Randomized Control Trial Evaluation of the Implementation of the PSA-DMF in Dane County, WI

Summary of Final Report

Respectfully Submitted

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This Summary provides an overview of the Final Report of the Access to Justice Lab at Harvard Law School ("A2J Lab") with respect to a randomized study investigating the use of the PSA-DMF in Dane County, Wisconsin. The A2J Lab's fundamental findings are as follows. First, the PSA-DMF caused modest changes in Commissioner decisions at first appearance hearings in the direction of PSA-DMF recommendations, but there were no corresponding changes (positive or negative) in new criminal activity, new violent criminal activity, failure to appear, number of predisposition incarceration days, or measures of racial fairness. Thus, the PSA-DMF failed to achieve hoped-for improvements in criminal justice outcomes. Second, the most likely reasons for this lack of change are (i) the PSA's inability to classify risk well, and (ii) the fact that bail itself did not deter misconduct. Neither explanation is certain, but both represent the A2J Lab's current best guesses.

I. Introduction and Background

In the early 2010s, the Dane County Community Justice Council ("CJC")[1] accelerated efforts to consider reforms to the County's system for administering individuals between arrest and disposition of criminal charges. One impetus for this effort was concern over perceived racial disparities in the criminal justice system, including during the predisposition period. Another was a desire to reduce, safely, reliance on incarceration. After compiling a report on racial disparities, the CJC implemented a suite of reforms. For example, in July 2016, Dane County courts amended local Rule 206, covering bail hearing procedure, to reduce the amount of time between booking and first appearance hearings.[2] Law enforcement also increased the use of citations as opposed to custodial arrest for some suspected misdemeanors and low-level felonies, resulting in fewer first appearance hearings overall.[3] In 2017, the Courts reduced the use of drug and alcohol testing and GPS monitoring as a condition of release.[4] In 2018, the County implemented state policy regarding the automatic removal of certain criminal records from public-facing websites, a process known as "sunsetting,"[5] as well as systems of text message reminders for court appearance dates. Finally, pretrial services implemented telephone (instead of in-person) check-ins for some individuals on monitored pretrial release.[6]

The CJC's decarceral reform effort also included an investigation into whether the County should incorporate a risk assessment instrument into its predisposition process. In this context, a risk assessment instrument was a scoring system that assigned numbers, or "weights," to certain events (e.g., a defendant's prior convictions) or characteristics (e.g., a defendant's age) to compile a score. The score purportedly classified the risk that an arrested individual if released predisposition would do something undesired, such as be rearrested (particularly for a

[1] The CJC is a collaborative body "composed of executive level criminal justice leaders, including the Presiding Judge, Sheriff, District Attorney, Clerk of Courts, County Executive, and County Board Chair, as well as stakeholders from law enforcement, defense, municipal judiciary, and corrections." It seeks to implement evidence-based policies to improve the County's criminal justice system. https://cjc.countyofdane.com/about-us (last visited January 10, 2024).
[2] https://courts.countyofdane.com/prepare/CompleteRuleList#rule206 (last visited July 27, 2023).
[3] Dane County CJC Research Team, Memo, "Comments/edits on the Interim Report "Randomized Control Trial Evaluation of the Implementation of the PSA-DMF System in Dane County, WI" (memorializing comments and suggested edits to the A2J Lab's Interim Report of Apr. 13, 2020) (on file with the Access to Justice Lab).
[4] Matthew Stubenberg, Memo, "Meeting with Clerk of Court and Register in Probate," Memorializing Conversation on Dec. 12, 2019 (on file with the Access to Justice Lab).
[5] Email exchange, Manager of the Division of Policy and Practice Innovation Dane County Board of Supervisors & Matthew Stubenberg, Jul. 19, 2019 (on file with the Access to Justice Lab).
[6] Dane County CJC Research Team, Memo, supra note 3.

violent offense) or fail to appear at a subsequent court date. Decision makers could review an individual's score when deciding whether to release them before disposition and, if so, the type of conditions to impose. At this time, Wisconsin law required a demanding, and hardly-ever-used, process before an arrested individual could be remanded to jail without possibility of predisposition release. Thus, essentially all arrested individuals could achieve predisposition release if they could comply with ordered conditions. Conditions included how much and what type of bail and what kind (if any) of monitoring. If implemented, a risk assessment instrument's scores would become one among several factors Dane County decision makers would review. Other factors included a law enforcement affidavit/police report, information about the individual's ties to the community, and specifics of the individual's criminal history. Key decision makers who might use a risk assessment instrument included the Commissioner, who made the initial decision regarding predisposition release at the first appearance hearing; the judge, who oversaw the case from first appearance hearing to disposition, and who had the power to change predisposition release conditions (including those regarding bail); and Pretrial Services, which had a role in assigning the frequency and type of contact/check-ins for released individuals ordered to the County's monitoring program.

