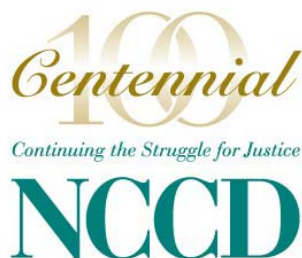


DYRS Risk Assessment and Structured Decision-Making

Validation Study & System Assessment Summary Report

Prepared by the National Council on Crime and Delinquency and The Annie E. Casey Foundation
for the District of Columbia Department of Youth Rehabilitation Services

March 2012



The Annie E. Casey Foundation

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Introduction

Five years ago, the District of Columbia’s Department of Youth Rehabilitation Services (DYRS) began to explore a new methodology for how it determined the appropriate level of restrictiveness of placement for newly committed youth. DYRS developed and implemented a structured decision making (SDM) system, explicitly linking two key factors to placement decisions: the likelihood that a youth will reoffend (risk) and the severity of a youth’s committing offense. In the SDM system, a research-based instrument classifies each young person as high, medium, or low risk to reoffend. This is cross-indexed with the committing offense severity level – also assigned as high, medium, or low – to determine the recommended restrictiveness of placement. (See Table A.)

Through a grant from the Annie E. Casey Foundation (AECF) and in collaboration with AECF and DYRS, the National Council on Crime and Delinquency (NCCD) has performed a risk assessment validation and review of the SDM system. The primary goals of this study were to measure the effectiveness of DYRS’s placement methodology and offer suggestions for improvement. This report focuses primarily on key findings and recommendations from the validation study.¹

Table A. DYRS’ Structured Decision-Making Matrix and Definitions

DYRS SDM Matrix		Risk Level		
		High Risk	Medium Risk	Low Risk
Offense Severity	High Severity	HIGH	HIGH	HIGH or MEDIUM
	Medium Severity	HIGH	MEDIUM	MEDIUM or LOW
	Low Severity	MEDIUM	LOW	LOW

SDM Placement/Restrictiveness Definitions:
High: 24 hour supervision in residential facility (e.g. New Beginnings, residential treatment center)
Medium: Staff-supervised facility in community setting (e.g. group home, foster care)
Low: In-home supervision (e.g. home w/ wrap around services, independent living)

¹ A forthcoming full validation study report offers more detail about both the risk assessment and SDM validation process and the qualitative assessment that included interviews and focus groups with a wide range of DYRS staff as well as external system partners.

Methodology

Risk Assessment Validation & Review: NCCD's validation study used a cohort of all youth committed in FY2009 (between October 1, 2008 and September 30, 2009). Data regarding demographics, current offense, placement, and new system involvement in the 12-month period following release was matched to risk assessment findings for n=308 youth. NCCD also analyzed override data from two sources: a DYRS staff review of approximately n=40 cases from the FY2009 cohort and placement and risk assessment scores from a FY2010 and FY2011 cohort.

Qualitative Assessment: Over the course of several months, AECF staff interviewed approximately 40 DYRS employees, including case managers, middle and upper management, YFTM facilitators, and staff from the Pre-Commitment Unit. In addition, focus groups were held with representatives from the judiciary, Office of the Attorney General, and Public Defender Service.

Summary of Key Findings and Recommendations

The following are key findings and recommendations from the risk assessment validation and SDM system review, each of which is explained in greater detail below:

- 1 The risk assessment instrument currently used by DYRS successfully classifies committed youth into three groups according to their likelihood of re-arrest, with youth designated "low-risk" least likely to recidivate and those assigned to the "high-risk" category most likely to recidivate.²
- 2 DYRS's risk assessment instrument can be strengthened with the following revisions: (1) reweighting the items such that those most influential in predicting recidivism have greater influence on the risk score, (2) collapsing categories within items when appropriate, and (3) replacing an item shown in this validation study to have no impact on risk (parental supervision) with a new one that is correlated with future arrest (previous out-of-home placement by the District's Child and Family Services Agency (CFSA)).
- 3 To maximize the effectiveness of the SDM system, DYRS should refine and sharpen SDM practices and policies in a number of ways: data should be regularly tracked and clear policies should be developed regarding the handling of overrides, which occur when the placement is different than that recommended by the tool; staff should be retrained on the risk assessment instrument and SDM using a more robust training methodology; detailed definitions for risk items should be drafted and refined; and regular quality reviews for staff use of both the risk assessment instrument and SDM matrix should be completed.
- 4 DYRS should develop a reassessment tool to aid in subsequent placement decisions that occur after a youth's initial placement. On average, committed youth spend two and a half years under agency custody and supervision, so DYRS typically makes multiple placement decisions in the months and years after commitment. DYRS would benefit from a clear process and reassessment instrument to determine specific placements for youth who are being stepped up or down or whose community status is being revoked.

