

The importance of process in developing outcome measures

Keynote address

Nico Trocmé

National Outcomes Symposium
Ottawa, February 20-21, 2003



Centre of Excellence
for Child Welfare

Centre d'excellence pour
la protection et le bien-être des enfants

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INTRODUCTION

When Kelly asked me to prepare an opening address for the Outcomes Symposium he asked me to help set the stage by focusing on the importance of outcome measurement. In a field where need for help rather than efficacy of help has been a defining principle, where measurement is seen with suspicion as inherently reductionistic, where the concept of paperwork becomes a means of trivializing written assessments and treatment plans, and where evaluation is often reduced to self-serving reports aimed at securing funding, it is indeed important to keep articulating the rationale for shifting to an outcomes driven service model. However, because of the self-selection process inherent in this symposium, I decided that I would probably end up preaching to the converted.

I thought, therefore, that I would start by taking it for granted that we are all convinced of the critical importance of outcome measurement. In fact, outcome or results-based management has been the marching order in one way or another across Canada. The call for research on the effectiveness of our interventions is not new. In the mid 70's Sheila Kammerman and Alfred Kahn conducted a review of the state of knowledge with respect to the effectiveness of residential and foster care programs. They concluded that:

Remarkably few systematic data are available to support the various extremist positions on child care. In fact most policies and practice decisions are still based primarily on value judgements and assumptions. Until more conclusive data are available ... it seems likely that the question of what forms of care have what effects on what types of children under what circumstances will continue to be a major issue. (Sheila Kammerman and Alfred Kahn, 1976, as quoted in Kadushin, 1978).

Limited progress has been made over the last twenty-five years. Despite repeated calls for systematic tracking of outcomes (Magura and Moses, 1986; Pecora, Whittaker, Maluccio, Barth, & Plotnick, 1992); National Research Council, 1993), services to children and their families continue to be driven primarily by evidence of need

¹ Based on Trocmé, N., MacLaurin, B., & Fallon, B. (2000). Canadian child welfare outcomes indicator matrix: An ecological approach to tracking service outcomes. Journal of Aggression, Maltreatment & Trauma, 4 (1), 165-190.

irrespective of evidence of service effectiveness. The evidence that children and families are better off as a result of the service we provide is still shockingly limited. Given the push for outcome evaluation, the key question is not why should we measure outcomes, but rather why aren't we.

I will argue here that to move forward we need to pay careful attention to the challenges inherent in the process of developing outcome measures. Using examples from the outcome development work we have been doing in child welfare, this talk examines some of the key processes required to arrive at a credible and feasible outcome measurement framework.

CAPTURING THE MULTIPLE DIMENSIONS OF CHILD AND FAMILY SERVICES

The first challenge in developing any outcomes measurement system is to identify the key objectives from which measurable indicators can be selected. This confusion stems in part from a history of providing services on the basis of need with limited consideration of service objectives. Attempts to articulate objectives have also been hindered by the fact that the problems we try to address – child abuse, learning disabilities, social and emotional problems – are multi-dimensional and require interventions at different levels of children's environment.

Needs driven services

The overwhelming needs of children and families we serve have overshadowed the question of whether interventions are effective. Research has focused predominantly on prevalence and burden. The rationale for providing services is generally articulated around need with an assumption that our services will somehow address these needs. Less attention has been paid to long-term outcomes and the effectiveness of interventions (Parton, 1985; Pecora, Whittaker et al., 1992; Lindsey, 1994). Traditionally, funders have not required accountability based on outcomes, but have focused on trying to respond to increasing caseloads. For example, the rapid expansion of family preservation programs in the United States was initially driven by the increase in the number of children entering foster care. Success was primarily measured in terms of placement prevention rather than evidence that children were benefiting from the programs (Littell and Schuerman, 1995; Pelton, 1997).

While funders are now starting to request evidence of program effectiveness, funds for evaluation research are often expected to come out of already stretched program budgets, at the expense of direct services. Evaluation research appears to be an unaffordable luxury for an overburdened child welfare system where responding to need is the driving concern.

