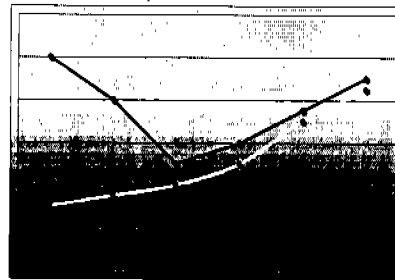


Outcomes for Child Welfare Services in Ontario

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For more information on child welfare outcomes measurement in Canada see Thompson & Fallon, Eds. (1999) *Proceedings from the First Canadian Roundtable on Child Welfare Outcomes*, Bell Canada Child Welfare Research Unit, University of Toronto, and consult the BCCWRU website at <http://cwr.utoronto.ca/>.

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Background

Ontario's independent Children's Aid Societies (CASs) provide a unique service delivery system that has supported the development of an array of service models designed to reflect the diverse needs of communities across the province. The effectiveness of this system has recently come under scrutiny as a result of a series of inquests into the deaths of children receiving child welfare services. Hampered by the absence of province-wide statistics about children receiving services from CASs, the inquests and related reviews commissioned by the Ministry of Community and Social Services have all recommended that CAS information tracking systems be improved. Similar concerns about limited service statistics have been raised in other provinces.

The purpose of this document is to review available child welfare service trend data and make recommendations for a province-wide information system that would provide a means for systematically assessing and tracking outcomes of child welfare services in Ontario. The document is organized in three sections. First we provide an overview of available CAS service trend data for the province. We then examine some of the limitations of the data available from current Management Information Systems and discuss the benefits of a child centered Client Tracking System. Finally we present ten indicators that have been selected for tracking outcomes.

Ontario Outcomes Working Group

This document is the final product of work conducted by the Bell Canada Child Welfare Research Unit (BCCWRU) for the Ministry of Community and Social Services to improve its capacity to assess the effectiveness of Ontario's child protection system. In the fall of 1998 the Ministry decided to adopt an outcomes measurement framework developed by the Client Outcomes in Child Welfare Project¹, a national project initiated by the Canadian provincial and territorial directors of child

¹ see Trocmé, 1999, "Canadian child welfare multi-dimensional outcomes framework and incremental measurement development strategy" in *Proceedings from the First Canadian Roundtable on Child Welfare Outcomes* BCCWRU, University of Toronto

welfare and funded by Human Resources Development Canada.

The Outcomes Working Group was set up to help select and operationalize outcomes indicators to be incorporated in a comprehensive province-wide information system. The Working Group included Ministry staff, the BCCWRU research team, a representative from the OACAS, and senior level CAS managers with experience in using service statistics. The Working Group met five times from December 15, 1998 to April 20, 1999.

Ontario Outcomes Working Group:

Phil Schwartz – Project Leader, Capacity Building, Children's Services Branch, Ministry of Community and Social Services

Jane Brackley – Policy Analyst, Children's Services Branch, Ministry of Community and Social Services

Margaret Barr – Director of Services, The Children's Aid Society of Brant

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Anne Lumsden – Manager, Quality Assurance Program, The Children's Aid Society of the County of Simcoe

Sandy Moshenko – Manager of Accreditation Ontario Association of Children's Aid Societies

Margaret Morrison – Coordinator of Education Services, Ontario Association of Children's Aid Societies

Raymond Lemay – Executive Director, The Children's Aid Society of Prescott-Russell

Bill Charron – Executive Director, Niagara Family and Child Services

Jerry Muldoon – Local Director, Family and Children's Services of Renfrew County

Rick Andreychuk – Member of The Board of Directors, Grey County Children's Aid Society

Vicki Corbiere – Association of Native Children's and Family Services

Pat Szego – Manager Quality Assurance, Catholic Children's Aid Society of Toronto

Natalie Fouquette – Service Supervisor, Abinoojii Family Services

Roy Walsh – Executive Director, Children's Aid Society of Halton

Karl Kimmitt – Ministry of Community and Social Services

Kevin Morris – Children's Services Branch, Ministry of Community and Social Services

An Incremental Approach

Over the last few years CASs have undergone a number of significant changes in information and reporting systems. Prior to the Ministry initiated changes, many CASs had been actively redesigning their information systems. The last year saw the introduction of the Risk Assessment Model for Child Protection in Ontario and the Common Recording Package. A fast-track province-wide data-base is being implemented and a comprehensive information system is being developed. While these changes are driven by a strongly supported call for improved data gathering and information sharing, there is concern that adding yet more changes could overload the capacity of the system. Information systems are limited by the quality of the information entered, and the

quality of information entered is related to its perceived relevance. Three key principles for developing an outcomes tracking system in Ontario follow from these observations:

1. build on current initiatives;
2. minimize burden to CASs;
3. keep information requests relevant to CASs and policy makers.

The Outcomes Working Group focused on selecting outcomes indicators that would build on current and emerging information systems, rather than develop yet another layer of information requests. A review of service trends based on currently available data was also included to illustrate the potential benefits of collecting province-wide data while recognizing the limitations of these data.

SERVICE TRENDS: 1971-1998

Province-wide service statistics provide a crucial perspective for understanding major trends in child welfare policy and practice. In an era dominated by news stories based on individual tragedies one can easily lose sight of the "bigger picture." The last published review of province-wide service data appeared in the 1991 publication *State of the Child in Ontario*. Trocmé² examined over 15 years of provincial service data (1971-1988) and noted a dramatic shift towards family based intervention models with fewer children in care and fewer cases brought to court. The following review presents an updated analysis covering changes over the past 25 years.

This review builds on the 1971-1988 dataset using service statistics from the Ministry of the Attorney General, the Ministry of Community and Social Services, the Ontario Association of Children's Aid Societies, and Statistics Canada.

² Trocmé, N. (1991). Child welfare services. In D. Barnhorst & L. Johnson (Eds.), *State of the child in Ontario* (pp. 63-91). Toronto: Oxford University Press.

Where data from different sources were inconsistent, official Ministry data was used.

Family Services & Children in Care

Table 1 presents the overall trends in families served and children in care in Ontario between 1971 and 1998. Table 1 should be interpreted with caution since most rows represent different units of analysis and different methods of tracking service volume. The "families served" statistic (Row A) is derived by adding all new family cases opened during a year to the number of cases that were open ("carried over") at the beginning of the year. Not known are the number of children in these families, nor how many families are double or triple counted because of multiple case openings. The "children in care" statistic is a year end count of the number of children in care, and does not account for the large number of children admitted to care during the year but not in care at year end.

