Client Outcomes in Child Welfare: Phase II

Final Report – April 5, 2002

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Executive Summary

Little is known about the children and families who receive child welfare services across Canada. Designed to protect children from further abuse and neglect, Canadian child welfare authorities do not currently report rates of recidivism. Most jurisdictions do not track the proportion of children who are reported to child welfare services and are subsequently admitted to care. Although front-line child welfare workers invest significant amounts of time documenting their activities, this rich source of data is not easily accessible to managers and policy makers. A more systematic approach to tracking child welfare service outcomes is required in a context of growing public concern about the safety and well-being of children, government requirements for service accountability, and increasing challenges for agencies to develop better targeted and more effective services

The Client Outcomes in Child Welfare (COCW) project was initiated in 1996 by the 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. The national consultation and design phase of the project concluded with the endorsement of a common outcomes framework based on a Child Welfare Outcome Indicator Matrix of 10 outcome indicators designed to monitor the extent to which child welfare services lead to improved child safety, well-being, permanence and family and community support.

The second phase of COCW project (2000-2002) was designed to further develop and test operational definitions for the selected outcome indicators. The primary objective of the COCW Phase II project was to test the capacity of provincial and territorial Child Welfare Information Systems (CWIS) to track and export key service data that could be used to calculate outcome indicators. Phase II was particularly interested in CWISs' capacities to move beyond year-end case counts to report case-flow statistics that provide more meaningful bases for tracking service outcomes.

All participating jurisdictions demonstrated the capacity to generate case-flow data tracking cases through their CWISs. Three indicators – 12 month service recurrence, placement rate and moves in care – proved to be the most broadly available indicators, with some jurisdictions having access to two others – time to reunification or permanent wardship and placement matching. Most CWISs do not currently track severe injuries/deaths, grade level, child emotional/behavioural functioning, parenting capacity and family address changes.

Four possible data collection models were reviewed. A centralized national data collection model would likely yield the highest quality data and great analytical potential. However, this option was not considered to be feasible given the costs of a centralized system and the lack of a Federal mandate with respect to the delivery of child welfare services. The project team recommends instead that Provinces and Territories develop a nationally coordinated data collection system with case-level data maintained in provincial and territorial databases, and aggregate statistics submitted nationally on an annual basis. This option would require a commitment from

participating jurisdictions to a common set of data fields and codes. This commitment could be implemented on an incremental basis. Some data fields could be redeveloped immediately at little cost; others would be added as jurisdictions update their CWIS.

The coordinated data collection option would not require a major national investment of resources since most of the data cleaning and manipulation would be done by the provinces/territories. However, some financial support for national coordination, reporting, and analysis will be required. The collection and dissemination of these data could be assumed by the Federal Government through an organization like the Provincial Working Group on Child and Family Services Information. Alternatively, an independent research organization, such as the Centre of Excellence for Child Welfare could be used to house, analyse and disseminate these statistics.

A number of recommendations concerning the calculation and presentation of outcome indicators are made, including maximizing comparability with equivalent national and international statistics, articulating specific objectives associated with each outcome, and calculating indicators on a sub-population specific basis (e.g. separate indicators for children in long-term care). It is also recommended that reports of provincial and territorial statistics include a number of contextual indicators, such as population age distributions and poverty rates.

The report provides a detailed list of a recommended common set of dedicated data fields that would provide a basis for meaningful comparative analyses.

The importance of systematically tracking outcomes is well recognized, however, competing priorities, limited resources, and the multi-layered structure of CWISs complicate the task of redesigning information systems. In addition, consideration needs to be given to concerns that naturally emerge from reporting outcome data: concerns from administrators that inappropriate comparisons will be made between jurisdictions, concerns from front-line staff that their performance will be evaluated using crude indicators that are beyond their capacities to control. These concerns can be addressed in part by including administrators and front-line staff in preliminary analyses of the selected indicators and clearly identifying the limited meanings of the indicators.

The project team strongly recommends that the Provincial and Territorial Directors propose to their Deputies the establishment of a permanent COCW Implementation Committee to coordinate the implementation of the COCW initiative. The Committee should include Directors and their representatives as well as representatives from First Nations/Aboriginal service providers.

The COCW initiative has been on the Provincial/Territorial Directors of Child Welfare agenda for over seven years. Progress has been incremental, moving from developing a common framework to pilot testing indicators. The COCW project is now at a point where further progress can only

Background

The following report summarizes the methodology, major findings and recommendations from the *Client Outcomes in Child Welfare (COCW) Phase II* project. The report includes five major sections: a summary of the project's background, a description of the project methodology, a presentation of the major findings in terms of the available aggregated outcome indicators, a discussion of the key data collection issues, and recommendations for future development of child welfare outcome tracking systems.

Client Outcomes in Child Welfare (COCW) Phase I

Phase I of the Client Outcomes in Child Welfare project was initiated by the 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. Phase I of the COCW was conducted by a consortium of university researchers in Toronto, Kingston and Montreal over a two-year period from 1996 to 1998. The project was designed to: (1) develop a comprehensive overview of the existing state of knowledge about outcomes measurement for child welfare in Canada and internationally; and (2) initiate a consensus-building process among key stakeholders for a coordinated strategy in tracking child welfare outcome information across Canada. Following extensive consultations and reviews of different outcome measurement systems, the preliminary findings from the COCW project were presented in March of 1998 at the First Canadian Roundtable on Child Welfare Outcomes which brought together policy makers, information specialists, senior service providers and researchers from across Canada. The Roundtable strongly endorsed the need for a better coordinated approach for tracking outcomes in child welfare based on a common outcomes framework. On the basis of the Roundtable discussions, a matrix of 10 key outcome indicators – designed to monitor the extent

Grade Level/Graduation

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-maltreated children special 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 indicator for child welfare services to collect, especially for children receiving home based services. For out of school older youth, graduation rates are a simple and appropriate measure. Outcome monitoring for pre-school children depends on the extent to which child welfare authorities use developmental assessments.

Child Behaviour

Maltreated children are higher risk for behavioural problems at home and in school, delinquency, and criminal activity. Preliminary findings from the Looking After Children in Canada Project were that 39% of maltreated youth reported having difficulties with anger, and 32% reported often getting into trouble for defiance⁶. 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 sample⁷. 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 information, either in risk assessment tools or in assessment records for children in long-term care.

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 whose needs cannot be met at home. The Canadian Incidence Study of Reported Child Abuse and Neglect found that 8% investigations lead to a placement in care within the first two-months of the investigations⁸. 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

⁵ Eckenrode, J., Laird, M., & Doris, J. (1993). The Effect of Neglect on Academic Achievement and Disciplinary Problem: A Developmental Perspective. *Developmental Psychology*, 29, 53–62.

⁶ Kufeldt, K., Baker, J., Bennett, L., & Tite, R. (1998). Looking After Children in Canada: Interim Report. Fredericton, New Brunswick: University of New Brunswick.

⁷ 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.

⁸ see footnote 4.

after referral 7% of children had been placed in care compared to 21% within one year of the initial referral. Interpretation of placement statistics is complex. An increase in placement rates is not necessarily a negative outcome; it could mean that child welfare authorities are doing a better job at identifying and protecting children who would have been severely harmed if left at home. This is further complicated by the fact that placement decisions are affected by the availability of placement resources. 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.