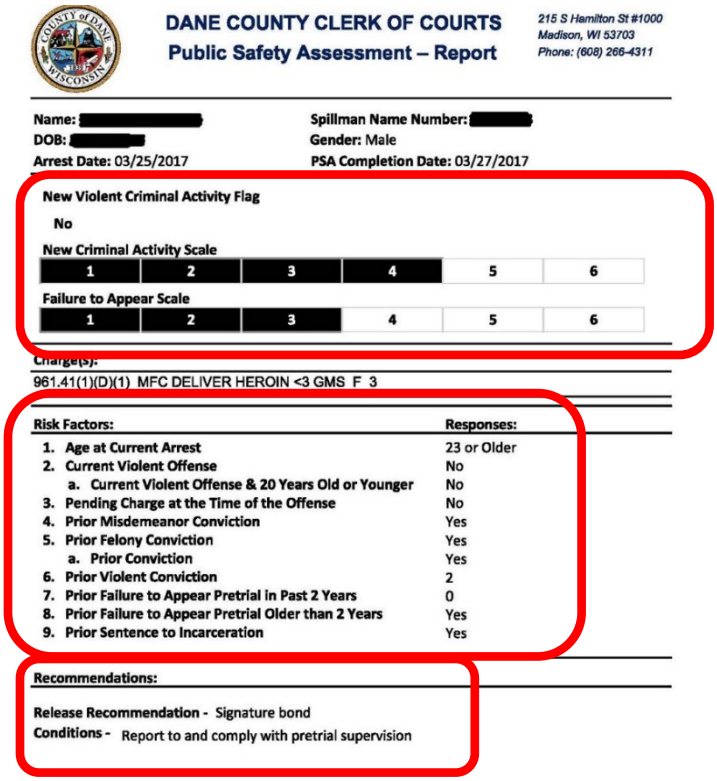
Around 2015, the CJC recommended that the predisposition process include a risk assessment instrument into its predisposition process, but to do so cautiously. At this time, risk assessment instruments were controversial, especially in criminal justice. Detractors argued that they worsened racial disparities, caused more people to be incarcerated, or lessened individualized consideration of each defendant. Proponents, in response, contended that they reduced racial disparities or decreased incarceration. Proponents also argued that risk assessment instruments improved judicial decisions, thereby lowering rates of undesired behaviors such as failure to appear ("FTA"), rearrest for a new offense (called "new criminal activity" or "NCA"), or rearrest for a new violent offense (called "new violent criminal activity" or "NVCA"), during the predisposition period.

In the face of such controversy, and particularly cognizant of concerns regarding racial disparities, the County took an evidence-based approach. When in mid-2017, the Dane County courts began using a risk assessment instrument, the CJC also launched a gold-standard evaluation of the instrument's effects. The gold-standard evaluation took the form of a randomized control trial ("RCT"), the type of study used to assess whether drugs and vaccines can be provided safely to the public. Specifically, the courts did not immediately make the risk assessment instrument available to the Commissioner and other decision makers in all cases. Rather, in partnership with the A2J Lab, it made the instrument available in a randomly selected half of cases and proceeded without the instrument, i.e., just as it did before mid-2017, in the other half. Arrested individuals received notice of the study in the form of a short flyer. The County provided data on criminal justice outcomes for all cases to the A2J Lab for analysis.

The particular risk assessment the CJC chose was called the Public Safety Assessment-Decision Making Framework System ("PSA-DMF"), a product of research funded by Arnold Ventures, formerly the Laura and John Arnold Foundation.[7] The PSA-DMF consisted of two parts. The first part, the PSA, took data on the arrested individual's criminal history, current charge, and age as inputs to produce two risk scores ranging from 1 to 6, with higher numbers signaling higher risk. These two 1-6 risk scores corresponded to risk of NCA and FTA. The PSA also produced a "flag," with a value of 1 signaling an elevated risk NVCA and 0 meaning no

[7] Maximize Opportunity. Minimize Injustice. | Arnold… | Arnold Ventures (last visited December 28, 2023).

such elevated risk.[8] The second part, the DMF, incorporated the PSA scores with community-specific determinations, policies, and values; state statutory requirements; and jurisdictional resources. The result was a recommendation regarding the conditions of release, including bail and supervision level. The PSA scoring system was the same in all jurisdictions, but the DMF recommendation system differed across jurisdictions. The decision on release and conditions rested always with the judicial official. The PSA did not produce a recommendation, and the DMF's was not binding. A redacted sample of the PSA-DMF printout from a Dane County case appears below.



DANE COUNTY CLERK OF COURTS
Public Safety Assessment – Report

215 S Hamilton St #1000
Madison, WI 53703
Phone: (608) 266-4311

Name: [redacted]
DOB: [redacted]
Arrest Date: 03/25/2017

Spillman Name Number: [redacted]
Gender: Male
PSA Completion Date: 03/27/2017

New Violent Criminal Activity Flag

No

New Criminal Activity Scale

1	2	3	4	5	6

Failure to Appear Scale

1	2	3	4	5	6

Charge(s):
961.41(1)(D)(1) MFC DELIVER HEROIN <3 GMS F 3

Risk Factors:	Responses:
1. Age at Current Arrest	23 or Older
2. Current Violent Offense	No
a. Current Violent Offense & 20 Years Old or Younger	No
3. Pending Charge at the Time of the Offense	No
4. Prior Misdemeanor Conviction	Yes
5. Prior Felony Conviction	Yes
a. Prior Conviction	Yes
6. Prior Violent Conviction	2
7. Prior Failure to Appear Pretrial in Past 2 Years	0
8. Prior Failure to Appear Pretrial Older than 2 Years	Yes
9. Prior Sentence to Incarceration	Yes

Recommendations:

Release Recommendation - Signature bond
Conditions - Report to and comply with pretrial supervision

Figure 1: Sample PSA-DMF

A redacted PSA-DMF printout appears to the left. This arrested individual was charged with manufacturing, distributing, or delivering three grams or less of heroin. The information in the top rectangle shows (i) the absence of the PSA NVCA flag, indicating no elevated risk; (ii) a PSA NCA score of 4; and (iii) a PSA FTA score of 3. The middle rectangle shows the PSA inputs and their values. The bottom rectangle shows the DMF recommendation of a signature bond with a referral to Pretrial Services for supervision.