Table 1: Child Welfare Service Trends, Ontario: 1971-1998

	1971	1976	1981	1986	1991	1996	1998
A. Families served during year	28,323	34,196	48,489	67,714	119,725	128,578	154,130
B. Ontario families with children	1,343,300	1,487,500	1,538,600	1,630,600	1,775,300	1,881,889	2,037,332
C. Families served as % of Ontario families	2.11%	2.30%	3.15%	4.15%	6.74%	6.83%	7.57%
D. Children in care at year end	17,807	13,904	13,033	9,875	10,040	10,419	12,515
E. Ontario population < 19 years	2,921,900	2,881,800	2,695,800	2,564,100	2,678,000	2,833,080	2,884,698
F. Children in care as % of Ontario children	0.61%	0.48%	0.48%	0.39%	0.37%	0.37%	0.43%
G. Ratio of children in care to families served	0.63	0.41	0.27	0.15	0.08	0.08	0.08

1971-1986 all rows: Trocmé, N. (1991). Child welfare services. In D. Barnhorst & L. Johnson (Eds.), State of the child in Ontario (pp. 63-91). Toronto: Oxford University Press.

1991-1998: Rows A & D Ministry of Community and Social Services Quarterly Reports and Service Management Information System

1991-1998: Rows B & E: Statistics Canada Revised Intercensal Population and Family Estimates (1991); Annual Demographic Statistics (1998); & Final Postcensal Estimates (1992-1998).

Outcomes for Child Welfare Services in Ontario

Trocmé, Fallon, Nutter, MacLaurin, & Thompson (1999), Toronto: Bell Canada Child Welfare Research Unit, University of Toronto Faculty of Social Work.

Two trends are noteworthy. The number of families served has continued to increase. Over the past twenty five years the number of families served has risen an average of 16% per year. In contrast, the number of children in care decreased dramatically between 1971 and 1986, but increased in the past three years. The recent increase in children in care should be interpreted with caution. It may not reflect a shift toward more intrusive practice. The increase appears to reflect the increase in the child population and the increase in families served (see Rows E and F). The ratio of children in care to families served³ is a rough indicator of the extent to which out of home placement is used. The ratio decreased dramatically from 0.61 to 0.27 between 1971 and 1981, and appears to have been stable at 0.08 over the last eight years.

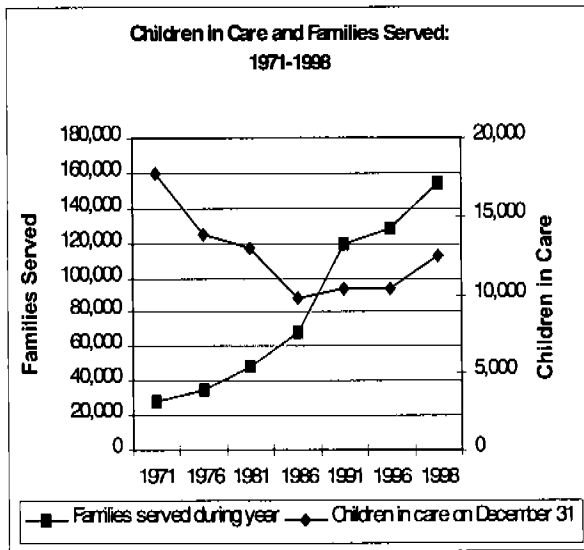


Figure 2: Children in Care & Families Served: 1971-1996

Source: see Table 1

³ This ratio is not to be confused with the proportion of children served who are served in care, a statistic that cannot be derived from current information systems

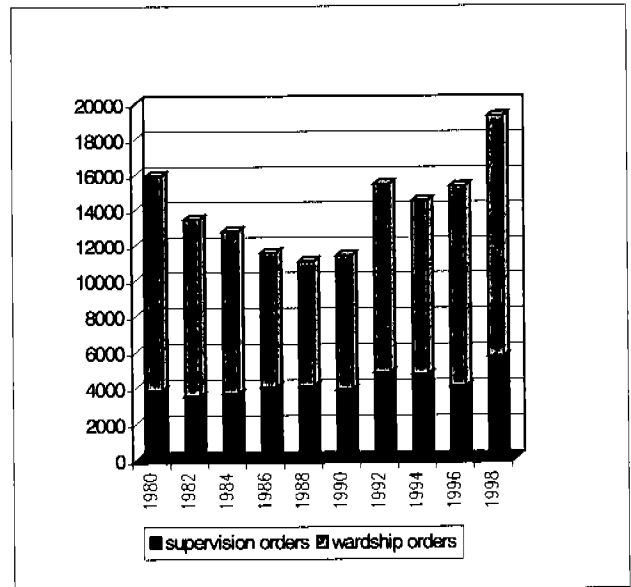


Figure 1: CFSA court orders: 1980-1998

Source: Trocmé (1991) & Attorney General's Office CISS

Family Court

Court statistics reveal a more dramatic trend reversal. While court ordered interventions decreased during the 1980s reflecting the less intrusive⁴ tone of the 1984 CFSA, the number of court orders has increased in the 1990s due primarily to larger numbers of wardship orders.

These court and service trends provide an interesting perspective on the shifts in service approaches, from the family support model in the 1980s' to an approach that puts greater emphasis on child protection. However, their most remarkable feature is what they are unable to show. Are children better off when services are primarily provided in the home? Has the recent increase in court orders helped to protect more children? How much of the increase in families served is due to the same families receiving repeated spells of services?

⁴ Barnhorst, D., & Walters, B. (1990). Child protection legislation in Canada. In N.Bala, J.Hornick, & R.Vogl (Eds.). In N. Bala, J. Hornick, & R. Vogl (Eds.), *Canadian child welfare law* (pp. 339). Toronto, Ont: Thompson Educational Publishing.

CHILD WELFARE OUTCOMES MATRIX

From MIS To CTS: Moving From A Management To A Client Centered Information System

Child welfare information systems in Ontario 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 end. 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 child welfare system is recorded. This allows accurate reporting of statistics such as the proportion of investigated children admitted to care, the average amount of time children spent in care, and the average number of placement changes, etc. A CTS also facilitates discovery and display of individual case service patterns, both simple and complex.

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. While a CTS has the capacity to report MIS data it can also track information in a much more comprehensive way. The changes needed to move from an MIS to a CTS are primarily technical software design changes that do not

necessarily require changes in the way front-line workers enter information. These differences are described in the Appendix of this document.

Multi-Dimensional Outcomes

In moving to a Child Tracking System (CTS) it is critical to select a number of key indicators that can be easily tracked and provide a reasonable picture of how well children are doing. The indicators that are currently documented by MIS are system events that do not provide direct evidence of outcomes. Admissions to care is a case in point. Is an increase in admissions a positive outcome (more at risk children are being protected) or a negative outcome (home-based services are not effective)?

A valid outcome tracking system must go beyond system events and record the safety and well-being of children. Direct measures of child well-being can be difficult to administer and complex to interpret. At this time in Ontario, the addition of new measurement instruments in a sector that has been going through many changes is not realistic. However, well selected system level indicators can serve as proxy outcome measures that provide a more meaningful profile of child and family outcomes than the current uni-dimensional focus on case openings and admissions to care.

Feedback loop

Collect measures directly relevant to social workers. Provide feed back frequently so that workers can examine their clients within a broader service context, and see that the data they input is useful.

A Multi-Dimensional Ecological Framework

Child welfare workers seek to maintain a complex balance 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. While safety is the paramount objective, the child's family and community are the preferred milieu for intervention as long as safety can be assured.

