

# NC RISK ASSESSMENT VALIDATION

## EXECUTIVE SUMMARY

In 2002, North Carolina Department of Health and Human Services, Division of Social Services (the Division), implemented a Structured Decision Making<sup>®</sup> (SDM) case management system to assist child protection workers in making decisions at critical points during a child protective services (CPS) case. This case management system includes an actuarial risk assessment, which classifies families based on their likelihood of future child maltreatment. Workers complete the risk assessment at the end of an investigation to help determine which families are most likely to benefit from services. When they implemented the case management system, the Division chose to adopt Minnesota Department of Human Services' CPS family risk assessment and validate the risk assessment on a population of families assessed by the Division at a future time. The Division contracted with Children's Research Center (CRC) to conduct the risk assessment validation study in 2008. The objective of this validation study was to assess how well the current risk assessment estimates future maltreatment and, if necessary, to propose revisions to improve its classification abilities.

This research was conducted by sampling families who were assessed for allegations of child abuse or neglect during between April 1 and September 30, 2006, in 23 North Carolina counties.<sup>1</sup> Families were assessed using traditional investigative assessments or alternative family assessment methods. If a family was involved in more than one investigative and/or family assessment during the sample period, the first assessment was selected. To help ensure adequate representation of racial/ethnic groups, Native American and Hispanic/Latino families were over-sampled, while White/Caucasian and Black/African American families were under-sampled.

This research was conducted using information available from SIS and paper forms collected from case files and entered into CRC's data collection system (DCS). The information accessed for the study included data describing the type of abuse or neglect alleged and substantiated, demographics about children and other family members, information describing placements and service contacts, and findings from the safety assessment and risk assessment as recorded by workers at the time of the sample incident. Data describing subsequent CPS outcomes were observed for each family during a standardized follow-up period of 18 months (1.5 years) after their sample assessment. These outcome measures included CPS assessments (family or investigative) for allegations of abuse and/or neglect, traditional investigative assessments of abuse and/or neglect allegations, maltreatment substantiations, subsequent case openings, and subsequent placements during the follow-up period.

CRC staff examined the relationship between the current risk classification and subsequent CPS outcomes to determine how well the current risk assessment estimated future maltreatment. The current assessment performed reasonably well when distinguishing between families classified at low versus higher risk levels for subsequent assessments and case openings resulting from

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<sup>1</sup> Families were identified using the SIS county case number. This number is used to identify families each time they are reported. However, the county case number does not transfer from one county to the next, so if a family had a subsequent report for abuse and/or neglect outside of the county in which the sample report occurred, the subsequent report would not be captured in the analysis. This may result in an underrepresentation of subsequent reports, substantiations, and placements. During data entry, CRC noted that different county case numbers were occasionally assigned to the same family. If the county case number was not assigned consistently over time, this may also result in an underrepresentation of subsequent reports.

maltreatment allegations. For all CPS outcomes (assessment/investigation, substantiation, and case opening) and among all sample subgroups, the recidivism rates observed among low risk families were significantly lower than those of families classified at higher risk levels. The risk assessment did not always distinguish well, however, between moderate and high/intensive risk families. Although there were very few intensive risk families, those classified as high and intensive risk had similar rates of subsequent assessment and case opening during the 18-month follow-up period (see Table E1).

The second step of the research involved the construction of an actuarial risk assessment. The proposed assessment presented in this report was developed by observing the actuarial relationship between family characteristics observed at the time of the sample investigation and subsequent assessments and their findings. The proposed risk assessment has three classifications rather than four due to policy considerations and empirical issues. Division policy assigns the same priority for case contacts to high and intensive risk families, so there is little practical difference in terms of agency response.

When evaluated across all measures of subsequent maltreatment, the classification resulting from the proposed family risk assessment provided more distinction between risk levels than the classification obtained with the current risk assessment (see Table E1). The current risk assessment classified families such that those in the moderate risk group had a subsequent investigative assessment and case opening rate similar to the corresponding rates among high risk families. In contrast, the proposed risk assessment resulted in a subsequent investigative assessment rate for high risk families that was more than double the rate among moderate risk families, and a subsequent case opening rate that was three times greater than the rate among moderate risk families. Findings for a subsequent assessment, family or investigative, were also improved.

