THE HIDDEN COSTS OF PRETRIAL DETENTION REVISITED

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EXECUTIVE SUMMARY

Any time a person is arrested and accused of committing a crime, a decision has to be made. Will this person be quickly released back into the community, or will this person be detained in jail to await the next stage of case processing?

This decision is not a strictly "either-or" proposition. Some people facing charges are incarcerated during this pretrial stage for months or even years, while other spend only a few hours or days in jail, and some spend no time behind bars at all.

This pretrial detention decision carries enormous consequences for the individual charged, and has serious downstream effects throughout the entire justice system. Accordingly, the decision whether to subject someone to incarceration awaiting further court processing is a weighty one and is often informed by a complex set of factors. Concerns about community safety, the constitutional rights of justice-involved persons, and the need for individuals to appear in court all play an important role.

The key question at hand is whether pretrial detention promotes future court appearance or public safety. If it does, there may be a benefit of pretrial detention with respect to public safety. However, it is possible that pretrial detention actually makes things worse for justice-involved individuals—a finding revealed by a recent meta-analysis of over 100 studies on the effects of custodial versus community sanctions (Petrich et al., 2021). If pretrial detention actually inflicts harms, then not only does it compromise public safety, but it also forces the public to bear additional costs—not only financially but also the human costs on people and their families-of incarcerating citizens unnecessarily.

The present study builds upon prior analyses that showed pretrial detention for a period longer than three days was associated with higher rates of failing to appear and re-arrest during the pretrial phase. However, this "three-day rule" was generated with data that had little precision in terms of actual time spent in pretrial detention. The new data used in the present study contain time-stamped information for more precise estimates, and more rigorous statistical analyses were applied to assess the potential "generality" of the effects.

To that end, the present study uses data on 1,487,107 individuals booked into a jail in Kentucky between 2009 and 2018 to address two broad research objectives:

1) to investigate the relationship between pretrial detention and failure to appear, 2) to investigate the relationship between pretrial detention, and the length of pretrial detention, and new arrest during the pretrial phase, 3) to investigate the relationship between pretrial detention and sentencing outcomes, and 4) to determine the extent to which these findings are "general" across sociodemographic categories of people and across different time periods.



This work was supported by Arnold Ventures, a philanthropy dedicated to tackling some of the most pressing problems in the United States. The authors wish to thank Tara Blair, Daniel Sturtevant, the members of the Arnold Ventures Pretrial Policy and Research Advisory Board, Stuart Buck, and the State of Kentucky for assistance, participation, review, and support of this project. Multivariate models were generated that controlled for relevant factors such as the likelihood of FTA or rearrest, supervision status, offense type, offense level, time at time in the community, demographic characteristics, and other factors. Three critical findings related to the impact of pretrial detention were revealed.

- 1. **Pretrial detention and failure to appear (FTA): Pretrial detention—for any amount of time (not just for three days or** longer)—is not consistently associated with the likelihood of failing to appear.
- 2. *Pretrial detention and rearrest:* Pretrial detention—for any length of time (not just for three days or longer)—is associated with a higher likelihood of a new arrest pending trial.
- 3. *Sentencing outcomes:* Pretrial detention is associated with an increased likelihood of receiving a sentence to jail or prison and a longer sentence compared to those that were released pretrial. This finding held even when controlling for the outcomes of pretrial release. That is, those that were rearrested or failed to appear on pretrial released were still less likely to receive a sentence to incarceration and received a shorter sentence relative to those that were detained pretrial.
- 4. *Generality of effects:* Race was not a significant factor in predicting either failure to appear or for rearrest, and the relationship between pretrial detention and pretrial outcomes (failure to appear and rearrest) did not vary significantly or consistently by race of the justice-involved person. Furthermore, the effect of pretrial detention on these outcomes was general across time periods both before and after legal changes were implemented to begin using a new risk assessment instrument during the pretrial phase.

PROJECT DESCRIPTION

Previous analyses of data drawn from Kentucky between 2009-2010 were conducted in 2013. These original analyses showed that, overall, there was no significant "deterrent effect" of pretrial detention on outcomes such as failure to appear or rearrest when the length of pretrial detention exceeded three days.¹ Even further, the general pattern of findings—in particular, the apparent "three day rule"—indicated that, if anything, longer periods of pretrial detention were associated with worse outcomes: higher rates of failure to appear and rearrest, especially for individuals who were found to be lower risk based on an assessment.