Child welfare statutes attempt to balance the intrusive powers accorded to child protection workers with the requirement to provide, where feasible, home-based services. Maintaining the appropriate balance between these two principles is complicated by how difficult it is to decide when risk of harm is too great to leave a child at home.

The principle of child safety can also be at odds with the principle of enhancing child well-being. This may seem paradoxical. One could assume that a child's well-being requires first and foremost that a child is protected from harm. However, too great an emphasis on safety may exclude broader family support and community development activities.

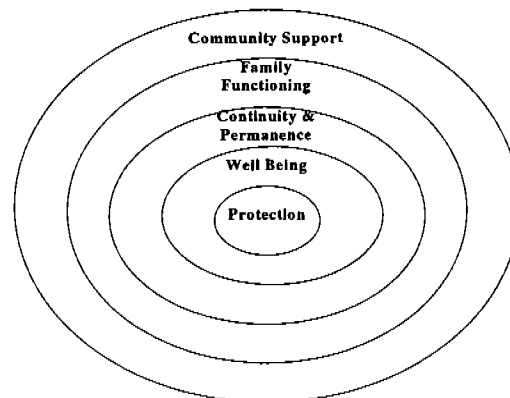
Multiple and some times divergent objectives reflect the ecological dimensions of child maltreatment. Child maltreatment is a complex problem resulting from the interplay of factors at the level of the child, parents, the family's immediate community, and the sociocultural context of parenting. While the child welfare system alone cannot be expected to affect all aspects of these systems, narrowly focussing on the parent-child relationship fails to account for the important advocacy roles that Canadian child welfare services play.

Direct & proxy outcome measures

Direct client measures: Standardized observational and self-report instruments, such as the *Child Behavior Checklist*, the *Child Well Being Scales*, and the *HOME* provide the most accurate and comprehensive method for measuring outcomes. While these instruments 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.

Systems based indicators reflect systems events, such as adoption, grade completion, and YOA charges, that can be used as **proxy** outcome measures. Systems based indicators are easy to collect and more salient for the public, however, the extent to which they truly reflect child outcomes must be carefully monitored. It is important to work toward validation of such proxy indicators and work towards systematically including direct measures of child well-being.

Figure 3: Ecological Framework for Child Welfare



A child welfare outcomes framework should integrate and balance child safety, child well-being, and child and family support. Selecting specific objectives and related outcome indicators is not a neutral technical exercise but reflects fundamental views about the objectives of child welfare. The rapid expansion of placement prevention programs, for example, was strongly influenced by a singular focus on placement rates. A uni-dimensional outcome measurement system that fails to recognize the complex nature of child welfare runs the risk of supporting simplistic cure-all initiatives that fail to meet the diverse needs of maltreated children.

Principles for selecting outcome indicators

From a list of over 30 potential outcome indicators 10 were selected on the following basis:

1. can be measured using readily available data that do not require the introduction of new measurement instruments;
2. clearly linked to service objectives;
3. salient and simple to interpret.

Child Welfare Outcomes Matrix

A matrix of ten indicators reflecting important ecological dimensions of child welfare was developed by the Client Outcomes Project to serve as a common framework for provincial and territorial child welfare authorities. The Child Welfare Outcomes Matrix received strong support at the First Canadian Roundtable on Child Welfare Outcomes held in Toronto in March of 1998. The Matrix has been further developed in consultation with the Ontario Outcomes Working Group. Without introducing a new series of measurement instruments, the

matrix was designed to be an initial step in an incremental outcomes development strategy.

Figure 4 : Child Welfare Outcomes Matrix

Domain	Indicator
Safety	Recurrence of maltreatment
	Serious injuries/deaths
Well-Being	School performance (grade level/graduation)
	Child behaviour (risk assessment scales) /YOA charges
Permanence	Placement rate
	Moves in care
	Time to achieving permanent placement
Family & Community Support	Family moves
	Parenting capacity (risk assessment scales)
	Ethno-cultural placement matching

The Matrix is designed around four key domains: safety, well-being, permanence, and family and community support. While the complex and multi-level services provided by child welfare authorities cannot be reduced to a simple list of ten indicators, a selection of two to three indicators per domain provides a manageable first step towards more meaningful Client Tracking Systems.

Implementation of the Matrix

Eight of the ten indicators (recurrence, grade level, child behaviour, placement, moves in care, time to permanence, family moves, and parenting capacity) are based on information that is currently tracked by all MIS, although not in a format that can be directly used. For instance, placement, measured as the rate of children receiving services who come into care, cannot be tracked in agencies that keep unlinked family service and children in care data bases. While no additional information needs to be collected from workers, changes in the design of current information systems are needed.

The remaining two indicators (injuries⁵, and ethno-cultural matching) include information that is generally available in text form in most files but for which there are not dedicated fields on most information systems.

- Priority pilot tests:**
1. Recurrence of maltreatment
 2. Placement rate
 3. Moves in care
- Additional exploratory indicators:**
1. Serious injuries/deaths
 2. School performance (grade level/graduation)
 3. Child behaviour (risk assessment scales) /YOA charges
 4. Time to achieving permanent placement
 5. Family moves
 6. Parenting capacity (risk assessment scales)
 7. Ethno-cultural placement matching

The pilot test phase of the Matrix will focus on collecting data on as many indicators as possible in volunteer CASs with the capacity to collect the required information. Given that there is little experience in Ontario in tracking and interpreting this type of data, a pilot phase is critical in working out an effective CTS. The Ministry has selected three indicators for priority pilot testing in volunteer sites (recurrence, placement rate and moves in care). Exploratory data on the remaining seven indicators may be collected in CASs where the configuration of their information systems allows for convenient data collection.

1. Indicator selection & initial operationalization (1999)
2. Pilot testing (2000)
3. Begin to integrate into Comprehensive Information System (2001)

The Ontario Outcomes Working Group has also maintained links with Ministry initiatives to develop CAS information systems. The most recent changes to the Common Recording Package include information fields that cover most of the indicators. The final phase of implementation will integrate the Outcomes Matrix with the child welfare information system being developed for the province.

⁵ The inclusion of injury data in the Revised Common Recording Package is under consideration

SAFETY: RECURRENCE OF MALTREATMENT

Rationale

Child protection is the core function and primary focus of the child welfare system with the ultimate goal of preventing future maltreatment.

Rates of recurrence have been reported in the literature to range from under 10% to over 60%. The best study to date found that 24% of families experienced at least one repeat incident of confirmed maltreatment within 12 months of the first incident, 43% within 5 years (DePanfilis, D., & Zuravin, S. *Epidemiology of Child Maltreatment Recurrences. Social Services Review*, 1999, 73(2))

Measurement

Recurrence of maltreatment measures the proportion of children who have been reported to the child welfare system who are subjected to a subsequent incident of maltreatment.

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. Twelve to 24 months provide a reasonable timeframe for measuring recurrence, since most interventions target relatively short-term changes.