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 out-of-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 four¹⁰. 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. 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. Rosenbluth

Interpretation Issues

Many of the indicators selected for the Child Welfare Outcome Indicator Matrix are proxy measures that will need to be interpreted with caution. A narrow focus on any one indicator could have unintended effects on delivery of services. Reducing placements, for example, without ensuring safety and supporting child well-being, could simply result is a loss of services leaving more children at risk of further maltreatment. Proxy indicators that reflect system events can nevertheless provide a meaningful measurement framework if the selection of indicators covers a broad set of domains, as proposed in the *Child Welfare Outcome Indicator Matrix*.

COCW Phase II

The COCW Phase II project was initiated by the Provincial and Territorial Directors of Child Welfare and HRDC to further develop and test operational definitions for the Child Welfare Outcome Indicator Matrix. The contract for Phase II was awarded to a team of researchers affiliated with the Bell Canada Child Welfare Research Unit at the Centre of Excellence for Child Welfare, Faculty of Social Work, University of Toronto. The team includes Nico Trocmé (Principal Investigator), Barbara Fallon (Project Manager), Stanley Loo (Database Manager) and Butch Nutter (Consultant).

The primary objective of the COCW Phase II project was to test the capacity of provincial and territorial Child Welfare Information Systems (CWIS) to track and export key service data that could be used to calculate outcome indicators. Phase II was particularly interested in CWISs' capacities to move beyond year-end case counts to report case-flow statistics that provide more meaningful bases for tracking service outcomes. Our review of CWIS was conducted in a number of ways:

- 1) further develop the definitions of the ten Outcome Matrix indicators in ways that would support development of a Canadian child welfare client outcomes data base; (see COCW Phase II Report Number 1: Outcome Matrix Preliminary Operational Definitions, February, 2001);
- 2) test the utility of these definitions as a basis for gathering client outcome data from each participating province and territory;
- review the structure and capacity of CWIS, including a review of the computer hardware and database management systems used, and interviews with technical staff responsible for the CWISs (see COCW Phase II Report Number 2: Child Protection Information Systems in Canadian Provinces/Territories: Characteristics and Capacity, April, 2001);
- collect data, using a customized data retrieval protocol (see sample attached, Appendix
 A), to test the capacity of each participating province's or territory's CWIS to produce
 data on each of these indicators;

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5)	assess the technical quality of the data received from each participating province and

Methodology

The COCW Phase II project was conducted in four stages. The first stage was to further develop the definition of the ten Outcome Matrix indicators and propose a data collection plan to be reviewed by the Steering Committee. During the second stage of the project we reviewed existing child welfare information systems in order to assess system capacities and refine data requests. Data analysis was conducted during the third stage to identify interpretation and data quality issues. Recommendations for future data collection were developed in consultation with the Steering Committee. The results of these four stages form the basis for this final report. Detailed descriptions of each stage were presented in the following reports:

Nutter, Trocmé, Fallon & Loo, (February, 2001). COCW Phase II Report Number 1: Outcome Matrix Operational Definitions.

Loo, Trocmé, Nutter & Fallon (April, 2001). COCW Phase II Report Number 2: Child Protection Information Systems in Canadian Provinces/Territories: Characteristics and Capacity.

Trocmé, Loo, Fallon & Nutter (November, 2001). COCW Phase II Report Number 3: Data Collection.

Trocmé, Loo, Fallon & Nutter (January, 2002). COCW Phase II Report Number 4: Findings and Framework for Recommendations.

Stage 1: Data Collection Plan and Operational Definitions

A draft data collection plan including operational definitions of all ten indicators was completed in February 2001 and distributed for review to representatives from participating provinces and territories. Feedback was very constructive in developing the jurisdiction-specific data requests. The cohort selection process and definitions of key variables are described below.

Cohort Selection

Unit of Observation

Most Child Welfare Information Systems (CWISs) track information by both family and child, with some systems using family as the unit of observation for investigations and home-based services, and child as the unit of observation for in-care services. However, the child is the pre-

Time Periods for Selecting and Tracking Cohorts

To test date-based data retrieval capabilities and to restrict the volume of data, specific time periods were set for selecting cohorts of cases. In this study two cohorts were selected, each including one month of cases closed. Cohort A included cases closed in January 2000 tracked forward for 12 months¹². Cohort A was a follow-up cohort used to study recurrence of maltreatment after case closure. Cohort B included cases closed in January 2001 whose records were then tracked back to the most recent preceding case opening: their most recent spell of service¹³. The possibility existed that Cohort B could provide data on all ten of the Outcome Matrix indicators. Seven provinces¹⁴ and one territory provided usable data: British Columbia (Cohort A); Alberta (Cohort A and Cohort B); Saskatchewan (Cohort A and Cohort B); Manitoba (Cohort A and Cohort B); New Brunswick (Cohort A and Cohort B); Nova Scotia (Cohort A and Cohort B); Newfoundland (Cohort A and Cohort B) and the Yukon (Cohort A and Cohort B).

Case Identification

Legal Status

Because legal status, sometimes called legal authority, can be part of the definitions of more than one indicator we have addressed it separately. Legal status describes the legal auspices under which services are provided. These include legislatively mandated services such as investigations and emergency apprehensions as well as voluntary agreements and court orders. We defined nine legal status categories relevant to the ten matrix indicators: (a) Apprehension; (b) Investigation; (c) voluntary family service agreement; (d) court ordered family service agreement or supervision order (in both of these parental rights over the child are intact); (e) parent(s) temporarily relinquished rights and care of child; (f) parent(s) permanently relinquished parental rights and care of child; (g) court temporarily removed parental rights; (h) court permanently terminated parental rights; and (i) child is legally an adult (child has reached age of majority). These legal statuses have different labels and definitions in different jurisdictions. As with other variables, how

Serious Injuries/Deaths

Serious injuries were measured by tracking the proportion of children receiving child welfare services who had sustained a serious injury, whether or not that injury was caused by an incident of maltreatment. Information systems should in principle document all serious injuries to children receiving child protection services.

There were three components to the operational definition of serious injury: severity, type, and

behaviour if these measures are administered near case opening and again near case closing. Repeated administrations would allow calculation of difference scores that could be converted to standard scores for purposes of comparison. Unfortunately this process could not be tested because the participating jurisdictions did not include child behaviour measures in their CWISs.

Permanence

Placement rate

Placement rate is measured at case closing (Cohort B) by calculating the proportion of children admitted to care among all children who received child protection services. This proportion can be calculated by dividing the number of children in Cohort B taken into care by the total number of children in Cohort B.

Placement is defined by two essential components: (a) The child resides outside the nuclear family home and (b) persons other than the child's parents are legally empowered to make decisions and give consents on behalf of the child. For each child in Cohort B we requested the following: Placement date; placement type which included foster care, group home, residential treatment, adoption probation, extended family care, YOA placements, and independent living arrangements for minor children; date of discharge from care; and discharge from care type which included extended family care, absent without leave/permission, family reunification, emancipation at age of majority, and death of child. How to fit the codes of each participating province and territory into these categories was negotiated with each of these jurisdictions.

Moves in Care (Placement Changes)

Placement changes were measured for each child at the point of case closure (Cohort B). Placement changes measure the number of admissions, discharges, re-admissions, and other significant placement changes. In general, a significant placement change involves the child being cared for by a different set of carers than cared for the child just prior to the move. Short-term changes in living arrangements that do not involve changing the child's home base or primary caregivers are not included as placement changes. Examples of these include respite care, home visits, acute hospital admissions, and changes in legal status such as adoption finalization, and extended care and maintenance for youth 18 years and older.

