full Models of Failure to Appear and Rearrest						
	Failure	Re	arrest			
Fixed Effects						
	В	Std.	Odds	В	Std.	Odds
		Error	Ratio		Error	Ratio
Defendant Level						
Gender	0.31	0.19	1.36	-0.07	0.22	0.93
Age	-0.01	0.01	0.99	-0.03*	0.01	0.97
African-American ¹	0.14	0.21	1.14	-0.03	0.23	0.97
Latino ¹	0.25	0.25	1.28	-0.64*	0.32	0.53
Violent MSO ¹	-0.56*	0.27	0.57	-0.71*	0.31	0.49
Drug MSO	0.23	0.19	1.26	-0.19	0.22	0.82
Public Order MSO	0.07	0.31	1.08	-0.07	0.36	0.93
Number of Charges at Arrest	0.13**	0.04	1.14	0.07	0.05	1.08
Criminal Justice Status at Arrest	-0.25	0.23	0.78	-0.19	0.26	0.83
Time from Release to Adjudication	0.01***	0.00	1.01	0.00***	0.00	1.00
Prior Failure to Appear	0.84***	0.21	2.32	0.48*	0.23	1.611
Number of Prior Felony Arrests	0.00	0.04	1.00	0.21***	0.04	1.23
Number of Prior Felony Convictions	0.07	0.07	1.07	-0.12^{+}	0.07	0.88
County Level						
Quantitative Risk Assessment	-0.28	0.49	0.76	-1.14*	0.50	0.31
Mixed Risk Assessment	-2.37***	0.60	0.09	-0.77	0.58	0.46
Number of Potential Supervision	-0.21	0.21	0.81	0.24*	0.26	1.27
Conditions						
Can Impose Administrative Sanction	1.51**	0.53	4.50	1.20	0.55	3.31
for Non-compliance						
Can Report to Court and Request Court	-1.54*	0.74	0.21	0.11	0.88	1.11
Action for Non-compliance						
Number of Options Sanctions for Non-	-0.34 ⁺	0.21	0.71	-0.27	0.23	0.76
compliance Available						
Number of Opportunities for	-0.34	0.23	0.71	0.21	0.25	1.22
Notification of Court Date						
Number of Follow-up Options to FTA	-0.17 ⁺	0.10	0.84	-0.28*	0.11	0.75

Available						
Targeted Use of Metal Health	-1.51**	0.57	0.22	-2.31***	0.65	0.10
Screening						
Universal Use of Mental Health	0.33	0.41	1.39	-1.07*	0.44	0.34
Screening						
Mental Health Supervision Done by	1.18***	0.28	3.24	-1.08***	0.33	0.34
Pretrial Program						
Intercept	1.20	1.11		-0.30	1.14	
Random Effects						
County Intercept	3.56 e-07	0.09		4.98 e-09	0.10	
LR Test vs Logistic Regression X ²	3.8 e-09			6.7 e-09		
Ν	1,183			1,182		
Groups	20			20		
$^{+}p \le .10; *p \le .05; **p \le .01; ***p \le .001$						
¹ Residual is almost entirely composed of whites.						
² Residual is property MSO. MSO=most serious offense charge.						

For the full models, we find that the relationships discovered in the county level models generally hold true. Defendants in pretrial programs which use mixed quantitativequalitative risk assessments rather than qualitative risk assessments are less likely to fail to appear. A pretrial program's ability to report to a court with a request for action in response to a failure to appear lowers the likelihood of failure to appear. The more follow-up responses a pretrial program has to failure to appear, the lower the likelihood of a defendant failing to appear (at the 90 percent confidence level). Targeted mental health screening by pretrial programs is associated with lower likelihoods of a defendant's failure to appear. Defendants in counties which supervise the mentally ill are also more likely to fail to appear than defendants in counties which do not supervise mentally ill defendants. Just as in the county level models, we find a different set of predictors for rearrest. Defendants in pretrial programs which use quantitative risk assessments rather than qualitative risk assessments are less likely to be rearrested. The more follow-up responses a pretrial program has to failure to appear, the lower the likelihood of a defendant's being rearrested. Defendants in programs which screen all defendants are less likely to be rearrested than defendants in programs who do no mental health screening at all. Defendants in programs which do targeted screening of defendants are less likely to be rearrested than defendants in programs who do no mental health screening at all. Defendants in counties which supervise the mentally ill are less likely to be rearrested than defendants in counties which do not supervise mentally ill defendants

The multilevel full models do not show a statistically significant improvement over a regular logistic regression. This indicates that the inter-county variation explained by the random component of the model is not significant. PJI set the covariance structure to identity. This functionally makes the full models quite similar to regular logistic regression if the full models have county level variables that explain a significant amount of the county variance. PJI interprets the nonsignificance of the random component as further evidence that the county level variables in the full models are doing a good job of explaining inter-county variation.

