Child Maltreatment Recurrence

A Leadership Initiative of the National Resource Center on Child Maltreatment

Principal Developers

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Both Dr. Fluke and Ms. Hollinshead are affiliated with Walter R. McDonald & Associates, Inc. (WRMA) , a leading provider of consulting services to human services worldwide. WRMA provides managerial and technical consulting in the education, juvenile justice, health and human services fields to improve the lives of children and families. WRMA specializes in five service areas: Research, Evaluation, Strategic Planning, National Data Collection and Reporting Systems, and Information Systems development. Since the firm's founding in 1980, WRMA's professional staff have conducted more than 300 customized, time-limited projects for States, counties, and cities as well as for U.S. Federal agencies, several National governments, leading foundations and national associations and consortia.

National Resource Center on Child Maltreatment (NRCCM)

The National Resource Center on Child Maltreatment provides federally subsidized expert consultation, technical assistance, training and knowledge assimilation and development in the area of Child Protective Services. The Center helps States, Tribes and local CPS agencies build their capacity to effectively prevent and respond to maltreated children and their families. The NRCCM is operated by a collaborative effort between the Child Welfare Institute, based in Duluth, Georgia and ACTION for Child Protection, based in Aurora, Colorado.

Introduction

Under regulations set forth at 45 CFR 1355.31-37, the federal government established requirements for the Child and Family Services Reviews. One of these requirements establishes national standards for particular data indicators that are used to assess a State's substantial conformity with Titles IV-B and IV-E of the Social Security Act. Child maltreatment recurrence is one of the six Statewide data indicators set for this purpose.

This monograph was developed to:

- Focus attention on specific circumstances of maltreatment and the types of intervention that are most important in reducing maltreatment recurrence.

- Illuminate aspects of the Child and Family Services Review (CFSR) recurrence measure that can help in understanding how this measure is likely to be impacted by CPS policy, information system and program changes.

The CFSR recurrence measure is based on child level data provided by State CPS agencies to the National Child Abuse and Neglect Data System. States with recurrence rates above the federal CFSR standard must develop a Program Improvement Plan as mandated by federal regulation under the Adoption and Safe Families Act of 1997. This monograph can assist States in developing a viable and balanced improvement plan to reduce maltreatment recurrence. Because the CFSR recurrence indicator provides a constrained view of the issues surrounding recurrence, the developers of this monograph encourage States to analyze their data in multiple ways to develop a clearer understanding of recurrence and their approach to program improvement.

Included in this monograph is a review of research findings on recurrence; a general presentation of limitations of the recurrence measures; a discussion of the federal recurrence outcome indicator and the recurrence standard, and an examination of implications of strategies for program improvement. The review of research findings section provides a brief overview of definition, measurement and research regarding recurrence. It lays out the subject in general rather than focusing on the CFSR recurrence outcome measure which represents a special segment of this broader topic. As with any measurement of outcomes, measurement of recurrence has many limitations. The section on recurrence measure limitations explores some of these limitations. The implications section examines some of the implications of the research on child maltreatment recurrence as well as the development of the measure of recurrence for the Child and Family Services Review. In particular, it addresses how this information can be translated into strategies for program improvement.

Approaches to Definition and Measurement

Studies of recurrence vary greatly in the methods they use and the issues and factors they examine. Regardless, it is important to note that the findings presented here are inherently limited to those families known to the child protective services system. For a more detailed discussion of the considerations addressed herein, please see the supplement to this monograph and related Appendices.

Research Methods

There is a myriad of methodological considerations for researchers looking at the issue of recurrence. These include the purpose of the study, the population studied and unit of analysis, the definition of recurrence, data sources and analytic approaches.

Purpose of Study

Over the years, recurrence has been examined for different purposes. Recurrence has been used as an indicator of the effectiveness of a particular intervention under study (e.g., Littell, 1997; Lutzker and Rice, 1987) or as an indicator of the predictive validity of safety and risk assessment protocols (e.g., Baird, 1988; Johnson and L'Esperance, 1984). In recent years, more studies focusing specifically on recurrence have been conducted (e.g., DePanfilis and Zuravin 1999a; Fluke, Yuan, Edwards, 1999; Fryer and Miyoshi 1994). The purpose of the study affects the population studied, data sources and analytic method used to study the issue.

Data Sources

Data sources used to assess recurrence vary across studies. Most commonly, studies have used CPS intake and investigation administrative data (e.g., Fluke et al., 1999; Way et al., 2001; Palusci, 2002), but a number of studies have either used case record reviews, surveys, interviews and/or focus groups to gather data and/or supplement analysis of administrative data (e.g., DePanfilis and Zuravin, 2002; Fluke et al., 2001a; Herrenkohl et al., 1978).

The data and data collection methods selected are often driven by the goal of the study, considerations of availability of data and resources available to the researchers. Overall, however, studies using multiple sources of information are generally thought to be more robust and, because recurrence is a rare event, using population data is considered more optimal than using sample data (Fluke et al., 2001b).

Definition of Recurrence

Definitions of recurrence vary significantly across studies. Most commonly, recurrence has been defined as a substantiated report following a prior substantiation that involves the same child victim or family (DePanfilis and Zuravin, 1998; Fluke et al., 1999; US DHHS 2002a). However, because of concerns about factors affecting substantiation, and

evidence to suggest that unsubstantiation may not mean no maltreatment occurred, some studies have examined repeat reports, sometimes called re-referrals (e.g., English, et al., 1999). Such studies analyze re-reported cases regardless of whether the reports were substantiated or unsubstantiated. Further, some studies have used events other than CPS referrals or substantiations as measures of recurrence. Examples include repeat court involvement (Murphy et al., 1992), repeat hospitalization (Levy et al., 1995), or repeat referrals to police child protection units (Hamilton and Browne, 1999). Finally, to date, studies focusing on perpetrators, as opposed to children or families have generally used any new report or new substantiation against a perpetrator of child maltreatment as a measure of recurrence (Way et al., 2001; Hamilton and Browne, 1999).