Placement changes that count as moves in care are moves within and between the following types

The moves in care variables requested were date of placement change, type of placement, and reason for placement. As with other variables, we negotiated with each participating province or territory how best to recode the data they submitted into our categories on these variables.

Time to Achieving Permanence

Time to achieving permanence should be measured at the point of case closure (Cohort B) by counting cumulative days in care up to a child's return home, adoption, emancipation, or other permanent placement. The indicator should be based on the number of days in temporary care for all children discharged home, adopted, emancipated, or placed in some other permanent placement during a spell of service. The data required to calculate time to achieving permanence had been identified earlier in relation to placement rate and moves in care¹⁶.

Family and Community Support

Family Moves

Family residential stability could be measured at case closing by counting the number of times a family's address had changed during that spell of service and dividing each count by the length of service spell. Annual family move rate could be calculated for each family by dividing each family's number of moves by their service spell length in days and multiplying the resulting quotient by 365. Patterns of moves both in terms of frequency and distance could be calculated from the date of move plus the postal code moved to.

Virtually all child protection agencies keep current address files on the families they serve. Unfortunately, in many information systems, after families move their former address is replaced by their present address and no record is kept of the dates or numbers of former addresses. This practice of replacing old addresses with new addresses reflects older information system requirements when the cost of electronic data storage was relatively high.

Parenting Capacity

As with child behaviour a number of promising measures of parenting capacity are in development but have not been included in CWISs. As provinces or territories included these in their CWISs, parenting capacity change scores could be used for comparisons within jurisdictions over time. A possible specific indicator for such comparisons could be derived by subtracting opening from closing parenting capacity scores and converting the differences to a three point scale: positive change, no change, and negative change or change scores to standard scores if distributions were approximately normal.

Ethno-cultural Placement Matching

The most reliable ethno-cultural data available in CWISs is First Nation status¹⁷. Few jurisdictions, however, include Aboriginal status of foster parents in their CWISs.

¹⁶ In practice we found that return home status and emancipation status were harder to analyze than anticipated, in hindsight a separate case closing status variable should have been included.

¹⁷ It is unclear how well other Aboriginal (Metis and Innuit) children and families are tracked.

Stage 2: Review of Child Welfare Information Systems (CWIS)

The second stage of the COCW Phase II project involved reviewing the capacity of provincial and territorial CWISs. A standard information request guided interviews with CWIS personnel in each of the participating provinces and territories. All provinces and territories, except Quebec and Nunavut¹⁸

- The project database was protected with four separate passwords: at the CMOS level, server level, directory level, and database level.
- The project database manager was the sole steward of the database. No other people had access to the data.
- Upon completion of the project, the project database data and all original datasets from the provinces/territories will be transferred to a CD and submitted to HRDC. A copy of the data will also be kept in a locked cabinet in a locked office at the University of Toronto for safe storage according to university policy and guidelines. All data on the project server will be drastically erased.

Throughout the data collection process, project team members worked to provide every opportunity for full provincial and territorial participation and input. With agreement from Human Resources Development Canada to amend the original deliverable dates, project deadlines were lengthened to accommodate the scheduling difficulties for some provinces and territories.

Data Cleaning

The purpose of data cleaning was to ensure that datasets from the provinces/territories were prepared according to protocol specifications. This means that the cases and service data must fall inside the oeusased.T*-0.00g

Data Analysis

For the purpose of this project, all data were selected according to specific time frames to restrict the volume of data to a manageable level. In addition, extensive reliance on dates in case selection would also allow us to empirically assess a key capability of the information systems, i.e., viability of date-based selection.

We discovered that date data (for example, child's date of birth, date service spell started, date child placed, etc.) in all provinces/territories were generally very complete and readily usable, and were direct and clear information requiring no interpretation. However, many coded data (for example, "Reason for investigation," "Maltreatment type," "Type of placement," "Legal Status," etc.) presented difficulties. The main reason for the problems was related to the coding schemes used.

Because provincial/territorial coding schemes are specific to their child protection statute, they vary in language and categorization. In addition, because it can be costly and confusing to update old codes with new ones in the database, some systems end up using different codes to represent the same thing. We also know that the labels of quite a few codes are cryptic and difficult for outsiders to decipher. Using the same set of codes to serve multiple purposes appears to be another common practice some of older systems, and this practice obstructs direct use of the information. In addition, we found out that sometimes a particular piece of information cannot be used as provided because its specific meaning is contingent upon other information concerning the case. If the same information could be taken to mean different things at different times, conditional on inadequately specified interpretation, then the coding scheme is incomplete.

Before analyses could proceed, provincial/territorial codes had to be mapped to project codes, a set of higher-order standard codes meant to apply across provinces/territories. Codes mapping was a task of fundamental importance because the meanings of the Outcome Matrix data collected in this project were directly determined by the extent to which provincial/territorial codes could be accurately mapped to project codes. For this reason, we verified our interpretations of codes and proposed mapping with each source province or territory to ensure that we used the available data accurately. This process involved the following tasks:

• Updated the database with the final conversions. The updated data were then used in analyses or computations of child protection outcomes.

A key feature of the analysis design was full automation. To achieve maximum efficiency and to eliminate human errors, the entire computational process was automated. A database program was written to perform the following tasks in one single step and automatically.

- Prompted the user to pick a province/territory.
- Instructed the database to select the data needed for that particular set of computations.
- Manipulated the data using state-of-the-art relational database features.
- Computed various statistics for that jurisdiction.

We then linked Microsoft Excel to the database table that contained the results, and "moved" the results-set to an Excel spreadsheet, which project personnel could use instantly. This method of data management allowed us to produce the results accurately and to work efficiently.

Findings: Characteristics and Capacity of Provincial/Territorial CWIS

Characteristics of Provincial/Territorial CWIS

The summaries in this section were abstracts from the fuller descriptions presented in *Child Protection Information Systems in Canadian Provinces/Territories: Characteristics and Capacity* (Loo, Trocmé, Nutter, and Fallon, April 2001).

British Columbia

Features of the Information System

The Intake and Child Services System, a subsystem within the MIS SWS (Social Work System), is an IBM DB2 for OS/390 application implemented in mid-1996. Workers in the Ministry and most Aboriginal Agencies enter and access data online via terminals or PCs running 3270-emulation. The Intake and Child Services System maintains Family Service and Child-In-Care data on two main modules: Intake, and Child Services. A main feature of the Intake module is a temporary working file for capturing details during Intake and before a prior contact or file check can be completed. These Note Pad files can be sent to other workers or locations across the province. Intake information is used to create new service files or is copied into existing service files to update them. The Child Services Module is the core subsystem of the Intake and Child Services System. It allows workers to maintain information about the services the Ministry and Aboriginal Agencies provide to children. Its key purpose is to store and allow authorized personnel to access important personal and historical information about the child, the child's family, and placements.

Future Development Plan

Alberta CWIS 4.0, developed in 1990, is a Sybase application written using PowerBuilder and operates within a Windows environment. CWIS is utilized in over 140 worksites across Alberta. PCs in district offices are on Local Area Networks (LANs) and offices are connected via a Wide Area Network (WAN) to a provincial Windows NT server. Some offices not on the WAN gain remote access via the Internet. Workstations are PCs running Windows 95. CWIS mimics paper forms with drop down menus for field specific data entry and includes Microsoft Word for narrative text entry. CWIS is supported by training, manuals, and help lines. CWIS also includes calendar and bring forward functions that automatically keep track of case progress and remind caseworkers of important milestones. When information is updated, it is available immediately across the province.

