Child Welfare Outcome Indicator Matrix

Nico Trocmé, Butch Nutter, Bruce MacLaurin and Barbara Fallon Bell Canada Child Welfare Research Unit

October 1999

Ecological Outcome Framework

Child welfare practice is at a turning point in Canada. Inquests and media interest have drawn public attention to the plight of maltreated children. With this increased attention there is a risk that the complexity inherent in helping maltreated children and their families may not be fully recognized. The proposed multi-dimensional ecological framework reflects the complex balance child welfare service providers seek to maintain between a child's immediate need for protection, a child's long-term needs for a nurturing and stable home, the family's potential for growth and the community's capacity to meet a child's needs.^{1,2} child welfare outcomes in four domains that reflect the broad ecological traditions of Canadian child welfare practice: child safety, child well-being, permanence, and family and community support. The indicators selected for tracking outcomes are simple, can be feasibly documented with minimum introduction of new instruments, and are meaningful for front-line workers, managers, policy makers and the general public. While most of these indicators taken individually are only proxy measures of child and family outcomes, as a set of ten indicators they provide a broad perspective on the children served by the child welfare system and some outcomes of that service.

Child Safety	1	Recurrence of Maltreatment	
	2	Serious Injuries/Deaths	
Child Well-Being	3	School Performance (Grade Level/Graduation)	
	4	Child Behaviour/ YOA Charges	
Permanence	5	Placement Rate	
	6	Moves in Care	
	7	Time to Achieving Permanent Placement	
Family and	8	Family Moves	
Community	9	Parenting Capacity	
Support	10	Ethno-Cultural Placement Matching	
		i i i i i i i i i i i i i i i i i i i	

The outcome measurement strategy presented in this document proposes measuring

Child Welfare Outcome Indicator Matrix

Child Safety

Recurrence of Maltreatment

Child protection is the core function and primary focus of the child welfare system with the ultimate goal of preventing future maltreatment. Recurrence of maltreatment includes all confirmed cases of child abuse of neglect known to a child protection system in which a subsequent confirmed incident of maltreatment occurs and becomes known to child protective services.

Reported rates of recurrence range from under 10% to over 60%. The best study to date reported 24% of families experienced at least one repeat incident of confirmed maltreatment within 12 months of the first incident, 43% repeated within 5 years³.

Recurrence is measured over a set period of time. A 12 month recurrence rate, for example, measures the proportion of children who are abused or neglected a second time within 12 months of being identified by child welfare services. Detecting and reporting the recurrent incident is the key challenge in tracking this indicator. While recurrence is easily tracked for cases that are closed and re-opened because of a new incident, documentation of new incidents is less systematic for cases receiving ongoing services. In cases of chronic maltreatment, where the distinction between a "new" incident and an on-going problem is far

Child Welfare in Canada in the Year 2000: A Research and Policy Symposium Cornwall, Ontario, October 18-22, 2000

Contact: Child Welfare League of Canada (613) 235-7616 Sponsored by: Social Development Partnerships Division Human Resources Development Canada and the Bell Canada Child Welfare Research Unit from clear, on-going maltreatment should be counted as recurrent.

Recurrence of maltreatment should not be confused with service recurrence. Families who return for preventive services because they need assistance with a new crisis must be distinguished from families who are reported because of new incidents of maltreatment. Rates of recurrence should also be distinguished from the proportion of investigations involving re-opened cases. Because case re-opening are measured cross-sectionally, they do not include children who never return for services and significantly over-represents chronic cases.

Serious Injuries and Deaths

Protection from serious harm is a priority for all child protection services and such cases require immediate intervention and tracking. While the majority of investigated maltreatment cases do not involve serious injuries or fatalities, every effort must be made to prevent such tragic outcomes. A 1993 Ontario study found that 8.5% of substantiated or suspected maltreatment cases involved minor physical injuries, and 2.4% of cases involved physical injuries requiring medical care, and one in 2,000 investigations involved child deaths⁴.

Injuries associated with suspected maltreatment and all serious injuries (intentional and non-intentional) to children in child welfare placements (e.g. foster care, group care, and residential care) are documented in child welfare case notes. However, most electronic information systems do not track injury information. The first challenge in developing this indicator is to ensure that key injury information currently included in text files is also tracked by electronic information systems, both during investigations and on open cases. Ideally, a tracking system should also include serious injuries and deaths of children whose cases were closed.