The present research revisits this question with more fine-grained data on the time spent in pretrial detention, a longer time window of cases, more detailed data on the length of time spent in pretrial detention, and investigates these questions using more advanced statistical modeling techniques that are more likely to reveal "causal" relationships.²

DATA AND METHODS

The sample used for the current study includes 1,487,107 individuals who were arrested and booked into a Kentucky jail between 2009 and 2018. The measures in this study included the following:

- Individuals' demographic characteristics
- · Individuals' likelihood of FTA or rearrest
- Offense characteristics including offense level (e.g., felony, misdemeanor) as well as felony offense class (e.g., A, B, C, D)
- Details of the pretrial status (released or detained, length of detention in days)
- Time in the community for both pretrial and postdisposition periods

The key outcome variables used in this study include:

- Failure to appear
- Rearrest for new offense during pretrial release
- Sentencing outcomes (sentenced to incarceration and sentence length)

The majority of individuals in the sample were white (80%) and male (71%); most were not arrested for a felony offense (61%); and the majority were subject to pretrial detention for less than 24 hours (56%). With respect to the outcomes of interest, only a small percentage either failed to appear (17%) or were rearrested (12%).

Multivariate analyses were used to complete these analyses, including logistic regression analysis, regression discontinuity models³, as well as robust and bias-corrected models. The results are presented in the simplest form and are consistent across all methods of estimation.

RESULTS

Time at Risk

Black

Male

Failure to Appear

Table 1 displays the results of a multivariate regression analysis for failure to appear. This model controls statistically the full range of other factors mentioned earlier that may influence the likelihood of failing to appear. Note that most of the risk ratios for each of the lengths of pretrial detention are not statistically significant.⁴ The exception to this trend are the risk ratios for pretrial detention lengths of 10, 11, and 12 days. Additional models indicated that an increase in failure is noted when a defendant is detained for four or more days and still other models indicated that longer periods of pretrial detention were associated with a decreased likelihood of failure to appear. Finally, regression discontinuity models at using hours in detention revealed that there is no "optimal" time in pretrial detention as related to failure to appear.⁵ Overall, it appears then that pretrial detention does not maintain a consistent relationship with failure to appear.

Variable	Risk Ratios	p-value
Number of Charges	1.037893	≤ 0.001
Felony Charge	0.69097	≤ 0.001
Misdemeanor Charge	1.351901	≤ 0.001
Against Person	0.553353	≤ 0.001
Property	1.382691	≤ 0.001

≤ 0.001

≤ 0.001

0.945

Table 1. Multivariate regression results for the impact of pretrial detention length and failure to appear (FTA).

1.003432

1.215701

1.000688

Hours in Detention		
(0/23=0)		Reference
(24/47=1)	1.061	0.05
(48/71=2)	1.060	0.374
(72/95=3)	1.108	0.186
(96/119=4)	1.124	0.055
(120/143=5)	1.137	0.011
(144/167=6)	1.118	0.057
(168/191=7)	1.092	0.191
(192/215=8)	1.114	0.142
(216/239=9)	1.110	0.019
(240/263=10)	1.186	≤ 0.001
(264/287=11)	1.259	≤ 0.001
(288/311=12)	1.185	≤ 0.001
(312/335=13)	1.128	0.028
(336/359=14)	1.044	0.597
(360/383=15)	1.212	0.009
(384/407=16)	1.131	0.119
(408/431=17)	1.165	0.011
(432/455=18)	1.157	0.03
(456/479=19)	1.179	0.077
Constant	0.071	

Pretrial Rearrest

Table 2 displays the results for the analyses for the relationship between hours spent in pretrial detention and the odds of being rearrested during the pretrial period. The basis of comparison here is 0-23 hours spent in pretrial detention, and these coefficients are interpreted as a value of 1.0 is no association at all; a value below 1.0 would indicate that the odds of being rearrested are lower for those subject to pretrial detention, and a value above 1.0 would indicate that the odds of being rearrested are higher for those subject to pretrial detention.

Table 2. Multivariate regression results for rearrest by hours spent in pretrial detention.

Variable	Risk Ratio	p-value
Number of Charge	0.975	≤ 0.001
Felony Charge	1.056	0.179
Misdemeanor Charge	1.163	≤ 0.001
Against Person	0.875	0.011
Property	1.270	≤ 0.001
Time at Risk	1.003	≤ 0.001
Black	0.958	0.336
Male	1.188	≤ 0.001

Hours in Detention		
(0/23=0)	Reference	
(24/47=1)	1.237	≤ 0.001
(48/71=2)	1.289	≤ 0.001
(72/95=3)	1.448	≤ 0.001
(96/119=4)	1.432	≤ 0.001
(120/143=5)	1.459	≤ 0.001
(144/167=6)	1.428	≤ 0.001
(168/191=7)	1.432	≤ 0.001
(192/215=8)	1.484	≤ 0.001
(216/239=9)	1.504	≤ 0.001
(240/263=10)	1.528	≤ 0.001
(264/287=11)	1.581	≤ 0.001
(288/311=12)	1.500	≤ 0.001
(312/335=13)	1.406	≤ 0.001
(336/359=14)	1.407	≤ 0.001
(360/383=15)	1.513	≤ 0.001
(384/407=16)	1.456	≤ 0.001
(408/431=17)	1.518	≤ 0.001
(432/455=18)	1.490	≤ 0.001
(456/479=19)	1.375	≤ 0.001
Constant	0.055	≤ 0.001