Future Development Plan

Plans for further development include: (a) addition of a Child Welfare Financial interface; (b) redesign of the Placement Resources module; and (c) possible enhancements to support outcome measures. The system will also be upgraded to Windows 2000 as resources permit.

Saskatchewan

Features of the Information System

The Saskatchewan child protection information system consists of two subsystems: Automated Client Index (ACI), and Family and Youth Automated Payments (FYAP). ACI is an Adabas application, written in Software AG's Natural language, running on an IBM mainframe, and was installed in 1985. Workers enter and access data online using PCs running 3270-emulation. ACI has three sets of functions: Client Identification, Client Registration, and Client Movement. Client Movement identifies the office location of clients' files and has a built-in "Case Notes" case recording tool. FYAP, implemented in 1999 and

Future Development Plan

CICS. Workers enter data online using terminals or PCs running 3270-emulation. A user's guide and a procedures guide are available.

The four core subsystems of the Family and Children's Services Case Management System are: (a) Client Registry that captures client identification and program involvement data; (b) Case Management that tracks client details, case details, worker analysis, placements, and caseload maintenance; (c) Child Abuse

Newfoundland and Labrador

Features of the Information System

The Client and Referral Management System (CRMS) is an Oracle application written in Visual Basic and deployed using Citrix's thin-client/server technology implemented in Spring 2000. All child and family service data were successfully migrated into the new system from the old one. Although all workers supply data to CRMS, only about 40% have the computer equipment to do so online so the remaining 60%complete paper forms that are then sent to a central location for data entry. CRMS is designed to satisfy two key organizational functions, client management and referral management. The client management function enables Health and Community Services

available. CFIS appears to have the capacity to track many key indicators, not only for case management, but also for program monitoring, accountability management and research²¹. However, the newness of CFIS means that the amount of client data is limited at this time, even though they will soon have more client data (since April 1, 2000) back entered into CFIS.

Future Development Plan

Continual features upgrades are central in the implementation plan. There are plans to add a risk assessment module that will likely include child behaviour ratings and parenting capacity ratings.

Yukon

Features of the Information System

Yukon CWIS is made up of two subsystems: "Client Index 2000" (CI2000), and "Placement." Both are mainframe SAS applications. CI2000 has three main database tables: (a) Person table stores fixed client demographic data; (b) Activity stores service events data; and (c) Person-Activity table is a transaction table for linking data in the Person and data Activity tables. In addition, there are Case, Bring Forward, and Notes tables, linked to each other via Case ID. Workers do case recording using a screen form, and the information is stored in the Notes database table. The CI2000's coding system is very similar to Saskatchewan's.

The "Placement" system was installed in 1997 to manage foster homes and to process foster home cheques. Since the end of 1999 Placement captures placement information but only one person at a time can use it. Presently, the "Placement" system and CI2000 are not directly linked at the database level, although combining records from the two systems can be done.

While workers have the facility to enter data online using Windows PCs running a 3270 terminal emulation, most choose to fill out paper forms that are then sent to head office for data entry. The two forms they use for child protection services are: "Client Information," and "Placement Slip." Workers use their PCs mainly for looking up case information, not for data entry. On their Windows desktop, workers also have Microsoft Outlook for messaging and Microsoft Office.

Future Development Plan

The current system is under review.

Findings: Preliminary Baseline Indicators

The summary data presented in this report is based on our analyses of the combined COCW database. The purposes of the analyses were to test the operational definitions of the outcome indicators, and to identify shortcomings in provincial/territorial CWISs in relation to using existing data to measure outcomes. The data were not verified for accuracy, and the one-month sample may not be representative of annual service trends. The data included in the pilot were strictly for testing purposes, not for making comparisons between jurisdictions or generalizations about individual jurisdictions.

A selection of child population statistics is included as an example of the type of supplementary context data that might be provided along with the child welfare outcome indicators. These estimates are derived from the Canadian Institute of Child Health's report on the *Health of Canada's Children* (2000) and from the Federal Provincial Working Group on Child and Family Services Information (1998) *Child and Family Services Statistical Report: 1994-95 to 1996-97*.

The findings are presented in five separate tables (context, safety, well-being, permanence, and support) using the combined data from all reporting jurisdictions. The selected format is designed to emulate a web-based display. See the web site for the U.S. Department of Health and Human Services *Child Welfare Outcomes 1998: Annual Report* (http://www.acf.dhhs.gov/programs/cb/publications/cwo98/Sec4/summary.html) and *Child Welfare Outcomes 1999: Annual Report* http://www.acf.dhhs.gov/programs/cb/publications/cwo99/index.html for examples of use of this type of data, as well as a comparison point in interpreting the indicators.

Context

Contextual factors must be examined in interpreting provincial and territorial child welfare statistics. Child welfare services respond to the varying needs of populations. Higher concentrations of poor families, limited access to services for families living in remote areas, and differential birth rates can all contribute to variations in child welfare statistics. The following table is an example of the type of data that could be used to help set jurisdiction-specific a contexts for interpreting outcome indicators.

Table 3: Sample Context Indicators (COCW II Pilot Data, 2001)

C	Child Population (1999)	
	Children under 18	
Α	Canada*	7,562,300
В	Reporting Jurisdictions (BC, AB, MB, SK, NB, NS, NF and YK)*	2,905,100
	- % of Aboriginal Children (Reporting Jurisdictions)**	7%
	- Rate of Child Poverty (Reporting Jurisdictions)***	21%
Λ	Maltreatment Investigations	
	Investigations (Canadian Estimates: 1998****)	135,500
	Substantiated Investigations (CIS)****	61,201
	Incidence of Substantiated Maltreatment per 1,000 Children (0–15)****	9.71
	Forms of Investigated Maltreatment (COCW Phase II: 2,278 cases closed January 2000: AB, BC, NB, SK)	
	- Physical Abuse	20%
	- Sexual Abuse	5%
	- Neglect	46%
	- Emotional Maltreatment	8%
	- Other	21%
C	Children in Care	
D	Canada March 1999*	59,560
	- Incidence of Placement per 1,000 Children (0-18) (D/A)	7.88
E	Reporting Jurisdictions*	28,494
	- Incidence of Placement per 1,000 Children (0-18) (E/B)	9.81

^{*} Child and family services statistical report: 1996-97 to 1998-99 (2001). Hull, Quebec: Child and Family Services Information, Human Resources Development Canada.

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^{**} The Health of Canada's Children: 3rd edition. Canadian Institute of Child Health (2000), from Tables 6-3 and 6-1 (controlling for differential age distribution)

 $^{^{\}star\star\star}$ The Health of Canada's Children: 3rd edition. Canadian Institute of Child Health (2000), from Table 7-7

^{****} The Canadian Incidence Study of Reported Child Abuse and Neglect (CIS): Final Report. Trocmé, MacLaurin, Fallon, et.al. Ottawa, Ontario: Minister of Public Works and Government Services Canada, 2001.