Rates of recurrence can be calculated either by examining recurrence of investigations (including both confirmed and unconfirmed cases) or by examining recurrence of confirmed maltreatment. Recurrence can also be calculated for a specific type of maltreatment (e.g. recurrence of sexual abuse) or for all forms of maltreatment (e.g. physical abuse, sexual abuse, neglect and emotional maltreatment). Recurrence of maltreatment cannot be accurately measured on information systems that only track families, since recurrence should be measured on a child specific basis.

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 reopened because of a new incident, documentation of new incidents is less systematic for cases receiving ongoing services. Identifying new incidents is particularly difficult for certain types of maltreatment, such as chronic neglect, where the distinction between a "new" incident and an on-going problem is far from clear. In such cases, 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 carefully 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 previously opened cases. Because case re-opening statistics are usually measured cross-sectionally as a proportion of all case openings they do not include children who never return for services and significantly over-represents chronic cases.

Pilot Test

Recurrence of maltreatment is one of the three indicators selected for priority pilot testing. Given the challenges inherent in shifting to a comprehensive measure of recurrence, a mid-range definition is suggested for the pilot test:

- new allegations on previously closed cases as determined by re-openings (as opposed to new incidents on already open cases)
- families as the unit of analysis
- recurrent maltreatment as defined by Risk Decision #1 Case Eligibility Standards 1 through 4 (abuse, neglect, emotional harm, & abandonment)
- exclude reports received where no investigation was required.
- exclude reports where level of verification not documented and therefore not retrievable
- 12 month recurrence tracking period.

Recurrence is best calculated by tracking cases closed during a set period to determine the proportion of cases reopened because of a new incidents of maltreatment. For example one could track cases closed in January 1999 forward to January of 2000.

SAFETY: SERIOUS INJURIES AND DEATHS

Rationale:

Cases of maltreatment where injuries are sustained are considered to be amongst the most severe cases, requiring priority intervention and tracking within child welfare agencies. While the majority of investigated maltreatment cases do not involve serious injuries or fatalities, protection from serious harm is a key priority for all child protection services.

In Ontario 2.4% of substantiated or suspected maltreatment cases involve physical injuries requiring medical care, and 8.5% of cases involved minor physical injuries. Approximately one in 2,000 CAS investigations involve child deaths. The Canadian child homicide rate in 1993 was 1.4 per hundred thousand children. (Trocmé & Brison, (1997). Homicide Assault and Abuse and Neglect: Patterns and Opportunities for Action. In *For the Safety of Canadian Children and Youth*. Ottawa: Ministry of Public Works and Government Services)

The interpretation of injury as a measure of safety can be problematic. As a measure of severity of maltreatment, injuries are most meaningful in cases of battered child syndrome typified by patterns of increasingly severe injuries. In cases of neglect or excessive corporal punishment the interpretation of injury data is more problematic. For example child injury can be an indication of severe maltreatment (dangerous living environment and minimal supervision or a parent using increasing amounts of force to manage a child's behaviour) or an isolated incident. In addition many cases of serious maltreatment do not involve injuries. This is particularly evident in cases of sexual abuse where the harm to the child is primarily psychological. Injuries are also a relatively poor indicator of severity of neglect, where physical health and cognitive and emotional effects of chronic deprivation are the key concerns.

Measurement:

Injuries associated with suspected maltreatment are carefully documented in child welfare case notes and supported by legislated reporting requirements. However, child welfare services are not usually informed about non-intentional injuries occurring to children receiving child welfare services. A more systematic

documentation process is in place for all serious injuries (intentional and non-intentional) to children in child welfare placements (e.g. foster care, group care, & residential care).

Most automated child welfare 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 as well as on all incidents on open cases. Ideally, a full tracking system should also include serious injuries and deaths involving closed cases.

While serious injuries and deaths are critical indicators, the interpretation of these data should be done with caution because they are relatively infrequent and we lack valid comparison data for children who have not received child protection services.

Pilot Test:

For children receiving home based services we recommend using the Physical Harm code developed for the Canadian Incidence Survey of Reported Child Abuse and Neglect (CIS)⁶:

"physical harm suspected or known to be caused by suspected maltreatment (all that apply):

1. *no harm; 2. Bruises/cuts/scrapes; 3. Burns/Scalds; 4. Broken bones; 5. Head trauma; 6 Failure to Thrive, 7. Fatal; 8. Other (specify).*
2. *Was medical treatment required?"*

For children in care we recommend tracking all serious injuries. Using the same injury categories, the question should include all serious injuries and a suspected maltreatment question should be added:

3. *Was harm suspected or known to be caused by abuse or neglect?*

Exploratory data may be collected from volunteer agencies by examining injuries sustained by children receiving services during a set period. In addition, CIS data on over 2,500 investigations conducted in Ontario in 1998 will be analysed to examine injury rates at investigation.

⁶ Eligibility Spectrum Scale 1-1 does not provide clear categories of types of physical harm.

WELL-BEING: SCHOOL PERFORMANCE

Rationale:

Maltreatment is a significant risk factor for developmental, cognitive and academic delays. Given that enhancing the well-being of children is one of the paramount objectives of the child welfare system, improvements in cognitive functioning is a key outcome indicator. While it is recognized that this is not the exclusive domain of the child welfare system it represents a service priority that should be well documented.

Research on children receiving child welfare services consistently shows that these children 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-maltreated children. (Eckenrode, J. L., Molly, Doris, John. (1993) School Performance and Disciplinary Problems Among Abused and Neglected Children. *Developmental Psychology*; 29(1), 53-62.)

The preliminary findings from the Looking After Children in Canada Project show that more than half of the foster children participating in the study had been tested for a learning difficulty and a third reported that they had one. (Kufeldt, K., Baker, J., Bennett, L., & Tite, R. (1998). Looking After Children in Canada: Interim Report. Fredericton, New Brunswick: University of New Brunswick.)

Measurement:

School performance is the simplest indicator of cognitive functioning to use for school aged children. Performance can be measured in a number of ways, including: age to grade ratio, achievement on standardized tests (e.g. math & 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

services⁷. The age to grade ratio may underestimate delay since many children not functioning at the appropriate grade level are nevertheless kept in their age-appropriate grade. Grade level functioning documented in the new province-wide report cards may be accessible for children in out of home care and may provide a more accurate measure of those children's academic performance.

For out of school older youth, graduation rates are a simple and appropriate measure.

There are fewer readily available indicators of cognitive functioning for pre-school children. However, a growing number of early intervention and prevention programs are using screening instruments to measure child development⁸. These may eventually provide an opportunity to gather outcome data for pre-school children receiving child welfare services.

Pilot test:

Tracking grade-level provides a simple measure that corresponds to information that most workers have in their files, although these data are not tracked by most MIS. The age to grade ratio can be derived by combining grade level with child age data that are currently gathered by all MIS.

It is recommended that grade level data be systematically collected and annually updated for all children receiving on-going child welfare services beyond intake. The data could be analyzed cross-sectionally or longitudinally, as required.

Exploratory data will be collected from agencies that have been collecting grade data. Some data may also be available from agencies involved in the Looking After Children projects, as well as from Crown Ward Reviews.

⁷ Given the problems inherent in interpreting any of these indicators it may be useful to also track placements in special education classes. Grade level will likely become a more valid indicator as standardized grade testing is developed across Ontario.

