The Michigan Department of Social Services

Structured Decision Making System

An Evaluation of Its Impact on Child Protection Services

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This report outlines the results of a comprehensive evaluation of Michigan’s Structured Decision Making System. The design of this system was a joint effort of the Michigan Department of Social Services and NCCD’s Children’s Research Center. The primary objective of the system is to improve decision making, case planning, and case management, thus reducing the incidence of child abuse and neglect in families referred to child protective services. The following is a brief summation of the system and the major findings of the evaluation completed in 1995.

ACKNOWLEDGMENTS

The development of this system is the result of substantial and sustained effort of many Michigan administrators, supervisors, and line staff. Without their input and direction, success would not have been possible.

While space prohibits the listing of all individuals who were important to this effort, we want to acknowledge the special contributions of the following people:

Bud Maxey, whose vision provided the impetus for this project; Dr. Gerald Miller, Terry McHoskey, Harold Gazan, and Delois Whitaker Caldwell for their steadfast support throughout the implementation period; Joanne Nagy and David Berns for their invaluable support and input in all phases of the project; Jim Evans, Julia Luttrell, and Bill Patrick who provided advice, training, and technical assistance; and staff and administrators from all the pilot counties who remained committed to the project and helped keep it “on track” when problems arose.
FROM THE DIRECTOR’S OFFICE

The Michigan Department of Social Services (MDSS) is pleased to distribute an executive summary of an evaluation of the children’s protective services (CPS) Structured Decision Making (SDM) System.

When a complaint of child abuse and/or neglect has been substantiated, children’s protective services staff must make very important decisions. Should a case be opened for services? What services should be provided? When has risk to the child(ren) been ameliorated enough to close the case? These decisions are made thousands of times a year by staff with various levels of education, experience, and skill. Each case requires complex assessments of the family, the child(ren), and the capacity of the service delivery system to intervene positively.

MDSS and the Children’s Research Center (CRC) of the National Council on Crime and Delinquency (NCCD) designed SDM to improve consistency, effectiveness, and service delivery for substantiated cases of child abuse and neglect. Key features of SDM are:

- Research-based risk assessment and reassessment - an objective way of measuring risk;
- Needs assessment - an objective way of identifying service needs;
- Case decision making policy based on risk and needs assessments - case plans based on risk and needs;
- Comprehensive case planning procedures based on identifying family strengths and on working with the family to ameliorate risk;
- Standards for contacts with families based on risk - the higher the risk, the more intensive the services;
- Workload assessment and resource allocation based on workload - ability to identify staffing and resources needed to reduce risk and strengthen families;
- Comprehensive management information system - data which provided local offices and central office with key data needed to implement and evaluate program impact and to advocate for resources.

The risk assessment scales are based on research conducted in Michigan. The SDM system defines risk as the probability of continued maltreatment in cases which have been substantiated. Risk assessment scores ranging from low to intensive suggest the degree of probability of the recurrence of abuse or neglect. Besides risk, the scales determine standards for frequency of case contacts. Specific services are directed to address the highest need and to strengthen families in the care and protection of their children.

The evaluation results indicate a reduction of recidivism and out-of-home placements in counties that use the SDM process compared to control counties. Aggregated data provide a basis for budgeting and resource allocation.

Structured Decision Making has become one of the key components in our strategies to build strong families and keep Michigan children safe. The results of the evaluation strongly support our plans for statewide implementation of Structured Decision Making.

Gerald H. Miller
Director
Michigan Department of Social Services
HIGHLIGHTS

I. DESIGN

- The Michigan risk assessment system is based on actual experience with nearly 3,000 Michigan families. Risk factors were identified using a cohort of nearly 2,000 families and the scales developed were subsequently revalidated on a randomly selected sample of 1,000 families four years after the phased implementation began.

- The Michigan risk assessment system is unquestionably the most thoroughly tested system in operation. It is a valid and reliable assessment of the probability of future harm.

- By design, the system is concise and simple to complete. It has been integrated with other CPS requirements to effect a comprehensive system of case planning and case management.

- While risk assessment forms the foundation of Michigan's Case Management system, other components are of equal importance. These include:
  - A family needs assessment,
  - Clearly defined service standards,
  - Reassessment procedures to move cases through the system expeditiously and account for changes in circumstances,
  - Workload accounting to assist with resource development and deployment, and
  - A comprehensive information system to provide data for monitoring, research, and evaluation.

II. THE STUDY

To measure the effects of the new system, the 13 pilot counties were matched to other Michigan counties that were still operating under the “old” policies and procedures. All cases with abuse or neglect substantiated between September 1992 and October 1993 from both the pilot counties and the comparison counties formed the study cohort. Each group totaled approximately 900 families. Data on risk, needs, referrals, program participation, and outcomes were collected on all study cases.

III. PROCESS EVALUATION RESULTS

- Results of this study demonstrate that the use of this system in Michigan resulted in better decisions regarding the selection of cases to be opened for services following substantiation. In counties using the SDM system, cases that were closed without
services had fewer new reports and substantiations, fewer subsequent removals, and fewer child injuries reported over a 12-month follow-up period.

- When cases were opened to services, the SDM system resulted in significantly higher rates of service provision, especially in the critical areas of Parenting Skills Training, Family Counseling, and Mental Health Services.

