

National Child Welfare Outcomes Indicator Matrix (NOM)

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Over 200,000 children and youth¹ come into contact with child welfare authorities every year across Canada (Trocmé, Fallon, et al. 2005) and on any one day of the year over 67,000 children and youth are living in out-of-home care (Mulcahy & Trocmé, 2009). While this is one of the most high risk groups of children in Canada, there is currently no common framework for tracking how well children receiving child welfare services are doing. The purpose of this document is to present a common set of indicators developed to track outcomes for these children.

A Multi-Dimensional Outcomes Framework

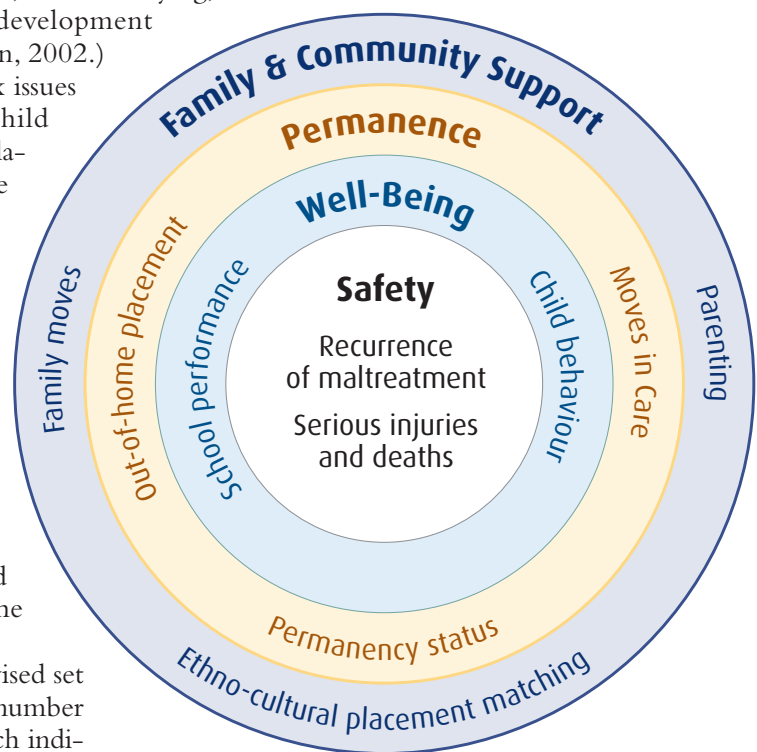
The National Child Welfare Outcomes Indicator Matrix (NOM) was developed through a series of consultations initiated by the provincial and territorial Directors of Child Welfare and Human Resources Development Canada (Trocmé, Nutter, MacLaurin, & Fallon, 1999). It provides a framework for tracking outcomes for children and families receiving child welfare services that can be used as a common set of indicators across jurisdictions. The NOM is designed to reflect the complex balance that child welfare authorities maintain between a child's immediate need for protection; a child's long-term requirement for a nurturing and stable home; a family's potential for growth, and; the community's capacity to meet a child's needs. The NOM includes four nested domains: child safety, child well-being, permanence, and family and community support (see NOM ecological framework).

The final ten NOM indicators were selected on the basis of information that could be feasibly documented using readily available, non-identifying, aggregated client data (for details on the initial development of the NOM, see Trocmé, Loo, Nutter, and Fallon, 2002.)

Together they provide an overview of the complex issues common to families involved with Canadian child welfare services and should not be examined in isolation lest, for example, one is emphasized to the exclusion of another.

The NOM is intended for use by child welfare managers and policy-makers to inform decision-making in regards to programming and policy development. It is not designed to guide clinical decision-making. For instance, while the average number of moves in care across a whole program provides a measure of stability, on a case by case basis it should not influence a clinician's decision to move a child out of a placement that is not meeting his or her needs. The NOM framework guides the development of baseline indicators used by service providers to track trends and evaluate the impact of programs and policies.

This updated version of the NOM presents a revised set of indicators based on pilot testing conducted in a number of jurisdictions across Canada² and highlights for each indicator a proposed priority NOM measure. While the primary strategy has been to identify ten key indicators, a number of sub-indicators are also being developed to capture important variations that must be understood in order to adequately interpret the indicators.