The development of an outcome-based approach has been further complicated by the fact that service providers are keenly aware that funding will be determined by the types of outcome that are measured. Service providers, from front-line staff to senior managers, worry that the measures that are selected will not document the impact of the services they provide. The principle of "what gets measured gets done" can be interpreted to mean "what gets measured gets funded" (Grasso, 1988; Traglia et al., 1996). As a result the

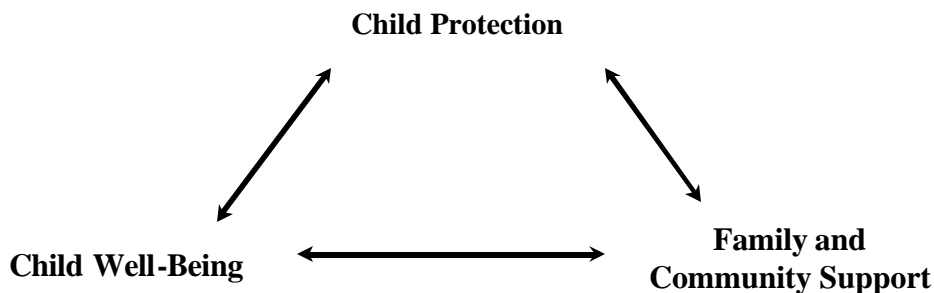
introduction of outcome measures has led some service providers to fear a loss of clinical independence. Government funders, on the other hand, are concerned that the information collected by an outcome tracking system will simply put them under pressure to provide more resources. The process of choosing outcome measures can therefore bring out previously unresolved debates about critical service priorities.

Balancing Competing Objectives in Child Welfare

The unresolved tensions that arise when one tries to articulate service objectives was exemplified in a review of statutes and mission statement and interviews with senior managers that we conducted to assist us in developing a national outcomes framework in child welfare (see Trocmé et al, COCW Phase I). We found that there was no consensus about the objectives of child welfare services, and several apparent contradictions. Some informants spoke of the tension between family preservation and child protection. Others focused on the difference between child well-being and child protection. I suspect that across child and family service delivery systems there is even less consensus.

We summarized these tensions in terms of three overlapping but potentially competing objectives: protecting children from maltreatment; enhancing child well-being; and providing services, when possible, within the context of the child's family and community. (see figure 1)

Figure 1: The balancing objectives of child welfare



Protection vs. Family and Community Support

The tension between providing protection and supporting children within their family and community is the fundamental challenge of child welfare. While protection is the paramount principle, the child's family and community are the preferred milieu for intervention. Child welfare statutes attempt to balance the intrusive powers accorded to child protection workers by requiring them to provide where possible home-based services. Maintaining the appropriate balance between these two principles is complicated by the fact that it can be difficult to determine when the risk of harm is too great to leave a child at home (Browne, Davies et al., 1988; Lyons, Doueck et al., 1996).

The challenge of balancing protection and family support arose in all our interviews and was a dominant theme in the policy and legislative review. For instance, New Brunswick's legislation requires that children be removed only when "all other measures are inappropriate." Over half of the key informants suggested that family preservation or

family functioning were key objectives for child welfare, and many people stressed the importance of maintaining a balance between preserving the family and protecting the child. The emphasis put on providing services in the home has recently come under criticism in a number of jurisdictions as a result of deaths of children known to the child welfare system (Gove, 1995; Ontario Ministry of the Solicitor General, 1997; Gelles, 1996). Changes to child welfare statutes in a number of jurisdictions have been made or are being considered in order to clearly emphasize the primacy of protection over family preservation (Panel of Experts on Child Protection, 1998). In British Columbia, for example, the legislation now states that if there is any conflict between any of the stated principles, “the child’s safety and protection will take priority” (British Columbia Ministry of Children, 1997).

In most provinces, child welfare statutes also stress the importance of community preservation. Ontario’s Child and Family Services Act states that services should be “provided in a manner that respects cultural, religious and regional differences” (Sect 1 e), and sets specific provisions for considering community factors in placing children in out of home care, especially for children from native communities. While there appears to be less discussion in the literature about the potential tension between child protection and community preservation, there are circumstances where the child’s community may also pose risks to the child. For example, the rapid development of kinship care in some American jurisdictions has raised questions about over-reliance on extended families that may not have the resources to adequately protect some children {Dubowitz, Feigelman, & Zuravin, 1993}.

