

The Need for Comprehensive Risk Management Systems in Child Welfare

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Risk assessment studies in child welfare have largely focused on identifying individual or family risk factors associated with future harm or on the value of various assessment tools constructed of such factors, paying scant attention to the risks posed by the system and its larger context. These risks include services provided to children and families that have little or no evidence of effectiveness, lack of proper assessment of service needs, inadequate linkage of available services to desired outcomes, and an agency culture that is reactive rather than proactive in its pursuit of risk reduction. Drawing on related literature, this article introduces guidelines for the development and implementation of a comprehensive risk management system in child welfare.

Currently, risk assessment in child welfare is characterized more by what is not done than what is done. The term "risk assessment" implies that there is an effort to assess risk to children when, if one examines what is done, only some potential sources of risk are addressed (e.g., risk of biological parents to their children). A narrow approach has been taken to assessing risk to children who are potentially or actually involved in the child welfare system: developing risk assessment instruments to predict which children should come into care and which should not. This narrow approach ignores a host of other factors that may influence risk to children including the quality of assessment and services provided to children and families and the validity of evaluation methods. If we are concerned about

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risk to children, we should make efforts to identify and minimize *all* sources of risk. Research regarding risks suggests that this will require systemic risk management programs that attend to all potential sources of risk to children including staff and management practices and policies that contribute to risk. Definitions of risk management differ in their breadth. The aim of risk management described in the social work literature has been defined narrowly as "identifying practices or activities that potentially may lead to legal liability" (Gelman, 1992). Other literature takes a broader approach. Kavalari and Spiegel (1999) suggest that risk management is "an organized effort to identify, assess, and reduce where appropriate, risks to patients, visitors, staff, and organizational assets" (p. 3). We draw on approaches that include a wide array of aims and methods designed to maximize hoped-for outcomes and minimize adverse events within an evidence-based practice framework.

Ideally, risk management should minimize risk from *all* sources that contribute to unwanted outcomes (e.g., harm to children), not only risks posed by parents to their children, but risks posed by child welfare staff and service providers to clients and all procedures put in place to decrease both (see Table 1). Clements (1995) also includes safeguarding the assets of the organization (financial, reputational, and staff morale) under aims of risk management as well as responding effectively to client concerns such as continuity of care, swift compensation for justified claims, and improving the quality of care. The National Patient Safety Foundation (2000) defines patient safety as "the avoidance, prevention, and amelioration of adverse outcomes or injuries stemming from a process of health care" (p. 1), and highlights that safety emerges from the interaction of system components (see Table 2). Risks may be avoidable or unavoidable. We suggest that avoidable risks now taken in child welfare include incomplete assessment, referring clients to agencies offering ineffective services, and the pursuit of vague outcomes. Unnecessarily risky decisions during early phases influence risk during later phases. For example, if assessment is fragmented and incomplete, ineffective or harmful services may be selected. We can draw on practice-related research to identify practices and policies that minimize risk.

Table 1
Components of Risk Management Systems in Child Welfare

1. Clear description of practice and policy components likely to maximize attainment of hoped-for outcomes.
2. Effective implementation of a risk assessment instrument that contributes to sound decisions.
3. Clear performance standards for all staff and selection of standards based on what has been found, via rigorous appraisal, to maximize hoped-for outcomes (e.g., increase safety for children).
4. Monthly random audit of a sample of cases of each staff member and provision of individualized feedback and training based on this review.
5. Hiring supervisors with the values, knowledge and skills required to help staff maintain desired staff performance levels and random audit of a random sample of related supervisory behaviors/products.
6. Hiring staff who possess values, knowledge and skills required to fulfill expected tasks at minimal levels of competence as demonstrated by their performance on related tasks.
7. Hiring administrators who encourage evidence-based practices and policies (see text) and who are expert in arranging positive contingencies to support related staff behaviors; routine review of their policies and practices in relation to key indicators.
8. Up-to-date, clear descriptions of services offered and outcomes attained by local agencies related to areas of interest (e.g., parent-training, substance abuse). This should include critical reviews of the evidentiary base of each service offered.
9. Description of variations in services provided and related outcomes that are provided to staff, clients, and funding sources.
10. Clear description of what is needed to achieve hoped-for outcomes and what is provided on each case.
11. Access to computer databases that facilitate sound decision-making.
12. A whistle blowing policy that contributes to constructive criticism of current agency policies and practices.

Table 1 Continued

13. A nonpunitive (anonymous?) system for identifying errors and mistakes and use of these data to improve service quality.
14. An accountable, accessible, user-friendly client feedback system and regular review of complaints and compliments to enhance quality of services. Complaint forms should be readily accessible in every office.
15. Selection of evidence-based training programs for staff (i.e., programs that include instructional formats that maximize learning and that incorporate content found via rigorous appraisal to help clients achieve certain outcomes) and evaluation of training via review of on-the-job practices and outcomes.