The Physical Harm codes developed for the Canadian Incidence Survey of Reported Child Abuse and Neglect (CIS)⁵ provide a simple checklist for describing type and severity of injuries:

□ bruises/cuts	failure to thrive
□ burns/scalds	other
\Box broken bones	medical treatment
□ head/neck trauma	required

Child Well-Being School Performance

Maltreatment is a significant risk factor for developmental, cognitive, and academic delays. Enhancing child well-being is a paramount objective of the child welfare system. Improvements in cognitive functioning is a key outcome indicator. This is not the exclusive domain of the child welfare system, but it represents a service priority that should be well documented.

Research consistently shows that children receiving child welfare services are behind their peers in all aspects of cognitive development and school performance. A community survey in upper New York State found that maltreated children were 2.5 times more likely to repeat a grade than were a matched group of non-mal-treated children⁶. The preliminary findings of the Looking After Children in Canada Project show that a third of the foster children participating in the study had a learning difficulty⁷.

School performance is the simplest indicator of cognitive functioning for school aged children. Performance can be measured as age to grade ratio, achievement on standardized tests (e.g. Math and English), placement in special education classes, school attendance, and assessed risk of failure. While test scores may more accurately measure specific skills, age to grade ratio is the most feasible one to collect for child welfare services, especially for children receiving home based services. For out of school older youth, graduation rates are a simple and appropriate measure. Developmental information is not routinely available for pre-schoolers, however consideration should be given to including regular developmental assessments for these children.

Child Behaviour

Maltreated children are at risk for behavioural problems at home, in school, and in the community. The preliminary findings from the Looking After Children in Canada Project show that 39 % of youth report having difficulties with anger, and 32% report often getting into trouble for defiance⁷. Similarly, a recent American study using the Teacher report from the Child Behaviour Checklist found that over 40% of children in the child welfare system were rated as having problem behaviours compared to 20% in a matched sample⁸. A community survey in North Carolina found that 12% of maltreated children compared to 5% of children from a general school population had at least one delinquent complaint from the community⁹.

Standardized measures of child behaviour are not generally used in child welfare settings. However, some jurisdictions have started to use instruments that include some behavioural infor-

Moving From A Management to a Client Centered Information System: Canadian child welfare information systems are primarily designed as Management Information Systems (MIS) directed towards financial accounting. The most commonly reported service statistics are number of case openings per year and number of children in care at year end¹⁰. These are system service volume statistics that provide limited information about service patterns. A family case opened and closed three times during the year is indistinguishable from three family cases each opened and closed once. Neither the proportion of cases reopened nor the proportion of children investigated and subsequently placed into care are derivable from such statistics. In fact most agencies maintain separate data bases for children in the community and children in care. Answering questions about service patterns requires special studies because MIS do not contain information linking service events to individual children.

A Child Tracking System (CTS) has a dramatically different structure. A CTS links each service event to the child(ren) and family(ies) served by that event. Thus the path of each child and family within the service system is recorded. This allows accurate reporting of statistics such as the proportion of investigated children admitted to care and the average number of placement changes. A CTS can be distinguished from an MIS by the fact that it can report child and family specific case-flow information. Case-flow information is necessary for reporting child and family outcomes that track changes over time.

Direct and Proxy Outcome Measures: Standardized observational and selfreport instruments, such as the NLSCY child and family measures, provide the most accurate and comprehensive method for measuring outcomes¹¹. While these direct client measures provide useful information for clinical and research purposes they are lengthy to complete and are not easily interpreted as aggregate measures. In addition, self-report measures are not designed to be used in a potentially adversarial child protection context. There also is a risk of measurement bias if these instruments are first introduced as performance measures rather than as tools to assist in clinical assessments.

Case events, such as adoption, grade completion, and address changes, can be used as proxy outcome measures. These systems based indicators are salient and easy to collect, however, the extent to which they truly reflect child outcomes must be carefully analyzed. Interpretation requires examination of the rationale for linking case events to specific outcomes and consideration of confounding events. A decrease in the proportion of children in age appropriate grades could just as well indicate lower academic functioning as it could reflect changes in grading policies or the introduction of standardized tests.

