# The Value of Pretrial Risk Assessment Instruments:
## Don’t Throw the Baby out with Bathwater

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1. The ProPublica study was based on a single county (Broward, FL) which uses (kind of ) COMPAS which is not a pure pretrial instrument;

2. The study used a two-year follow-up re-arrest data instead of only measuring arrests and FTAs that occurred prior the disposition of the charges by the courts;

3. In so doing the re-arrest rates in the reports were artificially amplified as well as the degree of potential racial bias;

4. Blacks in Broward had a higher pretrial re-arrest rate than whites (as do males versus females);

5. Because blacks had a significant higher re-arrest rate, a higher proportion of them were classified as higher risk as they tend to have lengthier prior criminal records which are associated with re-arrest rates; and,

6. The proportion of false positives for people assessed as high risk but are not re-arrested was higher for blacks as opposed to whites.

The Research Triangle Institute recently completed a re-validation of the PSA as it has been implemented in Kentucky. It reached the following conclusion:

> "After analyzing nearly 165,000 pretrial cases in Kentucky, we found that that the PSA was a good predictor of failure to appear and new arrests and a fair predictor of new violent arrests. We found the PSA predicted equally well on re-arrests for black and white defendants and male and female defendants across the outcomes. The one exception is we found the instrument underestimates the rate at which black defendants would fail to appear in court. Our study suggests that risk assessments can be helpful to judges, but does not replace them. We emphasize that researchers and practitioners need to work more closely to develop risk assessments that maximize accuracy and minimize bias".

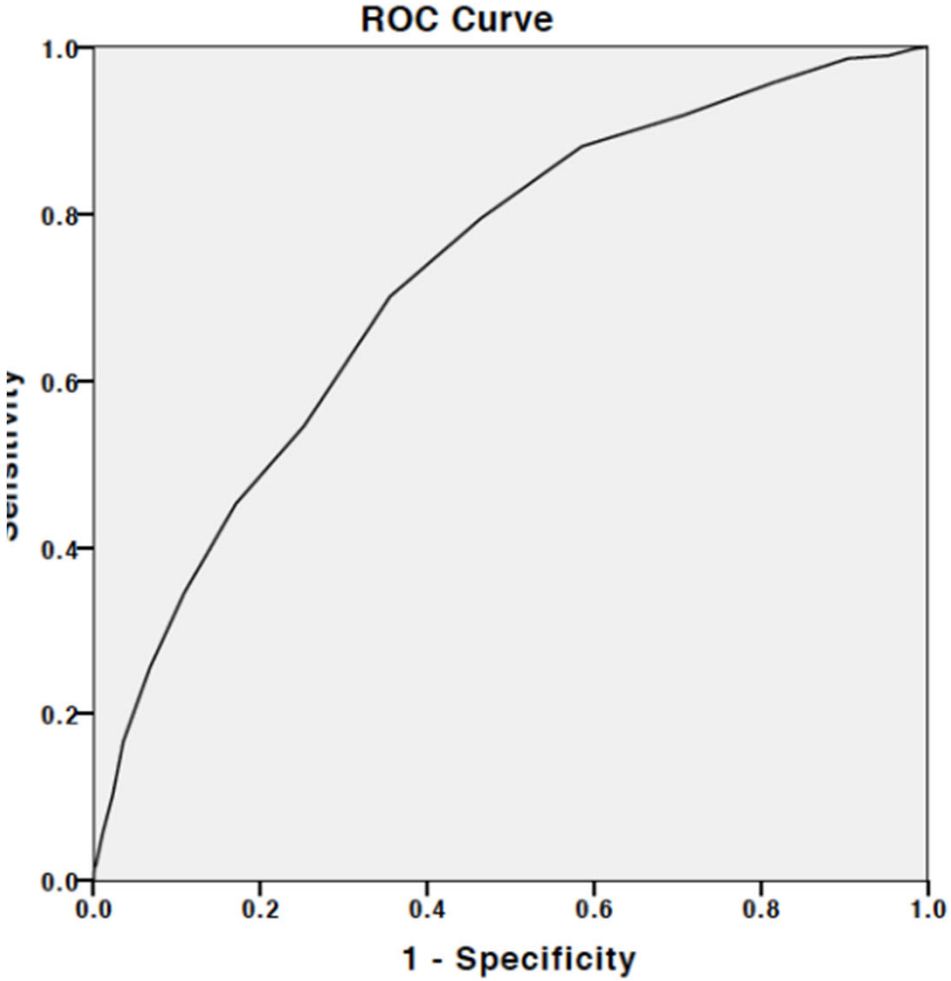
DeMichele, Matthew, Peter Baumgartner, Michael Wenger, Kelle Barrick, Megan Comfort and Shilpi Misra. 2019. The Public Safety Assessment: A Re-Validation and Assessment of Predictive Utility and Differential Prediction by Race and Gender in Kentucky. Research Triangle Park, NC: Research Triangle Institute.