Table 2
Underlying Factors Related to Safety Problems

- Organizational structures and processes
- Safety culture and the blame processes
- Safety [risk] reporting (e.g., incident reporting and other mechanisms for learning about system vulnerabilities)
- Organizational learning processes and barriers
- Production pressures
- Fundamental human limitations that influence performance
- Fatigue and sleep deprivation
- Stress
- Human factors design in devices and systems
- Coordination and cooperation across people and boundaries (coordination infrastructure)
- Education and training procedures;
- Resource-limitations

Source: National Patient Safety Foundation (2000)

Counterarguments against proposals for risk management programs in child welfare include the view that professionals (child welfare staff) know what they are doing based on their training and that they need no oversight. Appeal to professional licenses, credentials and experience may also be used to claim that audits of behavior are not necessary. In fact, related literature suggests that a variety of avoidable errors are made (e.g., see Grove). Another counterargument is that services are poor because staff members do not have MSW degrees. However there is no evidence that individuals with licenses, training and degrees provide better services to clients than individuals without such credentials (e.g., see Christensen & Jacobson, 1994; Dawes, 1994). Yet another counterargument is that we do not have the resources needed to provide high quality services. However, a careful description of services provided may reveal that many are ineffective or even harmful. Money saved in *not* paying for ineffective and harmful services could be used to pay for services with a track record of success. This will require a description of variations in services provided and their outcomes as they relate to populations served. One more counterargument is that child welfare policies and practice are shaped by societal values and related decisions about funding and thus "our hands are tied." While in some circumstances this might be true, our hands are not tied when it comes to gathering and disseminating the kinds of information about services and their outcomes described above, maximizing decisions that decrease risk to children, and involving clients as informed participants in decisions made.

What Accounts for the Focus on Parents?

What accounts for the focus on biological parents in relation to risks to children, leaving out many other sources of risk such as those posed by agency practices and policies, and related funding sources and policies? Certainly societal values regarding the responsibilities of parents for their children are a key influence on the current, fragmented view of risks to children and steps to minimize them. Some argue that parents who maltreat their children are morally stigmatized (see, e.g., Howitt, 1992) and are likely to be further marginalized by such factors as poverty and race (Lindsey, 1994; Pelton, 1989). Research suggests that environmental stressors compromise maternal attention to children's behavior (Wahler & Dumas, 1989), and this may impact parenting ability. Preferred practice ideologies tend to encourage a focus on parents. That is, rather than attend-

ing to broader social realities that influence families, and despite professional rhetoric to the contrary, emphasis is often on individual and family pathology ignoring such environmental factors (e.g., see Margolin, 1997; Pelton, 1989). Only reluctantly has the view of risk broadened to consider environmental factors such as poverty (e.g., see Lindsey, 1994; Pelton, 1989).

Attending to risks posed by agency practices and policies and related funding patterns might be threatening to the many people who make their living by claiming to help parents who abuse and neglect their children. Child welfare is a big business. In the US, Federal, state, and local child welfare expenditures (which include out-of-home care, other, and adoptions) totaled over \$12 Billion in 1996. Expenditures for the State of California alone were almost \$2 Billion (Child Welfare League of America, 2000). If, as we suspect, the majority of services provided to parents (e.g., such as parent training and substance abuse programs) are ineffective or harmful, this would threaten the livelihood of many professionals. No wonder there is a reluctance to implement systemic risk management programs. It is time to change this balance of attention to risk factors. It is time to systematically examine all risks and their sources that influence child abuse and neglect and their trajectory over time, and to use the information gained for the benefit of clients. Professionals would also benefit by providing more ethical, efficient, effective services.

Risk Management and Screening (Risk Assessment)

Risk assessment and an individualized assessment of children and families are often two different processes that occur at two different times, each of which carries a risk to children (e.g., of harm). The predictive accuracy of risk assessment measures used affects the safety of children and families. Faulty measures may result in faulty decisions such as not removing a child from a home in which he or she is reabused. Thus, unnecessary risks may result from the use of invalid risk assessment instruments as well as the misuse of valid measures. Cognitive biases may compromise correct implementation of a valid risk assessment measure. For example, the vividness of an injury to a child may encourage a worker to "over-ride" the instrument (see Gambrill & Shlonsky [2000] for a more detailed discussion). Research by Munro (1999) suggests that assessments of risk made by child welfare staff are based on a narrow range of evidence. That is,

decisions are biased by a reliance on readily available information, and important data available to other professionals are overlooked.

Risk Management and Individualized Assessment

Data collected during risk assessment (screening) may not provide sufficient detail or comprehensiveness for judicious selection of service plans. For example, risk assessment instruments typically require staff to check whether certain concerns are present (e.g., substance abuse problems). Such general labels may not maximize the likelihood of attaining hoped-for outcomes (e.g., protection of children from harm). For instance, the term "substance abuse" is quite vague. What is "substance abuse"? How does it relate to child maltreatment? What factors influence its frequency and intensity (whatever "it" is)? There should be a clear description of how outcomes focused on relate to the unique personal and situational context of each client and how both relate to service plans designed to maximize hoped-for outcomes.

A key avoidable risk to children may be the lack of an individualized assessment that permits judicious selection of service plans most likely to maximize hoped-for outcomes. Let us take this a step further by considering three possibilities in relation to what kind of assessment is needed to maximize success: (1) little or no individualized assessment; (2) some; (3) a great deal requiring expert assessment knowledge and skills, as well as agency incentive systems that encourage their use. Currently, there seems to be little distinction among these different situations in terms of what is offered. That is, the same, often minimal assessment is frequently offered to all. Assessment is often contracted out to other agencies with little or no monitoring of quality. Does this pattern of service minimize risk to children? Kinds of assessment that pose unnecessary risk to children and families include use of invalid measures (e.g., of parenting skills), vague descriptions of outcomes, pathologizing clients, and overlooking assets. Standardized measures that are not enlightening regarding factors that influence child maltreatment may be used in lieu of an individualized assessment simply because they are available, appear "professional," and save time. If objectives are vague (a common problem) such as "enhance parenting skills," there is no way to tell if anything changed because hoped-for outcomes are unknown. If selection of assessment methods does not take reliability and validity of sources into account (i.e., selection is not evidence-based), assessment may be inaccurate resulting in the choice

of ineffective or harmful plans. Risk may be decreased by the use of aids such as algorithms and interactive decision making programs that contribute to sound choices.