Protection vs. Well-Being

To a lesser extent, the principle of child protection can also be at odds with the principle of enhancing child well-being. This may seem paradoxical. One would assume that a child’s well-being requires first and foremost that a child is protected from harm. Indeed the terms are used interchangeably in some provincial legislation. In Ontario, for example, the “paramount objective” of the Child and Family Services Act is to “promote the best interests, protection and well-being of children” (Sect 1 a). However, some child welfare critics argue that child welfare policy and legislation has focused far too much on protection and not enough on the broader concepts of child well-being (Pelton, 1989; Lindsey, 1994; Wharf, 1993). Putting too great an emphasis on protection may exclude broader family support and community development activities. Some reformers argue that the mandate to protect children has diverted child welfare from its original purpose, and that child welfare agencies should leave protection to the police and re-focus on child welfare (Wharf, 1993; Lindsey and Regehr, 1993). Others, however, see the tension between protection and well-being as an unavoidable characteristic of child welfare (Maidman, 1984; Hutchinson, 1987; McDonald, 1994; Savoury and Kufeldt, 1997)

Research on children in foster care shows that the protection offered by removing children from their homes does not necessarily ensure that these children will do better than children who remain at home. Much of the push towards family preservation originated from studies showing that children in care were not doing as well as expected (Fanshel and Shinn, 1978; Klee and Halfon, 1987). Although foster care does not seem to put children at additional risk of doing poorly, it has not yet been proven to improve

children's lives (Wald, Carlsmith et al., 1988; Pecora, Whittaker et al., 1992). The success of foster care and residential placements must be evaluated in terms of more than just protection.

Child Well-Being vs. Family and Community Preservation

A third source of tension arises from trying to achieve a balance between the principle of child well-being while keeping children in their families and communities. While providing services to children in their homes and in their communities is often the best way of enhancing their well-being, some critics argue that family preservation is not always in the child's (Lindsey, 1994; Gove, 1995; Gelles, 1996). Programs designed to keep children at home are criticized when they delay the removal of children from dangerous home environments that showed little likelihood of improvement. Taken to extremes, family preservation has been interpreted to mean that an array of home based interventions must be attempted before a child can be removed. For children who end up being permanently removed, especially young children who could easily be adopted, a more decisive approach may be required (Steinhauer, 1991).

The tension between child well-being and community preservation has become an issue in some jurisdictions in the United States for some African American children are kept in limbo longer than Caucasian children because of ethno-racial matching policies. A recent contested custody case in British Columbia provides a dramatic example of this potential conflict, when two aboriginal children who had been adopted by non-aboriginal parents contested a decision to have their youngest sibling placed in a native home, rather than their own (British Columbia Family Review Board, 1998).

A multi-level ecological outcomes framework

There is no simple way to harmonize these conflicting objectives. Service providers must constantly seek to balance a child's immediate need for protection, a child's long-term needs for a nurturing and stable home, the family's potential for growth and the community's capacity to meet a child's needs. Likewise, an effective outcome measurement system must find a balanced way of tracking outcomes associated with each principle. The importance of keeping outcome measurement focused on these complex and at times conflictual sets of objectives reflect the ecological dimensions of child maltreatment. Child maltreatment can only be understood as a complex problem resulting from the interplay of factors at the level of the child, parents, the family's immediate community, and the socio-cultural context of parenting (Belsky, 1993; Garbarino & Eckenrode, 1997). While the child welfare system alone cannot be expected to affect all levels of the problem, a narrow focus on the parent-child dimension would fail to account for the important advocacy roles that Canadian child welfare services play.

The greatest challenge in developing an outcomes framework in child welfare is finding a framework that integrates and balances the principles of child protection, child well-being, and child and family support. The selection of specific objectives and related outcome indicators is not a neutral technical exercise but reflects fundamental views about the objectives of child welfare (Fallon and Trocmé, 1998). The rapid expansion of placement prevention programs, for example, was strongly influenced by a focus on

placement rates (Pelton, 1997). The current emphasis on risk assessment has been criticized by those who feel that it pushes child welfare agencies away from their traditional child and family support roles towards a system focused primarily on investigation and removal (Pelton, 1989; Wharf, 1993). A uni-dimensional outcome measurement system that fails to recognize the complex nature of child welfare runs the risk of supporting simplistic cure-all initiatives that fail to meet the diverse needs of maltreated children (Parker, Ward et al., 1991; Gibbons, 1997).

The framework developed by COCW project provides a good example of a multi-dimensional approach to defining the scope of child welfare. The framework uses four overlapping outcome domains: child safety, child well-being, permanence, and family and community support. A matrix of outcome indicators was selected from all four domains to reflect they take into account the child's immediate need for protection, the child's long-term needs for a nurturing and stable home, the family's potential for growth and the communities' capacity to support the child and her family. The multi-dimensional framework developed by the COCW Project underscores the importance of these domains, while recognizing that when families break down, the balance between these objectives can be difficult to achieve. Tomorrow afternoon's session will expand on this further.

