Methodology for Developing the Statewide DRAI

To enable counties to meet the legislative requirement of using a detention risk assessment instrument (DRAI) to inform detention decisions in delinquency cases, OCFS designed and validated a DRAI for use outside of New York City (the city already uses a validated tool to inform these decisions). More specifically, agency researchers designed the instrument based on a research study of factors that were statistically correlated with the risk of re-arrest or failure to appear in court pending a court disposition.

As a first step toward creating an empirical DRAI for the state, OCFS researchers needed comprehensive and reliable information on recent delinquency cases in New York. To access this information they invited six counties to participate in a DRAI development study—Albany, Dutchess, Erie, Monroe, Onondaga, and Suffolk. The state selected these counties based on the size of their juvenile delinquency caseloads, their commitment to detention reform, their use of the CaseLoad Explorer system (a comprehensive case management system for probation departments), and their willingness and potential to contribute to the empirical process.¹ During the early months of the study development, OCFS met with juvenile justice stakeholders in each of the six counties to provide an overview of the study methodology; learn more about local data sources; and solicit input from stakeholders about the types of factors that should be tested for inclusion in the instrument.

Once the state identified appropriate and available data sources, OCFS researchers set about analyzing data on 1,564 youth who were petitioned on a juvenile delinquency offense in 2010 (across the six study counties).² As stated earlier, the goal of the analysis was to identify factors correlated with - or statistically predictive of - re-arrest and/or failure to appear in court during the time between a youth’s original arrest and his/her disposition (as opposed to over the long term). Researchers aimed to test as wide a range of potential risk factors as possible, including many factors recommended by juvenile justice stakeholders from the study counties.³ To conduct the analysis, they explored data from multiple sources, including the Office of Court Administration (OCA), the Division of Criminal Justice Services (DCJS), OCFS, and county probation departments. As a result of challenges accessing certain data as well as limitations of certain sources, however, researchers relied on data from OCA and DCJS for the final DRAI development process.

Despite data challenges, OCFS was able to test more than 250 possible predictors of re-arrest and failure to appear, including factors related to current offense, current legal circumstances (e.g.,

¹At the time of the study, five of the counties were already using DRAIs. Dutchess was using the detention tab of the Youth Assessment and Screening Instrument (YASI), a national tool developed by Orbis Partners. Albany, Erie, Monroe, and Onondaga, in turn, were using consensus-based instruments, which were created based on the values and experiences of juvenile justice stakeholders in the locality. While none of these instruments are validated, they received critical support from local officials; played a significant role in reducing the use of detention in many of the jurisdictions; and were invaluable in helping researchers decide what factors to include in the DRAI study.
²The original sample included 1,803 youth, but a small subset were excluded because they either 1) had fewer than 10 days in the community (or at risk to be rearrested or not appear in court) between incident and disposition; or 2) had more than 180 days between incident and petition.
³Due to data limitations, however, not every recommended measure could be tested.
whether the young person was on probation supervision at the time of the arrest, whether or not he/she had an active warrant), legal history (prior arrests and prior petitions), and adjudication/service history (with services defined as dispositions received for a given adjudication, such as probation or placement). Of those tested, four factors were significantly correlated with re-arrest and/or failure to appear and are present on the OCFS-developed DRAI. As seen below, the three factors are variations on the theme of legal history.

- Youth had a JD petition filed in Family Court prior to current arrest
- Youth had a prior Persons in Need of Supervision (PINS) petition filed in Family Court prior to current arrest
- Youth had a JD or PINS warrant issued by Family Court prior to current arrest
- Youth’s current arrest charges include any of the following: burglary, grand larceny, auto-stripping, or motor vehicle theft

The instrument assigns one point for each relevant factor. As with other national models, the final DRAI score (based on the accumulation of points) places youth into one of three risk categories: low (0 points), mid (1 point), or high (2-4 points).

It should be noted that OCFS researchers tested several risk models to determine the combination and “weight” of factors that would produce the most predictive and valid screening instrument, based on the available data. They also collaborated with the six study counties on a feasibility assessment—in which county officials were asked to score the DRAI at various implementation points—to help shed light on potential challenges accessing data or otherwise completing the instrument, and incorporated feedback from the state’s DRAI Implementation Work Group.

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4 Note, that no other current petition charges were useful for discriminating risk in the analysis.