NOM Ecological Framework



Recurrence of Maltreatment

Using case-level National Child Abuse and Neglect Data System data on 505,621 children from eight states, Fluke, Shusterman, Hollinshead, and Yuan (2008) examined individual, maltreatment, and service-related factors associated with maltreatment rereporting and substantiated rereporting and found that within 24 months 22% of children who had not been the subject of a prior investigation or assessment were rereported, and seven percent were rereported with substantiation. "Younger and White and mixed race children, those with disabilities, and those whose caregivers abused alcohol were more likely to be rereported and rereported and substantiated. Service provision, including foster care placement, was associated with increased likelihood of subsequent events." (p. 76)

In Quebec, Helie (2005) found 8.8% of child welfare-involved children were rereported in the first 12 months of a first report and 21.6% in the four years following the first report.

Serious Injuries and Deaths

The 2003 cycle of the Canadian Incidence Study of Reported Child Abuse and Neglect (CIS 2003) found that 10% of victims had suffered some type of physical harm, representing an estimated 10,222 children across Canada (Trocmé, Fallon, et al., 2005). Three percent of victims sustained severe enough harm to require medical care (for a breakdown of types of injuries, see Trocmé, Lajoie, Fallon and Felstiner, 2007).

Canadian police services document an average of 35 children per year killed by their parents, a figure that has remained stable over the past thirty years (Trocmé et al., 2007).

Safety

Recurrence of Maltreatment

Child welfare services are designed first and foremost to protect children from further maltreatment. Recurrence tracks children who are rereported as a result of being revictimized after they have started receiving child welfare services.

There are a number of challenges inherent in measuring recurrence. (1) While some service providers report the proportion of investigations involving families with previous involvement, this measure over-estimates chronic situations and fails to take into consideration families who are never rereported. Recurrence is more accurately measured prospectively by tracking cases forward over a defined period of time. The NOM measure tracks cases forward for 12 months from file closing. (2) The types of reports that are counted as recurrent events range from new substantiated incidents of maltreatment to any new report including request for service. Because substantiation is not consistently tracked across information systems, the priority NOM measure includes all rereports of suspected child abuse or neglect. (3) Some studies include rereports made while a family is receiving services, while others only include reports made after the initial spell of services has been completed. Because of difficulties in consistently tracking reports made on open cases, the priority NOM measure is limited to reports made once services are completed.

NOM The priority NOM measure of recurrence is the proportion of children who are investigated as a result of a new allegation of abuse or neglect within one year following closure of their child welfare file.

Serious Injuries and Deaths

Situations where children are seriously injured or die while receiving child welfare services are carefully tracked and reviewed to prevent such tragedies from recurring. The interpretation of trends related to serious injuries and deaths should, however, be done with caution because these events are relatively infrequent and rates can therefore vary considerably from one year to the next.

A number of challenges arise in tracking child injuries and fatalities. Under-detection has been shown to be a problem in many instances. In tracking deaths of children receiving child welfare services, it is important to distinguish between maltreatment-related deaths and deaths of medically fragile children who are placed in child welfare care because of their special needs. While serious injuries are systematically documented in child protection case files, data on injuries are not often aggregated or analyzed at an administrative level. Finally, it should be noted that because serious injuries and deaths are relatively rare, trends need to be examined over several years before they can be considered significant.

NOM The priority NOM measure is the percentage of children who die while in the care of child welfare services, distinguishing between natural, accident, suicide, homicide and/or undetermined causes of death.

The physical harm codes developed for the CIS provide a simple checklist for describing the type and severity of injuries: (1) bruises, cuts, and scrapes; (2) burns/scalds; (3) broken bones (4) head trauma (5) fatality and (6) other health condition. For each type of injury the CIS measures severity according to whether the child required medical care (Trocmé, Fallon, et al., 2005).

Well-Being

School Performance

Victims of child abuse and neglect are at significant risk for developmental, cognitive, and academic delays. Helping victims of maltreatment requires not only ensuring their physical safety but also ensuring they have the opportunity to reach their full potential. How well these children perform at school is a key indicator of their well-being.

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

NOM The priority NOM measure for school performance is the proportion of children placed in out-of-home care who are in school and in the grade appropriate for their age. For older out-of-school youth, high school completion rates or the number of completed years of schooling are recommended.

Child Behaviour

Abused and neglected children are at high risk of developing emotional and behavioral problems at home, school, and in the community. Children with emotional and behavioral problems tend to spend longer periods of time in out-of-home care, experience more placement disruptions, and are less likely to be reunified with their family of origin (Keil & Price, 2006).