Risk Management and Intervention

It does little good to spend money to develop actuarial prediction methods if we then fail to provide appropriate services. Combining accurate assessment with high quality services is essential for risk management (Moss, 1995). Poor service quality may compromise the predictive validity of actuarial tools. If certain services are found to decrease risk, they should be used. "Decisions require not simply risk-assessment, but detailed information on probability of success and degree of efficacy of differing interventions" (Macdonald & Macdonald, 1998, p 15). There has been a striking lack of attention to research findings that would allow us to predict what is needed to protect children. Consider, for example, neglect of research findings regarding lack of generalization and maintenance of gains. These show that achieving such effects requires systematic planning and implementation. This research has been largely ignored in child welfare. Rather, a "train and hope approach" is used in which training is offered and it is hoped that changes will generalize to natural environments (home, school, playground) and be maintained (Stokes & Baer, 1977). For example, the rise and fall of family preservation in the 1980's and 1990's may be linked to the use of short-term interventions with little attention to generalization and maintenance. Why bother creating changes in behavior if these will not occur and be maintained in real-life settings?

Combining accurate risk assessment and evidence-based selection of services is a key step in minimizing risk to children, parents, social workers, and agencies. Currently, there is little clear description of variations in services (e.g., substance abuse, parenting programs) and their outcomes. For instance, parents are referred to many different parent training programs. Are they all equally effective? Are any effective? Currently, there is little clear information about what services are offered to what effect. For example, there is little information about the extent to which parent training programs offered in child welfare take advantage of information available about the effectiveness of parent training programs and barriers to their implementation (e.g., see Barlow, 1997). We should describe variations in services and their outcomes including clear description of services used (e.g., number of sessions, format used, duration of each ses-

sion), outcomes sought including intermediate steps, criteria used to evaluate whether each step is attained, and the degree to which service components are evidence-based (i.e., have survived critical tests of their effectiveness in relation to achieving hoped-for outcomes and are acceptable to clients). Other important questions include: Are follow-up data available? What arrangements are made for generalization and maintenance of gains? How long do gains last?

Purchase of Services

Services-purchased should maximize the likelihood of attaining hoped-for outcomes as demonstrated via critical appraisal. Payment for services purchased should be contingent on meeting agreed-on provisions (e.g., providing clear data regarding outcomes). Purchasing ineffective or harmful services increases risk to children by losing opportunities to alter factors related to child maltreatment. Once again, consider selection of parent training programs. Exploratory research in the San Francisco Bay Area suggests that programs provided to parents are not those most likely to enhance positive parenting skills nor are they carefully evaluated in terms of their effectiveness (Westby & Casteneda, 2000). Rather, they seem to be selected based on availability and whether they "sound politically correct" (e.g., include multicultural terms). Evidence-based purchase of services requires selecting agencies with a track record of success and ongoing evaluation (e.g., see Eddy, 1994). For any service provider, we should examine the gap between services they provide to referred clients, what should be provided based on related research findings, and the acceptability of the services to the client. For each service purchased we should ask: "Is anything known about its effectiveness?" If so, what? Does it:

- Do more good than harm.
- Do more harm than good.
- Of unknown effect--not being evaluated in research setting or being evaluated poorly
- Of unknown effect, but in good quality research program.

As part of a risk management system, we could create a pie-chart for each agency representing current and ideal services based on the above possibilities (see (Gray, 1997). For each service area (e.g., substance abuse,

parent training) we should describe the following: (1) frequency of referrals to each agency, (2) services used in each agency, (3) outcomes of each service program and outcome measures used to evaluate results. We can then review this information to identify gaps between services used and methods found to be effective, attending carefully to the validity of outcome measures used. Shifts in services and research efforts could be made to fill these gaps.

Clear written agreements between child welfare agencies and referral agencies should be prepared. Vague agreements pose yet another unnecessary risk to children. Unless service agreements are clear regarding what is expected, providers cannot be held responsible for meeting hoped-for outcomes such as timely reports. It should be the service provider's responsibility to provide information that will help child welfare staff choose wisely among different services. Public child welfare agencies and dependency courts should request information from agencies to which they refer clients allowing all parties to make evidence-based choices. Potential or actual service providers should provide clear written descriptions of services offered, criteria used to select them (e.g., critical appraisals of related research findings), outcomes they address, their track record of success in relation to each outcome pursued, and data describing the reliability and validity of assessment and evaluation measures used (See, e.g., *Ethical child welfare practice: A companion handbook to the code of ethics for child welfare professionals, Vol. I: Clinical Issues, 1999*).

Providers should be responsible for supplying clear, accurate documentation describing the fidelity of service methods used, including a description of how data were collected and the extent to which methods used are evidence-based. It is the responsibility of providers to select and monitor valid progress indicators related to each outcome addressed for each client referred, and to provide data to CPS staff in a timely manner as required in the purchase-of-service agreement. An example of a letter that could be sent to each agency can be seen in Figure 1. Complaints by referral agency staff about requests for information can be answered by reaffirming agency requirements and ethical obligations to clients. A liaison may be needed to help agencies participate effectively. Child welfare agencies should take the lead in providing or helping to develop the standards and tools for accurate evaluation and evidence-based practice and policy. Here, too, as in all other areas of life, politics enter. Certain agencies may be popular. However, if our primary concern is to provide services that are most likely to result in hoped-for outcomes (decrease risk and

increase safety) as suggested by critical appraisals of practice and policy related research, we must use criteria other than popularity and tradition to purchase services in accord with our professional code of ethics.