² For the purposes of this validation study, the two key recidivism outcome variables were new adjudication and new charges (juvenile or adult) in DC Superior Court. New charges were used as a proxy for re-arrest.

- 5 DYRS needs to develop a strategy for sharing the purpose and vision of structured decision making with staff and external partners; clarifying SDM policies and processes, including how it complements the DYRS Youth Family Team Meetings (YFTMs) and Court Social Services' Family Group Conferences (FGC); and more openly discussing SDM on individual cases as part of the dispositional process.

DYRS's risk assessment instrument successfully classifies youth by likelihood of re-arrest

Perhaps most fundamental to a well-functioning structured decision making system is a risk assessment instrument that successfully sorts youth based on their likelihood for future delinquency. DYRS's risk assessment instrument – comprised of 11 variables that capture information about a youth's delinquency and juvenile justice system history, other youth behavior, and the behavior of people in a youth's life – assigns each youth to one of three risk levels: low, medium, or high.

Table B. DYRS Risk Assessment Variables

Delinquency/System History		Other Youth Behavior		Peer/Parent/Sibling Behavior	
1	Current offense severity	6	Prior abscondence from post-dispositional placements	9	Peer relationships
2	Age at arrest for first adjudication	7	School discipline/attendance in last year	10	Caregiver/guardian supervision
3	Prior adjudications	8	Substance use/abuse	11	Parent/sibling criminality
4	Prior adjudications for violent/ assaultive offenses				
5	Prior out-of-home placements				

The instrument is successful because across several measures of recidivism (e.g. any subsequent charge, any subsequent charge adjudicated) youth with medium risk scores were more likely to recidivate than youth with low risk scores, and youth with high risk scores had the greatest likelihood of all for subsequent delinquency. As illustrated in Table C, 43% of youth classified as low risk had a subsequent charge and 31% a charge upheld in court within a year of release to the community. Among medium risk youth, 61% had a new charge and 43% a charge upheld. Among high risk youth, 71% had a new charge and 54% a charge upheld.

Table C. Three Recidivism Measures by Risk Level for Current DYRS Risk Assessment

Risk Level	Total Sample (N)	Any Subsequent Charge		Any Subsequent Charge Upheld	
		N	%	N	%
Low Risk	111	48	43.2%	34	30.6%
Medium Risk	173	106	61.3%	72	42.9%
High Risk	24	17	70.8%	13	54.2%
Total	308	171	55.5%	119	38.6%

To maximize its effectiveness, DYRS’s risk assessment instrument can and should be improved

A key purpose of the risk assessment validation study was to consider ways of improving the performance of the instrument and thus improving DYRS’ capacity to consistently place youth in the most appropriate setting. In the current risk assessment the groupings of youth by risk are distinct, with recidivism rates moving in the right direction, but because re-arrest rates were somewhat weakly differentiated between the low, medium, and high risk levels, the risk assessment has room for improvement. A stronger risk assessment would produce wider differentiation between the risk levels and individual items would have a stronger relationship to outcomes. To this end, NCCD evaluated several options for revising the current risk assessment. Approximately ten alternative versions of the risk assessment were extensively tested.

The strongest version would include four primary changes to the existing tool:

- *Change the weight or value given to some of the items.* For example, total prior adjudications and prior adjudications for violent/assaultive offenses were highly predictive of subsequent re-arrest and thus were given additional weight, while less predictive variables such as school attendance/discipline and abscondence were given less weight.
- *Modify the cut-off scores used to define the risk levels.* This change is made to produce stronger separation among the risk levels.
- *Collapse some item responses which did not account for additional differentiation among risk levels.* For instance, peer influence originally had four levels of responses, but re-arrest rates were the same for youth identified as having some friends as bad influences vs. those with most or all friends as bad influences. These categories were collapsed into “at least some friends are bad influences.” Changes of this type produced the strongest separation between risk levels and increased the reliability and validity of responses by making items more independent of each other and easier for caseworkers to define.
- *Remove an item and replace it with one more predictive of re-arrest.* Despite common wisdom and the perception of many that parents are often a root cause of chronic delinquent behavior, the parent/guardian supervision item was not significantly associated with recidivism and provided almost no differentiation between levels of recidivism. However, involvement in the child welfare system – and more specifically, prior foster care or group home placement with CFSA – was found to be predictive of re-arrest. It is suggested that this new item be added to the risk assessment instrument.