- Data collected within the SDM pilot counties clearly indicate that services designed to improve parenting skills, reduce substance abuse, etc. do work to reduce subsequent incidences of child maltreatment.

### IV. OUTCOME EVALUATION RESULTS

The SDM system produced significant reductions in important measures of child maltreatment analyzed over the duration of the study follow-up period. Most significantly:

- In counties using the SDM system, the rate of new substantiations for abuse/neglect was less than half that reported in comparison counties.

- Subsequent placements in foster care were significantly lower in SDM counties.

- Child injuries recorded during the follow-up period were also lower in SDM counties.
THE MICHIGAN STRUCTURED DECISION MAKING SYSTEM

Child protective services (CPS) has one of the most difficult missions imaginable. When child abuse or neglect is suspected by the community, CPS workers must investigate the report, determine if maltreatment occurred, and then if abuse or neglect is confirmed, select a course of action that will ensure that the child(ren) is protected from future harm. The stakes are obviously very high, both in human and economic terms.

While there has been a threefold increase in reports of abuse and neglect nationwide since 1980, there is little data available to agencies to guide the selection of the most effective strategies for intervention. So little is known that CPS agencies even struggle with how effectiveness can be measured.

In the face of the rising number of reports of abuse and neglect, most child protection agencies have acknowledged that workers need help in assessing the degree of risk represented by each family entering the system. As a result, many have adopted or developed systems of risk assessment. These systems vary greatly in terms of objectives, complexity, and content but all are designed to standardize the way risk to children is assessed with the overall goal of improving the effectiveness of the child protection system. Over five years ago, the State of Michigan, with assistance provided by the National Council on Crime and Delinquency's Children's Research Center, began the development of a comprehensive risk-based case management system. Drawing on knowledge gained in the development of similar approaches in both juvenile justice and child protection, the CRC worked with Michigan staff to establish the following principals to guide development.

- First, risk was defined as the probability of continued maltreatment. The assessment system was to be based on research conducted on Michigan cases. Its validity and reliability should be clearly documented.

- The assessment system should be simple to implement and drive all subsequent decisions regarding services to families and children.

- Finally, information generated by the assessment process should be aggregated to form the basis for policy development, budgeting, and resource allocation.

To develop risk assessment instruments for protective services in Michigan, an extensive data collection effort was undertaken. A stratified random sample of 1,896 cases was selected and relationships between family characteristics and case outcomes were examined. The results of this research were two simple risk assessment scales, one that classified cases based on the risk of continued abuse; the other according to the risk of subsequent neglect. Ratings from these scales were used to assign cases to one of four different service levels.
In 1994, a revalidation study was undertaken resulting in minor revisions to the instruments. This represents the first time a research-based risk assessment system has been subjected to a revalidation, underscoring Michigan's continued commitment to improving decision making in protective services. Figure 1 presents data from the revalidation study, showing the relationship between risk levels and outcomes. New substantiations reported ranged from 0% in the low risk group to 29% for families classified as needing intensive services.

The importance of validated risk assessment instruments cannot be overstated. Such instruments provide CPS workers with a simple, straightforward method of determining the relative risk levels of families entering the system. This allows agencies to prioritize their efforts, focusing resources on cases with the highest proclivities for continued maltreatment.

It was recognized that improved assessments by themselves have limited impact on case practice unless there are clear expectations regarding service delivery and monitoring. Thus, service standards were developed to correspond directly to the level of risk of each family. These standards define the minimum frequency of contacts that workers should have with cases at each risk level. It is, in effect, an effort to differentiate services provided, giving priority to those families most likely to again abuse or neglect children (see Figure 2).
The goal of the Michigan development effort was to provide structure to case decision making and to base services on the risk and need levels of families. To accomplish this, a comprehensive case management system called Structured Decision Making (SDM) was developed. In total, the system is comprised of the following components:

- Highly structured assessments of family risk and family needs.
- Service standards that clearly define different levels of case contacts, based on risk levels.
- A workload accounting and budgeting system that translates service standards into resource requirements and helps deploy resources equitably throughout the organization.
- A system of case review and reassessment to expeditiously move cases through the system.
- A comprehensive information system to provide data for monitoring, planning, and evaluation.

### Michigan CPS Service Standards

**Low**
- 1 face-to-face contact by the CPS worker with client per month, plus
- 1 collateral contact per month by the CPS worker on behalf of the client

**Moderate**
- 2 face-to-face contacts by the CPS worker with client per month, plus
- 2 collateral contacts per month by the CPS worker on behalf of the client

**High**
- 3 face-to-face contacts by the CPS worker with client per month, plus
- 3 collateral contacts per month by the CPS worker on behalf of the client

**Intensive**
- 4 face-to-face contacts by the CPS worker with client per month, plus
- 4 collateral contacts per month by the CPS worker on behalf of the client
Although the workload assignment and budgeting components of the system have not been fully implemented to date, the remaining elements were implemented in 13 Michigan counties beginning in 1992. The absence of workload budgeting and case assignment systems meant that the new service standards were difficult to meet, particularly for cases at the higher service levels as the mechanism for equating resources with needs was missing. Nevertheless, substantial changes were initiated in the counties that adopted SDM: risk and need assessments were conducted on all families where neglect or abuse was substantiated and decisions regarding case services were made accordingly (the abuse and neglect scales presented on the following page include the revisions that resulted from the 1994 validation study). A new case planning protocol established clear expectations for service referrals and agency managers were provided detailed reports on case decisions, family and children needs, service provision, and the progress of cases served. These data provided the basis for monitoring actions taken bringing an unprecedented level of accountability to the agency. When patterns emerged that indicated actions were not in concert with good case practice, new policies were developed, directing workers toward more judicious use of resources, and helping to ensure that case decisions reflected the risk level of families served.