Incremental Strategy: The Child Welfare Outcome Indicator Matrix is proposed as a first step in an incremental process to develop meaningful, valid and reliable outcome measures for child welfare. The 10 selected outcome indicators rely primarily on case events as proxy indicators of outcomes. As the clinical use of standardized measures develops it will be possible to replace these proxy indicators with more sophisticated measures. Until then, the Matrix provides a theoretically grounded ecological framework which relies on improvements to the structure of information systems rather that the introduction of new instruments. This strategy respects the feedback rule for developing effective information systems: provide those who collect information with relevant aggregated analyses based on their data before making new information requests. **Project Background:** The Client Outcomes in Child Welfare (COCW) Project was initiated by the Canadian provincial and territorial directors of child welfare in conjunction with Human Resources Development Canada to support the development of a coordinated approach to assess the effectiveness of child welfare services and policies across Canada^{1,2}. The Project developed in a context of growing public concern about the safety and well-being of children, increasing government requirements for service accountability, and increasing challenges for agencies to develop more effective services.

The COCW Project used an iterative process for both information gathering and consensus-building amongst child welfare practitioners and policy makers. In addition to traditional literature and instrument surveys, we examined child welfare statutes, policy documents, and service information systems in each Province and Territory. Key informant interviews, regular consultation with a national advisory committee and the distribution of a newsletter for regular Project updates ensured a dynamic process. An inventory of child welfare outcome initiatives from across Canada was developed. The focal point for the Project was an examination of promising instruments and existing data collection systems, in order to understand the processes and issues arising from the development of outcome initiatives.

The Child Welfare Outcome Indicator Matrix is the final product of the COCW Project. An earlier version of Matrix was endorsed at a National Roundtable on Outcomes in Child Welfare. The final version was developed in collaboration with a group of Ontario service providers and policy makers and is being pilot tested in several Ontario Children's Aid Societies¹⁵.

mation. For instance, the modified versions of the New York Risk Assessment scales that are used in several Canadian jurisdictions includes a simple Child Behaviour scale that could be used as a pretest, post-test measure of child behaviour. The child behaviour section of the National Longitudinal Survey of Children and Youth (NLSCY) is an easily administered measure of child and youth behaviour. This large national sample could provide an effective comparison for children and families receiving child welfare services.

Charges for delinquent acts provide another source of information on youth behaviour. For children 12 years of age or older, charges under the Youth Criminal Justice Act provide a proxy measure of serious behaviour problems in the community (variations in charge rates across jurisdictions limits the interpretation of this indicator).

Permanence Placement Rate

Placement of children in out-of-home care is a consistently documented indicator for child welfare services. Placement in care is necessary for children who cannot be adequately protected at home or who have special needs that cannot be met at home.

Among an Ontario random sample of 2,447 child maltreatment investigations, 6% of children were placed in care within the first two months of service, and placement was being considered for another 5%⁴. An Illinois study of over 10,000 child welfare investigations found that placement rates increase as a function of the time a case is kept open. At one month after referral 7% of children had been placed compared to 21% within one year of the initial referral.¹²

Placement has traditionally been measured in terms of the number of children in care and number of admissions to care. To be a meaningful child welfare service indicator placement should be measured as the proportion of children who receive child welfare services who end up in care. Because the probability of placement increases with the length a case is kept open, the indicator should be calculated once services are completed. An annual placement rate would therefore be calculated using the cohort of cases closed during the year.

As a community health indicator, placement is best measured by dividing the total number of children admitted to care in a year by the child population in the region served by an agency. This community indicator must be interpreted with some caution since it is also influenced by variations in reporting rates and placement practices. Service placement rates are usually calculated as a percentage of children served, while the incidence of placement in the community is calculated on a per thousand basis.

Interpretation of placement statistics is complex. While placement decisions are based primarily on child protection needs, they are also affected by the availability of placements. Placement availability must be known to sensibly interpret placement trends. In some jurisdictions official placement rates may significantly under represent children who are placed in nontraditional child welfare settings, such as customary care or informal community placements. Runaway youth should also be carefully tracked in placement statistics.