⁸ Cognitive development for pre-school children is not currently being systematically tracked by the province-wide Healthy Babies / Healthy Children programme.

WELL-BEING: CHILD BEHAVIOUR

Rationale:

Children who have suffered child maltreatment are at a higher risk for behavioural problems at home and in school, delinquency, and criminal activity. A decrease in behavioural problems is an indicator of improved child well-being.

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 defiance (Kufeldt, K., Baker, J., Bennett, L., & Tite, R. (1998). *Looking After Children in Canada: Interim Report*. Fredericton, New Brunswick: University of New Brunswick.). 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 sample (Howing, P. T., Wodarski, J. S., Kurtz, P. D., & Gaudin, J. M. (1993). *Maltreatment of the school-age child: Developmental outcomes and system issues*. New York, NY: Haworth Press.)

Measurement:

While standardized measures of child behaviour are not generally used in child welfare settings, the Risk Assessment tool being used in Ontario includes a simple Child Behaviour scale (item C3) that could be used as a pre-test, post-test measure of child behaviour. Given that these measures are usually taken at multiple intervals, in particular at initial assessment and closing, these can be used to document changes in child behaviour.

For children 12 years of age or older, charges under the Young Offender's Act (YOA) rates provide a proxy measure of serious behaviour problems in the community (variations in charge rates across jurisdictions limits the interpretation of this indicator). Charge rates for youth in the child welfare population can be compared to provincial charge rates.

Pilot Testing

Behavioural Changes: A limited number of CASs currently have the capacity to disaggregate items from the Risk Assessment instrument on

their information systems in order to report individual item scores. Behaviour can be measured by taking the rating from the Child Behaviour scale (C3) in the Risk Assessment instrument. The measure at intake can be used to describe the incidence of behaviour problems known to child welfare workers (e.g. % of children with "serious" to "dangerous" behaviour problems). This pre-service measure for each child can be compared to their final assessments to determine the proportion of children who improve while receiving CAS services.

Given that this scale was not designed as an outcome measure, its validity should be tested. A simple comparison with a standardized instrument (e.g. the Child Behaviour Checklist), and reliability assessments could be used to validate the scale as an outcome indicator.

YOA Charge Rates: While YOA charges are generally tracked by child welfare workers, this information is not tracked by current MIS. A single-month cross-sectional survey in a selected number of CASs can be used to generate some pilot data. We recommend using the narrower charge rate measure rather than police complaints because workers are less likely to be aware of complaints. Conviction rates could be tracked as well.

Matching CAS and YO databases could provide a second method of deriving charge rates. The

While a histories of maltreatment or out of home care have been reported in many retrospective studies of incarcerated offenders, prospective studies show that most maltreated children manage to avoid criminality. 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 (Zingraff, M. T., Leiter, J., Johnsen, M. C., & 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.).

technical aspects of linking databases and the legal restrictions on accessing such information will need to be investigated.

Limitations with charge rate data must be carefully considered when interpreting these statistics because charging practices vary from one jurisdiction to another. Furthermore, absence of charges does not indicate the presence of good behaviours.

PERMANENCE: PLACEMENT RATE

Rationale:

Placement of children in care is the most consistently documented indicator for child welfare services across Ontario. However, as a stand-alone outcome indicator, placement rate is difficult to interpret. Placement in out of home care is necessary for children who cannot be adequately protected at home or who have needs that cannot be met at home. An increase in placement rates can therefore be an indication that more children are in need of protection and are being adequately protected. For programs designed to prevent placement, decrease in placement rates has been used as an indicator of success. Using multiple indicators promoted by the Outcomes Matrix approach, a decrease in admissions in conjunction with improvements on safety and well-being indicators is a positive

A 1993 study of a random sample of 2,447 child maltreatment investigations in Ontario found that 6% of children had been admitted into care within the first two months of service, and placement was being considered for another 5% (Trocmé, N., McPhee, D., Tam, K. K., & Hay, T. (1994). *Ontario incidence study of reported child abuse and neglect*. Toronto: Institute for the Prevention of Child Abuse.)

An Illinois study of over 10,000 child welfare investigations found that placement rates increase over time from 7% at one month after referral to 21% at one year. (Schuerman, J. R., Rzepnicki, T. L., & Littell, J. H. (1994). *Putting Families First: An Experiment in Family Preservation*. New York, NY: Aldine De Gruyter).

development.

Placement rate is easiest to interpret as a community health indicator. The per capita annual incidence of placement is a fair overall indicator of the well being of children and families in communities. Placement is strongly associated with socioeconomic factors, such as income and employment rates, that are associated with child health and well being.

Measurement:

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.

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. 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 non-traditional child welfare settings, such as customary care or informal community placements. Runaway youth should also be carefully tracked in placement statistics.

Pilot Test:

Placement rate is one of the three indicators selected for priority pilot testing. Because most agencies maintain separate family service and children in care data bases, the most feasible method for tracking placement is to examine placement histories for a selected number of recently closed cases.

- Placement rates should be calculated by dividing the number of *child cases* closed in which there was at least one admission by the total number of child cases closed.
- The simplest and most reliable way to count *child cases* is to count the number of children under 16 living at home when the case was opened⁹.

In addition to calculating service placement rates it is also suggested that the community incidence of placement be calculated by dividing all new admissions to care in 1999 by the child population (<16) in the region served by the pilot test CASs.

⁹ While not all children at home are the target of services, the new provincial standards require that all children under 16 living at home be assessed at intake.

PERMANENCE: MOVES IN CARE

Rationale:

Placement stability is essential for children to develop a sense of belonging and identity as they struggle with the difficulties inherent in separation from their families. While some placement changes can be beneficial, an overall pattern of multiple moves can have serious and long-term negative repercussions for children.

A 4 year longitudinal study of 717 children who entered foster care in Saskatchewan in 1988, found that 71% of children experienced only one placement. The average number of moves for children who experienced more than one placement was 2.3, and only 10% of these had been in more than 4 homes. (Rosenbluth, D. (1995). *Moving In and Out of Foster Care*. In J. Hudson. a. B. Galaway (Ed.), *Child Welfare in Canada: Research and Policy Implications* (pp. 233-244). Toronto: Thompson Educational Publishing)

Measurement:

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 (age 16 to 18).

The moves in care indicator should only track significant placement changes. A significant placement change includes permanent placement changes (e.g. moving to a new foster home) as well as some temporary removals (e.g. admission to a young offenders or children's mental health facility), but not respite placements or home visits. In order to account for multiple admissions, admission to care should be counted as a move. The baseline for this indicator is therefore "1".

Pilot Test:

"Moves in care" is the third indicator that has been selected for priority pilot testing. Because some manual counting may be required to determine which moves should be counted, it is recommended that a limited discharge cohort (e.g. one month) be tracked retrospectively.