Michigan continues to improve and expand the system knowing that its ultimate impact may not be realized for several years. Most importantly, statewide implementation in CPS is planned and the SDM system will be extended to the foster care caseload. The goal is to move cases more expeditiously through out-of-home placements, shorten stays in temporary care, and enhance the potential for successful family reunification. Other important changes in policy regulating how cases are handled have emerged as information regarding actual practice and case outcomes have been produced.

The remaining sections of this report present results of a comprehensive evaluation of the Michigan Structured Decision Making System. The same level of care taken in system design was applied to the evaluation. Controls implemented during the evaluation helped ensure that changes, both positive and negative, could be attributed to the new system.

While the primary focus of this report is to determine the impact of the new system on case outcomes, it is also important to assess how SDM actually changed the way cases are handled in Michigan. Unless the system produced differences in the management of CPS cases, there is little reason to expect that outcomes will change. Therefore, the first part of the study analyzed case decision making and service provision to determine the degree to which operations actually differed in the counties that implemented Michigan's SDM system.
<table>
<thead>
<tr>
<th>Neglect</th>
<th>Score</th>
<th>Abuse</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>N1. Current Complaint is for Neglect</td>
<td>a. No</td>
<td>0</td>
<td>a. Current Complaint is for Abuse</td>
</tr>
<tr>
<td></td>
<td>b. Yes</td>
<td>1</td>
<td>b. Yes</td>
</tr>
<tr>
<td>N2. Number of Prior Assigned Complaints</td>
<td>a. None</td>
<td>0</td>
<td>a. None</td>
</tr>
<tr>
<td></td>
<td>b. One</td>
<td>1</td>
<td>b. Abuse complaint(s)</td>
</tr>
<tr>
<td></td>
<td>c. Two or more</td>
<td>2</td>
<td>c. Sexual abuse complaint(s)</td>
</tr>
<tr>
<td></td>
<td>d. Both b and c</td>
<td>3</td>
<td>d. Both b and c</td>
</tr>
<tr>
<td>N3. Number of Children in the Home</td>
<td>a. Two or fewer</td>
<td>0</td>
<td>a. No</td>
</tr>
<tr>
<td></td>
<td>b. Three or more</td>
<td>1</td>
<td>b. Yes</td>
</tr>
<tr>
<td>N4. Number of Adults in Home at Time of Complaint</td>
<td>a. Two or more</td>
<td>0</td>
<td>a. One</td>
</tr>
<tr>
<td></td>
<td>b. One/none</td>
<td>1</td>
<td>b. Two or more</td>
</tr>
<tr>
<td>N5. Age of Primary Caretaker</td>
<td>a. 30 or older</td>
<td>0</td>
<td>a. No</td>
</tr>
<tr>
<td></td>
<td>b. 29 or younger</td>
<td>1</td>
<td>b. Yes</td>
</tr>
<tr>
<td>N6. Characteristics of Primary Caretaker (check &amp; add for score)</td>
<td>a. Not applicable</td>
<td>0</td>
<td>a. No</td>
</tr>
<tr>
<td></td>
<td>b. Lacks parenting skills</td>
<td>1</td>
<td>b. Yes</td>
</tr>
<tr>
<td></td>
<td>c. Lacks self-esteem</td>
<td>1</td>
<td>c. Lacks self-esteem</td>
</tr>
<tr>
<td></td>
<td>d. Apathetic or hopeless</td>
<td>1</td>
<td>d. Apathetic or hopeless</td>
</tr>
<tr>
<td>N7. Primary Caretaker Involved in Harmful Relationships</td>
<td>a. No</td>
<td>0</td>
<td>a. No</td>
</tr>
<tr>
<td></td>
<td>b. Yes, but not a victim of domestic violence</td>
<td>1</td>
<td>b. Yes</td>
</tr>
<tr>
<td></td>
<td>c. Yes, as a victim of domestic violence</td>
<td>2</td>
<td>c. Yes, as a victim of domestic violence</td>
</tr>
<tr>
<td>N8. Primary Caretaker Has a Current Substance Abuse Problem</td>
<td>a. No</td>
<td>0</td>
<td>a. No</td>
</tr>
<tr>
<td></td>
<td>b. Alcohol only</td>
<td>1</td>
<td>b. Yes</td>
</tr>
<tr>
<td></td>
<td>c. Other drug(s) (with or without alcohol)</td>
<td>3</td>
<td>c. Other drug(s) (with or without alcohol)</td>
</tr>
<tr>
<td>N9. Household is Experiencing Severe Financial Difficulty</td>
<td>a. No</td>
<td>0</td>
<td>a. No</td>
</tr>
<tr>
<td></td>
<td>b. Yes</td>
<td>1</td>
<td>b. Yes</td>
</tr>
<tr>
<td>N10. Primary Caretaker's Motivation to Improve Parenting Skills</td>
<td>a. Motivated and realistic</td>
<td>0</td>
<td>a. No</td>
</tr>
<tr>
<td></td>
<td>b. Unmotivated</td>
<td>1</td>
<td>b. Yes</td>
</tr>
<tr>
<td></td>
<td>c. Motivated but unrealistic</td>
<td>2</td>
<td>c. Motivated but unrealistic</td>
</tr>
<tr>
<td>N11. Caretaker(s) Response to Investigation</td>
<td>a. Viewed situation as seriously as investigator and cooperated satisfactorily</td>
<td>1</td>
<td>a. Viewed situation as seriously as investigator and cooperated satisfactorily</td>
</tr>
<tr>
<td></td>
<td>b. Viewed situation less seriously than investigator</td>
<td>0</td>
<td>b. Viewed situation less seriously than investigator</td>
</tr>
<tr>
<td></td>
<td>c. Failed to cooperate satisfactorily</td>
<td>2</td>
<td>c. Failed to cooperate satisfactorily</td>
</tr>
<tr>
<td></td>
<td>d. Both b and c</td>
<td>3</td>
<td>d. Both b and c</td>
</tr>
</tbody>
</table>