Recurrence definitions also vary on whether they focus on specific types of maltreatment (e.g., Finkelhor and Baron, 1986; Johnson and L'Esperance, 1984; Palusci, 2002); all types of maltreatment (e.g., Berkeley Planning Associates, 1983; DePanfilis and Zuravin, 1998; Fluke et al., 1999; US DHHS 2002a), and/or more than one type of maltreatment associated with a single report (e.g., Herrenkohl et al., 1978; US DHHS 2002a). Further, some studies restrict recurrence analysis to focus only on incidents in which the same type of maltreatment has been perpetrated (e.g., Palusci, 2002), while others consider any future type of maltreatment to be recurrence (Fluke et al., 1999; Hamilton and Browne, 1999; US DHHS 2002a; Way et al., 2001).

Definitions of recurrence also vary according to the length of time over which recurrence has been measured. The length of time studied ranges between months to over a decade. Most commonly, recurrence is looked at over a matter of 2-5 years (DePanfilis and Zuravin, 1998). In addition, studies have used alternate definitions of what time periods are considered relative to the status or life of the case. Some focus on recurrence rates during treatment (e.g., DePanfilis and Zuravin, 2002); others examine recurrence rates post-treatment or case closure (e.g., Lutzker and Rice, 1987; Zuravin and DePanfilis, 1996), while others have measured recurrence without regard to the current treatment status of the child or family (e.g., Fluke et al., 1999; US DHHS, 2002a).

Analytic Approaches

Once the data have been collected, a number of analytic approaches have been used to interpret the data. The common element between the analytic approaches is the use of a dichotomous dependent variable for recurrence, i.e., use of one variable that reflects the presence versus the absence of recurrence. However, more recently, studies have tended to examine time to recurrence as an outcome, as in event history analysis.

Factors Associated with Recurrence

Key Findings

While the methodological differences described previously somewhat limit the ability to generalize across the study findings, there do appear to be a number of findings that are common, or replicated, across the studies. For a more comprehensive overview of the following findings and examples of findings about factors associated with recurrence, see the supplement to this monograph and related Appendices.

General Recurrence Findings

- **Rate of Recurrence**

  An analysis of multiple studies of recurrence has shown *wide variability on the rate of recurrence, from as few as 1 to 2 percent of cases identified as low risk to over 66 percent of cases followed for more than five years* (see DePanfilis and Zuravin, 1998). However, the results from these studies are difficult to compare because the studies did not use the same definitions of recurrence, study the same types of cases, or follow cases for the same length of time, and may be dissimilar on other factors.

- **Timing of Recurrence**

  Many studies employing survival analysis have noted that *the risk of recurrence is greatest soon after the first incident and that the risk of recurrence diminishes over time* (e.g., DePanfilis, 1995; Fluke, et al., 1999; Fryer and Miyoshi, 1994).

- **Number of Recurrences**

  Although rates vary across studies, in part due to methodological differences, research has consistently found that *the majority of cases that recur, do so only once* (e.g., Fluke et al., 1999; Hamilton and Browne, 1999; Herrenkohl et al., 1978).

- **Multiple Recurrences**

  Studies have also found that *cases with multiple recurrent maltreatment incidents tend to recur more quickly than those with only one recurrent maltreatment incident* (e.g., DePanfilis and Zuravin, 1999a; Fluke et al., 1999; Marshall and English, 1999; US DHHS 2002a).

- **Child vs. Family Recurrence**

  Research suggests that *studies that focus on recurrence of maltreatment specific to a particular child generally identify lower rates of recurrence than studies that focus on recurrence rates for families* (e.g., DePanfilis and Zuravin, 1998).

- **Case Status**

  Predictors of time to recurrence differ according to the case status – i.e., whether the case is open or closed (e.g., Herrenkohl et al., 1978; Zuravin and DePanfilis, 1996).

- **Re-referrals vs. Recurrence**

  Re-referrals may be driven by many of the same factors identified as associated with recurrence (e.g., Marshall and English, 1999).

- **Recurrence and Population**

  Although this finding has yet to be replicated, recurrence also appears to be *correlated with the rate of child victims per 1,000 children in the population* (US DHHS, 2002b).

Child Demographics and Recurrence

Most recurrence research examines child characteristics to determine whether particular characteristics of children are associated with different rates of recurrence. It appears there are a number of common findings across studies. For further information regarding the number of studies that have identified the following factors in relation to recurrence, please see Table A.

- **Prior History of Maltreatment**

  A well-established factor affecting recurrence is that *children with a history of reported child maltreatment are more likely to recur than those children with no prior CPS involvement* (e.g., Hamilton and Browne, 1999; Littell, 1997; US DHHS 2002a).

- **Age of Child**

  A number of studies have consistently identified that *younger children are more likely to experience recurrent maltreatment* when compared to older children (e.g., Fluke et al., 1999; Fryer and Miyoshi, 1994; Hamilton and Browne, 1999; Marshall and English, 1999).

- **Gender of Child**

  Results of analyses comparing rates of recurrence between different genders have generally found *no difference between rates of recurrence for boys and girls* (Fluke et al., 1999; Hamilton and Browne, 1999; US DHHS 2002a).