The emotional and behavioural problems faced by children receiving child welfare services are, however, under-diagnosed, and standardized measures of child emotional and behavioural functioning are not generally used in child welfare settings. Documenting the rates of emotional and behavioral problems, as well as referrals to and the outcome of supportive services is a priority for child welfare authorities.

NOM A four-stage strategy is suggested for monitoring outcomes related to child emotional and behavioural problems: (1) document the specific problems identified in children (the 2008 Canadian Incidence Study provides a relatively simple child functioning checklist with national norms³); (2) track the proportion of children with emotional and behavioural problems who are referred to specialized services; (3) document the service completion rates for these children; and (4) report on rates of improvement to the extent to which these are documented by the specialized services.

A Canadian study reviewed all 364 cases of Shaken Baby Syndrome (SBS) reported over a 10-year period to the child protection teams of 11 tertiary care paediatric hospitals (King, MacKay, Sirnack, & The Canadian Shaken Baby Study Group, 2003). A past medical history and/or clinical evidence of previous maltreatment was noted in 220 children (60%), and 80 families (22%) had previous involvement with child welfare services. 69 children died of a result of SBS, while only 65 were "well" at discharge.

School Performance

A study in British Columbia examined a point-in-time sample of 3,523 school-aged children between the ages of 6 and 19 and found approximately 50% of children in care in grades 10 and 12 were behind at least one grade compared to children in the general population who had no involvement with child welfare services (Mitic & Rimer, 2002).

Slate and Wissow (2007) examined two waves of data on sibling pairs from the 1994-2002 National Longitudinal Study of Adolescent Health. In a sample of 2,342 children, evidence of childhood maltreatment was found to be associated with impaired academic functioning in middle and high school. More severe abuse or neglect correlated with an increased likelihood of academic delay.

Child Behaviour

In an American study using data collected as part of the National Survey of Child and Adolescent Well-Being (NSCAW), Stahmer et al. (2005) explored domains of cognition, behavior, communication, and social and adaptive functioning in 2,813 young children investigated for abuse or neglect. They found both toddlers (41.8%) and preschoolers (68.1%) had developmental and behavioral needs significant enough to warrant early intervention, but few overall were receiving services for those issues (22.7%).

A second study using NSCAW data on 2,823 children followed for one year after a substantiated maltreatment report found that although 42.4% had clinically significant emotional or behavioral problems, only 28.3% received specialty mental health services (Hurlburt et al., 2004).

In an Ontario study (Burge, 2007) of a random sample of 429 children who were permanent wards, the prevalence rate of mental disorders was 31.7%.

Out-of-Home Placement

An Illinois study of over 10,000 child welfare investigations found that placement rates increase as a function of the time a case is kept open. At one month after referral, 7% of children had been placed compared to 21% within one year of the initial referral (Schuerman, Rzepnicki, & Littell, 1994).

Analysis of data from the multistate foster care data archive in the U.S. revealed that young children, especially infants, face the highest risk of placement with, on average, twice the rate reported for older children (Wulczyn, Kogan, & Harden, 2002).

According to the 2003 estimates from the CIS, eight percent of victims of maltreatment were placed in out-of-home care during the first six to eight weeks of contact with child welfare authorities (Trocmé, Fallon, et al., 2005).

Permanence

Out-of-Home Placement

Legislation in every province and territory requires that children be served whenever possible in their own home. However, out-of-home placement may be required when leaving children at home poses significant risk, or when placement can give families needed respite. While placement is not an inherently negative outcome on an individual basis — indeed for some children it may be the only feasible option — on an aggregate basis, high rates of placement indicate a lack of effective home-based service options or unacceptable living conditions that should be addressed as a priority over removal. As a broader community health indicator, the incidence of out-of-home placement is an important gauge of the overall well-being of children in a community.

Most jurisdictions report on the number of children in out-of-home care at year end; a method of tracking placements that undercounts the experience of most children who come into care for relatively short periods of time. Placement rates are best understood in terms of a “case-flow” calculation that follows children’s trajectories through the child welfare system. See “Methodological Considerations” for a more in-depth discussion.

NOM The priority NOM measure tracks the percentage of children who had at least one investigation begin in the fiscal year who were placed in out-of-home care within 12 months from the start of the first investigation. In order to exclude respite care and emergency placements, placements lasting less than 72 hours are not counted.