Moves in Care

Social stability is essential for children to develop a sense of belonging and identity as they cope with separation from their families. Some placement changes can be beneficial, but multiple unplanned moves can have seriously negative short and long-term consequences for children.

Moves in care tracks admissions, re-admissions, and significant placement changes. A four year longitudinal study of 717 children who entered foster care in Saskatchewan found that 71% of children experienced only one outof-home placement. The average number of moves for children who experienced more than one out-of-home placement was 2.3, and only 10% of these had more than 4¹³. The simplest way to measure moves in care is to count the number of moves experienced by children when they are discharged from care. This method measures moves during a specific spell in care. A lifetime measure including all spells in care can only be taken once a child is no longer eligible for entering into care. The moves in care indicator should only track significant placement changes, not respite placements or home visits.

Time to Achieving Permanent Placement

Most children brought into care return home after relatively short periods of time. Children entering care in a Saskatchewan study spent an average of one year in foster care, although the majority of children returned home in less than six months¹³. Placement drift is a concern for children who remain in care.

The challenge in measuring time to achieving permanence is deciding which placements can appropriately be categorized as permanent. The simplest definition of permanent placement is one that is intended to be permanent, such as returning a child home (reunification), placement in an adoptive home, or a permanent foster home placement. Using time to achieving permanence as an outcome measure is complicated by the fact that hasty placements may be more likely to break down. Reunification breakdown rates have been as high as 30%. A Californian study found that foster children reunified within three months were more likely to be taken into care again than children reunified between three and six months¹⁴.

Family and Community Support Family Moves

Frequent moves lead to loss of peer and social support networks for children and parents. For children, frequent moves and multiple school changes may prevent the formation of constructive social support networks.

Housing instability is caused by many factors including lack of affordable good quality housing, employment changes, lifestyle, and other family crises. While child welfare services are not responsible for providing housing, many child welfare social workers advocate for better affordable housing for their clients as well as working with families to adopt lifestyles that will increase their likelihood of enjoying housing stability.

In one Ontario child welfare study 18% of families had moved at least once in the six months preceding being investigated⁴. Another Ontario study found that housing problems were factors for 18% of children brought into temporary care and delayed return home in 9% of cases¹⁶.

Children's addresses and changes are recorded on all child protection information systems. However in many the updated information replaces the previous address, needlessly deleting valuable information. Contemporary relational data bases can easily store and retrieve addresses and dates of change. Workers would not be required to collect any additional information. Postal codes could be used to approximate distances between old and new addresses, an indicator of the likely social disruption accompanying moves.

Parenting Capacity

Parents involved with the child welfare system are less organized, have higher levels of conflict, are less emotionally responsive to their children, provide less stimulation, feel less competent and more likely to be depressed¹⁷. Parenting capacity is a major concern in many cases of child maltreatment. Most home-based child welfare services target parents' ability to meet the emotional, cognitive, physical, and behavioural needs of their children. Improved parenting is a good outcome for children. Better parenting translates into better long-term child outcomes.

Parenting is targeted by many child welfare interventions and tools have been developed to assess parenting and family functioning. While standardized parenting measures are not routinely used to assess families or track outcomes in child welfare, structured assessment models are being used in some jurisdictions for highrisk cases¹⁸. The NLSCY forms contain a set of parenting self-report questions, although the use of self-report parenting measures in child to child welfare settings has proven to be problematic¹⁷. Most risk assessment tools also include a number of potentially useful parenting measures, although their interpretation as outcome measures has yet to be tested.

Ethno-Cultural Placement Matching

When children and youth must be removed from their homes, efforts should be made to place them within their geographic community with extended family, a family with similar ethno-cultural background, or in foster care that is very inclusive of their family and friends. There is well founded concern that many minority children (e.g. Aboriginal, Black, Muslim, etc.) are not placed in matched foster homes or homes that are readily accessible to their family and friends. For example, although 64% of children in care in Saskatchewan in March 1990 were of Aboriginal ancestry, and these children spent on average more time in foster care than did non-Native children, less than 10% of these Native children were in matched foster homes¹³.

Placement matching data must be interpreted with caution in individual cases because

References

 Trocmé, N., MacLaurin, B., and Fallon, B. (in press). Canadian child welfare outcomes indicator matrix. In S. Ward and D. Finkelhor (Eds.), *Evaluation research and family violence research*. New York, NY: Haworth Press.

geographic and ethno-cultural matching are

only two of the factors to be considered in find-

ing the most appropriate placement for a child.