- **Race of Child**

  The *findings comparing recurrence across racial and ethnic groups are more mixed*. While some studies have found no discernable difference in recurrence rates across different racial and ethnic groups, (e.g., Levy et al., 1995; Inkelas and Halfon, 1997) some studies have found that generally, children of color are less likely to experience recurrent maltreatment when compared with White, non-Hispanic children (Fluke et al., 1999; US DHHS 2002a).

- **Child Disability**

  Fewer studies have examined the relationship between a child's disability and re-referrals or recurrent maltreatment, but some association has been found to suggest that *children with disabilities may be more likely to be re-referred or to experience recurrent maltreatment* (e.g., Marshall and English, 1999; Hamilton and Browne, 1999; Palusci, 2002).

- **Type(s) of Maltreatment**

  Recurrence rates do appear to be related to the type of maltreatment that a child experiences. The majority of studies that assessed this issue found that *cases involving neglect are more likely to recur than cases involving other maltreatment types* (e.g., DePanfilis and Zuravin, 1999a; Fluke et al., 1999; US DHHS 2002a).

  Studies that have examined cases involving multiple maltreatment types (e.g., neglect and abuse or physical abuse and sexual abuse) have revealed that *cases involving multiple maltreatment types are more likely to recur than cases involving one type of maltreatment* (e.g., Herrenkohl et al., 1978; US DHHS 2002a).

- **Severity of Maltreatment**

  In addition, studies assessing the severity of maltreatment have consistently found that *more severe maltreatment is associated with higher rates of recurrence* (e.g., Berkeley Planning Associates, 1983; Cohn, 1979; Ferleger et al., 1988; Marks and McDonald, 1989).

Table A:
Number of Studies
Identifying Specific Child Factors Affecting Recurrence

Factors	Recurrence[1]		
Child Characteristics	**Greater Likelihood**	**Less Likelihood**	**Equal Likelihood**
Age of child Younger (different ranges, but all under age six)	10		
Older (12-17)		1	
Race/Ethnicity of child			
White, Non-Hispanic	2	1	4
African American		2	3
Asian American		3	1
Hispanic		1	2
Alaskan Native	1		
Native American	1		
Gender of child			
Female (vs Male)			5
Child has disability	3		
Child has behavior problems	2		
Type of maltreatment			
Neglect (vs. other maltreatment types)	13		1
Physical Abuse (vs. other maltreatment types)	1	1	1
Sexual Abuse (vs. other maltreatment types)	1		1
Multiple maltreatment types (vs. single maltreatment types)	5		
Higher severity of maltreatment	6		1
Child has history of child abuse or neglect	8		

[1] The numbers in Tables A, B and C refer to the number of studies found for each characteristic.

Family Characteristics and Recurrence

Studies of recurrence have also analyzed family and perpetrator characteristics associated with different rates of recurrence. Although studies have looked at a myriad of different factors, there do appear to be some trends in their findings. For further reference regarding the number of studies that identified the following factors, please see Table B.

- **Family Demographics**

  Studies reveal that *families with more children are likely to recur* (e.g., Baird, 1988; Johnson and L'Esperance, 1984) as are *families in which the caregiver's age, at the time of the report, was younger* (e.g., Baird, 1988; Berkeley Planning Associates, 1983; Wagner, 1994).

  Risk of repeat victimization may also differ according to the makeup of the family, i.e., whether the family is comprised of a single parent, a stepparent, two parents, foster parents, etc. (e.g., Hamilton and Browne, 1999; Levy et al., 1995).

  The *geographic location of families is also associated with different re-referral or recurrence rates*. Studies have identified that *families living in rural areas are more likely to re-refer or recur* (e.g., Marshall and English, 1999; Way et al., 2001). Further, Marshall and English (1999) found that *re-referral rates vary according to the region in which a family lives* and Way et al., (2001) found that *families living in economically depressed areas had higher rates of recurrence*.

- **Family Problems**

  Consistent with the findings about children with a history of maltreatment, *families with a prior history of child maltreatment are more likely to recur* or re-refer (e.g., Cohn, 1979; Johnson, 1994; Marshall and English, 1999).

  Caregiver substance abuse or domestic violence in the household is associated with higher rates of recurrence (e.g., Baird, 1988; DePanfilis and Zuravin, 1999b; Palusci, 2002).

  Recurrence rates are higher for families in which psychological problems are identified as a problem (e.g., Murphy et al., 1992; Palusci, 2002).

  Families who lack social supports and families experiencing higher levels of stress are more likely to recur (e.g., Baird, 1988; DePanfilis and Zuravin, 1999b).

Regarding a family's income or economic resources, research has found *higher rates of recurrence and re-referrals in families with lower levels of income* (e.g., Baird, 1988; English and Marshall, 1998; Levy et al., 1995).

- **Other Family Factors**

  Another replicated finding is that a *family's inability to use agency resources has been found to be associated with higher rates of recurrence* (Johnson and L'Esperance, 1984; Marks and McDonald, 1989).

  Studies have also been conducted to assess recurrence according to the level of risk identified for families either at intake or following an investigation. Findings from different studies cannot be generalized because of the different methodologies and assessment protocols employed to determine levels of risk. However, studies conducted do generally suggest that on a continuum of risk from low to medium to high, *the lower the level of risk, the lower the likelihood of recurrence* (e.g., Baird, 1988; Johnson, 1995a).

Perpetrator Recidivism

Most studies have focused on recurrence by looking at child victim level or family level recurrence rates, and numerous studies have been conducted regarding perpetrator recidivism of sexual abuse (Finkelhor, 1986; Hanson and Bussiere, 1998; Hanson, Steffy, and Gauthier, 1993). Some recent studies have explored other types of child maltreatment perpetrator recidivism, including physical abuse and/or neglect (Way et al., 2001; Hamilton and Browne, 1999). Such studies assist in understanding the scope of perpetration by offenders, i.e., whether they perpetrate child maltreatment against the same or different children. Further, the advantage of this approach is that while children over age 18 are rarely tracked for recurrence, the tracking of perpetrators' recidivism can extend throughout the perpetrator's life (Way, et al., 2001, citing Hanson et al., 1993).