Safety

Table 4: Safety Indicators (COCW II Pilot Data, 2001)

# of Child Cases Closed in January 2000 (BC, AB, MB, SK, NB, NS, NF and YK)	8,200			
Average Months of Service (Standard Deviation)	8.4 (14.1)			
ecidivism				
# of Child Cases Reopen within 12 Months of A	2,569			
12 Month Service Recidivism* (Child Cases: A/B)*	31%			
12 Month Service Recidivism* (Family Cases)	29%			
12 Month Recidivism of Substantiated Maltreatment (BC, NB, NS)**	43%			
Injury				
Severe Injury Rate for Recidivist Cases	NA			
Severe Injury During Service Spell for Cases Closed in January 2001	NA			
	Average Months of Service (Standard Deviation) Recidivism # of Child Cases Reopen within 12 Months of A 12 Month Service Recidivism* (Child Cases: A/B)* 12 Month Service Recidivism* (Family Cases) 12 Month Recidivism of Substantiated Maltreatment (BC, NB, NS)** njury Severe Injury Rate for Recidivist Cases			

^{*} Cases re-opened for child welfare services within 12 months of their being closed

Comment: Recidivism is calculated in three ways: (a) Child service recidivism; (b) child recidivism of substantiated maltreatment; and (c) family service recidivism. Substantiation is an incident and child-specific concept. Child and family recidivism data produced similar rates. As expected, the recidivism rate among substantiated cases is higher than among all cases because all cases includes a substantial number of cases in which maltreatment was not substantiated by the investigation at case opening.

The 12 month service recidivism rate is higher than anticipated. The 12 month recurrence of

^{**} substantiated cases closed January 2000 reopened within 12 months and substantiated/substantiated cases closed January 2000

Comment: At this point child well-being data are not available electronically. Some jurisdictions have limited education and or behavioural data, others have discussed the possibility of matching data with education statistics. Some risk assessment tools include behavioural data and the Looking After Children, Assessment and Action Records include both behavioural and educational data.

Permanence

Table 6: Permanence Indicators (COCW II Pilot Data, 2001)

A	# of Child Cases Closed in January 2001 (AB, MB, SK, NB, NS, NF and YK)		5,039
	Average Months of Service (Standard Deviation)	9.6	(18.6)
В	# of Children Who Experienced at Least One Spell in Care		856
Р	Placement Rate		
	Placement Rate (B/A)		17%
С	In Care Population on December 31 1999* (BC, AB, MB, SK, NB, NS, NF and YK)	2	7,515
D	Child (0-18) Population 1999* (BC, AB, MB, SK, NB, NS, NF and YK)	2,90	5,100
	Placement Incidence (1,000 x C/D: children 0–18 in care on March 31, 1996 per Thousand in Reporting Jurisdictions)		9.47
N	Moves in Care		
	Average # of Placements (AB, MB, SK, NB, NS, NF and YK) (Standard Deviation)	2.35	(2.83)
	- One Placement		54%
	- Two Placements		22%
	- Three to Five Placements		16%
-	- Five or More Placements		8%
R	Reunification and Adoption**		
	% Reunified (AB, MB, SK, NB, NS) (Children Placed and Reunified/Children Placed)		68%
	- Average Months from Admission to Care to Reunification	8.4	(11.3)
	% Permanent Crown Wardship (AB, MB, SK, NB, NS) (Children with CW Legal Status/Children Pl	aced)	10%
	- Average Months from Admission to Care to Crown Wardship (Standard Devia	ition) 1	6 (12)

^{*} Child and family services statistical report: 1996-97 to 1998-99 (2001). Hull, Quebec: Child and Family Services Information, Human Resources Development Canada.

Comment: Case-flow placement and reunification indicators provide a particularly powerful tool for analysis of children's experience in the child welfare system. Less than 20% of children who receive services are placed in care. Approximately 70% of children placed in care return home, 10% of children placed in care become permanent crown wards, and permanence status for 20% of placed children could not be tracked. Overall this means that only 2% of children in Cohort B became permanent crown wards.

In many jurisdictions, permanent crown wards represent up to 50% of children in care on any one day. Understanding the pathways to permanent removal/crown wardship, especially for children

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^{** 20%} of cases unclassified: may include youth leaving CW care without returning home or becoming Crown Wards (e.g. YOA or AWOL), others may have been missed because of missing data or code matching.

who are not subsequently adopted, is very important. It may be important to track outcomes for long-term wards separately, to ensure that issues specific to this population are not hidden by the experience of children in short term temporary care.

Table 7 (continued)

D	# of Aboriginal Children Placed in Care (AB, MB, SK, NB, NS and YK)	390
	% of Placed Children Who Are Aboriginal (D/C)	46%
	Non-Aboriginal Child Placement Rate (C-D)/(A-B)	20%
	Aboriginal Child Placement Rate (D/B)	26%
E	# of Aboriginal Children Placed in Aboriginal Homes (AB, MB, SK, NB, NS and YK)	141
	% of Aboriginal Children Placed in Aboriginal Homes (AB, MB and SK) (E/D)	36%

^{*} CICH Health of Canada's Children (2000), 6-3 and 6-1 AB. MB, SK, NB, NS and YK (factor differential age distribution)

Comment: As with child well-being, most family and community support indicators were not

Findings: Data Collection Capacity

Case-flow Tracking

All participating jurisdictions demonstrated the capacity to generate case-flow data tracking cases through the child welfare system. CWISs are primarily used to report cross-sectional month-end or year-end data. Cross sectional data provide adequate representation of the distribution of service resources but do not accurately represent child or family service histories. For example, the 1997 AFCARS foster care data reported for the United States in their annual outcomes report shows that the median length of stay for children in care measured cross-sectionally at year-end is 24 months, whereas measured as children exit care the median length of stay is in fact only 10.8 months²².

To fully represent one spell of service, COCW outcome indicators were collected at the time when clients left the child welfare system. To test the feasibility of this type of case-flow tracking, the COCW pilot data were collected for clients discharged in January 2000 (Cohort A, used to measure recidivism) and in January 2001 (Cohort B: used to measure recidivism and all other indicators). All participating jurisdictions were able to produce case-flow tracking data.

Tracking Families

is possible to tell the number of children (distinct or otherwise) served or the number of events (investigations, placements, moves in care, etc.) in a given period of time, it is very difficult to meaningfully describe, for example, the number of families served in the last fiscal year without complicated programming that must be based on very clear definition(s) of family.

Data Availability

Data availability varied by jurisdiction and by type of data. Generally provincial and territorial CWISs have complete or near complete coverage of child dates of birth and service spell dates, with less systematic coverage of other fields. The following description of data availability does not account for coding problems that may limit the usefulness of the available data (discussed in subsequent sections of this report), nor does it account for the relatively frequent use of "Unknown" or similar codes. While the "Unknown" category is a needed code for situations where repeated attempts to collect the information have failed, it appears to be over-used as a system default or for reasons of convenience.

The following variables are available for 100% or nearly 100% of the children in the data received from all provinces/territories:

- Child's date of birth
- ✔ Child's gender
- ✓ Date closed in Index Month
- ✔ Date service spell started
- ✔ Date re-opened
- ✓ Date of placement
- ✓ Date legal status granted

Variations exist between provinces/territories with respect to availability and amount of data on key service event descriptors requested by the project. The following table summarizes data availability by participating jurisdiction.

Most legal status types (81%, 5,475/,6729) are accompanied by legal status dates. This leaves one-fifth

needs" children is unlikely. Tracking the intent of the placement may provide a more accurate measure of permanence. In such a case days to permanent placement would be counted from the date a child enters care until that child is placed in a placement that is intended to be permanent. "Planned permanent placement" could be an alternative among the reasons for placement codes. The time in temporary care clock would stop. Of course, if a child was removed from a "planned permanent placement," the time in temporary care clock would not only restart, it would be set forward to include all the time the child had been in the "failed" permanent placement. This would require reworking the reasons for placements codes in some jurisdictions.

