Quality Improvement Center
ON EARLY CHILDHOOD

The Need for the Quality Improvement Center on Early Childhood: Background Research and Evaluation Framework

October 2, 2009

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This product was commissioned by the Quality Improvement Center on Early Childhood (QIC-EC). The QIC-EC is funded by the U.S. Department of Health and Human Services, Administration for Children, Youth and Families, Office on Child Abuse and Neglect, under Cooperative Agreement 90CA1763. The contents of this publication do not necessarily reflect the views or policies of the funders, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Department of Health and Human Services.

Quality Improvement Center
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Introduction to the Quality Improvement Center on Early Childhood

In FY 2009, the Children's Bureau funded the Center for the Study of Social Policy, in partnership with ZERO TO THREE: National Center for Infants, Toddlers, and Families, and the National Alliance of Children's Trust and Prevention Funds, to create a National Quality Improvement Center on Early Childhood (QIC-EC) focused on child maltreatment prevention. The purpose of the 5-year QIC-EC is to promote knowledge development, knowledge dissemination, and knowledge integration in this area. The logic model follows in Table 1.

Knowledge development focuses on program and systems strategies that contribute to the prevention of child maltreatment and to the promotion of increased family strengths and optimal development among infants and young children (birth-5) who are at high-risk for abuse, neglect, and abandonment.

Knowledge dissemination is supported by facilitating collaborative information-sharing and problem-solving via a national QIC-EC Learning Network, the Children's Bureau Training and Technical Assistance network, and ongoing relationships with other stakeholders and partners.

Knowledge integration is the culmination and desired impact of knowledge development and knowledge dissemination resulting in positive change for families and children and sustainable, systemic change at multiple levels of the child maltreatment prevention field. Integration happens as effective knowledge development and dissemination activities reinforce, support, and then translate new learning into practice and use.

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Table 1: The QIC-EC Logic Model

THE QIC-EC LOGIC MODEL

Vision: Develop, disseminate, and foster the integration of a strong theoretical model about conceptualizing, researching, and evaluating child maltreatment prevention efforts in order to increase family strengths, promote optimal child development, and decrease the likelihood of maltreatment of children ages birth-5 who are at high risk for abuse, neglect, and abandonment and for whom there is no substantiated Child Protective Services report.

Resources	Activities	Short-Term Outcomes (QIC-EC Years 2-5)	Long-Term Outcomes (Impact)
■ The Children's Bureau ■ The National Advisory Committee ■ Partnering organizations (CSSP, ZTT, The Alliance) ■ Evaluation Team (InSites) ■ Project staff ■ Subcontractors (NCCP, Chapin Hall) ■ Commissioned papers ■ Learning Network partners ■ Website and other dissemination channels ■ Funding for research and demonstration projects, dissertation projects, and other activities of the QIC	■ Fund and provide support to 3-5 selected R&D projects that test and evaluate how and to what extent collaborative, innovative, evidence-based and evidence-informed program and systems strategies that increase protective factors and decrease risk factors result in optimal child development, increased family strengths, and decreased likelihood of child maltreatment within families of young children at high risk for maltreatment. ■ Conduct a cross-site evaluation of the impact of funded R&D projects ■ Establish a national information-sharing and communications network to engage a broad maltreatment prevention constituency, disseminate lessons learned from this initiative, and receive feedback ■ Award up to four 2-year dissertation research stipends to advanced-level doctoral students conducting research on preventing the abuse and neglect of infants and young children and promoting child and family well-being	■ Increased knowledge about evidence-based and evidence-informed program and systems strategies that contribute to the prevention of child maltreatment and to the promotion of increased family strengths and optimal child development ■ Increased knowledge about maltreatment prevention research and evaluation methodology ■ Wide-spread knowledge dissemination to practitioners, key policy makers, leaders, state and federal agencies, parents, and the general public ■ Integration of knowledge that results in sustainable, systemic change at multiple levels of the child maltreatment prevention field ■ Increased collaborations and collective problem-solving among prevention partners including members of the Children's Bureau TTA Network, researchers, practitioners, and policy makers ■ Increased available and accessible resource information on child maltreatment prevention, protective factors, promotion of family strengths, optimal child development, evaluation, diffusion of innovation, etc. ■ Evidence-grounded recommendations about changes in practices, procedures, and policies	For children and families: ■ Strengthened family functioning ■ Improved developmental outcomes ■ Reduced likelihood of first occurrence of child abuse, neglect, abandonment, and entry into foster care system For systems: ■ Strengthened and sustained collaborations across child and family service systems ■ Proactive change within and across child and family service systems ■ Proactive change in the general public's attitude about child maltreatment ■ Public policy that serves the well-being of all children