Moves in Care

A stable placement experience can assist children in out-of-home care to develop and maintain family, peer, and community relationships while separated from their families. While some placement changes may be beneficial, multiple and unplanned placements have been associated with negative outcomes for children, including increased behaviour problems and poor academic performance (Barth et al., 2007; Price et al., 2008; Unrau, Seita, & Putney, 2008).

One of the challenges in tracking moves is deciding how to distinguish temporary absences such as home visits, respite, or hospital admissions from changes in out-of-home placement. Given the significant jurisdictional differences in the documentation of moves, excluding placements shorter than 72 hours is the best proxy measure of a “significant” move. Additionally, temporary absences are distinguished from significant moves by considering whether the original placement was kept open during the absence.

NOM The priority NOM indicator tracks the number of placement changes over a set period of time⁴ experienced by children placed in out-of-home care during the fiscal year. Placements shorter than 72 hours are excluded from this measure, as are initial placements, initial returns home, and planned respite.

Permanency Status

Lasting reunification with family is the primary goal for most children placed in out-of-home care, and a majority of children will return home within less than a year of their initial placement. However, for some children reunification is not possible and stable alternatives such as permanent foster care, kinship care, and adoption must be pursued. Many jurisdictions across Canada have established timelines (24 months for older children, 12–18 months for younger) by which a child must be reunified with their family or placed permanently in another home. Providing children with permanency in placement promotes healthy development and encourages continuity in relationships and a sense of community and identity.

The primary challenge in measuring time in temporary care lies in determining when a situation becomes truly permanent, given that any planned permanent placement or reunification can always break down. In fact, the actual permanence of a placement can only be completely established once a youth has reached majority. Since a growing number of jurisdictions have set timeframes for leaving children in temporary care, the NOM measure tracks placed children forward for up to three years, assessing the relative permanence of reunification or placement at the three-year point.

NOM The NOM measure of permanency status counts cumulative days in care until a child is reunified, permanently placed with kin, adopted, emancipated, or placed in a permanent foster home. Permanency status is tracked forward from a child's initial placement for up to 36 months, at which point permanence is not considered to have been achieved.

Family and Community Support

Family Moves

Frequent moves in residence are a source of significant stress for families receiving child welfare services. Housing instability is caused by a range of factors, including lack of affordable, good quality housing; employment changes; lifestyle, and other family crises (Courtney, McMurtry, & Zinn, 2004; Crowley, 2003). Frequent moves can result in the loss of peer and social support networks for parents. For children, changes in residence and associated school changes may adversely affect their well-being, academic achievement and ability to form supportive social networks. Sudden or unplanned moves pose a particular risk of emotional or psychological harm. When housing instability is accompanied by additional risk factors such as poverty or maltreatment the cumulative impact on the health and well-being of children may be especially detrimental (Gewirtz, Hart-Shegos, & Medhanie, 2008). Children in families experiencing housing problems have been reported to be at increased risk of child welfare involvement and out-of-home placement (Courtney, McMurtry, et al., 2004; Gewirtz et al., 2008).

Moves and changes of addresses are systematically recorded by child welfare services. Although data on previous addresses are often deleted from updated child welfare files, retaining this information would enable tracking this important indicator of family stability. Changes in postal code could be used to approximate the distance between old and new addresses, an indicator of the likely social disruption accompanying moves.

NOM The primary NOM housing indicator is the percentage of families receiving services during a fiscal year that move at least once during that period. Family is defined as the home in which the child was living when the case was opened for child welfare services and moves are designated by changes in address.

Moves in Care

Oosterman et al. (2007) examined risk and protective factors associated with placement breakdown across 26 studies of 20,650 children in foster families and found older age, previous placements, and behaviour problems predictive of placement breakdown.

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 four placements (Rosenbluth, 1995).

A study exploring the placement experiences of 729 children included in the NSCAW found that although half of the children achieved placement stability within 45 days of initial placement, nearly one third (28%) did not experience a stable placement during the 18 months of study (Rubin, O'Reilly, Luan, & Localio, 2007). Results revealed that placement instability significantly increased the risk of behaviour problems in children.

Permanency Status

Connell et al. (2006) conducted a five year longitudinal study in Rhode Island of 5,909 children following their entry into foster care to examine characteristics associated with the timing of reunification, adoption, and running away from care. Results indicated that reunification occurred almost immediately upon entry to care and generally decreased over time, while risk for adoption was initially low and began to escalate at about the nine-month mark. Run-away rates remained stable. Almost half (49%) of the children returned to their family within the period of study, while 8.6% were adopted, 4.4% were run-aways and 3.3% were placed with relatives.

