

Randomized Control Trial Evaluation of the Implementation of the  
PSA-DMF in Dane County, WI  
Abbreviated Summary of Final Report

Respectfully Submitted

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This Abbreviated 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 risk assessment instrument 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 (“NCA”), new violent criminal activity (“NVCA”), failure to appear (“FTA”), number of predisposition incarceration days, or measures of racial fairness. Thus, the PSA-DMF failed to achieve hoped-for improvements in criminal justice outcomes; that said, it is also true that no harmful consequences occurred. Second, the 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.

## Background

Individuals arrested in Dane County are brought to the Jail. Shortly thereafter, they participate in a first appearance hearing before a judicial officer called a “Commissioner.” The Commissioner decides whether to assign a “Signature Bond,” meaning the individual need pay no money to be released pretrial, or “Cash Bail,” meaning the individual can be released pretrial only if they deposit a specified amount of money with the court. The Commissioner also decides whether to require conditions of release, such as periodic check-ins with Pretrial Services.

In the 2010s, the Dane County Community Justice Council (“CJC”), motivated by among other things concerns about possible racial disparities in the County’s criminal justice system, began investigating the use at first appearance hearings of a “risk assessment instrument.” A risk assessment instrument is a system translating criminal history, charges, and other variables into numerical values purportedly indicating an individual’s risk of misbehavior if released pretrial.

Arnold Ventures, a philanthropic foundation, funded the development of the Public Safety Assessment-Decision Making Framework (“PSA-DMF”) in the early 2000s. The PSA-DMF consisted of two parts. The first part, the PSA, used data on an arrested individual’s criminal history, current charge, and age to produce separate scores ranging from 1 (lowest risk) to 6 (highest risk) for NCA and FTA. The PSA also produced a “flag,” with a value of 1 signaling an elevated risk NVCA and 0 meaning no such elevated risk. 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 non-binding recommendation regarding the conditions of release, including bail and supervision level.

In 2017, the Dane County Community Justice Council (“CJC”) decided to introduce the PSA-DMF at first appearance hearings, but to evaluate credibly the risk assessment instrument’s effects. The A2J Lab and the CJC designed a study, called a randomized control trial, similar to experiments used to test new drugs. In a randomly selected half of hearings, the Commissioner (as well as the prosecuting and defense attorneys) would have access to the PSA-DMF. In the other randomly selected half of hearings, the PSA-DMF would not be available. The study randomized cases from mid-2017 until the end of 2019. After a two-year follow-up period, the A2J Lab began receiving and analyzing data. The A2J Lab compared the PSA-DMF group to the Not-PSA-DMF group with respect to the following outcomes: NCA, NVCA, FTA, number of pretrial incarceration days, and measures of racial fairness. The hope was that the PSA-DMF would cause reductions in some or all of these metrics.

### Findings

The A2J Lab found that the PSA-DMF caused moderate changes in Commissioner decision making in the direction of the risk assessment instrument’s recommendations. Generally, arrested individuals with higher PSA scores received Cash Bail more often, with the highest scores leading to higher Cash Bail amounts, and vice versa. The changes were statistically significant, but modest in size. Table 1 provides an example of the changes in Commissioner decisions. It shows that for individuals receiving NCA scores of 5 (indicating high risk of NCA), PSA-DMF cases received Signature Bonds less frequently than Not-PSA-DMF cases by 13 percentage points. In those NCA = 5 cases, Commissioners’ use of Low Cash Bail (meaning bail less than or equal to \$500) increased by 11 percentage points in the PSA-DMF group versus the Not-PSA-DMF group, with little difference in High Cash Bail rates.

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

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

The changes in Commissioner decision making did not, however, lead to changes in NCA, NVCA, FTA, number of pretrial incarceration days, or measures of racial fairness. For these outcomes, there were few differences of any kind, and no statistically significant differences. Thus, the hoped-for improvements from the PSA-DMF did not materialize.

The graph below illustrates this result for NCA. It shows that 28% of PSA-DMF cases experienced NCA as compared to 27% of Not-PSA-DMF cases. This one-percentage-point difference is not statistically significant, meaning that it is most likely due to change.



**Figure 1: 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.

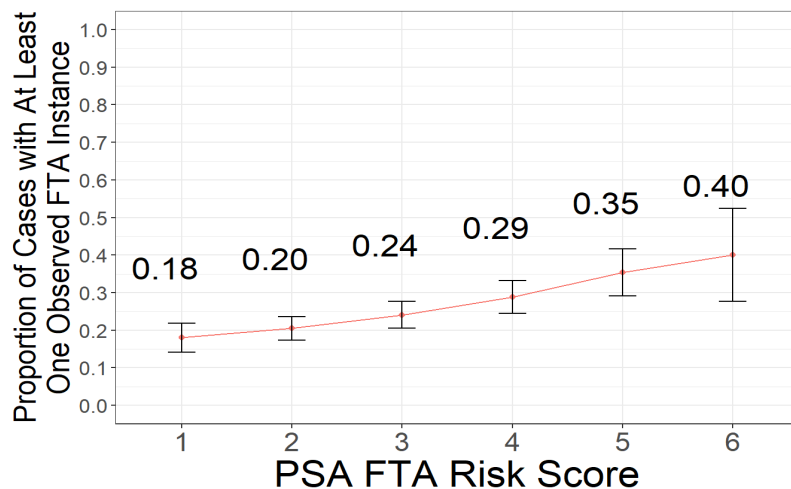
Thus, the PSA-DMF had no effect on NCA. Results were similar for NVCA, FTA, number of predisposition incarceration days, and measures of racial fairness.

In short, 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. The PSA-DMF also caused no harms. It simply had no effect.

**Possible Explanations for the Lack of Any Effect**

The most likely, but not certain, explanations for the absence of any material effect from the PSA-DMF are that (i) the PSA lacked sufficient power to classify arrestee risk well in Dane County, and (ii) bail had little if any deterrent effect on failure to appear or new (violent) criminal activity. Neither explanation is certain, but they represent the A2J Lab’s current best guess.

With respect to the first possible explanation, the following graph demonstrates that for individuals achieving release at any point in their pretrial periods, increases in PSA FTA scores corresponded to only modest changes in actual FTA. Results were similar for NCA and NVCA. This fact, while not conclusive, suggests that the PSA did not classify risk well in Dane County.



**Figure 2: 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.

The other possible explanation for the fact that 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.

Recent developments in statistics allow estimation of the fraction of individuals who "respond" to bail in the sense that they will engage in some undesired action (e.g., NCA, NVCA, or FTA) if given (for example) a Signature Bond but will not do so if given (for example) Low Cash Bail. When applied to Dane County, these techniques demonstrated that only about five percent of arrested individuals fit into this deterrable category. The other 95 percent of individuals either would or would not engage in undesired behavior regardless of the Commissioners' bail decisions. If true, this explanation suggests that the PSA-DMF caused no changes in criminal justice outcomes because the decision it was designed to improve could not change criminal justice outcomes.

Neither the first nor the second explanation is certain. The A2J Lab is investigating whether they also appear in other jurisdictions in which it is pursuing PSA-DMF randomized studies, and it will report its combined results to Dane County in the future.

#### Conclusion

The CJC's engagement in a credible evaluation of a critical part of its criminal justice administration demonstrates an admirable, and rare, commitment to a scientific approach to reform. The A2J Lab hopes that other jurisdictions will emulate Dane County's determination to pursue evidence-based improvements in criminal justice. The A2J Lab is grateful for the opportunity to participate in Dane County's improvement efforts.