As mentioned above, the County launched the PSA-DMF in mid-2017. With generous financial support from Arnold Ventures, the County and the A2J Lab simultaneously launched the RCT. From mid-2017 until December 31, 2019, the Commissioner, the prosecutor, and the defense attorney at each first appearance hearing had access to the PSA-DMF report for a randomly selected half of cases, and no such access for the other half. The CJC and the A2J Lab followed study cases until December 31, 2021. The CJC provided final data to the A2J Lab for analysis over the ensuing months. This report summarizes the A2J Lab's findings.

II. Changes in Decisions But No Broader Effect (Good or Bad)

The gist of the RCT study was a comparison of what happened in the cases in which the PSA-DMF was available to the presiding Commissioner (and the attorneys) versus what happened in the cases in which the PSA-DMF was unavailable. Because the assignment of a case to one group or the other was random, the two groups were as similar as possible in all ways except whether the PSA-DMF was available. Any statistically significant differences in results between

[8] A discussion of the PSA's inputs, initial integer weights, and processing of those weights into 1-6 FTA and NCA risk bands is available at https://advancingpretrial.org/psa/factors/ (last visited Oct. 25, 2022).

the two groups, meaning differences unlikely to be due to chance, were thus attributable to the availability of the PSA-DMF. The A2J Lab examined the data to assess differences, if any, in six areas: Commissioner initial release decisions; FTA; NCA; NVCA; number of days of predisposition incarceration; and measures of racial and gender fairness.

A word regarding terminology: when a Commissioner at an initial release hearing assigned a defendant a "signature bond," then for the purposes of that case,[9] the arrested individual could be released predisposition without the requirement of depositing money ("bail") with the County. A "cash bail" decision meant that, to achieve release, the individual had to deposit the amount specified by the County, with the amount subject to seizure if the individual violated the conditions of release. During the study period, just over 70% of arrested individuals received signature bonds. About half of the remaining 30% received cash bail of $500 or less ("low bail"), and the other half received cash bail of more than $500 ("high bail").

A nutshell simplification of the A2J Lab's findings is as follows: the availability of the PSA-DMF printout caused moderate changes in Commissioner initial release decisions. It caused no statistically significant change, good or bad, in any of FTA, NCA, NVCA, number of days of predisposition incarceration, or measures of racial (or gender) fairness.

A. Commissioner Decisions: Moderate Effect

The availability of the PSA-DMF caused modest changes in Commissioner decisions, and the changes were in the expected direction. In other words, when the PSA's NCA, NVCA, or FTA scores indicated higher risk, the availability of the PSA-DMF printout caused Commissioners to assign cash bail (sometimes low, sometimes high) more often. In contrast, when the NCA, NVCA, or FTA scores indicated lower risk, for the most part, the availability of the PSA-DMF printout caused no or small changes, with some increased assignment of signature bonds or of low bail. Most differences were around 5-10 percentage points and were not statistically significant. A few were 11-14 percentage points, and there was one 24-percentage-point difference (corresponding to individuals receiving an FTA score of 5); these were all statistically significant.

The following tables illustrate. Table 1 shows the fraction of cases in which the Commissioner assigned a signature bond, low cash bail (less than or equal to $500), and high cash bail (greater than $500) for individuals receiving an NCA score of 5. Here, there is a change of 13 percentage points. Table 2 shows the same decision fractions for individuals receiving an FTA score of 1. Here, there is a change of 4 percentage points.

Table 1: Commissioner Decisions (Fractions) by Treatment Condition, NCA Score of 5

NCA = 5, Fraction of Cases	Signature Bond	Low Cash Bail	High Cash Bail
PSA-DMF Available	.45	.30	.25
PSA-DMF Not Available	.58	.19	.23
Difference	-.13	.11	.02
Statistically Significant?	Yes	Yes	No

[9] Not all individuals receiving signature bonds secured immediate release. An individual receiving a signature bond might, for example, be on pretrial release in another criminal matter, or be the subject of a probation or immigration hold. Such individuals might not be released immediately, or at all.

Table 2: Commissioner Decisions (Fractions) by Treatment Condition, FTA Score of 1

FTA = 1, Fraction of Cases	Signature Bond	Low Cash Bail	High Cash Bail
PSA-DMF Available	.91	.03	.06
PSA-DMF Not Available	.88	.02	.10
Difference	.03	.01	-.04
Statistically Significant?	No	No	No

Overall, the PSA-DMF group experienced a three-percentage-point reduction in the frequency of signature bonds, a statistically significant difference. The A2J Lab does not consider this reduction of great importance for two reasons. First, three percentage points does not seem substantively large. Second, as described below, the lower signature bond rate in the PSA-DMF group did not translate into a statistically significant difference in predisposition incarceration days. The PSA-DMF group actually experienced a lower average number of predisposition incarceration days, although again, this effect was not statistically significant.