**TOTAL NEGLECT RISK SCORE**

assign the family's risk level based on the highest score on either scale, using the following chart:

<table>
<thead>
<tr>
<th>Neglect Score</th>
<th>Abuse Score</th>
<th>Risk Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 4</td>
<td>0 - 2</td>
<td>Low</td>
</tr>
<tr>
<td>5 - 7</td>
<td>3 - 9</td>
<td>Moderate</td>
</tr>
<tr>
<td>8 - 12</td>
<td>6 - 9</td>
<td>High</td>
</tr>
<tr>
<td>13 - 20</td>
<td>10 - 16</td>
<td>Intensive</td>
</tr>
</tbody>
</table>

**OVERRIDES**

Policy: Override to Intensive. Check appropriate reason.

1. Sexual Abuse cases where the perpetrator is likely to have access to the child victim.
2. Cases with non-accidental physical injury to an infant.
3. Serious non-accidental physical injury requiring hospital or medical treatment.
4. Death (previous or current) of a sibling as a result of abuse or neglect.

**TOTAL ABUSE RISK SCORE**

Assign the family's risk level based on the highest score on either scale, using the following chart:

<table>
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<tr>
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<td>6 - 9</td>
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<tr>
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<td>Intensive</td>
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**OVERRIDE RISK LEVEL**

<table>
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<th>Moderate</th>
<th>High</th>
<th>Intensive</th>
</tr>
</thead>
</table>

Note: In practice, comprehensive definitions accompany each item.
### FAMILY ASSESSMENT OF NEEDS AND STRENGTHS

#### S1. Emotional Stability
- **a.** Exceptional coping skills .......................... -2  
- **b.** Appropriate responses ................................... 0  
- **c.** Some problems ..................................................... 3  
- **d.** Chronic depression, severely low esteem, emotional problems ............ 5

#### S2. Parenting Skills
- **a.** Strong skills ...................................................... -2  
- **b.** Adequate skills .................................................. 0  
- **c.** Improvement needed ................................................ 3  
- **d.** Destructive/abusive parenting ...................................... 5

#### S3. Substance Abuse
- **a.** No evidence of problem ........................................... 0  
- **b.** Caretaker with some substance problem .......................... 2  
- **c.** Caretaker with serious problem .................................... 3  
- **d.** Problems resulting in chronic dysfunction ............................ 5

#### S4. Domestic Relations
- **a.** Supportive relationship ......................................... -2  
- **b.** Single caretaker not involved in domestic relationship .................... 0  
- **c.** Domestic discord, lack of cooperation ................................ 2  
- **d.** Serious domestic discord/domestic violence ............................ 4

#### S5. Social Support System
- **a.** Strong support system ........................................... -2  
- **b.** Adequate support system .......................................... 0  
- **c.** Limited support system ............................................ 2  
- **d.** No support or destructive relationships ................................ 4

#### S6. Communication/Interpersonal Skills
- **a.** Appropriate skills .................................................. 0  
- **b.** Limited or ineffective skills ........................................ 2  
- **c.** Hostile/destructive .................................................... 4

#### S7. Literacy
- **a.** Literate ................................................................. 0  
- **b.** Marginally literate ................................................... 2  
- **c.** Illiterate ................................................................. 3

#### S8. Intellectual Capacity
- **a.** Average or above functional intelligence .......................... 0  
- **b.** Some impairment, difficulty in decision making skills .................... 2  
- **c.** Severe limitation ..................................................... 3

#### S9. Employment
- **a.** Employed .............................................................. -1  
- **b.** No need ................................................................. 0  
- **c.** Unemployed but looking ............................................. 1  
- **d.** Unemployed, not interested ........................................... 2

#### S10. Physical Health Issues
- **a.** No problem ............................................................ 0  
- **b.** Health problem or handicap that affects family ........................ 1  
- **c.** Serious health problems or handicap that affects ability to provide for or protect child ..................................................... 2