- **Perpetrator Access to the Child**

  Studies have also demonstrated that *the more a perpetrator has access to the child victim, the higher the rate of recurrence* (e.g., Cohn and Daro, 1987; English and Marshall, 1998; Johnson and L'Esperance, 1984).

Because there have been few studies of perpetrator recidivism considering all maltreatment types, the following findings have not been replicated, but may be informative.

- **Unsubstantiated vs. Substantiated Perpetrators**

  Some research suggests that *there may be no overall difference in timing of recurrence for substantiated and unsubstantiated perpetrators, but*

there may be differences in recurrence rates for unsubstantiated and substantiated perpetrators depending on the type of maltreatment allegedly perpetrated (Way et al., 2001).

- **Different Perpetrator vs. the Same Perpetrator**

  Although it has yet to be replicated, research suggests that *there may be different recurrence rates depending on whether the perpetrator of the maltreatment is the same or a different person* (Hamilton and Browne, 1999).

- **Male vs. Female Perpetrators**

  Way et al. (2001) found that *female perpetrators were at greater risk for recidivism than males, depending on the initial type of maltreatment*.

Table B:
Number of Studies
Identifying Family or Perpetrator Factors Affecting Recurrence

Factors	Recurrence		
Perpetrator or Family Characteristics	**Greater Likelihood**	**Less Likelihood**	**Equal Likelihood**
Substance abuse	6		
Domestic violence	7		
Family structure			
Single parent family	3		
Family with stepparent	1		
Larger size of family	6		
Perpetrator history of maltreatment as a child	3		
Identity of perpetrator			
Biological parent	1		
Stepfather	1		
Same perpetrator	1		
Perpetrator access to child	4		
Caregiver a younger age at time of report	3		
Poor parenting skills	2		
Lack of social support	10		
Family stress	6		
Psychological problems	3		
Low motivation and/or low cooperation of perpetrator or caregiver	8		
Caregiver viewed incident as seriously as or more seriously than investigation worker		2	
Family has prior CPS case	13		
Multiple prior recurrences	9		
Recent report of maltreatment	7		
Perpetrator's history of perpetration			
Same maltreatment type	1		
Different maltreatment type	2		
Geographic location of family	4		
Family's ability to use agency resources	2		
Lower income	6		

Provision of Services

The body of research regarding the effects of services and interventions on recurrence is diverse and difficult to compare given all the differences between programs and services provided. Further, as DePanfilis and Zuravin (1998) note, few studies have looked at how the presence, type and length of treatment may affect recurrence rates. Despite this, some trends are apparent.

For additional information regarding the number of studies found to support the following findings, see Table C.

- **Post-Investigative Services**

  Studies that have looked at the relationship between the provision of services and recurrence have generally noted that *the provision of post-investigation services is associated with higher rates of recurrence* (e.g., DePanfilis and Zuravin, 1999a; Fluke et al, 1999).

  However, it appears *compliance with service plans is associated with lower rates of recurrence* (e.g., Ferleger et al., 1988; DePanfilis and Zuravin, 2002).

  Studies have shown that *the number of services received by a family may reduce recurrence rates,* although this effect may differ according to the type of maltreatment (e.g., Johnson, 2000; Inkeles and Halfon, 1997).

  Finally, *the use of safety or risk assessment protocol and planning tools appears to reduce risk of recurrence* (Fluke, 1991; Fluke et al., 2001b).

- **Family Preservation Services**

  Littell's (1997) research regarding the efficacy of family preservation services determined that the *duration, intensity and breadth of family preservation services had little overall impact on the recurrence of child maltreatment*.

- **Possible Effects of Services Over Time**

  It appears that *in cases in which services are provided, recurrence rates are highest at earlier points in time* (e.g., Fryer and Miyoshi, 1994; Zuravin and DePanfilis, 1996).

  When *compared to families with a history of CPS involvement, first-time CPS service recipients may be equally likely to recur while their cases are open but after case closure they appear to have lower rates of recurrence* (e.g., Zuravin and DePanfilis, 1996).

Research suggests that *cases receiving services for longer lengths of time have decreasing rates of recurrence* (e.g., Cohn, 1979; Berkeley Planning Associates, 1983; Johnson and L'Esperance, 1994).

Studies have determined that the *provision of foster care services is associated with higher rates of recurrence but decreased rates over time* (e.g., Baird, 1988; DePanfilis and Zuravin, 1999b; English et al., 1999; US DHHS 2002a)

- **Indicators of Service Surveillance Effect**

Families who receive services are subjected to greater scrutiny than those families who do not. Researchers have long thought this "surveillance effect" may influence recurrence rates for these families (e.g., DePanfilis, 1995; Fluke, et al.,1999; Johnson and Clancy, 1989). Research taking this into account suggests that *higher recurrence rates may be associated with increased scrutiny of families receiving services* (e.g., Johnson, 2000; MacMillan, 2002).