A Time for Reflection: Where to Turn Our Research Towards in the Near Future

Several routes for exploration clearly stand out as likely to yield policymakers considerable future benefits. First, continuing the refinement of screening methods for pretrial release and placement into needs specific forms of pretrial supervision. Second, the development of a clear picture of how sanctions for non-compliance with pretrial conditions of release operate to reduce pretrial misconduct. Third, an inquiry into the mechanics of what failure to appear responses work best to prevent failure to appear and rearrest. Lastly, there is a non-significant directional relationship that needs exploration -- is the nonsignificance of the number of conditions of release due to a relationship that is truly curvilinear? If so, what combination of conditions is sufficient to promote public safety without overburdening a defendant into misconduct?

Not all pretrial risk assessments are created equal. Not only are subjective screening devices prone to demographic disparities (VanNostrand 2007), but subjective screening devices simply produce poor results from a public safety perspective. This analysis also brings to light that the standard pretrial risk assessments, when aided by targeted needs assessments for mental health do a better job at preventing pretrial misbehavior than either does alone. This research is a strong endorsement of the Legal and Evidence Based Practices approach promoted by the National Institute of Corrections which places the refashioning of pretrial risk assessments into risk/needs assessments as a top priority.

Sanctions are a tough notion for some to stomach at the pretrial stage; pretrial practitioners have long had to struggle against the punitive orientation of other elements of the criminal justice system and their own inclinations in order to treat defendants as innocent. What this research shows is that sanctions, if backed by the courts reduce the likelihood pretrial misconduct. Yet we must be wary of overstating the results; at this stage of analysis we cannot tell if the sanctions are operating through increased incarceration of defendant which would defeat the point of pretrial release, or if the sanctions are operating through a deterrent effect. It is imperative for the improvement of pretrial handling of defendants to discover which route or if both routes are behind the relationships found in this study.

The story of the follow-up responses to failure to appear is as much a story of what does not work as what does work. In the supervision activities classification and operational model developed by Goldkamp and White (2006), failure to appear follow-ups short of reincarceration are largely informational for preventing pretrial misconduct. This study suggests that the follow-ups are successful due to other reasons than the reincarceration of defendants after failure to appear. If matters were otherwise, we suspect that we would see a positive association between the number of follow-up options and rearrest rather than a negative relationship. Clearly some pretrial programs are finding modes of response to failure to appear short of rearrest that work to satisfy the needs of their colleagues in the criminal justice system and the general public. If these modes are largely informational, what distinguishes them from the relatively ineffectual court date notification options?

At the start of this study PJI had cause to suspect that the imposition of conditions of supervision could have both aggravating and mitigating effects on pretrial misconduct. The practitioner perspective appears to have won out, at least provisionally. The more conditions that could be applied, the more likely a defendant was to commit pretrial misconduct. The relationship did not prove to be statistically significant. The most likely reason why is that the linear relationship modeled in this study is actually curvilinear. While we only had a range between 0 and 4 for number of supervision conditions, in reality defendants can be assigned far many more conditions (Mahoney, Beaudin, Carver, Ryan, and Hoffman 2001). Our four conditions are a proxy for the plethora of conditions regularly assigned to defendants. Future work needs to discover what conditions in what combinations work best for the prevention of pretrial misconduct.