The following list indicates what should and should not be counted as a move:

Types of Changes Included

Admission to care
Changes in placement
Re-admissions
Adoption probation
YOA admissions (count as 1, regardless of changes within the YOA system)
CMHC admissions and changes (count all admissions and changes)
Independent Living arrangements (up to age 18)

Types of Changes Not Included

Discharge/Reunification
Respite care
Home visits
Hospital admissions
AWOL (absent without leave)
Adoption discharge
Extended Care and Maintenance (over the age of 18)

PERMANENCE: TIME TO ACHIEVING PERMANENT PLACEMENT

Rationale:

While many children who are brought into care return home after relatively short periods of time, there is renewed concern about placement drift for children who remain in care. Children require a sense of stability, permanence and belonging. The longer children are left in limbo, uncertain about who will be looking after them in the long run, the greater the chance that children will develop serious socio-emotional difficulties. Recent changes to the Child and Family Services Act require significantly speedier decision-making for children who are admitted to care on a temporary basis. Time to achieving permanence is an indicator of service effectiveness.

A 1993 4-year longitudinal study of children entering care in Saskatchewan found that children spent an average of one year in foster care, although the majority of children return home in less than six months. (Rosenbluth, (1995), *Moving In and Out of Foster Care*, in Hudson, J. & B. Galaway, (Eds), *Child Welfare in Canada: Research and Policy Implications*, Toronto: Thompson Educational Publishing.)

While much research indicates that the likelihood of reunification or adoption decreases the longer children remain in care, a study of children in foster care in California indicates that children who are reunified within three months are at higher risk for family placement breakdown than children reunified between three and six months (Courtney, (1995). *Reentry to Foster Care of Children Returned to Their Families*, *Social Service Review*, Vol. 69: p. 226-

Measurement:

In principle, time in temporary care is a simple indicator to measure for any Child Tracking System. In practice, the challenge rests in determining when a placement can appropriately be categorized as permanent. The simplest definition of permanent placement

would be one that is intended to be permanent, such as returning a child home (reunification) or placing a child in an adoptive home. However, permanent plans are not always actualized. The reunification breakdown rate for children returned home can be as high as 30%.¹⁰

Using time to achieving permanence is complicated by the fact that hasty reunification or adoption placements may in some circumstances increase the chance of breakdown. The relationship between planned permanence and actual permanence is therefore best analyzed by tracking both time to achieving a planned permanent placement as well as tracking the breakdown rate for permanent placements.

Pilot Test:

For the purpose of pilot testing, time to achieving permanence is most reliably measured in terms of case events that can be relatively objectively measured:

- Return home for planned permanent reunification
- Crown Wardship (either for adoption or long-term care)¹¹.
- Using the cumulative time in care formula specified in the Child and Family Services Act amendments, time to achieving permanence should include all stays in care.

By separately tracking breakdown rates, the relative permanence of planned permanent placements can also be analyzed.

As with the other placement related indicators, time to achieving permanence is best tracked at the point of discharge from care. Pilot test data could be collected from agencies with the capacity to easily produce placement and discharge dates along with the data on number of moves in care. Time to permanence could be calculated for the cohort of discharges during the set data collection period (e.g. October 1999).

¹⁰ Wulczyn, F. (1991). Caseload Dynamics and Foster Care Re-Entry. *Social Service Review*, 65, 133-156.

¹¹ Not an indicator of permanence, although it marks a permanent decision not to return a child or youth to their family. We recommend separate tracking for Crown Wards, as is currently done by the Crown Ward Review Unit.

FAMILY & COMMUNITY SUPPORT: FAMILY MOVES

Rationale:

Poor quality housing and frequent moves are serious problems for many families receiving child welfare services. Frequent moves lead to loss of peer and social support networks for children and parents and multiple school changes for children. Thus housing stability is an indicator of family social stability.

Housing instability is caused by many factors including lack of affordable 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 and more stable housing for their clients as well as working with families to help them stabilize their lifestyles.

The 1993 Ontario Incidence Study of Reported Child Abuse and Neglect found that 18% of families had experienced at least one move within the six months preceding the investigation. (Trocmé, N., McPhee, D., Tam, K. K., & Hay, T. (1994). Ontario incidence study of reported child abuse and neglect. Toronto: Institute for the Prevention of Child Abuse.)

A 1992 study of 205 children brought into care in Toronto found that in over 18% of cases the investigating worker considered housing problems to be one of the factors that lead to admission, and in close to 9% of cases return home was delayed because of housing problems. (Cohen-Schlanger, M., Fitzpatrick, A., Hulchanski, J. D., & Raphael, D. (1995). Housing as a factor in admissions of children to temporary care: A survey. *Child Welfare*, 74(3), 1-10 (547-562)).

Measurement:

Address changes are recorded on all information systems, however in most case the updated information simply replaces the previous address. A Child Tracking System could easily monitor the number and dates of address changes and postal code¹² changes without requiring additional information collection.

Pilot Testing

The pilot test will be conducted with agencies that have the capacity to add an address change counter on their current information system.

¹² Postal code changes can be used to differentiate between moves to a different housing unit and moves to different neighbourhoods.

FAMILY & COMMUNITY SUPPORT: PARENTING CAPACITY

Rationale:

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 will translate into better longer term child outcomes.

Measurement:

Despite the facts that (a) parenting is targeted by many child welfare interventions, and (b) tools have been developed to assess parenting and family functioning, standardized parenting measures are not commonly used to assess families and track outcomes in child welfare. Parent self-report instruments used in other fields may not be applicable to child welfare settings because many parents are not aware of their own difficulties.

The Ontario Risk Assessment tool may provide an acceptable measure for tracking parenting capacity. Some items refer directly to parenting: Caregiver's Expectations of Child; Caregiver's Acceptance of Child; Family Identity and Interactions. Other items are related to parenting capacity: Ability to Cope with Stress; Family Violence; Alcohol or Drug Use; Availability of Social Supports; and Living Conditions. Given that these measures are usually repeated, in particular at initial assessment and closing, these could be used to track changes in parenting capacity.

The Ontario Risk Assessment tool, however, was not developed for purposes of outcome measurement. While it may provide a fair cross-sectional description of the population served by CAS, its sensitivity to change may be unduly influenced by procedural risk assessment requirements. Nevertheless, its potential use should be explored because this information is currently collected province wide.

A recent series of five American studies comparing neglectful families to matched groups of non-neglectful families, show that neglectful families are less organized, have higher levels of conflict, move more often and have more changes in family composition. Parents are less emotionally responsive to their children, provide less stimulation, feel less competent and more likely to be depressed. While neglectful families were different from non-neglectful on many observational measures, responses to self-report instruments rarely distinguished the two groups. (Gaudin, J. J., & Dubowitz, H. (1997). Family Functioning in Neglectful Families: Recent Research. In J. D. Berrick, R. Barth, & N. Gilbert (Eds.), *Child Welfare Research Review* (Vol. 2, pp. 28-62). New York: Columbia University Press.)

Pilot Testing:

Pilot testing in Ontario is currently limited because few agencies have information systems that can disaggregate specific items from the Ontario Risk Assessment tool. Pilot data could be collected at the point of initial assessment and the point of closing in those agencies that have information systems that maintain separate numeric fields for each risk item.

The following items contained in the provincial Risk Assessment tool were selected because they measure family characteristics that are amenable to change.