Table D. Risk Level Distribution in Current and Revised Risk Assessments

Risk Assessment Instrument Version	Risk Level							
	Low		Medium		High		Total	
	N	%	N	%	N	%	N	%
Current Risk Assessment	111	36.0%	173	56.2%	24	7.8%	308	100%
Recommended New Risk Assessment	100	32.5%	145	47.1%	63	20.5%	308	100%

While it will require a significant amount of effort to make all of these modifications to the risk assessment instrument, the benefits of investing in these changes would be significant and multifold—a more refined and accurate risk assessment, increased confidence in the SDM system on the part of staff and stakeholders, more youth placed in appropriate settings leading to better youth outcomes, and reduced costs without reducing public safety. In the case of the CFSA item, the CFSA information could be used to improve DYRS case planning and the data sharing agreement could be capitalized upon to improve cross-agency collaboration, reduction in unnecessary duplication of services, and coordinated care for crossover youth. Further analysis of potential new items would likely produce a still stronger version of the risk assessment.

DYRS should refine and sharpen SDM policies and procedures

While a revised risk assessment instrument positions DYRS to have an effective structured decision making system, DYRS has a good deal of work to do in order to improve its implementation and oversight.

- Clear definitions and procedures should be drafted for the risk assessment instrument and other SDM processes. These definitions and procedures should be refined through the re-training process.
- DYRS is not routinely collecting data on overrides, which occur when the placement is different than that recommended by the tool. If used carefully and transparently, overrides are acceptable, even necessary, in cases when additional information or staff expertise suggest a different placement will be more appropriate. However, ad hoc review of DYRS case files revealed that common reasons for overrides included confusion over the purpose of SDM and staff simply ignoring the results of SDM in decision making. Further, a separate analysis of recent data shows that overrides have increased in the past year. That analysis also showed that re-arrest rates were higher among overrides. This lends more support for the need to develop clear policies and procedures regarding the proper use of overrides, as well as the need to systematically monitor the use of overrides moving forward.
- A revamped training curriculum should be introduced, with all case management and pre-commitment staff being retrained on using the risk assessment instrument and SDM matrix. Training should emphasize increasing inter-rater reliability, such that, for any given youth, two DYRS case workers come to the same risk score and SDM placement level. Required training across all staff and management roles would foster a shared understanding of SDM throughout the department, highlighting the purpose and utility of the SDM system.
- DYRS should conduct regular quality reviews of the intake process, including risk assessment, SDM, and any other screenings and evaluations, to ensure that staff are using tools properly and that intake practices are consistent. Standard processes for collecting and inputting intake data can improve transparency, accountability, and quality assurance.

DYRS needs a clear process and tool for reassessment

It was clear from the interviews that case managers and supervisors wished for tools and procedures for reassessment when youth returned successfully or unsuccessfully from placement or due to changes in youth behavior, whether positive or negative, while in the community. In fact, much of the confusion

and criticism of the current SDM system seemed to arise from its perceived failure in reassessing youth, something it was never intended to do.

DYRS needs to develop a process and tool to measure changes in a youth's risk of future delinquency based upon response to programming and services and other near term changes (such as a change in living arrangement or a success, or failure, in a drug treatment program). Such a risk reassessment can be administered periodically (such as every three months), at judicial review, or when a significant change occurs with the youth that may affect risk level. The risk reassessment could be used on its own or along with modified elements from the current SDM system. Developing a risk reassessment would resemble the development of the current risk assessment, using a combination of quantitative and qualitative processes to determine the set of items, responses, and scoring procedure that fit best with the population DYRS serves.

To be most effective, the reassessment tool would be coupled with a system for responding to new offenses, placement failures, and other behavioral issues among committed youth whereby caseworkers can adjust supervision levels or other requirements in incremental fashion, without necessarily having to bump the youth up to a secure placement. A similar practice can be applied to making original placement decisions, with a continuum of options within each SDM level. For example, residential treatment centers (RTCs) may offer different levels of restrictiveness, even though all fall under the "high" SDM category.

DYRS needs a strategy for sharing the broad vision and specifics of SDM

In the broadest sense, DYRS would benefit from developing and disseminating, both internally and externally, a clear message as to the purpose and benefits of risk assessment and the SDM system and why DYRS has embraced this approach over alternatives. System stakeholders and DYRS staff overwhelmingly support the concept of SDM, but the vision and wisdom of SDM were not widely understood, and there were concerns about its application.

Moreover, there was a concerning lack of clarity among DYRS staff about how and when SDM should be used to make placement decisions. As referenced above, this is largely related to confusion about re-assessment for youth being stepped down from placement or stepped up after re-arrest or violation of terms of release. This lack of clarity is also a function of ambiguity about how the SDM system fits into the other processes for placement decision-making, how key a role it is meant to play, and how it compliments overarching policy and values at DYRS. Perhaps above all, DYRS leadership needs to make clear to staff that their decisions will be supported as long as certain procedures and protocols are followed.

Finally, among external stakeholders there was a commonly-held perspective that the presentation of SDM in the court process was applied inconsistently and lacked transparency. Rather than simply stating a youth's SDM level, DYRS could make a very strong case for their point of view by informing other parties of the dispositional process about a youth's risk factors and the rationale behind DYRS's placement decisions.