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Table 1. Counties in Sample					
	County	N County Model	N Person Model	N Full Model	
1	Maricopa, AZ	146	104	104	
2	Pima, AZ	209	195	195	
3	Los Angeles, CA	1	1	1	
4	Riverside, CA	22	14	14	
5	San Diego, CA	1			
6	New Haven, CT	7	7	7	
7	Broward, FL	27	25	25	
8	Dade, FL	176	153	153	
9	Palm Beach, FL	98	96	96	
10	Pinellas, FL	132	128	128	
11	Fulton, GA	32	29	29	
12	Cook, IL	5	5	5	
13	Marion, IN	26	26	26	
14	Baltimore County, MD	6	6	6	
15	Montgomery, MD	50	50	50	
16	Wayne, MI	90	89	89	
17	Shelby, TN	58	57	57	
18	Tarrant, TX	5	4	4	
19	Travis, TX	58	52	52	
20	Salt Lake, UT	149	134	134	
21	Fairfax, VA	8	8	8	
22	San Mateo, CA		35		
23	Santa Clara, CA		86		
24	Honolulu, HI		36		
25	Essex, NJ		1		
26	Franklin, OH		11		
27	Philadelphia, PA		190		
28	El Paso, TX		32		
Total N	, ,	1,306	1,581	1,183	
It is noted that in sev	veral counties there is o	only one observation.	For this preliminary	analysis, PJI decided	
to maximize the degrees of freedom at the county level by including these cases. In the full model there is					
only one such county - LA, CA. Removing it from analysis does not substantially affect the results.					

Table 2. Variable D	escription			
County Level Variables	Potential Range	Variable Constructed From:	Mean (Full Model)	Standard Deviation (Full Model)
Quantitative Risk Scale	0 (No)-1(Yes)	Built from responses to response to matrix system only; point scale only; subjective system only; point scale or matrix system plus subjective input; and other risk assessment scheme	0.30	0.47
Mixed Risk Scale	0 (No)-1(Yes)	Built from responses to response to matrix system only; point scale only; subjective system only; point scale or matrix system plus subjective input; and other risk assessment scheme	0.35	0.49
Monitoring Conditions of Release Count	0-4	Built from responses to drug testing; alcohol testing; electronic monitoring; and referred to treatment for substance abuse	2.80	0.95
Non-compliance: Administrative Sanction	0 (No)-1(Yes)		0.70	0.47
Non-compliance: Report to Court, Request Action	0 (No)-1(Yes)		0.85	0.37
Non-compliance Sanctions Possible Count	0-4	Built from warn; administrative sanction; report to court, no request for action; and report to court request for action	2.90	0.97
Notification of Court Date Opportunities	0-7	Built from after first appearance; during supervision contact; staff makes call before court date; automated calling	2.75	0.91

		system; computer- generated notice, staff-generated notice; and other court date notification		
Follow-up to Failure to Appear Actions Possible Count	0-9	Built from send letter urging return; call urging return; home visit urging return; arrest defendant; assist police tracking; search outside of jurisdiction; seek warrant quash if defendant returns; place defendant back on court calendar; and other follow-up	2.80	1.64
Targeted Testing of Defendants for Mental Issues	0 (No)-1(Yes)		0.15	0.37
Universal Testing of Defendants for Mental Issues	0 (No)-1(Yes)		0.75	0.44
Program Has a Supervision Unit for Mentally Ill Defendants	0 (No)-1(Yes)		0.25	0.44
Defendant Level				
Gender	1(Male)-2(Female)		1 26	0 44
Age	0-97		31.18	10.95
African-American	0 (No)-1(Yes)	Built from race and ethnicity variable, very few Asians or American Indians in the residual category. Almost all residual category defendants are white.	0.40	0.49
Latino	0 (No)-1(Yes)	Built from race and ethnicity variable, very few Asians or American Indians in the residual category. Almost	0.16	0.37

		all residual				
		category				
		defendants are				
		white.				
Most Serious	0 (No)-1(Yes)	Residual is most	0.18	0.39		
Current Offense		serious current				
Charge is Violent		offense is property				
Most Serious	0 (No)-1(Yes)	Residual is most	0.39	0.49		
Current Offense		serious current				
Charge is Drugs		offense is property				
Most Serious	0 (No)-1(Yes)	Residual is most	0.09	0.29		
Current Offense		serious current				
Charge is Public		offense is property				
Order						
Total Number of	0-97		2.18	1.71		
Charges at Current						
Offense						
Criminal Justice	0 (No)-1(Yes)		1.86	0.34		
Status at Arrest						
Release to	0-997 days		134.26	132.41		
Adjudication Time						
Prior Failure to	0 (No)-1(Yes)		0.24	0.43		
Appear						
Number of Prior	0-97		2.04	3.03		
Felony Arrests						
Number of Prior	0-97		0.71	1.68		
Felony						
Convictions						
County level variable	e means are calculate	d for n=20 (number of	counties). Defendar	nt level variable means		
are calculated for n=1,183.						