To place the above figures in context: the A2J Lab has completed a similar RCT evaluation of the PSA-DMF in another county. There, the availability of the PSA-DMF caused differences as high as 35-40 percentage points, with most changes statistically significant. Such was not the case in Dane; the availability of the PSA-DMF caused only moderate differences.

B. NCA, NVCA, and FTA: No Differences

The purpose of the PSA-DMF was not just to change Commissioner decisions. Rather, the hope was that the availability of the PSA-DMF printout would change Commissioner decisions so as to reduce some or all of NCA, NVCA, FTA, the number of days of predisposition incarceration, or measures of racial or gender disparity. No such reductions emerged. The moderate changes in Commissioner decisions did not translate into improved or worsened criminal justice outcomes. Instead, there were no statistically significant effects. Figures 2-4 illustrate.

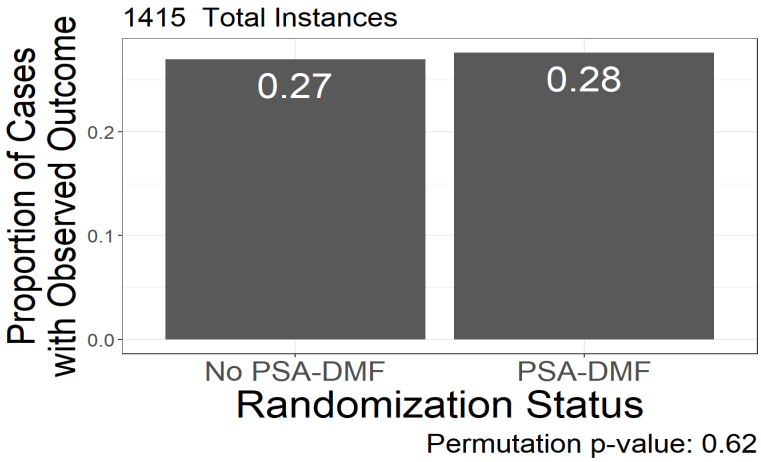
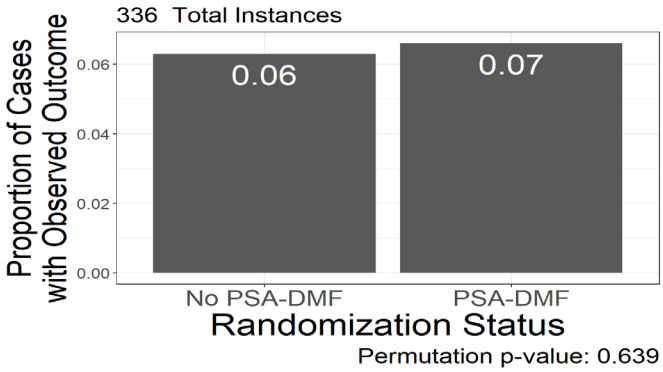


Figure 2: NCA Comparison
This figure shows the fraction of no-PSA-DMF cases (left column) and of PSA-DMF cases (right column) experiencing at least one NCA during the predisposition period. NCA rates, (0.27 and 0.28), were virtually identical for the two groups. The PSA-DMF had no effect.

Figure 3: NVCA Comparison
This figure shows the fraction of no-PSA-DMF cases (left column) and of PSA-DMF cases (right column) experiencing at least one NVCA during the predisposition period. NVCA rates, (0.06 and 0.07), were virtually identical for the two groups. The PSA-DMF had no effect.



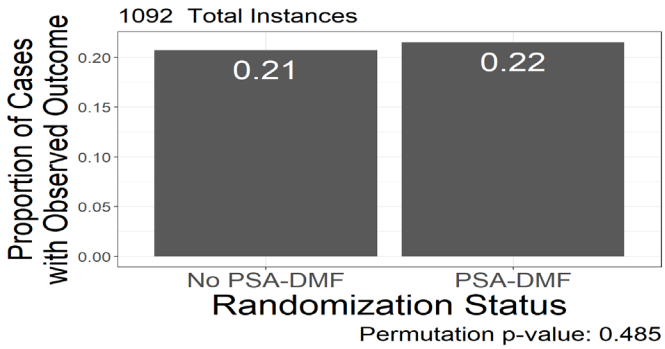


Figure 4: FTA Comparison
This figure shows the fraction of not-PSA-DMF cases (left column) and of PSA-DMF cases (right column) experiencing at least one FTA during the predisposition period. FTA rates (0.21 and 0.22), were virtually identical for the two groups. The PSA-DMF had no effect.

C. Number of Days of Predisposition Incarceration: No Difference

Results were similar for the number of days of predisposition incarceration. Figure 5 graphs the distribution of predisposition days incarcerated for the PSA-DMF group versus the no-PSA-DMF group. The two distributions were similar, with the overwhelming majority of arrested individuals experiencing incarceration time periods on the short end of the distribution. There was no statistically significant difference between the PSA-DMF group and the no-PSA-DMF group.