Nonetheless, geographic and ethno-cultural

matching provides a strong indicator of com-

munity engagement in recruiting foster homes

and finding the most appropriate out-of-home

ningfully for child placement purposes is

extremely complex and laden with issues of dis-

crimination and stereotyping. Socio-economic

status, aboriginal ancestry, national origin, reli-

gion, language, and skin colour present complex

combinations of factors to consider, in addition

to location, in measuring placement matching.

This complexity, however, should not lead to

ignoring a placement issue about which many

communities have expressed serious concerns.

Measuring ethno-cultural background mea-

placements for children in their communities.

- 2. Oxman-Martinez, J., Trocmé, N., and Moreau, J. (1998). Client outcomes in Canadian child welfare. The Social Worker, 66(3), 66–79.
- DePanfilis, D., and Zuravin, S. J. (1999). Epidemiology of child maltreatment recurrences. Social Services Review, 73(2), 218–239.
- 4. Trocmé, N., McPhee, D., Tam, K. K., and Hay, T. (1994). *Ontario incidence study of reported child abuse and neglect*. Toronto: Institute for the Prevention of Child Abuse.
- Trocme, N., MacLaurin, B., Fallon, B., and Daciuk, J. (1998). Canadian incidence study of reported child abuse and neglect: Maltreatment assessment form and guidebook. Toronto: Bell Canada Child Welfare Research Unit.
- 6. Eckenrode, J., Laird, M., and Doris, J. (1993). The effect of neglect on academic achievement and disciplinary problem: A developmental perspective. Developmental Psychology, 29, 53–62.
- 7. Kufeldt, K., Baker, J., Bennett, L., and Tite, R. (1998). *Looking after children in Canada: Interim report*. Fredericton, New Brunswick: University of New Brunswick.
- 8. Howing, P. T., Wodarski, J. S., Kurtz, P. D., and Gaudin, J. M. (1993). *Maltreatment of the school-age child: Developmental outcomes and system issues.* New York, NY: Haworth Press.
- 9. Zingraff, M. T., Leiter, J., Johnsen, M. C., and Myers, K. A. (1994). The mediating effects of school performance on the maltreatment-delinquency relationship. Journal of Research in Crime and Delinquency, 31(1), 62–91.
- 10. King, M., and Warren, W. (1999). *Child welfare information systems in Canada*. Kingston: Social Program Evaluation Group.
- 11. Moreau, J., and Graton, J. (1999). *Client-based measures: A review*. Montreal: University of Montreal.
- 12. Schuerman, J. R., Rzepnicki, T. L., and Littell, J. H. (1994). *Putting families first: An experiment in family preservation*. New York, NY: Aldine De Gruyter.
- Rosenbluth, D. (1995). Moving in and out of foster care. In J. Hudson and B. Galaway (Ed.), Child welfare in Canada: Research and policy implications (pp. 233–244). Toronto: Thompson Educational Publishing, Inc.
- 14. Courtney, M. E. (1995). Re-entry to foster care of children returned to their families. Social Service Review, 69(2), 226–241.
- 15. Trocmé, N., Fallon, B., Nutter, B. MacLaurin B and Thompson, J. (1999). *Outcomes for child welfare services in Ontario*. Toronto: Ministry of Community and Social Services, Childrenís Services Branch,
- Cohen-Schlanger, M., Fitzpatrick, A., Hulchanski, J. D., and Raphael, D. (1995). Housing as a factor in admissions of children to temporary care: A survey. Child Welfare, 74(3), 1–10 (547–562)
- 17. Gaudin, J. J., and Dubowitz, H. (1997). Family functioning in neglectful families: Recent research. In J. D. Berrick, R. Barth, and N. Gilbert (Eds.), Child Welfare Research Review (Vol. 2, pp. 28–62). New York: Columbia University Press.
- 18. Steinhauer, P., Leitenberger, M., Mangilcas, E., Paulker, J., Smith, R., and Goncalves, L., 1995, *Assessing Parenting Capacity*. Toronto: The Institute for Prevention of Child Abuse.