- Caregiver Influence scale, items CG2 (Alcohol or Drug Use), CG3 (Caregiver's Expectations of Child), and CG4 (Caregiver's Acceptance of Child).
- Family Influence scale, items F1 (Family Violence), F2 (Ability to Cope with Stress), F3 (Availability of Social Supports), F4 (Living Conditions), and F5 (Family Identity and Interactions).

Given that these scales were not designed for outcome measurement, their use should be tested. A simple comparison with a standardized instrument (e.g. the Family Environment Scale or the Child Well Being Scales) and inter-rater reliability assessments could be used to validate the scales as outcome indicators. The combination of scale items into a single score will also need to be explored.

FAMILY & COMMUNITY SUPPORT: ETHNO- CULTURAL PLACEMENT MATCHING

Rationale:

When children and youth must be removed from their homes, efforts are made to place them within their community, either with extended family or a family from similar ethno-cultural background. There is concern, however, that children from some communities (e.g. aboriginal, Black, or Muslim communities) are not being placed in matched foster homes. Matching rates provide an important indicator of the extent to which child welfare services have been able to engage with specific ethno-cultural communities in recruiting foster homes and finding the most appropriate out of home placements for children from these communities.

The Saskatchewan foster care study shows that 64% of children in care in March 1990 were of Native ancestry, and that Native children spent on average more time in foster care than did non-Native children. Less than 10% of Native children were in matched foster homes. Rosenbluth, (1995), *Moving In and Out of Foster Care*, in Hudson, J. & B. Galaway, (Eds). *Child Welfare in Canada: Research and Policy Implications*, Toronto: Thompson Educational Publishing, Inc.

A recent study of children in foster care in California showed that African American children were three times as likely to come into care and spent significantly more time in temporary care than did non-African American children. Courtney, M. E. (1995). *Re-Entry to Foster Care of Children Returned to Their Families*. *Social Service Review*, 69(2), 226-241.

This indicator must be interpreted with caution in individual cases because ethno-cultural matching is only one of the factors that is considered in finding the most appropriate placement for a child. However, it provides a strong indicator of community engagement.

Measurement:

Measurement of ethno-cultural background is fraught with definitional issues inherent in negative stereotyping. Provisions under the

Child and Family Services Act require involvement of the aboriginal community in making placement decisions for aboriginal children. Establishing which other communities should be considered in measuring matching rates is more complex. Black communities, for instance, are not as easily defined under a measurable category. The needs of Black children of immigrants from the West Indies, immigrants from Africa, or non-immigrant Black Canadians may be very different. Immigrant status, religion, language, and skin colour present complex combinations of factors to consider in measuring placement matching. This complexity, however, should not lead to ignoring a placement issue about which many communities have expressed serious concerns.

Pilot Test:

Information on child and foster family ethno-cultural background is routinely collected, however, we do not know the extent to which it is systematically included in client information systems. If the information cannot be derived from CAS client information systems, manual retrieval of the information for a set period of time may be required.

It is recommended that:

A cross-sectional measure be used, to indicate the proportion of foster children and youth whose foster parents are similar to them in:

- a) ethno-racial background
- b) language
- c) religion

The Statistics Canada Census ethno-cultural categories used for the Canadian Incidence Study of Reported Child Abuse and Neglect are:

- | | |
|-------------------|---|
| 1. White | 7. Arab/West Asian (e.g. Armenian, Egyptian, Iranian, Lebanese, Moroccan) |
| 2. Aboriginal | 8. South Asian (e.g. East Indian, Pakistani, Punjabi, Sri Lankan) |
| 3. Chinese | 9. Southeast Asian (e.g. Cambodian, Indonesian, Laotian, Vietnamese) |
| 4. Latin American | 10. Black (e.g. African, Haitian, Jamaican) |
| 5. Filipino | 11. Japanese |
| 6. Korean | 12. Other |

Alternatively, self-identification by foster children and foster parents may provide a more textured assessment of matching.

CONCLUSION

Child welfare practice is at a turning point in Ontario. Increased media interest has helped to draw 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. Appropriately balancing the protection needs of children while supporting their families and working with their communities is complex.

Developing a province-wide outcomes tracking system and a comprehensive information system are two of the initiatives in the Ministry's child welfare reform agenda. These two initiatives will provide critical information on the impact of the Ministry's other initiatives, including the amendments to the CFSA, implementation of the Risk Assessment Model, new standards for child protection cases, capacity-building, steps to revitalize foster care, and the new funding framework.

The outcome measurement strategy proposed in this document provides a unique opportunity to select a set of indicators that reflect the broad ecological tradition that has marked child welfare practice in Ontario over the past three decades.

The indicators selected for tracking outcomes are simple, can be feasibly documented with minimum introduction of new measurements, and are meaningful for front-line workers, managers, policy makers and the general public. While most 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.

APPENDIX: DESIGN CONSIDERATIONS IN MOVING FROM AN MIS TO A CTS

Moving from a Management Information System (MIS) to Client Tracking System (CTS) requires a significant shift in the way recorded case information is stored, managed, and reported. Because a CTS has the capacity to provide the basis for more sophisticated analyses, it requires that analytic parameters be specified before information is reported. The following appendix examines some of the key parameters that must be specified in moving from an MIS to a CTS.

Snapshots vs. Case-flow

Point in time snapshot statistics significantly undercount short-term cases in comparison to long term cases. Ten children in short-term care who each move in and out of one placement bed during a year will be counted as only one child in that placement on any day that year. And one child in care all year will be counted as one child in placement on any day that year. Thus, while less than 10% of children admitted to care become long term Crown Wards, 50% of children in care on any one day are Crown Wards.

Accuracy can be increased by combining point in time snapshot data with case-flow data. For example, total family cases served is calculated by adding the number of cases open at the beginning of the year (point in time snapshot) to the number of cases opened during the year (system-flow). However, cases that are opened, closed and reopened in a single year end up getting double or even triple counted because MISs do not track them as a single family, but count them as separate case events. Similarly, knowing that 1,000 different children were in care during a year and that they experienced 2,000 different out of home placements gives no information about how many of these children had one, two, three, or more foster care placements during that year. These time exposure snapshots report the flow of events

within the system, not the experience of individual children and families.

Case-flow data link service recipients to case events over time. Maintaining this three way linkage (recipients, events & time) in case-flow data allows reconstruction of the timing and services for each child and family. The only practical way to maintain complex, accessible, case-flow data is via electronic relational data bases.

Case Specific vs. Child Specific

Another obstacle to making use of some current MIS is structuring that unlinks some child specific data from family specific data. For example in Ontario, information for children receiving home based services is organized by family case, whereas information for children in care is organized by individual child. As a result it is currently impossible to derive a simple statistic such as the proportion of investigated children who are admitted to care. This is not just a reporting problem. For example, the transition to the Risk Assessment Model for Child Protection in Ontario which requires child specific assessments has been hampered by this family file focus. Clearly, to reflect the well-being of children, information systems must be based on child specific data structures because children in the same family may have very different levels of well-being.