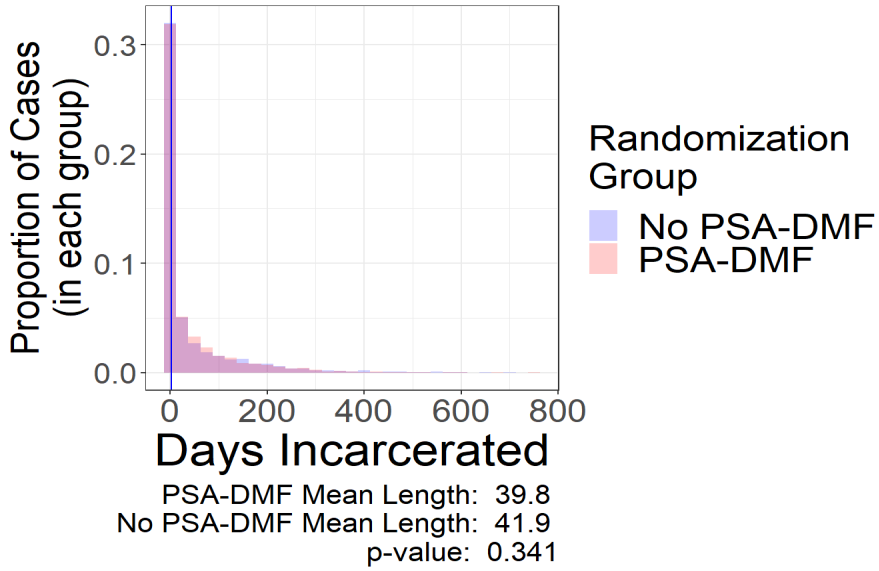
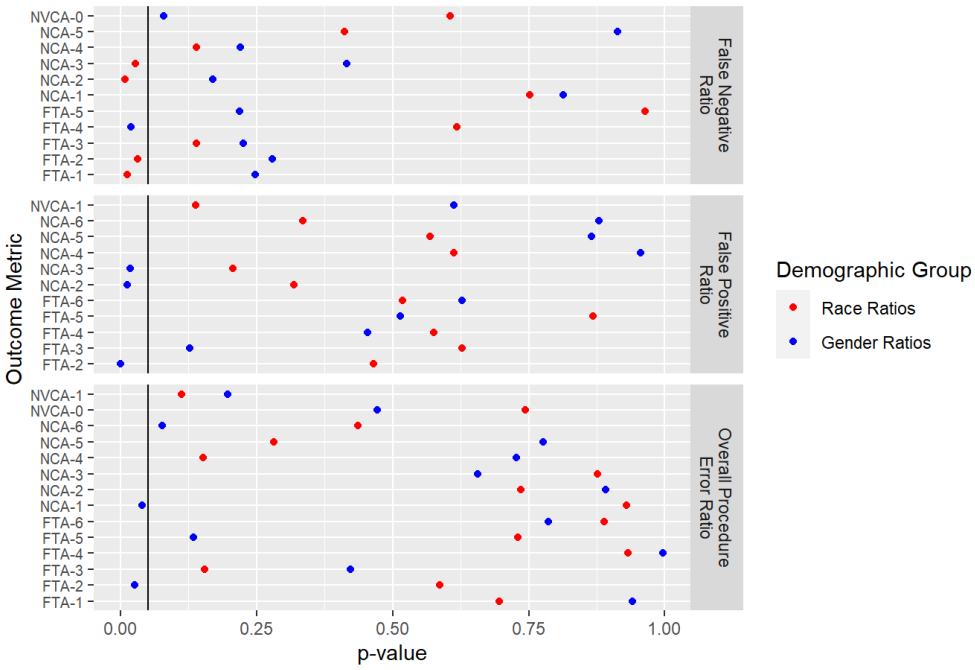


Figure 5: Comparison, Number of Days of Predisposition Incarceration
This figure shows the distribution of number of days of predisposition incarceration for the no-PSA-DMF group (in light blue) versus the PSA-DMF group (in light red). Areas of purple indicate overlap in the distributions. Almost the entire graph is purple, suggesting no difference between the two groups.

D. Measures of Racial and Gender Fairness: No Differences

Results were similar for measures of racial (and gender) fairness. Depicting results for racial and gender fairness comparisons is complicated because there are dozens of fairness measures. Some are mathematically incompatible with others. Most are designed for risk assessment instruments that have only two levels, corresponding in a loose sense to "high" and "low" risk. While the PSA's NVCA flag has two levels, the NCA and FTA scales have values between 1 and 6. The A2J Lab addressed these issues by calculating racial and gender fairness results for several such metrics and for all possible ways of transforming a 1-6 measure into two levels. The A2J Lab then compared the metrics for the PSA-DMF group versus the no-PSA-DMF group, looking for patterns of statistically significant differences. Sample results appear in Figure 6, which graphs statistics known as "p-values" for comparisons of the PSA-DMF and no-PSA-DMF groups. Generally speaking, p-values *below* 0.05 indicate statistical significance. There were few statistically significant differences, and no patterns emerged. There was thus no evidence that PSA-DMF availability improved or worsened racial or gender disparities.

Figure 6: Prediction Matrix Racial & Gender Comparisons[10]



This figure depicts p-values for comparisons of racial (red) and gender (blue) metrics of fairness across PSA-DMF versus no-PSA-DMF groups. Patterns of values less than 0.05 would indicate an improvement or worsening of racial or gender disparities. No such patterns were evident.