Figure 1

Dear Agency X:

As part of our ongoing effort to provide the best services to children and families, we request a description of the services you provide and their evidentiary base. This information will assist our staff in selecting providers who use services that maximize the likelihood of helping clients attain hoped-for outcomes. Services purchased fall into two main categories: 1) requests for assessment (e.g., a psychological assessment); 2) requests for services (e.g., parent training) including timely reports of progress based on on-going monitoring of specific, relevant outcomes (e.g., observed improvement of positive parenting) as well as subjective outcomes (e.g., client self-report).

The Code of Ethics of the National Association of Social Workers calls for informed consent on the part of clients. We must inform our clients concerning the potential benefits and costs of a service program, but can only do so if our staff is informed. We must also explain the reasons for our recommendations to the court. We know that you will join us in our effort to provide high-quality services to our families. If your agency offers both assessment and intervention services, please complete both attached forms. If you need assistance with these forms or have any questions, please call _____ at _____.

(Title)

Risk Management and Evaluation

Evaluation of progress is an important component of risk management programs. Providing services without carefully evaluating their impact opens the door to "wishful thinking" that services are successful when, indeed, there may be no progress or effects are harmful, ultimately increas-

ing rather than decreasing risk. Selection and tracking of clear, relevant objective and subjective progress indicators allows social workers and clients to plan next steps carefully in accord with degree of progress (e.g., see Schwartz & Baer, 1991; Wolf, 1978). We should gather detailed information from clients and significant others concerning the acceptability of goals pursued, outcomes achieved, and service methods used. Failure to do so poses a source of unnecessary risk to children (i.e., continuing ineffective or harmful service programs and forgoing use of effective programs because feedback is not gained or is ignored).

Risk Management and Agency Culture and Climate

Risk management requires an organizational culture and climate that facilitates and maintains related components (e.g., see Helmreich & Merritt, 1998). Climate refers to employees' perception of their work environments. James and his colleagues (James & McIntyre, 1996; James & Sells, 1981) distinguish between psychological climate (employees' views of the psychological impact of their work setting on their well being) and organizational climate (shared views of employees regarding the psychological impact that their work setting has on employees). Dimensions of climate measured include employees' views of support, conflict, challenges, depersonalization, opportunity, and stress among others (for further discussion of organizational climate and culture, see Ashkanasy, Wilderom, & Peterson, 2000). "Culture is variously seen as a component of, equal to, or a determinant of organizational climate, a popular area of study until culture took its place in the late 1970s" (Roberts & Hunt, 1991). Culture consists of shared values, ways of thinking, and customs, expected behaviors, and related contingencies (e.g., incentives provided for particular behaviors). Roberts and Hunt (1991) define the cultural environment of an organization as "the economic, social, and political context established by the larger culture in which the organization arises" (p. 116). Schein (1986) proposes:

For any given group or organization that has had a substantial history, culture is the pattern of basic assumptions that the group has invented, discovered or developed in learning to cope with its problems of external adaptation and internal integration, and that has worked well enough to be considered valid, and, therefore, to be taught to new

members as the correct way to perceive, think and feel in relation to those problems (p.30-31).

Child welfare agencies, especially those in urban areas, tend to have an authoritarian, bureaucratic structure, which influences opportunities for improving the quality of services. Rogers and Shoemaker (1971) suggest that although made most rapidly, authority- [based] decisions are more likely to be circumvented and may eventually lead to a high rate of discontinuance of the innovation unless external contingencies match intrinsic incentives. Glisson and Hemmelgarn (1998) used a quasi-experimental, longitudinal design (3 year period) in Tennessee (n=250) to explore the effects of a child welfare program designed to facilitate inter-agency coordination among service providers. The intervention involved a collaborative service delivery system seeking to integrate child welfare services with services provided by other agencies in order to offer a comprehensive service delivery package for children and families. Results indicated that inter-organizational coordination was not related to service quality or outcomes. However, organizational climate was significantly related to both ($p < .05$). Dimensions of organizational climate measured involved fairness, role clarity, role overload, role conflict, cooperation, growth and advancement, job satisfaction, emotional exhaustion, personal accomplishment, and depersonalization, all of which may contribute to agency culture and, ultimately, facilitate or defeat an innovation, regardless of its promise.

The child welfare culture has been described as one in which pursuit of the dual roles of helping and judging creates role conflict and ambiguity that, in turn, results in a high rate of staff burnout (Pelton, 1989). Such a culture detracts from the development of a safety culture. Reason (1997) suggests that a safety culture is comprised of four critical components: (1) a reporting culture defined as "an organizational climate in which people are prepared to report their errors and nearmisses" (p. 195); (2) a just culture described as "an atmosphere of trust in which people are encouraged even rewarded, for providing essential safety-related information – but in which they are also clear about where the line must be drawn between acceptable and unacceptable behavior" (p. 195); (3) a flexible culture, for example shifting from a hierarchical mode of taking charge "to a flatter professional structure, where control passes to the task experts on the spot" (p. 196); and (4) a learning culture which involves the willingness and the competence to draw the right conclusion from its safety information system, and the will to implement major reforms when their need is indi-

cated" (p.196). Other components include not forgetting to be afraid, gathering the right kind of data, and no blame. Agencies should undertake a cultural assessment to identify opportunities to shape their culture toward effective management programs that minimize risk including a description of organizational facilitators and impediments to their use. Examples of such components are suggested in the next sections (see also Table 1).