Affirmation of the Need for the QIC-EC

Research and demonstration projects within the QIC-EC will test and rigorously evaluate program and systems strategies that contribute to the prevention of child maltreatment and to the promotion of increased family strengths and optimal development among infants and young children (birth–5) who are at high risk for abuse, neglect, and abandonment—including those impacted by substance abuse or HIV/AIDS—and for whom there is no substantiated Child Protective Services report. The following sub-sections provide information and evidence that affirms the need for the QIC-EC and gives direction to the work of the R&D projects: (a) the need to focus on maltreatment prevention, (b) the need to use a social-ecological framework, (c) the need to focus on infancy and early childhood, (d) the need to focus on high-risk populations, and (e) the need for effective maltreatment prevention collaborations.

The Need to Focus on Maltreatment Prevention

Child maltreatment is not a new phenomenon; yet, more new knowledge is needed to understand and prevent its occurrence.

> A complete etiologic picture of child maltreatment is still emerging, and the myriad of risk and protective factors related to child maltreatment at all levels of the social ecology... remains unexplored.... Further, critical questions regarding the effectiveness of prevention programs still remain....Rigorous research is needed to assess the effectiveness of prevention programs and to determine which among them merit widespread use (Centers for Disease Control and Prevention, 2009, p. 76).

Historically, the majority of resources and efforts have been spent on responding to child maltreatment after it has occurred (tertiary prevention); thus, efforts addressing child maltreatment have typically targeted the child welfare system. While child protection services are vitally necessary, many agree they are not sufficient in the goal to prevent child abuse and neglect (Shaw & Kilburn, 2009). "Yet, despite the potential long-term benefits of preventing child abuse and neglect, only a small percentage of all resources specifically earmarked for child maltreatment in the United States is actually devoted to prevention" (Thomas, Leicht, Hughes, Madigan, & Dowell, 2003, p. 2). Thus, the need for a Quality Improvement Center that focuses on advancing knowledge and practice about effective primary prevention (before abuse and neglect occurs) and secondary prevention (focusing on those who are at high risk for maltreatment), is paramount.

The Need to Use a Social-Ecological Framework

The need to use a social-ecological conceptual framework grows out of the premise that human behavior does not occur in a vacuum. Children

develop within a network of family relationships, families exist within a community, and the community is surrounded by the larger society; these levels of the social ecology interact with and influence each other. Using a social-ecological framework expands the scope and reach of child maltreatment prevention efforts from a singular focus on individual factors to include relational/family factors, community factors, and societal/ systems factors and, thus, create a far more effective prevention system. As a contributor to the RAND working paper on child abuse and neglect prevention, Daro wrote, "the problem [of child abuse and neglect] and its solution are not simply a matter of parents doing a better job but rather creating a context in which 'doing better' is easier" (Shaw & Kilburn, 2009, p. 7).

The Need to Focus on Infancy and Early Childhood

The need for a Quality Improvement Center that would target early childhood and early intervention strategies, is essential. Daro, Barringer, and English (2009) pointed out, "A broad body of research has emerged which highlights the first three years of life as a particularly important intervention period for influencing a child's trajectory and the nature of the parent-child relationship" (p. 1). Emphasis on attending to early childhood and early intervention includes focusing on the pregnant woman, the prenatal period, and the neonatal period (Daro, 2009) to enable influences on parent behavior before neglectful and abusive patterns are established (Kotch, Browne, DuFort, Winsor, & Catellier, 1999). Practitioners also acknowledge the need to focus on infants and young children. For example, on-line survey respondents involved in the RAND Promising Practices Network project were asked about priorities in the child maltreatment field. With respect to the age group priority, 63% of the respondents indicated that children 0-2 should be the highest priority (Shaw & Kilburn, 2009).

Rapid physical, cognitive, language, and social-emotional growth and development characterize the first few years in a child's life. Focusing on the very youngest children recognizes the disproportionate rate at which the youngest children are maltreated. Wulzyn (2008) asserted, "More children start their child welfare careers during infancy than any other period within the span of childhood" (2008, p. 2). Although infants less than one year of age represent less than 6% of the child population they account for 10.6% of all substantiated abuse and neglect cases which represents a rate of 25.5 per 1,000 infants in the U.S. population (Centers for Disease Control, Spring 2009). The most recent data collected by Child Protective Services agencies through the National Child Abuse and Neglect Data System and reported in *Child Maltreatment 2007*, present the following national picture of the youngest victims of maltreatment (U.S. Department of Health and Human Services, Administration on Children, Youth and Families, 2009, p. 25, 27):

- Nearly 32% (31.9%) of all victims of maltreatment were younger than 4 years old.
- The youngest children had the highest rate of victimization.