Data Requests

The COCW Phase II project examined the feasibility and benefits of collecting and analysing caselevel data using both family and child level identifiers. Using an industrial strength relational database management system and powerful database programming languages we combined and analyzed the diverse datasets. This process was essential for the purposes of the Phase II project since it was the only way we could assess issues discussed above related to completeness and quality.

Planning for future data requests should distinguish between data to calculate indicators and data of interest in analysing these indicators. For example, the COCW codes for type of placement included categories that are not necessary for deriving the permanence indicator if permanence is based only on type of placement, but are relevant to other analyses of placement patterns and to other possible definitions of permanence.

All of the indicators could be analysed at the child level, even though two of the indicators, parenting capacity and family moves are measured at the family level. Having a family identifier for each child allows analyzing data at the family level. And family level analyses may be directed at answering different questions. For example, recurrence of maltreatment occurs in families. In some cases, not all of the children in the family are maltreated. Children in some families are much more likely to experience maltreatment and recurrence of maltreatment than children in other families. It may be useful to conduct analyses that identify the characteristics of children most likely to be maltreated and the characteristics of families in which children are most likely to be maltreated. And it may well be that different kinds of children are at greater risk in different kinds of families. These kinds of analyses can only be done if we have bik

Recommendations

Little is known about the children and families who receive child welfare services across Canada. Designed to protect children from further abuse and neglect, Canadian child welfare authorities do not currently report rates of recidivism. Most jurisdictions do not track the proportion of children who are reported to child welfare services and are subsequently admitted to care. Although front-line child welfare workers invest significant amounts of time documenting their activities, this rich source of data is not easily accessible to managers and policy makers. In a context of growing public concern about the safety and well-being of children, government requirements for service accountability, and increasing challenges for agencies to develop better targeted and more effective services a more systematic approach to tracking service outcomes in child welfare is required.

Client outcome tracking systems are required to support outcome based service planning and policy-making. Having access to a broad range of outcome data provides a basis for evaluating the performance of service delivery systems and setting targets for initiatives designed to improve services. A well-coordinated national approach will allow policy makers to learn from the experiences of other jurisdictions using comparable information and standards.

The COCW project was initiated to support the development of such an approach. A national outcome framework was developed in Phase I of the project. Phase II has tested the capacity of provincial and territorial Child Welfare Information Systems (CWIS) to track service data that could be used to calculate outcome indicators. On the findings from Phase II three sets of recommendations have been developed related to: (a) changes to the outcome indicators, (b) data collection options, and (c) a list of recommended variables that should be integrated into all CWISs.

A: Revised Outcome Indicators

A1: Maintain Four Ecological Outcome Domains

The four domains (safety, child well-being, permanence and family and community support) provide a conceptually important multi-level framework for interpreting and tracking outcomes in child welfare. While indicators are not as easily available for the domains of child well-being and family and community support, keeping these at the forefront is the best way to ensure that data will be eventually tracked in terms of these very important domains.

A2: Maximize Comparability with National and International Statistics

Where feasible indicators should be operationalized to maximize comparability with existing child welfare outcome measures. The USDHHS track outcomes in two key domains (safety and permanence) that correspond to several of the COCW indicators²³. Child well-being outcomes should also be developed to correspond to the new NLSCY based Looking After Children measures being developed by Dr. Flynn (University of Ottawa) with the Child Welfare League of Canada.

A3: Increase the Number of Variables for Some Indicators

The original ten indicators that had been identified for the Outcome Matrix were selected in part to simplify the task of developing a common outcomes framework. In practice, a simple ten-indicator list has proven to be too narrow to provide meaningful information. For example, time to permanence as a single indicator masks the different pathways for children returning home compared to children who become crown wards. Instead we have broken this down in terms of four indicators: (a) percentage of children reunified; (b) time to reunification; (c) percentage of children made permanent wards; and (d) time to permanent wardship. When data are available it may be useful to separately track adoptions and other permanency options.

There is widespread agreement that adequate family income and housing quality are important protective factors strongly related to the likelihood of children's protection needs and/or parents' abilities to adequately care for their children. From this perspective it is clear that the concepts of income and housing should eventually be added the present 10 indicators. It would be most useful to collect these data in exactly the same way as done by Statistics Canada in their censuses because this would allow direct comparison to various segments of the Canadian population and to Canada as a whole.

A list of specific recommended indicators is presented in the final section of this report: *Recommended Common Data Fields*.

A4: Use Median and Quartiles, Not Means

There is significant variation and skewed distributions underlying the arithmetic means reported in this pilot study. For example, while most children spend relatively short periods of time in care, the experience of long-term wards skews the average time in care calculations. The use of the median (50th percentile) provides a more accurate representation of the *typical* experience of children who have experienced care. This kind of *distortion* is always present when the arithmetic mean is used to summarize a skewed distribution and many of the distributions of indicators in the outcome matrix will be positively skewed, resulting in means that are significantly greater than the medians of those distributions. For all outcome matrix indicator distributions we recommend

²³ http://www.acf.dhhs.gov/programs/cb/publications/cwo98/index.html and http://www.acf.dhhs.gov/programs/cb/publications/cwo99/index.html

presenting the minimum, maximum, and quartiles in addition to the mean. In this way readers would know the ranges of scores that enclosed each 25% of scores moving from lowest to highest. The shapes of some distributions may be so important to meaningful interpretation that graphical representation of the distributions may be required as well.

A5: Review Cohort Selection

service patterns. Therefore recurrence of service and recurrence of substantiated maltreatment should be measured.

Reduce the occurrence of severe injuries due to new incidents of child abuse or neglect.

Well-being

Increase the emotional and behavioural functioning of children while they are receiving child welfare services.

Increase the proportion of children at age-appropriate grade level while they are receiving child

B: Data Collection Options

The data COCW Phase II pilot has demonstrated that it is feasible to collect and use case-level data to derive meaningful outcome indicators. While essential for the pilot study, this process would require an important centralized infrastructure commitment. Setting aside cost issues, there are two major advantages to having access to case-level data: (1) it is the best way to ensure that indicators are consistently calculated across jurisdictions and (2) it would allow for the type of analyses needed to adequately contextualize such data.

Before data can be used or analyzed, it must be cleaned. Data cleaning may be more easily accomplished by each jurisdiction with the use of a centrally generated standardized data cleaning protocol. It is very important to underscore the need to improve the quality of data in current CWISs. When provinces/territories review the quality of their current data, they will discover weaknesses in the information systems that need to be overcome. Most of the problems we have discovered could be corrected via stronger data integrity control in database design and application design, more logical coding schemes, and better user training and support.

Four options combining different levels of standardization and data collection centralization are briefly discussed below.

B1: Canada-wide CWIS

The "gold standard" option would be to develop a common Canadian CWIS. The Uniform Crime Reports and CPIC databases would be examples of such systems. In addition to allowing for national records checks (essential in those instances where families may be avoiding child welfare supervision by moving out of province), such a system would provide the most reliable standardized basis for tracking outcomes.

This option is unlikely to be feasible in the short-term because of costs, variations in statutes and difference in the structure of provincial/territorial child welfare systems.