III. Possible Explanations for the Absence of Effects

As suggested several times above, the fundamental result of this study was that, while the availability of the PSA-DMF caused moderate changes in Commissioner decisions, there were none of the (hoped-for) reductions in NCA, NVCA, FTA, number of days of predisposition incarceration, or measures of racial disparity. Instead, for the most important criminal justice

[10] The metrics deployed in Figure 6 are all based on a so-called "prediction matrix," also called a "confusion matrix." An explanation of this kind of matrix and accompanying metrics appears in the A2J Lab's interim Dane County report starting on page 67, see Dane-County-PSA-DMF-RCT-Interim-Report.pdf (a2jlab.org). In a nutshell, a confusion matrix compares predictions (e.g., "High Risk" versus "Low Risk") to actual occurrences (e.g., "Bad Outcome" versus "Good Outcome").

outcomes, there were no relevant statistically significant differences in the PSA-DMF versus no-PSA-DMF groups. This section discusses why such might have occurred, i.e., why no improvements in criminal justice outcomes emerged.

A variety of explanations are possible for the absence of any changes. Three deserve consideration. First, the availability of the PSA-DMF may not have caused large enough changes in Commissioner decisions. Although this explanation is possible, it is inconsistent with results from a counterpart A2J Lab study in another jurisdiction. Second, the PSA may not have classified arrestee risk well. Third, arrested individuals may not have responded to changes in Commissioner decisions, i.e., assigning a signature bond versus low bail versus high bail. The second and third explanations depend on statistical assumptions that may not be true. That said, because the second and third explanations are consistent with results in the aforementioned counterpart study in another jurisdiction, the A2J Lab currently considers them the most likely reasons for the observed lack of an effect.

A. Less Likely: Insufficient Changes in Commissioner Decisions

As noted above, the availability of the PSA-DMF printout caused moderate changes in Commissioner decision making. Most changes in the assignment of a signature bond, low bail, or high bail were not statistically significant, and those that were tended to be approximately 5-15 percentage points in size. The PSA-DMF could not change the behavior of an arrested individual in terms of engaging in FTA, NVCA, or any other outcome directly (the way, say, an antibiotic changes the progression of a disease). Rather, the PSA-DMF could work only by changing Commissioner decisions. If the PSA-DMF did not change decisions enough, it could not change criminal justice outcomes.

While this explanation is possible, the A2J Lab's current best guess is that it is not the source of the observed lack of effect on FTA, NVCA, NCA, number of days of predisposition incarceration, and measures of racial or gender disparity. In a similar study in another jurisdiction, the results of which are not yet public, the A2J Lab observed large changes in the decisions of magistrate judges (the jurisdiction's equivalent of Commissioners). Changes of 15-25 percentage points were not uncommon, and some were as high as 25-40 percentage points. But that jurisdiction, like Dane County, did not experience statistically significant effects on criminal justice outcomes. With this in mind, the A2J Lab does not currently believe that the modest size of the changes in Commissioner decisions is a sufficient explanation for the lack of an effect in criminal justice outcomes.

B. More Likely: Insufficient Classification Power

The availability of the PSA-DMF printout could change criminal justice outcomes only if its classifications were strong enough to provide the Commissioner with powerful information. For example, if an individual receiving a PSA FTA score of 4 was actually little different in terms of risk from an individual with a PSA FTA score of 6, the FTA scale likely did not provide the Commissioner with enough information to make decisions that would reduce FTA.

The A2J Lab's statistical tests suggest that, in fact, the PSA-DMF's classifications were not strong enough to provide the Commissioner with powerful information. Figure 7 illustrates. This figure graphs the FTA rate, for each value of the PSA's 1-6 FTA scale, for cases in which the arrested individual spent at least one day out of jail during the predisposition periods. There was only a 22-percentage-point difference between the lowest risk category (1) and the highest risk category (6), meaning that on average each step up (1 to 2, 2 to 3, etc.) corresponded to about

a 4-percentage-point increase in FTA rate. Jumps in score from, say, 1 to 3, or from 4 to 6, did not correspond to discernible differences in risk. More than half of the cases receiving a score of 6, the highest risk classification, did not include an instance of FTA.

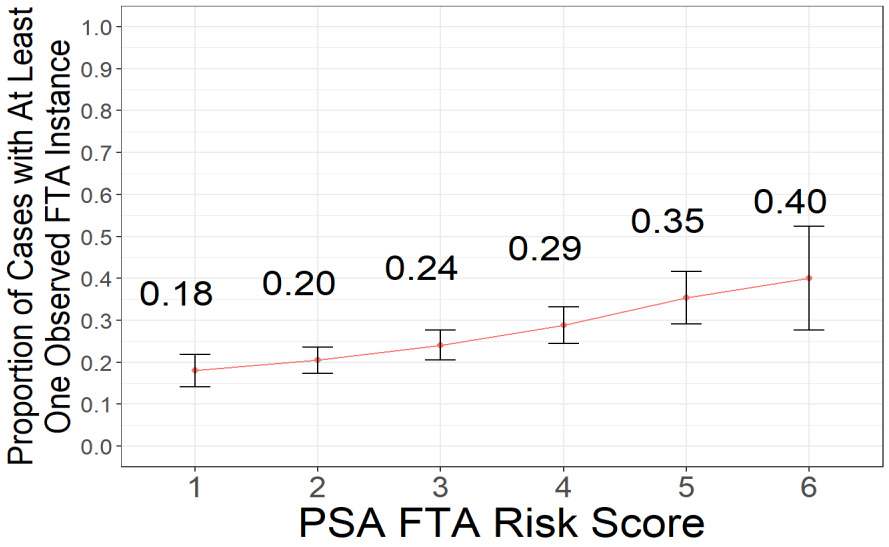


Figure 7: FTA Rates by PSA FTA Score
This figure shows the FTA rates by PSA FTA score for cases in which the arrested individual spent at least one predisposition day out of jail. Actual FTA rates for the scores were surprisingly similar, suggesting that the FTA score did not provide strong differentiating information about FTA risk.