Fortunately, many relational data base programs have the ability to track nested units of analysis and thereby facilitate both child and family based reporting. Family information common to all children is maintained in a family file, while child specific information is tracked in child files linked to the family file. Information systems using contemporary relational data bases can report service indicators in terms of children served and families served.

Example: Case re-openings vs. recurrence

The difficulty inherent in working with snapshot system flow data rather than case-flow data is illustrated by the difference between case re-openings and recurrence of maltreatment. Most MIS document case re-openings: the number of cases opened that had been previously opened. Unfortunately this is easily confused with recurrence: the proportion of closed cases in which recurrence of protection concerns requires case re-opening. Tracking closed cases forward (case flow data) to discover rates of recurrence leads to results very different from monitoring retrospectively which case openings had been previously opened (system flow data).

Assume the following:

1. Of every 1,000 families who first receive services (first case opening) and whose cases are then closed within one year, 200 of these families are served again (case reopened) at least once within 5 years of first opening. The 5 year recurrence of maltreatment rate is 20% or 4% per year if we assume a constant rate over 5 years.
2. However, if among those 200 families is a chronic high risk group of 100 families whose cases are closed and re-opened five times requiring 500 (5x 100) re-openings, a total of 600 (100 single + 500 repeated) re-openings would be generated by these 1,000 cases.
3. If we assume a constant rate of re-opening through the fifth year and none beyond, 1,000 families will produce 120 re-openings each year for five years, 12% re-openings per year.
4. Now assume that an agency has enough resources to open and serve 1,000 cases per year. Given the assumptions just made, this agency would serve 625 new cases (first case opening) each year and serve 375 re-opened cases each year. The arithmetic is as follows, 12% of 625 = 75; 5 (years) x 75 = 375; and 625 + 375 = 1000.

This example illustrates how chronic cases requiring multiple openings are significantly over-represented in system flow case re-opening statistics. If system flow data were all we had, we might conclude that 37.5% of the families were repeat recipients of child protection services. That calculated annually, the agency had failed to adequately protect children in over one third of the families it served. However, these hypothetical results were based on assuming an annual recurrence of maltreatment rate of only 4% based on case flow data. The case flow data in this example also illustrate that 10% of the families account for 83% of the case re-openings. It is important to remember that system flow reports can always be produced from case flow data, but the reverse is not true. If the information system has only system flow data, it cannot produce case flow reports because the essential linkages between data elements are missing: Their context has been stripped away.

Setting time frames

Adopting suitable time frames is a challenge in tracking cases (case flow data). Time frames must be long enough for the events of interest to have a reasonable opportunity to occur but short enough to permit timely analyses and reporting. It is tempting to think that indicators such as recurrence of maltreatment should be tracked until a child turns 16 (or 18 or 19, depending on the jurisdictional mandate). However, these lifetime data may require 16-18 years to collect and thus are not timely for program monitoring. If program monitoring is the purpose, then timeframes must be short enough to allow timely reporting and responding.

Given the complexity of life and the multitude of potential influences over which no one program has control, particularly over extended periods of time, is it reasonable to hold a program or an intervention accountable for events or conditions occurring long after last contact with the program? For example, is it reasonable to hold a child protection agency accountable for maltreatment that occurs ten

years after their last contact with the child?
How about five years or three years?

Ideally, both existing data and program theory should be considered in selecting time frames for case tracking. Unfortunately, existing data about very important outcomes such as the recurrence of maltreatment are not credible. Much of the literature in this area is based on system flow case reopenings and is essentially meaningless in relation to the probability that individual children will again be maltreated after their case is closed and also meaningless in relation to the probability that children will again be maltreated while in care. Case tracking studies of recurrence of maltreatment have generally found the incidence (rate per unit of time) of maltreatment to decrease, particularly after more than two years have elapsed since case closure¹³. However, these

¹³ see for example DePanfilis, D., & Zuravin, S. J. (1999). Epidemiology of Child Maltreatment Recurrences. *Social Services Review*, 73(2), 218-239; and Fluke, J., Yuan, Y.-T., & Edward, M. (1999). Recurrence of maltreatment: An application of the NCANDS. *Child Abuse and Neglect*, 23(7), 633-650.

studies have not actively monitored the welfare of these children, but have relied on data from county and state information systems. These systems are almost uniformly passive. Therefore, our best guess from existing data may be that five years is a reasonable time for tracking recurrence.

However, this ignores how dramatically both the child and the child's environment change over five years. Can we reasonably imagine child protective services that will continue to have detectable effects five years after last contact with child and family? What proximal conditions that child protective services might reasonably be expected to produce would continue to have substantial influence after five years?

The reasonable case tracking time frame is probably case dependent. For example, some normally well functioning families who are appropriately helped through a crisis should probably be tracked for a couple of years and let go. On the other hand, many low or marginally functioning families should probably be tracked until their children reach the age of majority because we expect they will continue to need at least occasional support to adequately care for their children. With these kinds of families, case reopening, far from being an indicator of failure, is an indicator of success. We want these families back when they need our support.

Moving from a financially driven system based MIS to child well-being driven child based CTS requires that information be tracked and reported on a child specific basis. Time frames are very important considerations for reporting, but if information is recorded so that child, date, and event or condition are always linked, the time frame can always be selected at the time the report is being prepared and different time frames can be used and compared from the same set of data.

Numerator / Denominator

Indicators must be reported as rates to be meaningful and comparable. The numerator, i.e. the number of children with a specific characteristic is usually clear to people when we have case flow data. Confusion arises around calculation of the denominator, the reference group. This is particularly true when all we have is system flow data. For example if we have only system flow data we simply cannot derive an appropriate denominator to calculate the likelihood of maltreatment recurrence on a per child basis.

Post service tracking

Prospective tracking is necessary to track post-intervention (after case closing) outcomes. Prospective tracking means that cases are tracked forward from the point of intervention to ensure that both cases that return for services and those that never return are included in post-intervention indicators.

Time-frame for tracking is best set in terms of child age and the types of problems and interventions involved. A one year follow-up is likely to be sufficient, for example, for supervision and home safety issues with infants and toddlers. In contrast, the permanence of an adoption or a return home is better assessed on a longer-term basis. A one to three-year time frame is likely to be adequate in most instances.

Post-Service Tracking

To be meaningful, post-intervention tracking must be active not passive. No news is not necessarily good news. However, access to confidential information become complex once cases are closed.

Retrospective tracking:

Retrospective tracking is used to examine the experience of children within the service delivery system. Experience is tracked retrospectively by describing the relevant indicator events up to a specified point in time. Tracking can either be done from the point of discharge or service termination, or at set intervals (e.g. annually) for children still receiving services. Retrospective tracking at point of discharge or service termination to describe service experience (e.g., placement history, school changes, treatment interventions, etc. experienced in care). Annual retrospective tracking is more appropriate for describing specific child developmental outcomes. Grade level in relation to age, for example, can be reported if grade level and age is recorded for each child who receives services each year. This case flow data would allow reporting of children's relative grade standing when the first received service and whether in comparison to non-served populations, the grade for age standings of children receiving protective services improved or declined.