B2: Canada-wide Initiative to Develop a Common Outcomes Database

Unlike the previous option, the common outcomes database would not be a fully shared CWIS but would include non-identifying case-level data to be used solely for reporting and analysing service and outcome statistics. The data would be uploaded on an annual or semi-annual basis using a process similar to the one tested in the COCW Phase II initiative. This option would yield a very rich special purpose policy and program planning research database without the costs and time required

Government has for many years played an active role in cost-sharing and even in guiding state child welfare policy and legislation. Participation in AFCARS, for example, is a condition for receiving federal foster care and adoption support funds.

Given that child welfare is solely a provincial or territorial mandate in Canada, a national database would need to be developed as a joint initiative. New cost-sharing initiatives seem unlikely in the current federal/provincial and fiscal restraint climate. However, the cost of this type of system would not be great

B4: Track, Clean and Report Data from Each Jurisdiction

Unbroken Historical Data

A main advantage of a relational database is the ability to store and retrieve historical data easily. Because of the way the system stores and tracks data, huge amounts of data can be stored efficiently and retrieved speedily. Failure to maintain historical service data was a problem in

Maltreatment Type

At a minimum every CWIS should have a field dedicated²⁶ to recording what types of maltreatment were investigated. Investigated maltreatment should be recorded for every new incident of suspected maltreatment on already open cases. This would allow for a more accurate measure of recidivism that does not require that a case be closed before a new incident can be registered on a CWIS. The following maltreatment typology is recommended:

- a) Physical Abuse,
- b) Sexual Abuse,
- c) Neglect,
- d) Exposure to Domestic Violence,
- e) Emotional Maltreatment,
- f) No Maltreatment Investigated.

It is suggested that jurisdictions consider a more detailed typology based on the CIS typology:

Table 11: CIS Maltreatment Typology

CIS Maltreatment Categories	
Physical Abuse	Neglect
Shaken Baby Syndrome	Failure to Supervise/Protect (Physical)
Inappropriate Punishment	Failure to Supervise/Protect (Sexual)
Other Physical Abuse	Physical Neglect
Sexual Abuse	Medical Neglect
Intercourse/Oral Sex	Failure to Provide Treatment
Attempted Intercourse	Permitting Maladaptive/Criminal Behaviour
Touching/Fondling Genitals	Abandonment
Exposure of Genitals	Educational Neglect
Exploitation: Pornography/Prostitution	Emotional Maltreatment
Sexual Harassment	Emotional Abuse
Voyeurism	Non-organic Failure to Thrive
Exposure to Spousal Violence	Emotional Neglect

Trocmé, MacLaurin, Fallon, et.al. (2001) The Canadian Incidence Study of Reported Child Abuse and Neglect (CIS): Final Report, Ottawa, Ontario: Minister of Public Works and Government Services Canada.

Substantiation Maltreatment

A substantiation code should be assigned to each maltreatment incident documented by provincial and territorial CWISs. Substantiation typologies vary across Canada. At a minimum it is critical to be able to identify substantiated or confirmed cases. We recommend that provinces and territories adopt the substantiation typology used by the CIS:

²⁶ Some CWISs do not have a dedicated field for tracking investigated maltreatment. When combined with other reasons for investigation, maltreatment type may be masked by other reasons for investigation (e.g. parent substance abuse).

- a) Substantiated,
- b) Suspected,
- c) Unsubstantiated,
- d) False.

Injury

For every recorded incident of investigated maltreatment the presence or absence of injury due to maltreatment should be noted. At a minimum this should include the following injury severity categories:

- a) No injury,
- b) Moderate,
- c) Severe (medical attention required),
- d) Hospitalization,
- e) Death.

Although injuries are relatively rare, given the critical importance of protecting children from lifethreatening maltreatment, we suggest that jurisdictions also consider documenting type of injury (head and neck trauma; broken bones; burns; bruises, cuts and scrapes; STDs; other health conditions).

For children receiving child welfare services it would also be important to track all severe injuries. Severe injuries to children in care are usually documented in case files, but not tracked by

Placement Rate

Calculation of placement rates requires sufficient detail and consistency in the type of placement categories used to differentiate between different types of placement events. The inclusion of independent living or YOA placements, for example, in calculating placement rates may vary depending on the service question that is being assessed. We recommend that the following categories be used across all CWISs (if more categories are used they should be mapped onto the suggested common categories):

- a) foster care;
- b) group home;
- c) residential treatment;
- d) adoption probation;
- e) extended family care (kinship care);
- f) YOA facility;
- g) supervised independent living;
- h) AWOL (runaway/missing youth).

Moves in Care

Careful attention should be given to distinguishing between placement changes and temporary placement changes such as extended home visits, respite care and summer camps. While this type of temporary change may register on some CWIS for administrative reasons, they should not be counted as placement changes.

The risk in using placement rates and moves in care as outcome measures is that placement avoidance

Table 12: Recommended common data fields for tracking client outcomes

Domain	Indicator	Required Fields Maltreatment Type	Physical Abuse; Sexual Abuse; Neglect; Exposure to Spousal Violence; Emotional Maltreatment; Other	Maltreatment Subtypes (See CIS Maltreatment
Safety				
Well-being				
Permanence				
Family and Community Support				

For children not reunified or adopted, permanence can also be measured by tracking time to permanent placement (placement's purpose is permanent and child is discharged to

D1: COCW Implementation Committee

The project team strongly recommends that the Provincial and Territorial Directors propose to their Deputies the establishment of a permanent COCW Implementation Committee to coordinate the implementation of the COCW initiative. The Committee should include Directors and their representatives as well as representatives from First Nations/Aboriginal service providers.

D2: Involve CWIS Technical Staff

The importance of systematically tracking outcomes is well recognized, however, competing priorities, limited resources, and the multi-layered structure of CWISs complicate the task of redesigning information systems. The complexity of CWISs requires that technical staff work be involved at the conceptual design phase to ensure that information systems are designed to meet the information needed of managers and policy makers.

D3: Involve Managers and Front-line Workers

Consideration also needs to be given to concerns that emerge from reporting outcome data: concerns from administrators that inappropriate comparisons will be made between jurisdictions, concerns from front-line staff that their performance will be evaluated using too crude a set of indicators. These concerns should be addressed by including managers and front-line staff in preliminary analyses of the selected indicators.

Tracking Client Outcomes: A Priority for Child Welfare in Canada

Child welfare service providers and policy makers across Canada do not have access to key indicators such as the proportion of youth in care who graduate from high-school, the number of maltreated children who sustain severe injuries, or the rate of maltreatment recidivism. Client outcome tracking systems are required to support outcome based service planning and policy-making. Having access to a broad range of outcome data provides a basis for evaluating the performance of service delivery systems and setting targets for initiatives designed to improve services. A well-coordinated national approach will allow policy makers to learn from the experiences of other jurisdictions using comparable information and standards.

References

Canadian Institute of Child Health (2000). *The Health of Canada's Children: 3rd edition*. Ottawa: Canadian Institute of Child Health.

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Appendix: General Considerations

- The unit of analysis is the child. This means that all data, with the exception of address changes, are at the child level, whether the child is served in the home or in care.
- For purposes of this project, a service spell began with an investigation. Therefore, the start date of a service spell is the start date of the investigation. It should also be noted that, as shown later, investigations of new allegations could occur within a service spell.