Graphs for NCA and NVCA were similar, and more sophisticated statistical tools also suggested that the PSA's scores did not classify risk well.

This explanation must be interpreted with caution. The key problem with this analysis is that the A2J Lab cannot observe FTA (or NCA or NVCA) rates for individuals while they are incarcerated. The fact of incarceration prevented (with rare exceptions) arrested individuals from experiencing NCA, NVCA, and FTA. If Commissioners made excellent predictive decisions by, for example ordering high cash bail for people likely to experience FTA, and if the high cash bail resulted in extensive predisposition incarceration that prevented FTA, then graphs like Figure 8 would be misleading. Existing statistical techniques do not allow the A2J Lab to rule out this possibility. That said, the A2J Lab's best guess is that this problem did not cause the PSA's risk scales to be less informative because arrested individuals in Dane County spent so much of their predisposition periods outside the jail. (As noted above, more than 70% of arrested individuals received signature bonds.) Arrested individuals in this study experienced a combined 569,433 days between first appearance and case disposition; 471,246, or 83%, of those days did not involve incarceration. Although hardly definitive, these figures are suggestive that near-perfect Commissioner decisions did not mask strong PSA classifying power, particularly for FTA, given that courts (not arrested individuals) set appearance dates, and do so without regard to whether an individual is incarcerated. In short, one likely explanation for the PSA-DMF's lack of effect on criminal justice outcomes was the risk scores' lack of classifying power.

C. More Likely: No Deterrence

The third possible explanation for the fact that the availability of the PSA-DMF had no statistically significant effect on criminal justice outcomes is that bail itself did not deter arrested individuals from engaging in NCA, NVCA, or FTA. As a result, no matter how strong the PSA's classifications might have been, there was little useful work that any risk assessment instrument could do because Commissioner bail decisions could have little on criminal justice outcomes.

The availability of the PSA-DMF could change criminal justice outcomes only by changing Commissioner decisions. But what if Commissioner decisions, at least those respecting bail, could not themselves affect NCA, NVCA, and FTA rates? If so, then the PSA-DMF, which could affect outcomes only through Commissioner decisions, could not affect NCA, NVCA, and FTA. Moreover, the number of predisposition incarceration days and demographic fairness metrics in part depended on NCA, NVCA, and FTA because reincarceration during the predisposition period ordinarily stemmed from one of these events. Thus, if Commissioner decisions could not affect rates of NCA, NVCA, and FTA, then there was little if any useful work the PSA-DMF could do. In Dane County, and in the counterpart jurisdiction in which the A2J Lab recently completed a similar study, it appears that assigning bail as a condition of release did not deter misbehavior. In other words, the vast majority of arrested individuals either would or would not commit NCA regardless of whether the Commissioner assigned a signature bond, low bail, or high bail. The vast majority of individuals either would or would not commit FTA regardless of whether the Commissioner assigned a signature bond, low bail, or high bail. The same was true for NVCA. The Commissioner, and thus the PSA-DMF, were powerless to affect via bail what happened for the overwhelming majority of arrested individuals.

Over the past several years, the A2J Lab and its research partners co-developed new statistical techniques, techniques adapted from medical (particularly vaccine) research. Those techniques allowed the research team to estimate whether bail deters negative criminal justice outcomes during the predisposition period. The techniques worked by estimating the fraction of individuals falling into one of the following four categories.

- “Safe” individuals would not commit NCA (or NVCA or FTA) regardless of Commissioner decision. In other words, “safe” individuals would not commit NCA (or NVA or FTA) if the Commissioner assigned a signature bond, assigned low bail, or assigned high bail. No bail was needed to deter.
- “Easily preventable” individuals would commit NCA (or NVCA or FTA) if the Commissioner assigned a signature bond but would avoid doing so if the Commissioner assigned low bail or high bail. In other words, for “easily preventable” individuals, low bail was enough to deter misbehavior.
- “Preventable” individuals would commit NCA (or NVCA or FTA) if the Commissioner assigned a signature bond or low bail but would avoid doing so if they received high bail. In other words, for “preventable” individuals, only high bail was enough to deter.
- “Risky” individuals would commit NCA (or NVCA or FTA) regardless of Commissioner decision. In other words, “risky” individuals would experience NCA (or NVA or FTA) if the Commissioner assigned a signature bond, assigned low bail, or assigned high bail. No amount of bail was sufficient to deter.

Under these definitions, bail could have had no effect on Safe or Risky individuals. Safe or Risky individuals would, or would not, commit NCA (or NVCA or FTA) regardless of Commissioner decision. The Commissioner was powerless to affect via bail what they would do. The Commissioner’s decision could make a difference only for Easily Preventable and Preventable individuals.