Table C:
Number of Studies
Identifying Service Factors Affecting Recurrence

Factors	Recurrence		
Service Interventions	**Greater Likelihood**	**Less Likelihood**	**Equal Likelihood**
Use of safety assessment or risk assessment protocol		2	
Post-investigation services received	5		
Family preservation services received			2
Substantiated but closed with no services (vs. services provided)		2	
Longer length of treatment/services		4	3
Higher number of in-person caseworker visits	1	1	
Higher number of service appointments kept		2	
More services received		2	1
Risk assessment continuum rating			
from high to medium to low risk	7		
Foster care placement	6	2	

Limitations and Issues with Recurrence as an Outcome

The limitations discussed here are well recognized in the field and some adjustments in measurement have already been made or proposed. Some of these limitations impact virtually any measure of recurrence that relies on administrative data and even data based on reading CPS records. In these areas of concern, the federal CFSR measure cannot be singled out. While it is important to be aware of these limitations, it is also important to recognize that the limitations are inherent in the data. Nonetheless, they represent areas where the measures and source of measurement can continue to be improved.

Putting aside concerns or limitations concerning specific measures of recurrence (e.g., the length of time over which recurrence is tracked), the primary limitations of recurrence measures are tied to the definition of events, event dates and the ability of track children and other individuals over time.

Incidence and Report Dates

By definition, the measurement of recurrence depends on knowing when child maltreatment occurred and, if a child is maltreated again, when the second maltreatment occurs. One limitation of recurrence measures is that in administrative data systems especially and case record reviews as well, it is very difficult to obtain the precise date of a maltreatment incidence. Almost without exception, CPS data systems do not collect an incident date. Rather, what is almost universally available is the report date. The use of the report date as the basis of recurrence measurement contributes to three potential sources of error:

- ***Difficulties in Distinguishing the Same Maltreatment Event Reported by Different Sources***

  This limitation has to do with the concern that in many States a report of child maltreatment concerning the same circumstances may be received more than once. For example, a report on the same child may be made on the same day by a police officer and a school nurse. This may happen if the nurse reports the maltreatment to both the police and to CPS, and the police in return report the maltreatment to CPS. Most agencies would consider this to be the same report and certainly the same investigation; however, in some States' data, these reports may be counted twice, especially if the reports are received more than a couple of days apart.

- ***Difficulties in Identifying Maltreatment that Occurred Some Time Ago***

  During the course of investigation or treatment, children or their caretakers sometimes identify maltreatment that occurred at some point in the past, even several years ago. Some agencies initiate a new report under these circumstances, but the report date is the date when the event was identified. Therefore, while it may still represent recurrent maltreatment, if

the actual incident took place outside the time period used to calculate recurrence, it may not be appropriate to count those reports of maltreatment.

- ***Difficulties Associated with Significant Delays Between the Date of the Report and the Completion of the Investigation Process***

  For some reports in some States, the time lag between the report date and the disposition determination date may be very long (or in some instances indefinite). This is especially important for definitions of recurrence that are based on the identification of a victim, since the victimization status is part of the determination process. If the determination has not been made, then a victim cannot be identified. Since research shows that for most States the majority of these investigations are likely to be considered unsubstantiated (US DHHS 2002a), the consequence is that the recurrence rate in a given year may be artificially higher if not all investigations have been completed during the period reviewed.

One solution that is often proposed to improve recurrence measurement is to incorporate an incidence date into the data collection system. However, in practice it is not an easy matter to determine a precise date for a maltreatment event. For example, maltreatment may have been occurring for several months before a threshold of severity is reached or an incident occurs that brings it to the attention of CPS. Under these circumstances, the person making the report to CPS will know when the event that they observed took place, but even if they are aware that maltreatment was initiated earlier, they probably do not know exactly when. Thus, while obtaining the incidence date would be ideal, it is likely to be a highly unreliable source of data, particularly for neglect reports since neglect is less likely to be incident based.

There are other, more practical adjustments and supplementary data which are already being used or that could be used to address the limitations identified above. Some of these are presented in the discussion on information system improvement.

Identification of Children, Families and Perpetrators Over Time

An essential part of the measurement of recurrence is the ability to track children, families and perpetrators so that if new maltreatment events occur, they can be observed. This capacity usually entails a means to assign a unique identifier to an individual in a data set. For example, most State agencies accomplish this by having the person responsible for taking a report about a child look up the child's name and other information to see if there is a match. If so, the child's identifier is retained or, if no record is found, a new identifier is assigned.

While this appears to be a straightforward process when aided by a computerized directory and a Soundex system, errors do occur. Sometimes individuals or family members with a prior history are not found on the database and, even though they have a

record, they are inadvertently given another identifier. Alternatively, in some instances, an individual may be given the same identifier as some other person because their names are similar or for other reasons.

While many of the problems with identifiers can be solved, there are some areas that will require additional long-term attention. For example, children and family members who move to another State cannot easily be identified at this time.

The Federal Child and Family Services Review Recurrence Measure

For the Child and Families Services Reviews (CFSR), recurrence of child maltreatment is defined as the percentage of children who were victims of a substantiated or indicated child abuse report during the first half of the calendar year who had a subsequent substantiated or indicated maltreatment report within six months of the first report. The indicator was developed based on information reported by 21 States to the National Child Abuse and Neglect Data System (NCANDS) Detailed Case Data Component (DCDC) for two calendar years, 1997 and 1998. Because multiple years were available for some but not all states providing data, 34 data points were available for the calculation of the national standard. The six-month parameter was chosen because recurrence across calendar years is difficult to calculate for some states and because research has indicated that the majority of recurrence within a twelve-month period takes place within the first six months following a substantiated or indicated report of child maltreatment (Fluke, Yuan, Edwards, 1999; Zuravin and DePanfilis, 1996).

Since its original calculation, the indicator has been revised once in order to account for corrected State data submitted for 1997 and 1998. The current national standard for the recurrence of child maltreatment is 6.1 percent. This standard reflects the 25th percentile on the normal probability distribution, i.e., 25 percent of the data on recurrence fell below this number. It also reflects a further correction for the sampling error; this resulted in an upward adjustment in the standard. A State is considered to have met the national standard if its recurrence rate, calculated according to the federal definition, is equal to or less than the national standard for recurrence (US DHHS 2001b).