Implement Compatible Contingency Systems

An effective risk management program will require careful attention to contingencies in effect in an agency; that is, what behaviors are reinforced, punished or ignored? Are behaviors that contribute to risk management reinforced? Are tools and cues arranged that increase the likelihood that they occur (e.g., see Gambrill & Stein, 1983)? Are all staff involved in review of agency culture, including contingencies in effect for specific practice-related behaviors and plans (e.g., see LaVigna, Willis, Schaul, Abedi, & Sweitzer, 1994). Agencies, especially those that are authoritarian in nature, may forward contingencies that limit adoption of practices and policies that decrease risk to children and increase safety. Hazards may include defensive routines that hinder detection and correction of errors. Such routines may have developed in response to a punitive agency culture. The fundamental rules of defensive organizational routines are to:

(1) bypass the errors and act as if that were not being done, (2) make the bypass undiscussable, and (3) make its undiscussability undiscussable. These conditions, in turn, make it difficult to engage the organizational defense routines in order to interrupt them and reduce them. Indeed, the very attempt to engage them will lead to the defensive routines' being activated and strengthened. This, in turn, reinforces and proliferates the defensive routines (Argyris, 1990).

These defensive routines should be identified and dismantled.

In order to change old norms or develop new culture, meaningful incentives will have to be provided to establish and maintain behaviors that minimize risk. Increasing desired staff behavior will require offering positive incentives for desired behaviors and withholding these incentives for undesired behaviors. Providing necessary tools and facilitating cues and contexts for desired behaviors is also necessary. Negative consequences for desired behaviors should be removed or minimized. Easy-to-use, read-

ily available forms will make it more probable that these will be completed. Clear expectations and frequent feedback based on specific accomplishments should increase desired behaviors. The context in which behavior occurs also influences its likelihood. For example, a frequent complaint by workers is the difficulty of systematic planning or report writing because of frequent telephone calls and other interruptions. Perhaps a daily "time out" from telephone calls could be sanctioned and arranged.

Track Mistakes, Accidents, and Errors and Implement Maintenance Programs Designed to Minimize Them

Yet another way to minimize risk is to track errors, accidents, and mistakes both avoidable and unavoidable, and use this feedback to minimize those that are avoidable before a breach in the system occurs. Reason (1993) suggests three universal accident components: (1) we all make accidents, that is, we make faulty decisions and carry out unsafe acts; (2) all systems we create possess some degree of latent failure no matter how well designed; and (3) all our efforts entail some measure of work. Areas of risk should be evaluated and minimized before a breach in the system occurs. Battles, Kaplan, Van der Schaaf, and Shea (1998) suggest a continuum of related efforts including observational studies of error incidence and descriptive studies of error typology, descriptions of error processes, and the development, implementation, and evaluation of programs to decrease avoidable errors.

Studies of risk and error reveal a *systemic* process that typically involves a number of *latent* causes (those that precede the point at which an error is made) that contribute to *manifest* causes (the point at which a mistake occurs) (Reason, 1995; Reason, 1997; Sharpe & Faden, 1998; Vincent & Bark, 1995). Errors of commission are unsafe acts or poor decisions made by those performing the service. Errors of omission include lack of expected behaviors that lessen risk to children (e.g., failing to visit as scheduled). Error producing conditions that have been identified include unfamiliarity with a task, time shortage, poor signal to noise ratio, poor human-system interface, information overload, misperception of risk or poor feedback from the system, inexperience, poor instruction, inadequate checking, hostile environment, and monotony and boredom. Violation producing conditions include lack of an organizational safety culture, a conflict between management and staff, poor morale, poor supervision, group norms condoning violations, misperception of hazard, perceived

lack of caring on the part of management, belief that bad outcomes won't happen, learned helplessness, and perceived license to bend rules. Thus an error may occur through a combination of failed defenses, unsafe acts, and error-producing conditions, as well as organizational failures. Error reduction requires systematic assessment including review of environmental as well as personal contributions. Examples of latent causes in child welfare include policies regarding home visitation and caseload size. For instance, due to high caseloads (latent cause), a worker may fail to visit a child or not spend enough time with the family to adequately assess risk (manifest cause); and a parent may later abuse that child. Reason (1995) proposes that:

Decisions made in the upper echelons of the organization create the conditions in the workplace that subsequently promote individual errors and violations. Latent failures are present long before an accident and are hence prime candidates for principled risk management . . . People do not act in isolation. Their behavior is shaped by circumstances. The same is true for errors and violations. The likelihood of an unsafe act being committed is heavily influenced by the nature of the task and by the local workplace conditions. These in turn, are the product of 'upstream' organizational factors (p. 52-53).

Staff are less likely to report errors or near misses in an environment where they are afraid to make mistakes. Safety cultures in medicine and aviation highlight the importance of developing an anonymous system for identifying errors. If errors are not reported, they cannot be used to improve services and subsequently decrease risk. "Effective risk management depends critically on a confidential and preferably anonymous incident reporting system that records the individual, task, situational, and organizational factors associated with incidents and their near misses" (Reason, 1995). Keep in mind that we are not speaking of errors at the final point, but hopefully long before so that they can be detected and altered before an untoward event occurs. At present, we pay little attention to identifying and minimizing errors, mistakes, and accidents. Reason (1995) suggests that staff fear of reprisal for uncontrollable events must be minimized or eliminated.