The new statistical techniques referred to above allowed estimation of the fraction of arrested individuals in the Dane County study who were Safe, Easily Preventable, Preventable, and Risky for each of NCA, NVCA, and FTA. Figure 9 shows the results for FTA. Results for NCA and NVCA were similar. Figure 8 suggests that about 95% of arrested individuals were either Safe or Risky, i.e., in the two categories for which the Commissioner was powerless to affect via the bail decision whether FTA would occur.

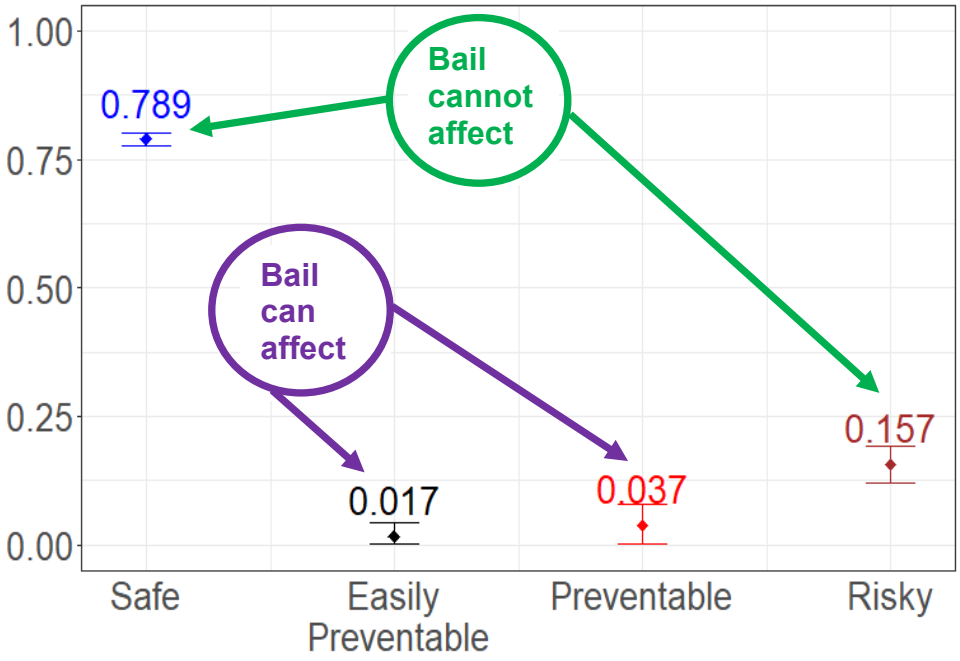


Figure 8: Fraction of Arrested Individuals in Each Deterrence Category for FTA Under the definitions discussed above, the Commissioner's bail decision could affect FTA only for Easily Preventable and Preventable individuals. This graph shows that only about 5% of arrested individuals fell into one of these two categories. For the other (approximately) 95% of arrested individuals, the Commissioner's decision could not affect FTA via bail.

This analysis requires one clarification and one caveat. The clarification is that the categories Safe, Easily Preventable, Preventable, and Risky are rough. They are rough because they are defined by where individuals fall vis-à-vis the classifications of low bail (here, less than or equal to $500), or high bail (here, greater than $500). There is a difference between bail amounts of $600 and $60,000, but both are considered high bail. Figure 8 and its counterparts (not shown) are therefore only approximations. Nevertheless, in the counterpart study in another jurisdiction, the A2J Lab used different definitions for low bail and high bail in a jurisdiction with different bail practices, including an active surety bond industry. In that jurisdiction, fewer than 20% of arrested individuals received the equivalent of a signature bond, and low bail meant less than or equal to $4,000 (requiring effectively a $400 non-refundable cash payment to achieve release). Despite all these differences, the A2J Lab observed substantively the same results; more than 95% of arrested individuals were either Safe or Risky for all of NCA, NVCA, and FTA, meaning that the bail decision could not affect what they did. Because the results in Figure 8 and its counterparts replicate in a jurisdiction with different predisposition processes, the A2J Lab's current best guess is that the results do not depend too heavily on the niceties of chosen categories or bail procedures.

The caveat is that the analysis above depends on the assumption that Commissioner decisions did not systematically depend too heavily on information available to the Commissioner but not to the A2J Lab. If, for example, Commissioner first appearance decisions turned a great deal on the contents of probable cause affidavits and/or on an arrested individual's ties to the community, facts that Commissioners but not the A2J Lab observed, then the analyses depicted in Figure 9 (and its counterparts) could be wrong. The A2J Lab is working to address this possibility in a third jurisdiction in which data collection is still ongoing.

IV. Conclusion

The CJC adopted the PSA-DMF as part of its overall effort to reduce the footprint of predisposition incarceration and to address perceived racial inequalities. The CJC did so

cautiously, with an eye toward gold-standard assessment of the PSA-DMF's effects. Many, including the A2J Lab, hoped that the PSA-DMF would help to reduce some or all of new criminal activity, particularly new violent criminal activity, as well as failure to appear, the number of predisposition incarceration days, and measures of racial disparity. Others feared that the PSA-DMF would worsen those same outcomes. The fact that neither those hopes nor those fears were realized shows the wisdom of the CJC's approach.

Many, perhaps most, efforts to make the world a better place fail. Failures are particularly common in criminal justice. But given the problems we face in the criminal justice system, complacency and inertia are not options. Trial and error is essential for improvement. The A2J Lab is grateful for the opportunity to participate in Dane County's improvement efforts.