The Adoption and Foster Care Analysis and Reporting System (AFCARS) collects information on all children in foster care in the United States. A recent AFCARS report indicated that almost half (49%) of the 510,000 children in foster care on September 30, 2006 had a case goal of reunification, while 23% had a goal of adoption (USHHS, 2008). Of the 289,000 children exiting foster care in 2006, 53% were reunified, 17% were adopted, 11% were placed with relatives and 9% emancipated. The average length of foster care placement children was 20.9 months.

Family Moves

In a study in Wisconsin comparing 480 families receiving in-home child welfare services to 494 families with children placed in out-of-home care, Courtney, McMurtry, et al., (2004) reported that “parents whose children have been removed were almost twice as likely as parents receiving in-home safety services to have been evicted, almost twice as likely to have been doubled up in housing with family or friends, and nearly three times as likely to have been homeless” (p. 404).

The results of the CIS (2003) indicate that close to a third of families substantiated for abuse or neglect moved at least once in the year prior to being reported, and 11% moved twice or more (Trocmé, Fallon, et al. 2005).

Parenting

The CIS (2003) documented caregiver functioning issues and reported that in 79% of cases of substantiated maltreatment involving 4,398 female caregivers, at least one functioning issue was identified, including being victims of domestic violence (51%), lack of social supports (40%), and mental health issues (27%). For the 2,324 male caregivers at least one functioning concern was noted in 72% of cases, with lack of social supports (33%), alcohol abuse (30%), mental health issues (18%), and drug or solvent abuse (17%) noted the most often.

Parenting

The quality of parenting is a significant concern in many cases of child abuse and neglect. Most children involved with child welfare will not be placed in foster care, while others will be reunited with their families after a relatively brief out-of-home placement. For these families, the provision of timely and appropriate services is essential for redressing the problems experienced by parents. Improvement in parent functioning is associated with a reduced risk of recurrent maltreatment as well as better long-term outcomes for children (Barth et al., 2005; Casanueva, Martin, Runyan, Barth, & Bradley, 2008).

NOM Because standardized measures of parenting are not routinely used by most child welfare service providers, the strategy being developed for the NOM focuses on tracking parenting problems. A four-stage strategy is suggested: (1) document the specific problems facing parents (the 2008 Canadian Incidence Study provides a relatively simple parent risk checklist with national norms⁵); (2) track the proportion of parents with problems who are referred to specialized services; (3) track service completion rates for these parents; and (4) report on rates of improvement, to the extent to which these are documented by the specialized services.

Ethno-Cultural Placement Matching

When children must be removed from their biological families, child welfare services attempt to place them as much as possible within their community; this includes extended family, individuals emotionally connected to the child, or a family of a similar religious or ethno-cultural background. For Aboriginal children, this preference is specifically stated in most provincial and territorial statutes. Implementing this policy can be a challenge, especially when such placements are not available. Difficulties in finding matched placements may not only lead to more disruptive experiences for placed children, but they are also indicative of difficulties in recruiting foster families and of limited engagement with the children's own communities (Higgins, Bromfield, & Richardson, 2005; Rubin et al., 2008).

Child welfare agencies serving other significant ethno-cultural or faith communities may, in a similar fashion, define groups for whom similar placement matching issues arise. Categorizations should be kept simple enough to support meaningful data collection and should be developed in consultation with the specific communities.

NOM Given that placement matching for Aboriginal children is legislated in most jurisdictions, the priority NOM measure tracks the proportion of placed Aboriginal children in homes where at least one of the caregivers is Aboriginal.

Methodological Considerations

Moving From Management to Client Centered Information Systems

Canadian child welfare information systems are primarily designed as Management Information Systems (MIS) directed towards financial accounting. The most commonly reported service statistics are the number of case openings per year and the number of children in out-of-home care at year end, statistics that provide limited information about service patterns. A case opened and closed three times during the year is indistinguishable from three cases each opened and closed once. Neither the proportion of cases reopened nor the proportion of children investigated and subsequently placed in out-of-home care are derivable from such statistics. To further complicate matters, many jurisdictions maintain separate data-bases for children in the community and children in out-of-home 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) links each service event to the child(ren) and family(ies) served by that event. Thus the path of each child and family within the service system is recorded. This allows accurate reporting of statistics such as the proportion of investigated children admitted to care and the average number of placement changes. A CTS can be distinguished from 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 (Courtney, Needell, & Wulczyn, 2004).