**Table 4. Comparison Between New and Old Charleston Risk Assessment Instruments**

| | VPRAI-R | | CPRAI | |
|---|---|---|---|---|
| Risk Level | % of Defendants | Total Failure | % of Defendants | Total Failure |
| | | | | |
| Low | 37% | 19% | 33% | 10% |
| Moderate | 41% | 31% | 42% | 29% |
| Higher | 22% | 39% | 18% | 45% |
| Highest | NA | NA | 7% | 65% |

**Table 7. CPRAI Risk Level Failure Rate Controlling for Race (Black and White)**

| Risk Level | Race | Median Risk Score | Average Risk Score | % Failure |
|---|---|---|---|---|
| Total | **Total** | **6.0** | **5.7** | **28%** |
| | Black | 6.0 | 6.3 | 30% |
| | White | 5.0 | 4.8 | 25% |
| Low | **Total Low** | **3.0** | **2.6** | **10%** |
| | Black | 3.0 | 2.8 | 11% |
| | White | 2.0 | 2.4 | 9% |
| Moderate | **Total Moderate** | **6.0** | **6.0** | **29%** |
| | Black | 6.0 | 6.2 | 28% |
| | White | 6.0 | 5.7 | 29% |
| Higher | **Total Higher** | **9.0** | **9.2** | **45%** |
| | Black | 9.0 | 9.2 | 44% |
| | White | 9.0 | 9.1 | 49% |
| Highest | **Total Highest** | **12.0** | **12.4** | **65%** |
| | Black | 12.0 | 12.4 | 63% |
| | White | 12.0 | 12.3 | 71% |




**New Overall AUC = .727**

**Overall AUC for Blacks = .708**

**Overall AUC for Whites = .756**

**VPRAI-R AUC = .617**

PRA Principles:

1. *Due Process and Transparency*. The results of any risk assessment completed in any individual must be fully disclosed to that persons with an ability to contest its accuracy.

2. *Reliability*. All risk instruments must undergo regular reliability tests to ensure the results are accurate. Defendants should be screened in a uniform and consistent manner.

3. *Validity.* All risk instruments should be properly tested to ensure they are properly scoring people by their risk to re-offend and or fail to appear in court during the time they are under pretrial status. PRAs should not be tested on re-arrests that have occurred after their cases have been disposed of. Further, future validation studies should also seek to also use convictions rather than arrests as the dependent variable.

4. *Tested on Local Population.* Risk assessment instruments perform best when tested on its local population rather than another city or state. Consequently, PRAs that have been developed in other jurisdictions need to be re-tested in the local jurisdiction and adjusted accordingly.

5. *Tested for Racial and Gender Bias*. All instruments must show that there is little if any systemic racial and gender bias in the assessment process. This is best accomplished by relying on the fewest number of risk factors that are not correlated socio-economic status (e.g., education level, employment history, etc.).

6. *Criminal Justice Factors. S*coring factors should consist of prior conviction factors only with time limits (e.g. felony convictions in the past 10 years, prior supervision failures in the past 10 years, etc.) and the attributes of the offense all of which have been shown to be strongly associated with risk.

*7. Use in the Detention Decision.* Risk assessment instruments were not designed for nor should they be used to be the sole determinate of a detention decision. Given that virtually all detained defendants are suitable candidates for release based on the criteria of flight and danger to the community, there should be a presumption of release. In this content risk assessment is best used to assign conditions of supervision rather than to decide whether to release or not.