<b>Table E1</b>						
<b>Risk Classification by Subsequent Maltreatment Outcomes</b>						
<b>Overall Risk Level</b>	<b>Sample Distribution</b>		<b>Case Outcome Rates During the 18-month Follow-up Period</b>			
	<b>N</b>	<b>%</b>	<b>Assessment of Any Type</b>	<b>Investigative Assessment</b>	<b>Maltreatment Substantiation</b>	<b>Case Opening</b>
<b>Current Risk Assessment</b>						
Low	712	55.0%	21.2%	9.0%	3.7%	4.6%
Moderate	459	35.5%	33.6%	17.6%	7.8%	10.7%
High/Intensive	123	9.5%	26.0%	17.1%	11.4%	11.4%
<b>Total Sample</b>	<b>1,294</b>	<b>100.0%</b>	<b>26.0%</b>	<b>12.8%</b>	<b>5.9%</b>	<b>7.4%</b>
<b>Proposed Risk Assessment</b>						
Low	446	34.5%	16.8%	5.6%	3.6%	3.4%
Moderate	641	49.5%	25.1%	12.6%	4.1%	6.1%
High	207	16.0%	48.8%	29.0%	16.4%	20.3%
<b>Total Sample</b>	<b>1,294</b>	<b>100.0%</b>	<b>26.0%</b>	<b>12.8%</b>	<b>5.9%</b>	<b>7.4%</b>

Adopting the proposed risk assessment should help improve workers' estimates of a family's risk of future maltreatment. This, in turn, would permit the agency to reduce subsequent

maltreatment by more effectively targeting service interventions to high risk families. Risk assessment is only useful, however, if it informs decision making. Using accurate risk assessment to target limited resources will only happen if workers have the necessary assessment and engagement skills, and if the use of risk assessment to inform decision making is integrated into agency practice (Shlonsky & Wagner, 2001). The Division may wish to strengthen implementation by employing efforts used in other jurisdictions, such as the following:

- Emphasize worker use of risk assessment scoring definitions to promote accurate and consistent assessment scoring. Ensuring that scoring definitions are easily accessible to workers may increase the accuracy of their risk estimates.
- Include a review of risk and other Structured Decision Making<sup>®</sup> (SDM) assessment scoring as part of routine case reviews conducted by supervisors or other staff.
- Use refresher risk assessment trainings and other feedback mechanisms to solicit worker questions and identify areas for follow-up training or additional emphasis.
- Encourage supervisors to routinely review risk scoring and include it in case discussions with workers.
- Ensure that assessment and service delivery data for CPS cases are easily accessible to Division staff. Division staff may benefit from systematically monitoring information to describe common safety and risk factors present in families, identify the service needs of their clients, prioritize service interventions with high risk families, and take action necessary to improve service delivery.

One of the most effective strategies for improving child welfare practice statewide identified through the Child and Family Services Review (CFSR) is monitoring practice with data (ACF, 2006). CRC recommends that the Division implement a statewide administrative data system that permits workers to capture assessment findings and links these findings to recommended service actions. Regular examination of assessment findings through data reporting can determine how often workers are completing the assessments, what their findings are, and if findings are consistent with worker decisions about case actions. A statewide data system could support workers by making assessment item definitions easily available and by automating assessment scoring. Managers would benefit from the ability to monitor, and therefore strengthen, field practice.

Implementing a statewide data system would also allow the Division to conduct future validation studies at lower cost. The Division should plan to conduct a second validation study in the next three to five years. Over time, changes to operational policies and procedures, as well as increases in the effectiveness of service delivery, may significantly alter the client population that is assessed and/or substantiated for abuse or neglect. Other changes among the client population itself, such as substance abuse patterns, homelessness, and demographic changes can occur and may also affect the validity of a risk assessment. If Division efforts to improve child protection practices are successful, another validation study will ensure that the risk assessment remains effective at classifying families.