#### S11. Resource Availability/Management
- **a.** Strong money management skills .................................. -1  
- **b.** Sufficient income to meet needs .................................... 0  
- **c.** Income mismanagement ................................................ 2  
- **d.** Financial crisis ....................................................... 3

#### S12. Housing
- **a.** Adequate housing ................................................... 0  
- **b.** Some housing problems, but correctable ................................ 2  
- **c.** No housing, eviction notice .......................................... 4

#### S13. Sexual Abuse
- **a.** No evidence of problem ............................................. 0  
- **b.** Caretaker has failed to protect child(ren) from sexual abuse ................ 4  
- **c.** Caretaker has abused child(ren) sexually ............................ 5

#### S14. Child Characteristics
- **a.** Age appropriate, no problems ....................................... 0  
- **b.** Minor physical, emotional, intelligence problems ........................ 1  
- **c.** One child has severe/chronic problems that result in serious dysfunction ..................................................... 2  
- **d.** Children have severe/chronic problems that result in serious dysfunction ..................................................... 3

**Note:** In practice, comprehensive definitions accompany each item.
EVALUATION DESIGN

A. Introduction

Two approaches to this evaluation were considered. The first, an interrupted time series design, was rejected because other changes that occurred at or about the time of the implementation of the new system meant that any pre/post program differences could be attributed to factors other than SDM. For example, a new perpetrator notification process was implemented during SDM implementation resulting in a rather dramatic decline in statewide substantiation rates. Such changes make an analysis across time periods difficult at best.

The second option was to establish a comparison group of substantiated cases that were subject to all of the policies and case procedures of the Michigan CPS system except those implemented with SDM. This design was chosen, and 11 comparison areas were selected based on economic, demographic, and protective service profiles similar to the counties that had been implemented in the new system. In the state's largest county (Wayne County, which includes the city of Detroit), SDM had been implemented in half of the CPS units; the other half operated under the old system. Hence, Wayne County served as its own "comparison group match." The remaining SDM counties were matched to others in the state based on the following criteria:

- Total Population of County
- Median Income of County
- Percent of Population Living in Poverty
- Percent Single Parent Households
- Number of Substantiated Abuse/Neglect Investigations Per Month
- Number of CPS Referrals Per Month
- Number of Full-Time CPS Employees
Table 1 illustrates that there were no significant differences between the two groups of counties prior to SDM implementation.

<table>
<thead>
<tr>
<th>Characteristics at Investigation*</th>
<th>Pilot</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior Abuse/Neglect Substantiation</td>
<td>43%</td>
<td>42%</td>
</tr>
<tr>
<td>AFDC Recipients</td>
<td>49%</td>
<td>50%</td>
</tr>
<tr>
<td>Foster Care Placement</td>
<td>9%</td>
<td>10%</td>
</tr>
<tr>
<td>Opened for Services</td>
<td>88%</td>
<td>88%</td>
</tr>
<tr>
<td>Court Involvement</td>
<td>32%</td>
<td>28%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CPS Follow-Up Outcomes at 12 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Re-Referred</td>
</tr>
<tr>
<td>Substantiated</td>
</tr>
<tr>
<td>Average # Re-Referrals</td>
</tr>
<tr>
<td>Average # New Substantiations</td>
</tr>
</tbody>
</table>

*Unduplicated count of families substantiated for abuse or neglect during the period. If a family was substantiated more than once, only the first one is represented. CPS follow-up outcomes are observed for 12 months after the first substantiation recorded during the time period.

All cases from both the SDM and comparison counties that had abuse or neglect substantiated between September 1992 and October 1993 were tracked for 12 months. Independent case readers were trained in SDM assessment procedures and sent to the comparison counties to conduct risk and need assessments, and review files to collect data on service referrals and program participation. Results of the risk and need assessments were not shared with CPS workers in the comparison counties to avoid influencing case decisions or service provision. Outcome data (new referrals, investigations, and substantiations) were taken from Michigan's computerized information system. Data on SDM cases were collected from Michigan's SDM data base, augmented by file reviews conducted by the same case readers cited above.
B. Measuring Changes in Open/Close Decisions

The first step in the evaluation was to determine how the new system affected worker decisions to open or close cases and/or resulted in a different use of protective services, family preservation (Families First), and foster care. As Figure 3 illustrates, changes at this level were minimal; there were no significant differences between the two groups in the percentage of cases that were closed, placed on protective services caseloads, placed in Families First, or transferred to foster care. There was, however, a general trend toward a greater degree of "triage" in the SDM counties, where about 3% more cases were closed without services and approximately 2% more cases were transferred to foster care.

Further analysis of this issue found some important and statistically significant differences between the two study groups. These differences included:

- SDM counties were significantly more likely to close low and moderate risk cases;
- Cases that were closed without services in SDM counties had significantly lower rates of re-referrals and new substantiations than closed cases in the comparison group, indicating that the "screening out" process was more effective in the SDM counties. In non-SDM counties, outcome data clearly indicate that many more cases where children were at risk of harm were closed without services.