In keeping with the federal definition, State performance on this indicator is calculated by determining the number of unduplicated children who were victims of maltreatment during the first six months of the calendar year for the NCANDS reporting period used in the CFSR (i.e., January 1 – June 30). A victim is considered as a child who experienced a substantiated or indicated maltreatment, or died as a result of maltreatment. Each child is followed for six months from the first report date during the January to June period to determine if another substantiated or indicated report was received. The count of children who met the recurrence criterion is then divided by the total number of children who were victims of maltreatment during the first six months of the calendar year.

In addition to the CFSR recurrence indicator derived from the statewide data, there is a specific item in the on-site review instrument regarding recurrence. This aspect of the on-site CFSR entails an examination of a sample of written case records, but is defined in the same way as the statewide indicator. Information related to case review findings helps to "flesh out" recurrence and highlight issues that may be present in the statewide data. These results are also reported in the final report along with the State's performance on the statewide recurrence measure described previously. The CFSR process includes an evaluation of the timeliness of initiating investigations, the maltreatment of children in foster care and services offered to protect children in their own homes. Additionally, the

risk of harm to children among the cases included in the on-site review is evaluated. Thus, even though this monograph focuses on recurrence, the CFSR review process is much more comprehensive.

While not taking issue with the specific measure of recurrence used in establishing the CFSR outcome standard for recurrence, it would be inaccurate and counterproductive to suggest that the CFSR measure is the ideal measure. As a measure of recurrence it is has been found to be feasible, reliable and valid measure over several years and across States. In the view of the authors, the current CFSR measure has appropriately enhanced serious dialogue about the performance of CPS and has been a driver in moving the field toward long-term improvement of CPS systems. From this perspective, it is a very good starting point from which to address recurrence and to assess improvements.

Implications and Strategies

The research findings from multiple studies of recurrence are mostly descriptive, but they present a remarkably consistent set of findings across agencies and over time. Among the many implications of these results is that there are some key features of child maltreatment and child maltreatment intervention that can probably be relied upon and used to target resources aimed at reducing recurrence. Before discussing these particulars, however, it seems appropriate to describe some basic assumptions about the consideration and formulation of strategies.

Outcome Improvement

Underlying this monograph is the fundamental assumption that recurrence of child maltreatment is a legitimate concern for CPS and that, generally, a reduction in recurrence would be a positive development for most agencies. A corollary to this assumption is that the reduction of recurrence is most likely to be achieved by attending to how a CPS agency intervenes with children and families.

In contrast, it is possible that attaining the federal recurrence standard might be achieved by focusing solely on the State's information system. However, this is likely to be a short-term solution and one that may fall short of the mark of effectively addressing child maltreatment recurrence. Similarly, making short-term policy decisions that alter basic definitions or restrict access to service (e.g., reducing services for older children because their recurrence rates are generally lower) may also achieve the desired effect of reducing recurrence in the near future, but may incur serious unintended consequences for an agency and for the children and families served.

The following areas that are reviewed here for possible consideration in addressing program improvement to reduce recurrence include:

- Information System Improvement
- State Policy Improvement
- Intervention Targeting
- Research and Evaluation

Information System Improvement

Despite the caution raised about relying on information system changes as the only strategy for improving recurrence outcomes, "cleaning up" or improving the data and the integrity of a State's information system is an important consideration. Therefore, a review of the information system should be a starting point for many agencies. As described within the data limitations discussion, the areas of concern include the use of unique identifiers, delays in getting completed investigation determinations, the degree to which investigation data reflect different unique circumstances, and the identification of events that occurred in the past.

In the area of appropriate creation and use of identifiers, there are many methods already in place or available to States that can be used to address this problem. These include more diligent searches by agency staff, more advanced search aids, and information system processes for merging identifiers after an investigation so that the data accurately represent the rate of recurrence.

Statistical matching algorithms, or statistical adjustments of recurrence measures, represent another category of adjustments. These methods use other information about individuals, such as distributions of birth dates, age, sex, addresses and other information to make adjustments. For NCANDS, estimates of the errors in the State level CFSR recurrence rates are made using these techniques, and for almost all States, errors in the use of identifiers have not been found to be significant.

Delays in completing investigation determinations are clearly a management concern, and may be due to such factors as staff workload, difficult procedures for completing the process, and backlogs in data entry. Ideally, this concern would be addressed at the management level. On a short-term basis, when faced with such problems, some States have systematically conducted an administrative review of open investigations which have exceeded the deadline to determine the appropriate disposition. The drawback to this solution is that if the process is not conducted routinely, the volume of completed investigations in any given year might be unusually large, and such a process might cause other concerns about the agency's statistics over time.

For many years some State information systems have combined multiple reports that address the same investigation event into a single investigation record. Such an adjustment is also made in calculating the federal CFSR measure so that additional reports regarding the same child made within the same day or during the following day are combined into a single event.

At this stage almost no research or other information is available concerning how large a share of CPS reports are based on the identification of maltreatment events that occurred long enough ago that they would not be considered current. So far, it has not been identified as a major issue among case records that have been reviewed for the CFSR. It has been proposed that agencies that are concerned about not including events that occurred in the past incorporate an additional data field that flags these events, or a field that captures an estimated date of occurrence limited to the month and year. These historical, or before present, events could then be removed from the data before the recurrence rates are calculated. Further, it would be important to ensure that the definition of historical is defined and applied consistently to all reports.

State Policy Improvement

From the research there is little evidence thus far that changes in State level policy will result in recurrence reduction. There are two critical areas of State level policy development that may impact recurrence: implementation of safety and risk assessment technology and development of diversified response systems.