Direct and Proxy Outcome Measures

Standardized observational and self-report instruments are the most accurate and comprehensive method for measuring outcomes. While such measures provide useful information for clinical and research purposes, they are lengthy to complete and are not easily interpreted as aggregate measures. In addition, self-report measures are not designed to be used in potentially adversarial child protection contexts. There is also a risk of measurement bias if these instruments are first introduced as performance measures rather than as tools to assist in clinical assessments. Case events, such as adoption, grade completion, and address changes can be used as proxy outcome measures. These systems-based indicators are salient and easy to collect; however, the extent to which they truly reflect child outcomes must be carefully analyzed. Interpretation requires examination of the rationale for linking case events to specific outcomes and consideration of confounding events. A decrease in the proportion of children in age-appropriate grades could just as well indicate lower academic functioning as it could reflect changes in grading policies or the introduction of standardized tests.

Incremental Strategy

The NOM is proposed as a first step in an incremental process of developing meaningful, valid, and reliable outcome measures for child welfare. The ten selected outcome indicators rely primarily on case events as proxy indicators of outcomes. As the clinical use of standardized measures develops it will be possible to replace these proxy indicators with more sophisticated measures. Until then, the NOM provides a theoretically grounded ecological framework which relies on improvements to the structure of information systems rather than the introduction of new instruments. This strategy respects the feedback rule for developing effective information systems: provide those who collect information with relevant aggregated analyses based on their data before making new information requests.

Using baseline and 18 month NSCAW data on 3,425 child welfare-involved children Libby et al. (2007) compared American Indian (AI) parents to White, Black, and Hispanic parents on mental health and substance abuse problems and access to treatment. Overall, an unmet need for mental health and substance abuse treatment characterized all parents in the study. AI parents fared the worst in obtaining mental health treatment, but were referred to substance abuse programs at nearly double the rate of other groups despite being assessed as having lower than average problems with substance abuse. Parents of children at home and of older children were less likely to access mental health or substance abuse treatment.

Ethno-Cultural Placement Matching

Although First Nations children represent less than 6% of the child population in Canada (Statistics Canada), they comprise an estimated 26%⁶ of children who are placed in out-of-home care during a child protection investigation (Trocmé, MacLaurin, et al., 2005).

In 2007-2008 in Alberta, 38.5 % of Aboriginal children in foster or kinship care were placed with Aboriginal families (Alberta Children's Services, 2008).

A recent qualitative study examined factors related to the recruitment, retention, and support of Indigenous Australian foster carers (Higgins, et al., 2005). Results from interviews and focus groups with service providers, foster carers, and children in care reported "word of mouth" as a best practice example for the recruitment of Indigenous foster carers and suggested recruiting should be conducted by Indigenous people. The study revealed that once recruited Indigenous carers tended to remain involved with child welfare and linked this to a strong cultural commitment to family and community.

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Notes

- ¹ For the sake of brevity this document uses the broad term "children" to refer to children and youth.
- ² These include work done by (1) the Federal Provincial Territorial Outcomes Coordinating Committee, (2) a Social Sciences and Humanities Research Council funded Knowledge Impact in Society initiative (Trocmé and colleagues), and (3) analytic support from the Centre for Research in Children and Families funded by a Centre of Excellence for Child Welfare Public Health Agency of Canada grant. Additional partners include the Canadian Foundation for Innovation and the Bell Canada Child Welfare Research Unit.
- ³ See Question 29 of the 2008 CIS Maltreatment Assessment form: http://cecw-cepb.ca/files/file/en/CIS-2008_Maltreatment_Assessment_FINAL.pdf
- ⁴ Some jurisdictions measure placement changes over 12 months; those with the capacity to do so measure over 36 months.
- ⁵ See Question 13 of the 2008 CIS Maltreatment Assessment form: http://cecw-cepb.ca/files/file/en/CIS-2008_Maltreatment_Assessment_FINAL.pdf
- ⁶ Estimated percentage calculated from Table 7-6 of Trocmé, MacLaurin, et al. (2005); 1,946 First Nations placements of 7,508 First Nations and non-Aboriginal placements.

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