![Figure 3](image)

**Action Taken Following Substantiation**

**SDM Counties**
- 920 Cases Substantiated

- Closed Following Investigation: 206 (22.4%)
- Opened to Protective Services: 360 (39.1%)
- Placed in Intensive Family Preservation Program: 158 (17.2%)
- One or More Children Placed in Foster Care: 196 (21.3%)

**Comparison Counties**
- 877 Cases Substantiated

- Closed Following Investigation: 169 (19.3%)
- Opened to Protective Services: 371 (42.3%)
- Placed in Intensive Family Preservation Program: 165 (18.9%)
- One or More Children Placed in Foster Care: 172 (19.6%)
It should also be noted that the SDM cases in this study entered the system before policies prohibiting closure of high and intensive cases were promulgated. Hence, studies of cases substantiated in 1994, for example, would, in all likelihood, find far greater differences in case closure statistics. The new policy appears to be well-grounded, given the relatively high rate of referrals for high risk cases in both study groups. Indeed, the relatively high rate of re-referrals in both the SDM and comparison groups demonstrate that closing these cases puts children at risk.

In total, 51% of low and 38% of moderate risk cases were closed following substantiation in the SDM counties compared to 35% of low risk and 28% of moderate risk cases in the comparison counties. On the other hand, comparison counties closed more high and intensive risk cases. Closing selected cases at lower risk is in concert with the goals of SDM. Such actions shift resources from cases where risk of continued abuse and neglect is low to families with higher risk profiles. It appears that the process of completing risk and need assessments to help determine which cases can be closed significantly enhances the screening process. Cases closed in the SDM counties had much lower rates of re-referral and re-substantiations than cases that were closed following investigation in comparison counties (see Figure 4).

At the other end of the service continuum, a higher proportion of cases sent to foster care in SDM counties were high or intensive risk. In fact, foster care was used for more cases in the SDM counties, but because the new case management system is not used, as yet, in foster care, no data on reunification and length of stay in out-of-home care were collected.

Figure 4

Outcome Comparison: Cases Closed Following Substantiation

![Outcome Comparison Chart](attachment:figure4.png)
C. Changes in Services Provided to Families

The SDM system, as designed, is intended to: 1) focus more attention on higher risk cases, and 2) focus case plans and services on needs identified during the assessment process.

As noted earlier, service standards requiring more contact with higher risk families were implemented in the SDM counties. Time studies were then conducted to determine the degree of compliance with these standards, and the amount of time spent on cases at each service level. While service standards were not met in a high proportion of cases -- due, in large part, to the fact that a workload-based budget was not in place -- there were, at least, significant differences in time spent on low or moderate risk cases and high/intensive risk cases (see Table 2).

<table>
<thead>
<tr>
<th>Service Level</th>
<th>All Cases Studied</th>
<th>Cases with Standard Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>2.0 Hrs/Mo.*</td>
<td>3.3 Hrs/Mo.</td>
</tr>
<tr>
<td>Moderate</td>
<td></td>
<td>4.2 Hrs/Mo.</td>
</tr>
<tr>
<td>High</td>
<td>3.0 Hrs/Mo.*</td>
<td>6.6 Hrs/Mo.</td>
</tr>
<tr>
<td>Intensive</td>
<td></td>
<td>7.7 Hrs/Mo.</td>
</tr>
</tbody>
</table>

*Categories are combined because minimal differences in time devoted to cases were reported between these levels when standards were not met.

When standards were met, the differences in time devoted to cases at each service level, of course, increased. The outcome portion of this evaluation demonstrates that increased services and case monitoring helps to protect children, lowering the rate of reported maltreatment over the next year. While no comparable time study data are available from non-SDM counties, prior studies conducted by NCCD/CRC have demonstrated that, unless clearly articulated standards are in place, there are generally only minimal differences in time devoted to cases at different risk levels.

A second and important measure of system impact is a comparison of program participation rates of families in each study group. Cases opened to protective services and the Families First program were identified and service referral and participation information was compared. **For every major program category, service participation in the SDM counties occurred at significantly higher levels than in the comparison counties** (see Figure 5). This was particularly true in areas outside of Wayne County. (In Wayne County, more cases are closed following substantiation and a much higher proportion of those remaining are transferred to foster care.)
The greatest increases in services provided are found in two critical areas: parenting skills and family counseling. In both of these service areas, SDM counties realized a 60% increase in the rate of referral.
Furthermore, an analysis of referral and outcome data within SDM counties illustrates that involvement in services significantly reduces the rate of subsequent maltreatment. Figure 6 compares outcome data from families with serious substance abuse problems who received treatment with those who did not. The rate of subsequent substantiated abuse or neglect declined markedly for the group receiving treatment. Similar results were found for families receiving other types of services.

Figure 6

**Substance Abuse Problems, Treatment, and Outcomes**

- Serious/Chronic Problems with Substance Abuse: 22.7%
  - Services Refused: 12.7%
  - No Referral: 37.4%
  - Services Unavailable: 1.7%
  - Received Services: 48.2%

- Program Participation: 18.5%
  - New Substantiations: 6.7%
D. Process Evaluation Summary

The results of the process evaluation lead to the following conclusions:

- The SDM system resulted in better decisions as to which cases could be closed following substantiation. A higher proportion of cases were closed in SDM counties than in comparison counties, but a greater proportion of closures were low and moderate risk, and the rate of re-referral and re-substantiation of SDM closures was significantly lower than for cases closed in the comparison group.