The attribution of blame, though often emotionally satisfying, hardly ever translates into effective countermeasures. Blame implies delin-

quency, and delinquency is normally dealt with by exhortations and sanction. But these are wholly inappropriate if the individual people concerned did not choose to err in the first place, nor were not appreciably prone to error (p. 39).

Inappropriate blame and subsequent organizational response may stem from hindsight bias. Macdonald and Macdonald (1998) define this basic error in risk assessment as regarding "the outcome as evidence of the prior existence of a risk at a sufficiently high probability to justify intervention" (p. 3). They view hindsight bias as a misunderstanding of risk, not as over-attention to outcome. They do not think it reflects a tendency to search for evidence in a biased way, but that it results from misperceiving the nature of decisions. While it is important to track and address errors, responses to such errors must be weighed in terms of the probability that such errors will occur again, the probability that such errors will result in undesirable outcomes, and the likelihood that a proposed intervention will do more harm than good. We should also distinguish between errors and moral lapses. The former are made in a context of good intentions. The latter are characterized by indifference to the rights of clients and the potential harms they may suffer. Morreim (2000) argues that these have different causes and require different consequences. She suggests that moral lapses, in contrast to errors, require a "shame on you" consequence and referral to ethics courses.

Identifying mistakes in judgment, statistical or clinical, can be used to improve predictive models. Limiting error at each stage of the risk assessment process will increase the hit rate. Errors may be decreased by training and effective audit and contingency systems. An environment must be created whereby an open and informed analysis of individual and organizational errors, both latent and manifest, can occur. Open systems characterized by the free flow of information and clear documentation should permit greater error recognition and encourage the uptake of promising systemic innovations. However, even in the best systems, poor outcomes will occur.

If a decision involves risk, then, even when one can demonstrate that one has chosen the unarguably optimal course of action, some proportion of the time the outcome will be sub-optimal. It follows that a bad outcome in and of itself does not constitute evidence that the decision was mistaken (Macdonald & Macdonald, 1998, p.4)

Policies and responses to error must reflect this reality. In their book *Culture at work in aviation and medicine*, Hemreich and Merritt (1998) include a chapter describing error management as a cultural universal in these areas (p. 133). Reason (1997) suggests that what is needed is an organizational analysis of the defenses, the error-producing conditions in the culture, and how these are related to the encouragement of mistakes and errors, as suggested in our earlier review of agency contingencies. This is the direction child welfare needs to take.

Implement Accountable, User-Friendly Complaint Systems

There has been little attempt in social work to systematically gather complaints on the part of clients and to use these to enhance the quality of services and the attainment of hoped-for outcomes. Reviewing complaints on the part of clients provides information about how services can be improved. Ignoring or neglecting to harvest them poses another source of avoidable risk to children. For example, unrecognized complaints may prevent effective client participation in service plans. In addition to complaints, positive client feedback should also be gathered and considered in planning services.

Implement Continuous Quality Improvement Programs

A quality improvement program including on-going audit of key indicators is an integral part of an overall risk management program. Moss (1995) suggests that essential features of quality improvement are that it is "reflective and not punitive or defensive; that it relies on learning and improving; and that it is based on an understanding of the needs of the customer [client] and on good evidence" (p. 97). There is increasing emphasis on the concept of learning organizations that arrange for and take account of self-corrective feedback regarding practices, policies and outcomes in order to enhance quality of services (e.g., see Brunsson, 1998; Hayes & Allinson, 1998). Staff at all levels have responsibilities in relation to risk management. Administrators have a responsibility to arrange policies, audit systems, and contingency systems that minimize risks to children, while also attending to safeguarding the assets of the organization. They should be integrally involved in establishing effective risk management systems and for critically reviewing the quality of these programs,

for arranging required training, and for improving programs based on on-going feedback. Supervisors have a responsibility to see that agency policies are implemented effectively. Line staff have a responsibility to report errors and maintain a level of expertise regarding agency procedures, measures used, and effective interventions for the clients they serve. Line staff should also be involved in maintaining and upgrading the system, as well as promoting a culture conducive to risk management. Too frequently, change only occurs from the top down. Reason (1995) proposes:

Accident and incident reporting procedures are a crucial part of any safety or quality information system. But, by themselves, they are insufficient to support effective quality and safety management. The information they provide is both too little and too late for this longer-term purpose. To promote proactive accident prevention rather than reactive "local repairs" an organization's "vital signs" should be monitored regularly. (p.49)

Barriers to Risk Management Programs

Risk management programs highlight the uncertainty involved in making decisions. This may be an unpleasant topic to clients and social workers who search for certainty. Risk management programs cast the searchlight regarding what is done to what effect on staff and policy at all levels, not just on clients. This calls for an openness to criticism – in fact a welcoming of criticism as a way to enhance the quality of services including a candid discussion of how much risk can be attenuated without altering basic structural arrangements (e.g., political and economic realities) that contribute to the likelihood of risk (e.g., see Halpern, 1990). This broader view may be quite threatening, particularly in cultures in which mistakes are not viewed in their systemic context as opportunities for improvement, in which authoritarian practice/policy reigns and clients have little say (e.g., complaints are not carefully harvested and attended to in improving services), and in which there is reluctance to alter broad structural arrangements. Implementation of effective risk management programs (those that minimize avoidable risk and so contribute to maximizing high quality services and outcomes) will require organizational changes (e.g., in cultures) as suggested in the previous section describing components of such programs. Changes take time. They require overcoming the inertia and ease of business as usual.