AN INCREMENTAL MULTI-LEVEL STRATEGY FOR OUTCOMES MEASUREMENT

A second challenge in developing an effective outcome measurement strategy lies in the confusion about the uses and purpose of outcome measurement. Practitioners, administrators and researchers turn to outcome measurement for different purposes and require measures that may be more or less well adapted to these purposes. In the haste to develop much needed measures the one size fits all approach may undermine the development of valid and relevant measures.

Different groups are proposing the assessment of outcomes for different purposes. For some, the purpose of outcomes measurement is to guide intervention in individual cases. Others see it as a quality assurance monitoring device. Still others see outcome assessment as a way to evaluate intervention effectiveness. To confuse matters even further, instruments designed to assess outcomes have at times been used to assess risk, and risk assessment tools have been suggested as outcome measures (Wald and Woolverton, 1990). McCroskey (1997), argues that much of the confusion over outcome measurement rises from a failure to distinguish between the needs of different users (also see (Parker, Ward et al., 1991). Table 1, below, illustrates some of the key differences between potential users of outcome information.

Table 1: Purpose and use of outcome assessment

Area of Use	Purpose	Level of Analysis	Primary source of data	Primary User
Case Management	Track indicators of client progress	Individual clients	Direct client measures	Front-line workers
Program	Monitor and evaluate	Service	Systems level	Administrators

Management	programs	population	indicators	and Government Officials
Treatment Outcome Research	Determine intervention effectiveness controlling for confounders	Sampled clients	Direct client measures & systems level indicators	Independent Researchers

Clinically Meaningful Outcomes

The distinction between the use of outcome measurement for clinical purposes and outcome assessment for program evaluation is a critical one (McCroskey, 1997; Unrau and Gabor, 1997). Clinicians need to know how well individual clients are doing. Has a child's self-esteem improved? Is a parent better able to control his or her anger? Are there more effective community supports in place to help a family? The specific outcomes that interest practitioners relate to the treatment plan developed to meet the specific circumstances of the child and family being served. Social workers need to be able to choose from a broad array of clinically significant measures. These measures must be sensitive to small changes that provide meaningful feedback to front-line workers (Grinnell, Williams et al., 1997). Different sets of measures will be appropriate for different clients. For instance, a depression inventory is appropriate for an adolescent who is showing depressive symptoms but not in a case where lack of infant stimulation is the reason for service.

Tracking clinically meaningful outcomes requires instruments that collect information at the client level, usually through clinician observation or client self-report. A number of instruments are currently being used by child welfare practitioners in Canada, including the Child Well-Being Scales (Magura & Moses, 1986), an adapted version of the Child Behaviour Checklist {Achenbach, 1991}, and the Looking After Children instruments (Ward, 1995). While there is increasing clinical interest in using standardized instruments to track individual client outcomes, these measures may not lend themselves as well to the needs of administrators and policy makers.

Outcomes as Management Tools

Administrators and policy makers require different levels and types of information (Rubin and Babbie, 1997). They need aggregate data that lets them know how well a program is serving a client population. They are interested in outcomes that are common to all clients, that reflect program and service goals, and that are meaningful to funders. Administrators and policy makers tend to rely on systems based indicators that record systems events that serve as proxy measures for client outcomes. These range from case re-openings due to new incidents of maltreatment, to number of placement changes for children in out of home care. Caution must be used in interpreting systems based indicators because they are proxy measures that can be influenced by a number of factors.

In some instances, instruments used to assess individual client outcomes can be aggregated across a client population. Using clinical instruments to assess program

effectiveness can, however, be problematic. The accuracy of measurements based on clinical judgments made by child welfare workers can be compromised if the measurement instruments are being simultaneously used for other purposes--for example, if a worker's performance evaluation or program funding are tied to improved client outcomes. For program evaluation, systems-based indicators are a more reliable source of data, because they are easily linked to program objectives, can generate meaningful baselines, and are not vulnerable to reporting bias.

Research Use of Outcome Measures

It is important to separate the evaluation efforts of administrators from those of independent researchers, who use more complex research designs that provide better control for measurement bias and for confounding explanations. Whereas administrators are primarily concerned with demonstrating that clients' outcomes have improved, researchers struggle to show that changes can be attributed to the intervention rather than to a co-occurring event or other factors (Gibbs, 1991). By using comparison group designs, clinical researchers seek to identify client changes that can be attributed to child welfare interventions (Wolfe and Werkele, 1993). Ecological researchers focus their analyses on the relationship between child welfare indicators, such as rates of reported maltreatment, and other social indicators, such as rates of poverty and unemployment (Zuravin, 1989).