- In SDM counties, more time was devoted to cases at higher risk levels. These differences are likely to increase if a workload-based budget is adopted and resources allocated accordingly.

- Cases in SDM counties, particularly those outside of Wayne County, received significantly more services than cases in comparison counties. The difference in services received was greatest for the highest risk cases.

- Services provided to families with serious problems -- particularly substance abuse treatment and parenting skills training -- substantially reduced the incidence of subsequent maltreatment.

- Closing high risk cases following substantiation leaves children unprotected. The movement toward a policy prohibiting closing these cases -- unless unusual circumstances warrant an exception -- is supported by this evaluation.
MEASURING THE IMPACT OF SDM

Data cited above document that the SDM system resulted in better decisions regarding which cases could be closed without services, and substantial increases in services to cases that were opened for services, particularly to those at the higher risk levels. The next step in the evaluation was to determine if these changes resulted in a better overall system of child protection. **The principle issue is, in effect, did risk-based decision making, coupled with clear expectations regarding contacts and service provision, translate into lower rates of maltreatment in Michigan?**

The first step in the analysis was to determine if the samples from the SDM and comparison counties were indeed similar. The strategy of selecting comparison counties based on economic, demographic, and CPS profiles matched those of the SDM counties produced remarkably comparable samples. Risk profiles of each sample are presented in Table 3.

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>SDM Counties</th>
<th>Comparison Counties</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Study Cases</td>
<td>CPS Cases Only*</td>
</tr>
<tr>
<td>Low Risk</td>
<td>5.1%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Moderate Risk</td>
<td>28.3%</td>
<td>26.6%</td>
</tr>
<tr>
<td>High Risk</td>
<td>66.6%</td>
<td>69.5%</td>
</tr>
</tbody>
</table>

*Includes those placed in the Families First program.

No significant differences in risk levels were found, either for the entire samples or when cases opened to protective services were compared. The SDM group did have a **slightly** higher risk profile, indicating that **marginally** higher rates of continued maltreatment could be expected, all other things being equal.
A 12-month follow-up period from the data of investigation was used for all cases in the study.¹ Five outcome variables were used to measure impact. These were:

- All new referrals on abuse and neglect complaints.
- Number of subsequent investigations conducted on each case.
- All new substantiations by type.
- All removals of children from homes of families in the samples.
- Any injuries reported as a result of maltreatment.

In combination, these outcome measures provide an excellent basis for determining both the frequency and severity of abuse and neglect during the follow-up period.

¹Eighteen months of follow-up data are available for the majority of cases. The conclusions listed in this report are fully supported by the 18-month data; however, since some cases did not have a full 18-month follow-up and because some data regarding events occurring near the end of the follow-up period may not have been captured in the agency's data system, a conservative approach was adopted to data presentation to ensure complete data on all cases studied.
A. Outcome Comparisons: All Cases in Each Sample

Figure 7 presents overall results for all cases in each sample, regardless of actions taken. Rates of new referrals, substantiations, removals, and injuries reported were all lower in SDM counties. The most significant decreases were found in rates of substantiation; new substantiations in SDM counties occurred at less than half the rate found in comparison counties. While rates of subsequent removal and reports of injury were relatively low in both groups, these measures in SDM counties were also well below those observed in the comparison counties.

![Figure 7: Outcomes for All Cases in Study 12-Month Follow-Up](image-url)
B. Outcome Comparisons: Cases Opened to Protective Services

Figure 8 compares overall results for cases opened to protective services (including those placed in Michigan’s Family Preservation Program) from SDM and comparison counties. Again, the greatest difference was found in rates of new substantiations and again the SDM rate was less than 50% that reported in the comparison group. Rates of referrals, removals, and child injuries were also lower in the SDM group.
The final measure of impact analyzed, the average number of new investigations assigned, was also significantly lower in SDM counties (see Figure 9). This, in large part, explains why the SDM counties experienced a rate of substantiation less than half that experienced by comparison counties, while the rate of referral in SDM sites was only 16% below (in relative terms) that of the comparison counties. In essence, more cases in the comparison counties had multiple referrals, which, in turn, resulted in more substantiations.

Figure 9

Average Number of New Investigations Assigned for CPS Cases

![Bar chart showing average number of new investigations assigned for high risk and low/moderate risk cases in SDM Counties and Comparison Counties. The chart indicates that SDM Counties had higher rates in both categories compared to Comparison Counties.](chart_image)
Because the SDM system was initially implemented only in child protection services, CPS cases, including those served by the Families First program, serve as the primary focus of the evaluation. Figure 10 presents a breakdown of these cases in both the SDM counties and the comparison group.