Cohorts

The project needs data on two separate sets of cases or cohorts. The purposes and case selection criteria for the two cohorts are different. The following describes the characteristics of the two cohorts, and specifies the data files and their contents for each.

Cohort A: Twelve-month Follow-up Cohort

Case Inclusion Criteria

- 1. All child protection cases closed in the Index Month, January 2000. This includes:
 - All children returned to home of origin when all protection services to the child and the family were terminated in the Index Month; and
 - All children served in the home of origin when all protection services to the child and the family were terminated in the Index Month.
- 2. All Permanent Wards of the Crown adopted in the Index Month, January 2000.
- 3. All Permanent Wards of the Crown *under XX years old* whose case was closed for reasons other than adoption in the Index Month, January 2000.

(**Note:** If a child's case is closed more than once in the Index Month, January 2000, then the end date of the service spell refers to the first closure in the Index Month.)

Use of Data

To compute two outcome indicators: Recurrence of Maltreatment, and Injuries/Deaths

Data Coverage

- Data in 12 months period since case closing in the Index Month, January 2000.
- Data collected on *all minor children in the family*, whether they are served in the home or in care.

Data Files

File #	Description	Data Fields
A1	Child-Family reference table for all minor children (under XX years old) in the family as per case closing date in the Index Month, January 2000	 Child ID Family ID Case inclusion criterion ID (1, 2, or 3, as per Case Inclusion description of Cohort A.)

Cohort B: Primary Cohort

Case Inclusion Criteria:

- 1. All child protection cases closed in the Index Month, January 2001. This includes:
 - All children returned to home of origin when all protection services to the child and the family were terminated in the Index Month; and
 - All children served in the home of origin when all protection services to the child and the family were terminated in the Index Month.
- 2. All Permanent Wards of the Crown adopted in the Index Month, January 2001.
- 3. All Permanent Wards of the Crown whose case was closed for reasons other than adoption in the Index Month, January 2001.

(**Note:** If a child's case is closed more than once in the Index Month, January 2001, then the end date of the service spell refers to the first closure in the Index Month.)

Use of Data

To compute eight outcome indicators: Recurrence of Maltreatment, Injuries/Deaths, School Grade/Graduation, Placement Rate, Ethno-cultural Placement Matching, Moves in Care, Time to Permanence, and Family Moves.

Data Coverage

- For cases meeting inclusion criteria #1:
 - Retrospective data from the service spell that began on the date of the investigation that started the spell, and ended on the date of first case closing in the Index Month, January 2001.
 - Data collected on all minor children in the family, whether they are served in the home or in care.
- For cases meeting **inclusion criteria #2 and #3** (i.e., Permanent Wards of the Crown):
 - Retrospective data from the service spell that began on the date of the investigation that started the spell, and ended on the date of first case closing in the Index Month, January 2001.
 - Data collected on target child only.

Data Files

ile #	Description	Data Fields
B1	Child-Family reference table for all minor children (under XX years old) in the family as per start date of service spell ending in the Index Month, January 2001 (Fixed data)	 Child ID Family ID Case inclusion criterion ID (1, 2, or 3, as per description of Cohort B)
B2	Characteristics of the child as per start date of service spell ending in the Index Month, January 2001 (Fixed data)	 Child ID Family ID (Optional but preferred) Child's DOB (Date data type in MM/YYYY format) Child's sex Child's national origin Child's racial origin Child's aboriginal origin Child's religion Date case first closed in January 2001 Date of original investigation that marks the start date of the first service spell ending in January 2001 First reason for investigation Second reason for investigation First type of maltreatment found Second type of maltreatment found Type of substantiation found New opening/reopening marker
B3	Investigations during service spell (Events data)	 Child ID Family ID (Optional but preferred) Date case was investigated First Reason for investigation Second Reason for investigation First type of maltreatment found Second type of maltreatment found Type of substantiation found
B4	Placements during service spell (Events data)	 Child ID Family ID (Optional but preferred) Placement date Reason for placement Placement type (Note: Include ALL placements, temporary or otherwise that the child moved into. Discharge to child's home origin, and adoption/emancipation (in the case of Permanent Ward of the Crown) are counted as a placement. This means the each child taken into care has a minimum of two placements.) Care provider's national origin Care provider's racial origin Care provider's aboriginal status Care provider's religion
B5	Child's school grade/ Graduation during service spell (Events data)	 Child ID Family ID (Optional but preferred) Date of grade/graduation Grade/Graduation type

(continued on following page)

Data Files (continued)

File #	Description	Data Fields
B6	Serious Injuries/deaths during service spell (Events data)	 Child ID Family ID (Optional but preferred) Date of serious injury/death Type (serious injury/death)
B7	Legal authorities during service spell (Events data)	 Child ID Family ID (Optional but preferred) Date of legal authority Name of legal authority
B8	Address changes for child's primary caregiver during service spell (Events of the control of the	Family ID Date of address change data)

Data File Output Features

We need comma-delimited ASCII data files. The following specifies the features common to all data files you output.

- The sequence of data in each file must follow the exact order of the data fields presented above in the Cohorts section. Provide a list of ordered field names and their associated properties (data type, and field length if TEXT) for each data file, but *do not* embed this list in the data file itself.
- The Family ID field in the data files (other than the data files called "Child-Family reference table") is optional. However, we very much prefer that you include it in all data files.
- You have the option of providing the codes or actual descriptions for some of the fields (e.g., Aboriginal Origin, Reason for Investigation, Type of Maltreatment, Reason for Placement, Placement Type, etc.). Please send your codebooks or coding schemes for all the data fields listed above in the Cohorts section, if you have not already done so.
- All dates, except child's DOB (see explanation in the next section), have the DATE format
 of MM/DD/YYYY. If your database handles the DATETIME format only, discuss with
 Stan Loo first.
- Use double quotes (") to enclose all TEXT data, and all other data that have been converted to the TEXT data type.
- *Do not* output NOTE or MEMO data type. Convert NOTE or MEMO data type to TEXT data type first.
- Use only comma (,) as the delimiter.
- If no data exists for a field, leave it blank. Do not use an ASCII representation for absence
 of data.
- Name your data files as A1, A2, A3, and so on, to correspond to the file numbering system used above in the Cohorts section.

Special Instructions for Safeguarding Confidentiality

The Federal Government stipulates that all case identifiers (Child ID, Family ID, and Child's DOB) in datasets must be represented in such a way that the original cases cannot be traced.

This new requirement means that you must apply the two following practices in preparing the data files.

- 1. Strip the day portion from a child's Date of Birth, so that the resulting date format is MM/YYYY. (Note that this special step applies to a child's DOB only. **All other dates will retain the MM/DD/YYYY format.** If your system does not allow you to output MM/YYYY as a DATE data type, then output it as a TEXT data type and use double quotes (") to enclose the value.
- 2. Represent the original Family IDs and Child IDs differently. How this is best done is up to you to decide. It is obviously critical that a child's ID and his/her family ID in all data files within a Cohort must be re-represented in an identical fashion, so that links between data files are not destroyed.

In addition, please consider the two following confidentiality safeguards in transmitting data files:

- If you intend to transmit the data files as email attachment(s), use PKZIP to zip the files with password protection. You will provide me with the password in a separate communication.
- If you prefer to use a courier to get the data files to me, you can store them on a CD or diskettes. Please ensure that you instruct the courier not to leave the package in the mailbox.

If you want to discuss these data retrieval or confidentiality handling requirements, please contact Stan Loo at (905) 737-5406.



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