Before discussing these strategies the issue of agency resources requires some comment. So far, there is no specific evidence to suggest that high workloads or inadequate general training have a direct relationship on higher or lower rates of recurrence, although there is some indication that training staff to improve decision-making skills or to utilize safety and risk assessment protocols may contribute to a decrease in recurrence rates in some States. Also, there is some indication that insufficient service resources are tied to higher levels of recurrence. This finding may have implications given the apparent relationship between the utility of more types of services and lower recurrence. In any case, it seems fairly clear that highly stressed staff with few organizational supports will not be able to successfully implement significant systematic and targeted changes.

Safety and Risk Assessments

Based on a review of much of the literature regarding worker decision-making and where it is effectively implemented, safety and risk assessment technology may impact worker and supervisory decisions regarding the identification of circumstances that endanger children, particularly those that would otherwise be considered more marginal. This means that most workers in most agencies make pretty good decisions regarding risk and safety most of the time. Lapses do occur that may result from errors of judgment, and it appears that risk and safety assessment tools may mitigate some of these lapses. The implication is that appropriate intervention is more accurately being targeted to children and families. However, despite years of research, the exact mechanism by which this occurs has not been identified. Nevertheless, there is some research evidence that suggests that the utilization of safety and risk assessment models, if well implemented, can result in reductions in recurrence.

At this stage the research base does not strongly support one approach to safety and risk assessment over another especially inasmuch as the results of comparison studies are confounded by potential bias. Nevertheless, as discussed in the supplement to this monograph, State agencies can access a range of resources to aid in developing or enhancing their approaches to safety and risk assessment technology.

Diversified Response Systems

Diversified response systems may reduce recurrence primarily because they represent a definitional shift in conditions that are considered maltreatment. The earliest example of a State that implemented a type of diversified response approach is Pennsylvania where only physical abuse, sexual abuse and severe neglect are considered to be part of the formal Statewide response to child maltreatment. Other forms of child maltreatment are

handled by the county agencies, but not considered a part of Child Protective Services at the State level.

Since the early 1990s other States, notably Missouri, Florida, and recently Virginia, have piloted or implemented policy to allow at least some counties or other jurisdictions to implement response systems where circumstances that had been previously defined as reportable child abuse are diverted to an alternative response where the family is assessed. For many of these events, no determination of victimization is made. In some instances, the circumstances targeted for diversified response are those that may be most likely to result in recurrence, such as undifferentiated neglect. One possible outcome of implementing such a system is that recurrence is reduced since the definition of victimization is restricted; therefore, the overall level of victimization is reduced.

Intervention Targeting

The ability to target specific populations for different types of effective interventions is likely to be the most important program improvement strategy in addressing recurrence. Sub-populations of children and caregivers who are most likely to recur have been identified from the research above. The numbers of children and families who exhibit key characteristics associated with recurrence vary from State to State so that one strategy will not work everywhere. However, the identification of relatively large target populations at the State and local level can help to set priorities and direct services that will maximize the chance for improving recurrence outcomes.

Characteristics of Children

One major profile of child characteristics likely to experience recurrence includes children who are neglected or experience multiple maltreatment types or who have a prior history of maltreatment. Taken together, analysis suggests that children with these characteristics constitute a large block of children with higher recurrence rates and represent about 18 percent of victims in most States. Consequently, interventions and services designed to address children with these two characteristics are likely to have a considerable overall effect on a State's recurrence rates.

Children who are relatively young children and children who are severely maltreated are good candidates for enhanced service interventions.

Characteristics of Perpetrators and Families

The presence of either substance abuse or domestic violence within families appears to create conditions where recurrence is most likely. The existence of these two characteristics points to the need to enhance services to this population, and to enhance the identification of these conditions among caregivers. Many States do not have an adequate system for collecting data that reliably identifies caregivers who experience domestic violence and substance abuse. Consequently, it is difficult to determine how reducing recurrence rates in these sub-populations might affect overall recurrence rates.

Nevertheless, there is a range of promising service interventions now being developed to address these areas.

Other important characteristics of families that appear to influence the likelihood of recurrence include:

- Prior history of maltreatment.
- Presence of psychological problems.
- Presence of lower incomes.
- Lack of social support.
- Single parents or stepparents.

Ongoing Service Provision

Children and families that receive continuing services, including foster care services, have higher rates of recurrence compared to children and families who do not. This apparent fact should be considered before addressing intervention targeting. Such findings may be due to surveillance effects associated with service provision. It may also be that children and families who receive services are already at higher risk and therefore may be inherently more likely to recur, no matter what is done. At this point it is not clear from the research exactly what accounts for the higher recurrence rates when services are provided. Even so, several studies provide some evidence for the presence of service surveillance as a factor that appears to elevate the likelihood of recurrence.

Regardless of the reason for the effect, it is not appropriate to consider reducing the overall level of services provided simply to reduce recurrence. Indeed, based on the current state of research, it is not clear whether the increase in reports associated with surveillance during service provision is an accurate representation of the incidence of child maltreatment recurrence. Given that reducing services simply to reduce recurrence rates is not a legitimate option, the implication is fairly clear: improvements in recurrence rates should be evaluated separately for children and families who receive services and those who do not. Ideally, one would hope that recurrence rates in both populations should improve, but that, assuming that there is no reduction in services, improvements in the population receiving services will have a more dramatic impact on the overall rate of recurrence. There is also an argument to be made that improvements in recurrence rates among children and families that receive continuing services should have a fairly high priority regardless. That is, whether the effect is due to risk or surveillance, ongoing services should be effective in reducing recurrence. Whichever perspective is taken, a more focused effort at reducing recurrence among children and families who are served is very likely to be an effective improvement strategy.