Figure 10

**Action Taken Following Substantiation**

<table>
<thead>
<tr>
<th>SDM Counties</th>
<th>920 Cases Substantiated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opened to Protective Services</td>
<td>360 (39.1%)</td>
</tr>
<tr>
<td>Low Risk - 5%</td>
<td>Moderate Risk - 30%</td>
</tr>
<tr>
<td>Placed in Intensive Family Preservation Program</td>
<td>158 (17.2%)</td>
</tr>
<tr>
<td>Low Risk - 1.2%</td>
<td>Moderate Risk - 19%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comparison Counties</th>
<th>877 Cases Substantiated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opened to Protective Services</td>
<td>371 (42.3%)</td>
</tr>
<tr>
<td>Low Risk - 10%</td>
<td>Moderate Risk - 27.2%</td>
</tr>
<tr>
<td>Placed in Intensive Family Preservation Program</td>
<td>165 (18.8%)</td>
</tr>
<tr>
<td>Low Risk - 4.2%</td>
<td>Moderate Risk - 14.5%</td>
</tr>
</tbody>
</table>

These figures indicate, as expected, a higher risk profile for families referred to Families First. However, they also illustrate part of the problem encountered in evaluating the impact of Family Preservation Programs throughout the nation. These programs have been established, in large part, as alternatives to foster care and theoretically target families where risk of placement is imminent. However, if many families referred to Family Preservation Programs do not have children at risk of placement, then the program’s impact on foster care placement rates may be marginal at best.

Based on results from SDM counties, Michigan has established a policy reserving Family Preservation referrals for higher risk families. Such a policy may well improve the impact of the program by ensuring the program serves the targeted population.
Figures 11 and 12 compare outcomes by risk level in SDM and comparison counties. (Because there were so few low risk cases opened to protective services, the low and moderate risk groups are combined throughout this section to simplify presentations.)
C. SUMMARY OF IMPACT EVALUATION FINDINGS

As the charts from the previous pages illustrate, all outcomes for CPS cases in SDM counties are substantially better than those found in comparison counties. Key findings include the following:

- The substantiation rate for high risk cases in SDM counties was about half that recorded in comparison counties. Injury rates and foster care placement were lower in the SDM high risk group.

- While referral rates were only marginally lower for high risk SDM cases, the average number of new investigations assigned per case was significantly lower. The referral rate reflects all cases with one or more referrals; the mean number of investigations reflects the number of referrals per case that were investigated. Therefore, this measure is a more accurate reflection of both the frequency and severity of new referrals received on each sample case. As such, it helps to explain the larger difference found in substantiation rates between the two study samples.
Outcomes for high risk cases in SDM counties were similar to those obtained for moderate and low risk families in comparison counties. This is strong evidence that structured assessments using valid and reliable risk assessment tools, followed by increased services and case monitoring, does work to protect children while keeping families intact.

The SDM system also produced significantly better outcomes for low and moderate risk families. Re-referrals and substantiations were markedly lower than rates observed in the comparison counties. Injury and foster care placement rates were also lower and the mean number of new investigations reported was less than half the average found in the comparison group.

D. WAYNE COUNTY (DETROIT) FINDINGS

One of the key issues to be addressed in this evaluation was how well this system functioned in a major urban area: Wayne County. Child protective services in Wayne County operate quite differently than in other Michigan counties. Most notably, when abuse or neglect is substantiated in counties other than Wayne, the majority of cases are opened to protective services. A small percent are closed and another relatively small percentage are transferred to foster care. In Wayne County, only about one-third of all substantiated cases are opened to protective services, and the majority of these cases are placed with the Families First program. About one-third of all substantiated cases are transferred to foster care and the remaining 30-35% are closed. As a result, few cases (48) from the Wayne County sample were really affected by case management requirements of the new system.

Operations also vary among units in Wayne County, further complicating attempts to measure the effectiveness of SDM. Table 4 presents the risk levels of Wayne County cases opened to protective services from both study groups.

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>SDM Group</th>
<th>Comparison Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CPS</td>
<td>Families First</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>High/Intensive</td>
<td>32</td>
<td>50</td>
</tr>
<tr>
<td>TOTAL</td>
<td>48 (42.5%)</td>
<td>65 (57.5%)</td>
</tr>
</tbody>
</table>
The comparison units in Wayne County made greater use of the Families First program and, conversely, made fewer foster care placements (31% of all substantiated cases versus 34.9%).

Overall, cases opened to protective services in the SDM units had slightly better outcomes than cases in the comparison units (see Figure 13). However, the number of cases analyzed is not sufficient to permit a meaningful breakdown by risk levels.

Figure 13

**Outcome Comparisons**

**Wayne County CPS Cases**

While the analysis of Wayne County cases was limited by the low number of families receiving in-home services, separating these data did produce some valuable findings. These include:

- Overall, Wayne County cases are higher risk than in other counties. About 71% of Wayne County cases (from the combined SDM and comparison groups) were high risk, compared to 64% of cases from other counties. However, this difference does not fully explain the greater use of foster care. CPS staff could, perhaps, adequately serve many of these cases through a combination of direct contacts and purchased services.
Despite a much lower use of foster care and the Families First program, SDM counties (other than Wayne) had a lower rate of new substantiations, foster care placements, and child injuries than the Wayne County comparison group. Changes to the Wayne County service mix with enhanced use of CPS staff and purchased services may help to reduce the reliance on out-of-home placement.

When Wayne County cases are excluded from the analysis, differences between SDM and comparison counties are even more pronounced. Figure 14 compares outcomes for cases outside of Wayne County. The differences noted in substantiations, foster care placements, and child injuries are extraordinary, given that some components of the case management system have yet to be implemented. The degree of structure and accountability offered by this system appears to substantially improve child protection in Michigan.

Figure 12

Outcome Comparisons
All Non-Wayne County CPS Cases