The management of risk is closely connected to the knowledge we seek, the knowledge we ignore, and what we do with what we learn, all of which is related to our cognitive biases and risk taking styles (e.g., see Mullen & Roth, 1991). Decisions about what knowledge to seek, use, and disseminate influence risk to all parties involved in the child welfare systems: clients, staff, politicians, and taxpayers. Many decisions prevent the discovery of knowledge. We suggest that knowledge that helps to minimize risk and increase the safety of children in the child welfare system includes the following: (1) a clear description of the reliability and validity of assessment methods used (what is the likelihood that they provide information that decreases uncertainty about how to decrease risk and increase the safety of children); (2) a description of what services are used to what effect; (3) a candid recognition of uncertainties involved in child welfare practice; (4) a description of avoidable and unavoidable errors including their rates and contexts; and (5) a clear description of the gaps between practice methods used and what research shows is most likely to result in hoped-for outcomes. This calls for transparency of what is done to what effect. This will be threatening to many. Providers of services of unknown effectiveness are clear beneficiaries of lack of transparency of what is done to what effect. They do not have to take the time to locate practice/policy related research findings, critically appraise them, and share what is found with clients. They do not have to take the time to screen whether staff have and use values, knowledge, and skills that contribute to evidence-based services. Nor do they have to take the time to assess the fidelity with which training programs are offered because it doesn't really matter. Poor payment rates to service providers and low expectations are yet another latent risk to children and families.

Resources provided to child welfare agencies by politicians may forward political and administrative careers rather than enhance the quality of lives for children and their families. Concerns about child welfare involve emotional reactions and clashing views about how children should be raised and the responsibilities of parents. These often become intertwined with political issues and aims. As a consequence, resources may be unavailable for implementing risk management programs and staff training that is offered may not increase knowledge, skills, and values that contribute to maximizing safety and minimizing risk to children. Rather than providing a model of evidence-based practice and policy, professional publications as well as politicians and administrators often serve up pseudoscience and quackery. Consider the inclusion of ads for anatomically

detailed dolls in NASW publications when critical reviews suggest that they are not valid (Elliott, O'Donohue, & Nickerson, 1993; Wolfner, Faust, & Dawes, 1993). We often do not take advantage of technology that could enhance the quality of decisions such as using computerized client data bases to track client progress and providing staff access to computerized data bases describing critical appraisals of research findings related to decisions they must make.

Discovering barriers to change in agency culture and innovations has been of considerable interest in a number of fields. We can draw on literature regarding innovation to design programs that increase the likelihood that valid assessment, intervention, and evaluation methods will be adopted and used appropriately (see for example, Rogers, 1995). The perceived and actual attributes of an innovation combined with the type of innovation, organizational communication channels, nature of the social system (e.g., pressure not to "rock the boat"), and the format and extent of promotion efforts influence the rate of adoption. Thoughtful implementation addresses these areas in a proactive manner. Researchers in sociology and business have identified barriers and offered suggestions designed to encourage diffusion of innovations in organizations. Most innovations diffuse slowly and many not at all (Rogers, 1995). Rogers identified four main elements of the process: (1) innovation - any idea, practice, or object viewed as new; (2) communication channels - word of mouth is important including credible statements by key individuals, testimonials by satisfied users; (3) time - slow at first; and (4) the social system - opinion leaders and change agents are especially important.

People adopt innovations at different rates, making it important to identify and act in different ways with different employees. Rogers and Shoemaker (1971) suggest that individuals vary in the amount of time they take to adopt innovations within organizations. They identify five types of people with corresponding lengths of time to adoption: (1) innovators - 0.40 years; (2) early adopters - 0.55 years; (3) early majority - 1.14 years; (4) late majority - 2.34 years; and (5) laggards - 4.65 years. The existence of early adopters highlights the importance of planning for generalization and maintenance of valued behaviors (Stokes & Baer, 1977). Adoption of innovations is enhanced by encouraging innovators to persuade early adopters, swaying the early majority, and maintaining adoption long enough to move the late majority and laggards into adoption. Once a certain threshold of adoption is reached, the likelihood that the innovation will be fully adopted and continued is increased. If all staff levels are in-

involved in the planning, implementation, and revision of a risk assessment tool, its adoption and maintenance should be more likely. Compatibility (degree to which the innovation fits the agency), complexity (ease of use), observability (can be seen in use), and relative advantage (benefits derived) also influence the rate of adoption (Rogers, 1995).