Service Mechanisms for Addressing Target Populations

There is very little information about specific effective services in the research literature. However, mechanisms to address the target populations could include some of the features of services that seem to be associated with lower recurrence. Services features and implementation of service approaches that may be promising include the following:

- Providing longer term treatment services;
- Insuring that caregivers receive services and attend appointments; and
- Providing a more comprehensive set of services.

An obvious but important implication of the three service mechanisms highlighted in the research is that they are likely to be costly. Still, effective targeting of these mechanisms to those populations identified as most likely to recur will help to insure a degree of cost effectiveness.

Research and Evaluation

In thinking about recurrence research and evaluation, there is a range of questions that has not been answered or in some cases even addressed by the existing research. In posing the questions the expectation is that their consideration will encourage a discussion leading to clearer understanding of beliefs and assumptions about what will work to reduce recurrence and what information is needed to help insure that these solutions will be effective.

One advantage of the CFSR measure is that it may provide some degree of standardization with respect to conducting research and evaluation efforts so that results can be translated across jurisdictions. However, the measure – like any other single measure - is limited in that it cannot be used to address certain types of questions of critical importance in tackling program improvement. Ultimately, each State engaged in attempting to improve or maintain its recurrence rate must engage in some degree of research and evaluation in this area in order to identify and evaluate the potential program improvement strategies or risk not being in compliance.

The following areas are logical starting points for developing an effective research and evaluation component for a State program improvement process:

- *Develop an Information Technology (IT) Infrastructure to Monitor/Track Recurrence*

  This entails both the ability to constantly monitor the CFSR recurrence measure and to look at different measures of recurrence including perpetrator recidivism, family level recurrence, child level recurrence, re-reporting, recurrence based on newly entering cohorts, and recurrence

after services have been provided and after the case has been closed. It is critical that this infrastructure have the capability to observe trends over a period of three or more years in monthly increments and provide timely information that will serve as feedback for the entire State.

- *Identify Target Segments of the Families and Children Served and Develop Service Intervention Strategies or Frameworks for the Target Populations*

  This entails using data from a Statewide Automated Child Welfare Information System (SACWIS) or, if unavailable, from case record review to identify features and characteristics of children and families who are most likely to recur statistically. The objective is to identify target blocks of characteristics that constitute a relatively large segment of the population being served. The next step is to identify services or mechanisms to improve services to these populations. Specific goals can be set regarding the desired amount of recurrence decline for the target group, over what time, and that include estimates of the resources that will be needed. Depending on the degree to which a goal is realistic and considered cost effective, an evaluation regarding implementation could be conducted. The ability to track and monitor target populations should also be incorporated as a functional part of the ongoing IT infrastructure.

- *Assess and Isolate Surveillance Effects*

  One implication of possible surveillance effects on recurrence is that they may "mask" any efforts to improve or enhance services. Some types of target populations may be more susceptible to surveillance effects. Since the existence and impact of surveillance remain hypothetical, it will probably be important to incorporate data collection and analyses activities that are designed to detect and understand it. If these are successfully put in place, they may be helpful in isolating surveillance as a factor and clarify the likely effectiveness of the improvements.

A more detailed checklist of evaluation activities is provided in supplement to this monograph.

Unintended Consequences

A serious concern about outcome measures and their use in setting program policy and services is the possibility that new interventions designed to improve the outcome measures might have unintended consequences on other aspects of the program. Recurrence is not immune from this concern and there are ways that recurrence might contribute to unintended consequences for CPS agencies:

- *Some Families with Relatively Minor Maltreatment Concerns Might Benefit from Being Re-Reported to CPS Agencies*

  This may be a particular concern for States that accept risk of maltreatment as a basis for substantiating or indicating an investigation of maltreatment or who take a family assessment approach to services. Under these circumstances it may be quite appropriate for the family to return to CPS following an investigation, since this type of involvement may prevent actual maltreatment. The use of a recurrence measure for outcomes may discourage reports or involvement of the CPS agency in these types of situations. Ideally, these concerns would be balanced through the use of other outcome measures such as child and family well-being indicators.

- *Policy May Gravitate to Making Only the Most Severe Forms of Maltreatment Reportable or Increase the Evidentiary Standard for Substantiation*

  This is a concern since a State may elect to adopt policies that would impede recognition of or even access to services for certain types of maltreatment. While restricting or eliminating services to this population may be effective in reducing recurrence in some locations, it may also place some children at risk of more severe maltreatment in the future and increase the risk of other poorer long-term outcomes. It may also exacerbate concerns in the broader community regarding the nature of the CPS agency's role.

Conclusion

There are several general areas State agencies should consider in developing their PIPs to reduce child maltreatment recurrence.

- First, be aware of the CFSR definition and its relationship to other definitions of recurrence and measurements.

- Second, focus intervention on the intent of the CFSR measurement and State measures in relationship to the philosophy and orientation of the agency.

- Third, develop adequate infrastructure to measure and mechanisms to monitor recurrence continuously.

- Fourth, use data and programmatic knowledge to maximize the impact of interventions.

- Fifth, acknowledge and address the possibility of unintended consequences and adjust planned interventions accordingly.

It is critical to continue the dialogue and to provide mechanisms for focusing attention on the experiences of States as they develop and implement Program Improvement Plans in this area. The dialogue in the area of recurrence has already resulted in improvements in data, analytic methods, approaches for setting goals for improvement, and has been a vehicle for focusing sustained attention about the safety of children involved with CPS systems. In the not too distant future, we hope it will also result in focused change both with respect to measurement issues and to actual improvements for children and families.

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