Overall, these results show is that any time spent in pretrial detention beyond 23 hours is associated with a consistent and statistically significant increase in the likelihood of rearrest.⁶ In particular, as can be seen in Figure 1, the relatively flat line that runs across the figure indicates that, even as you move from left to right along the line (indicating increasingly more time spent in pretrial detention), the elevated odds of rearrest remain fairly constant. These results held up even after controlling for a person's likelihood of rearrest.



Figure 1. Risk Ratio Hours Detained and Subsequent Pretrial Rearrest (Reference is 0-23 hours, All p values < 0.001)

Sentencing Outcomes

Multiple analyses were conducted investigating the likelihood of receiving a sentence to incarceration and the length of that sentence. Models were constructed that examined the relationship between pretrial detention and release and the likelihood of being sentenced to jail or prison, and the length of those sentences. The results of these analyses indicated that those released pretrial were about one-half to three-quarters as likely to receive a sentence to prison or jail compared to detained counterparts. Differences of these magnitudes persisted even for those that were released pretrial and were rearrested or failed to appear. Further, when those released pretrial were sentenced to incarceration, they were sentenced to shorter periods of incarceration than were those that were detained. Again, these shorter sentences were observed even when those released were rearrested or failed to appear.

Pre/Post PSA Implementation

In 2013 Kentucky began using the Public Safety Assessment (or PSA) in all 120 counties. The PSA implemented a researchbased and validated assessment tool to assess the risk of pretrial failure (both failure to appear and rearrest).

The analyses presented in Table 4 display the results for failure to appear (FTA) and rearrest by pre- and post PSA eras. The results show that the rates of those individuals detained and released were roughly similar across the two time periods. They also show that rates of FTA rose slightly in the PSA era, as did new rearrests. In addition to the bivariate models presented below, several multivariate models were also run investigating the impact of the PSA implementation on failure to appear, rearrest, and release rates. Overall, these multivariate models indicate that the FTA rate has been trending in an upward direction for some time and that there is not necessarily an increase in FTA rates associated with the date of implementation for the PSA.

Further, models investigating the relationship between the PSA implementation and rearrest on pretrial yielded contradictory results. Taken altogether, it is not likely that the implementation of the PSA had much impact on release, FTA, or pretrial rearrest rates. Finally, and of importance, additional analyses disaggregated by year indicate that the effect of pretrial detention on both of these outcomes (FTA and rearrest) remained constant across both the pre-PSA and PSA time periods.

	Ν			Percent	
	Detained	Released	Total	Detained	Released
Pre PSA ¹	182433	531015	713448	0.256	0.744
PSA	198609	578489	777098	0.256	0.744

Table 4. Bivariate results of pre-PSA and PSA eras for failure to appear (FTA) and rearrest 2010-2018.

	Ν		Ν		Ре	rcent	
	No FTA	FTA	Total	No FTA	FTA		
Pre PSA ²	460082	70933	531015	sssss0.866	0.134		
PSA	463067	115272	578339	0.801	0.199		

	N		N Perce		ercent	
	No RA	RA	Total	No RA	RA	
Pre PSA ³	475651	55364	531015	0.896	0.104	
PSA	500837	77502	578339	0.866	0.134	

1 = 2 = 0.032; p = 0.858

2 = 2 = 8564.410; p < 0.001

3 = 2 = 2323.651; p < 0.001

DISCUSSION AND CONCLUSIONS

The purpose of the present study was to extend previous analyses of the effect of pretrial detention on pretrial and sentencing outcomes using data from Kentucky. To do so, analyses were conducted with additional data and more rigorous quantitative methods.

The analyses revealed several key findings:

1) increasing the amount of time spent in pretrial detention was not consistently related to the odds of failing to appear in court; 2) increasing the amount of time spent in pretrial detention was consistently associated with an increased odds of rearrest, 3) those released pretrial had a lower likelihood of receiving a sentence to incarceration and when sentenced to incarceration received a shorter sentence, and 4) race was not a significant factor in predicting either failure to appear or for rearrest, and the relationship between pretrial detention and pretrial outcomes (failure to appear and rearrest) did not vary significantly or consistently by race of the individual or by the time period under investigation.