Factors That Encourage Implementation of Systematic Risk Management Programs

A number of current interrelated developments encourage the establishment of systemic risk management systems in child welfare. A key one is evidence-based practice, which draws on rigorous reviews of practice related claims (e.g., see Oxman & Guyatt, 1993), attends to ethical issues (e.g., involves clients as informed participants), and helps both professionals and clients gain access to practice/policy related research findings and to critically appraise what they find. Currently, child welfare services are authority-based, not evidence-based (Gambrill, 1999). That is, services are selected based on criteria such as popularity, how long they have been used, and who happens to say they are effective rather than on evidence that they help clients attain outcomes claimed (see also, (MacDonald, 1998). Evidence-based medicine (EBM) arose as an alternative to authority-based medicine in which decisions are based on criteria such as consensus, anecdotal experience, and tradition (e.g., see Chalmers, 1983; Sackett, Richardson, Rosenberg, & Haynes, 1997). Evidence-based practice (EBP) involves "the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual [clients]" (Sackett et al., 1997, p.2). It involves "integrating individual clinical expertise with the best available external clinical evidence from systematic research" concerning the efficacy and safety of therapeutic, rehabilitative, and preventive regimens (Sackett et al., 1997). Steps include the following:

- 1) Converting information needs related to important practice decisions into answerable questions
- 2) Tracking down, with maximum efficiency, the best evidence with which to answer them
- 3) Critically appraising that evidence for its validity and usefulness
- 4) Deciding whether research found (if any) applies to a particular client

- 5) Considering client values and preferences
- 6) Applying the results
- 7) Evaluating the outcome

Advantages of EBP include: (1) enabling staff and clients to make decisions based on the best available evidence (e.g., helping practitioners to keep up-to-date with current research findings related to important decisions that affect children and families), (2) encouraging participation in evidence-based continuing education programs that contribute to high quality practice, (3) honoring ethical obligations to clients (e.g., to offer competent services and to fully inform them), (4) clearly describing outcomes sought and progress indicators, and tracking these on an ongoing basis. Given the thrust toward evidence-based practice in Canada and the United Kingdom, we suspect that it is only a matter of time before this will have an increasing influence on social work. Key hallmarks of EBP are transparency of what is done to what effect and a consideration of the values and expectations of clients and involving clients as informed (rather than misinformed or uninformed) participants in decisions made. This involvement of clients as informed participants may help social workers acquire the resources needed to do their job. For example, if it becomes obvious that the vast majority of child welfare clients are referred to services in which there is a poor match between what is offered and what related research suggests is needed to maximize the likelihood of hoped-for outcomes, both clients and social workers can bring this mismatch and its ethical consequences to the attention of all involved parties including citizens and legislators.

Transparency of what is done to what effect should encourage risk management programs that minimize errors, mistakes, and harm and maximize use of services found to help clients achieve valued outcomes. Increased attention to errors, mistakes and harm in the helping professions and recognition of limited resources should also encourage risk management programs. These trends will increase accessibility of information related to important decisions to both clients and professionals. Helpful sources include the Cochrane Data Base (e.g., see UK Cochrane Centre, 2000), Bandolier, the National Library for Health in the UK, and Medline. As the use of risk management programs increase in related fields such as health care, we can draw on promising developments to create such programs in child welfare. These programs should include all players within a framework of continuous quality improvement.

Increased attention is now being devoted to the development and critical appraisal of risk assessment instruments. We see this as a positive development. Increased attention to ethical issues in evidence-based practice will also encourage comprehensive risk management programs. This compliments requirements in the Code of Ethics of the National Association of Social Workers (1996) for informed consent, competent practice, and drawing on practice related research findings. For example, clients have a right to information regarding the predictive accuracy of risk assessment tools and the likely benefits of services they are mandated to receive. We frequently talk about empowering clients, but often forget about informed consent and hide the coercive nature of social work intrusion into clients' lives (e.g., see Margolin, 1997). A distinction should be made between autonomous situations and autonomous acts within these circumstances (Faden & Beauchamp, 1986). A client's involvement with the child welfare system may not be "self-determined." However, the client has choices to act within this situation (e.g., to participate or not in required services) and a right to be informed about the evidentiary base of recommended services including those supplied by contracted providers. These issues should be discussed as part of the practical and ethical dialogue surrounding implementation of risk management programs.

In Conclusion

Our children are too precious a resource to take unnecessary risks with their futures. Their futures affect our futures. Few claim that the child welfare system has its house in good order—quite the opposite as can be seen from reports in professional sources (e.g., see Henry, 1996), the fact that child welfare systems in many states have been placed under conservatorship, in reviews of errors (Munro, 1996), and in exposes by journalists (Roche, 2000). Many of the same issues raised years ago (e.g., fragmented planning, poor assessment, tolerating shoddy work from agencies from which services are purchased) are emphasized today. An often eloquent literature notes obstacles to high quality services for children and their families and suggests remedies (e.g., see Lindsey, 1994; Pelton, 1989). Child welfare agencies are at the whim of funding patterns. Programs may be passed, but insufficient money provided to implement them.

The quality of decisions in child welfare will be influenced by the validity of risk assessment tools used, as well as by the quality of risk management programs in effect. Preventive programs offer the greatest

potential benefits of decreasing risk to all involved parties. Reid and Eddy (1999) argue that it is more effective and rational to promote positive parenting than targeting families already viewed as abusive. They suggest that providing parent training to all at-risk children (boys in poor families) is a bargain in terms of money saved. Judicious intervention at early developmental levels provides an opportunity to potentiate positive effects at later developmental stages (e.g., see Olds et al., 1998a; Olds et al., 1998b; Reid & Eddy, 1999). In effect, we have a moving target in terms of service opportunities. We are not taking advantage of this. The increased interest in evidence-based practice and its emphasis on a rigorous search for and critical appraisal of practice/policy related claims, involvement of clients as informed participants, and transparency of what is done to what effect, will promote the move from authority-based to evidence-based child welfare systems. In order for this to occur, changes in agency culture will be required as well as changes in the culture of professional education (Gambrill, 1997). Methodological problems are also significant and must be addressed. Yet the children and families we serve deserve no less than our best in taking on these challenges.

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