In summary, front-line workers, administrators and researchers approach outcome assessment from very different perspectives. Front-line workers need sensitive measures of individual client progress in many different areas. Administrators need a limited number of key indicators that monitor client progress in specific programs in an aggregated way. Researchers require sensitive measures applied by independent evaluators, using well-controlled designs. These different information needs must be considered in developing consensus for a common outcomes framework.

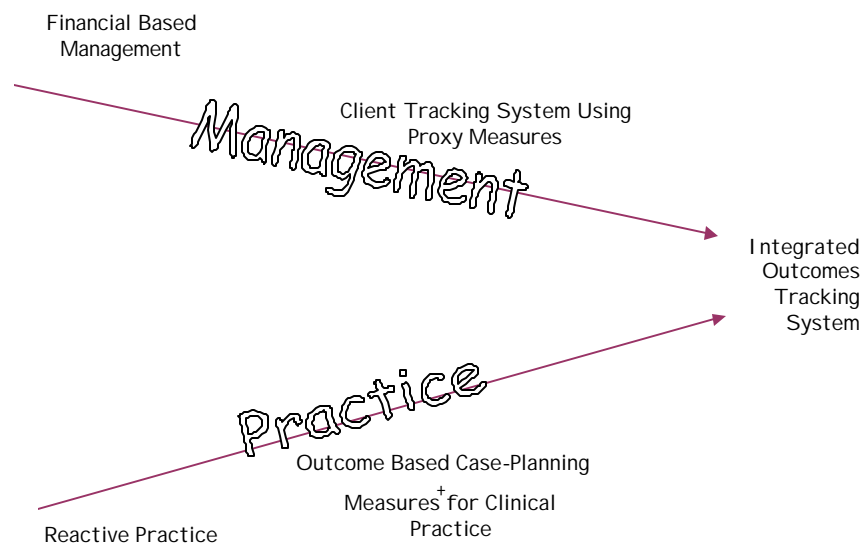
Incremental Multi-Level Outcomes Development Strategy

Our review of some of the more successful outcomes initiatives, such as the clinically driven Looking After Children project in England and Canada, and the administration driven State Automated Child Welfare Information System in the United States, shows that initiatives that focus primarily on meeting the needs of either clinicians or administrators are more successful than initiatives that attempt to meet the needs of both groups. On this basis, the COCW Project developed an incremental multi-level strategy that separates out the needs of clinicians and administrators.

The strategy builds on the types of information systems and instruments that are currently being used. Two primary sources of data are available to assess outcomes: direct client measures using worker-managed instruments, and systems-based indicators that reflect the relationship between clients and the service system. Both sources of data have advantages and limitations that depend in part on how well the information is collected and on the level of analysis required by those who will be using the information.

An incremental strategy places the immediate emphasis on making use of systems-based indicators. Systems-based indicators are easily collected and can be standardized, are relatively objective, and are meaningful to multiple stakeholders. Although these indicators are proxy measures that cannot be directly linked to client outcomes, these limitations can be partially overcome by using multiple indicators.

A less centralized strategy is recommended for developing clinical assessment and case-management tools. Many child and family service providers are developing clinical outcome measurement systems. Better information sharing between projects will enrich them without losing the momentum set by each project. An outcomes-based case-management model requires a strategy that nurtures the commitment of front-line workers who may need to significantly shift their approaches from case planning to assessment and case-planning (see Traglia, et al. 1996, for a good overview of this issue).



The proposed strategy also draws attention to the need to coordinate, track, and disseminate independent research initiatives more systematically. Clinical outcome studies using well-controlled designs are an essential component of an effective outcomes framework. Although these studies are expensive, they provide essential information on evaluation that is not otherwise available. Well-developed programs should be subjected to this level of empirical scrutiny.

CONCLUSION

Developing outcomes based practice and management models are complex endeavours that go well beyond selecting the right instrument. As all good clinicians know, respecting process is important if we want to achieve positive outcomes. I have

identified two major steps required in supporting this process: (1) developing a common outcomes framework that reflects the complex objectives of our service delivery systems, and (2) allowing for an incremental outcome development strategy that allows clinicians, managers and researchers to separately develop the tools most appropriate to their needs.

Although the appeal of the proposed multi-level strategy is that it allows clinicians, program, administrators, policy makers and researchers to develop outcome measurement systems that best suit their needs, the danger is that these initiatives will lead to approaches that are not complementary and cannot eventually be integrated. The sector-specific outcome initiatives we are proposing must be viewed in the context of a broader arena where consensus can be developed around a common outcomes framework. The Canadian Outcomes Symposium is an important step in moving toward this consensus.