These results are largely consistent with those found in previous analyses of data from Kentucky, where no "deterrent effect" of pretrial detention was observed on pretrial outcomes. In addition, that no deterrent effects were revealed is also consistent with decades of research⁷ on the effects of custodial sanctions (e.g., incarceration in either jail or prison) on outcomes like recidivism. In fact, the current analyses show that, at least with respect to rearrest during the pretrial period, longer stints in pretrial detention actually did more harm than good in terms of rearrest rates.

The key takeaway from these analyses is that incarcerating people prior to their trial does not result in better pretrial outcomes in terms of failure to appear or rearrest. Indeed, there is no observable "deterrent effect" of pretrial detention, and in fact there is a consistent "criminogenic effect" of pretrial detention on rearrest. This means that *the costly option of incarcerating defendants prior to trial is not being translated into a public benefit of an increase in public safety*.

It is equally important to note that there is no magic amount of time spent in pretrial detention that will result in a consistent public benefit (i.e, the "three day rule" can be safely abandoned)—the reality is that *getting people out of jail sooner rather than later is better*.

These analyses also have important implications and recommendations moving forward. For example:

- 1. Jail time should generally be avoided during the pretrial phase. This is not to say that certain justice-involved persons cannot ever pose a threat to public safety should they be released, but rather that, in most instances, jail is likely the most harmful option during the pretrial stage. Thus and recognizing that the majority of individuals are successful pretrial⁸ -- as a general rule, jail should not be the default choice.
- 2. Judges need to be informed with respect to the present results concerning the consequences of pretrial detention. While the potential for a "deterrent effect" of incarceration is enticing (i.e., that depriving someone of their liberty prevents someone from engaging in crime after release, or through example prevents others from engaging in crime)—and one that judges often assume will occur—the evidence suggests this estimated effect does not exist. At this point, we can say the evidence is clear that pretrial detention is likely more harmful than beneficial.⁹
- 3. It is important to offer resources to justice-involved individuals during the pretrial phase. Research has consistently demonstrated that a service-delivery approach to criminal justice—one that emphasizes treatment and support—is far more effective than one based on punishment.

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ENDNOTES

- 1 See "The Hidden Costs of Pretrial Detention" (2013, LJAF, Christopher T. Lowenkamp, Marie VanNostrand, and Alexander Holsinger); <u>https://nicic.gov/hidden-costs-pretrial-detention</u>
- 2 It is notoriously difficult to establish causality in non-experimental research designs. It is therefore critically important to control for other factors that could be related to the outcome of interest and to accommodate them into a multivariate modeling strategy, which is the approach taken in the present research.
- **3** The discontinuity in the regression models is the number of hours served in jail during pretrial detention. Discontinuities were tested for at 24, 48, 72, and 96 hours of pretrial detention.
- 4 To say that a result is "statistically significant" means that the results that were obtained are unlikely to be the result of sampling error. That is, there can be some random fluctuations in the numbers—where they may not be exactly zero—but we are using a statistical approach that determines whether those small deviations from zero might simple be due to chance.
- 5 These results remained similar across different subsamples of the data (i.e., across different offense and individual characteristics) as well as for different time periods "at risk."
- **6** These results remained unchanged across different multivariate estimation techniques (e.g., logistic regression and regression discontinuity analysis).
- 7 Several meta-analyses of the correctional treatment/sanctions literature have been conducted over the last two decades (see, e.g., Jonson, 2010; Petrich et al., 2021; Smith et al., 2002; Villatez et al., 2015), all of which reach the same general conclusion: that custodial sanctions (like jail relative to remaining in the community) do not consistently reduce recidivism.
- 8 In a review of Public Safety Assessment (PSA) validation research, base rates for pretrial failure, and specifically for experiencing an arrest pretrial for a violent charge range from 1% to nearly 10%. In Kentucky, the base rate for a new violent arrest pretrial was 1.1% (DeMichele et al., 2018), 4% in Lucas County, Ohio (Lowenkamp et al., 2020), and 9.8% in Los Angeles County, California (Hess & Turner, 2021). Other research (not PSA validation studies) found similarly low rates of arrests for violent charges during pretrial. This includes Cook County, Illinois, which reported a 3% base rate (Stemen & Olson, 2020) and Washington, D.C. with a 1% base rate for pretrial arrests for violence for supervision clients (Pretrial Services Agency for the District of Columbia, 2020).
- **9** There is a large body of evidence that stiffening criminal penalties in general do not provide any consistent deterrent effects (Mears & Cochran, 2018; Nagin, Cullen, & Jonson, 2009). Even further, more recent evidence in the form of a review of over 100 studies suggests that custodial sanctions (e.g., putting someone in jail rather than keeping them in the community) provides no benefits in terms of crime control (Petrich et al., 2021).