- Of the victims who were medically neglected, 20.4% were younger than 1 year old.
- Victims who were younger than 1 year old comprised 12.0 % of all maltreatment victims.
- The rate of child victimization for boys in the age group of birth to 1 year was 22.2 per 1,000 male children of the same age group.
- The child victimization rate for girls in the age group of birth to 1 year was 21.5 per
- 1,000 female children of the same age group.

Infants and toddlers are not only the most vulnerable to the *experience* of maltreatment, they are also the most vulnerable to the *effects* of maltreatment. There is substantial research that shows a relationship between child maltreatment and a broad range of developmental problems that can have a life-long impact if not properly addressed (Lowenthal, 2000; Wiggins, Fenichel, & Mann, 2007). For example, research on the developing brain has provided extensive evidence that children's earliest experiences create the brain architecture on which future development rests (Shonkoff & Phillips, 2000). Thus, everything regulated by the brain—including memory, emotions, and learning—is affected by the infant's most immediate and influencing environments (Kotulak, 1996).

> We have mountains of research that tell us how children who've been exposed to abuse or neglect for long periods of time have less exploratory behavior. They don't learn as well. They have more fears and they're more likely to have physical and mental illnesses as adults. So abuse and neglect literally changes the brains of young children. It doesn't just "affect their behavior." It literally changes the wiring of their brains (Shonkoff, 2007).

Maltreated infants and young children display a number of social-emotional disturbances, such as problems with forming secure attachments, specific mental health disorders including post-traumatic stress symptoms or disorder, adjustment disorders, regulatory disorders, and depression and withdrawal symptoms (Dubowitz, Papas, Black, & Starr, 2002; English et al., 2005). Long-term negative outcomes can include deficits in IQ scores and language ability; school failure; delinquency; high rates of unemployment and employment in low-level service jobs; and continuation of the cycle of violence (English, Widom, & Brandford, 2004; Thomas et al., 2003; Widon & Maxfield, 2001; Zolotor et al., 1999).

The data that depict the national picture of the youngest victims of maltreatment, as well as the substantial research that shows a relationship between child maltreatment and a broad range of developmental problems, are extremely alarming. However, the good news is there is also strong evidence that "the course of development can be altered in early childhood by effective interventions that change the balance between risk and protection, thereby shifting the odds in favor of more adaptive outcomes" (Shonkoff & Phillips, 2000, p. 32).

The Need to Focus on High-Risk Populations

The focus of the QIC-EC is on infants and young children who are at high-risk for abuse, neglect, and abandonment. It should be noted that risk for child maltreatment crosses economic, racial,

ethnic, and geographic lines. Furthermore, a focus on vulnerable families does not obscure the recognition of and intent to focus on strengths within those same families.

According to multiple sources, child neglect is the most prevalent form of child maltreatment in the United States (e.g., American Humane, 2009; Diaz, Peddle, Reid, & Wang, 2002; U.S. Department of Health and Human Services, Administration on Children, Youth, and Families, 2008). For example, the most recent national data available on child maltreatment show that:

- In FY 2007, 59% of the children in the United States who were victims of abuse and neglect suffered from neglect alone; 1% were medically neglected.
- Of the victims who were medically neglected, 20% were younger than 1 year.
- In FY 2007, 34% of child maltreatment fatalities in the United States occurred as a result of neglect only.

Some researchers have suggested that the effects of neglect are more severe and enduring than those from abuse. For example, Perry, Pollard, Blakley, Baker, and Vigilante (1995) documented that the effects of early deprivation (i.e., neglect) on brain development were greater than those associated with trauma (i.e., abuse). Despite the widespread incidence of child neglect and its especially damaging effects, the overwhelming focus of child maltreatment theory, research, and practice is on child abuse. Researchers report that less is known about how to prevent neglect than other types of child maltreatment (DePanfilis & Dubowitz, 2005). One of the major challenges in studying child neglect is the nature of the risk factors.

> Many risk factors associated with families referred to CPS for neglect are also found in distressed, non-maltreating families. Families characterized by poverty are also characterized by stress and social isolation, but these families may not maltreat their children. The key to evaluating risk for neglect is to separate out those characteristics that may be common to many families and identify those who omit appropriate care for their children for reasons other than poverty (English, 1999, p. 202).

Another major challenge relates to cultural differences in child rearing practices.

> Cross-cultural research has not yielded a universally ideal parenting strategy. What is considered optimal or deficient childrearing differs in various social and historical contexts. . . . A challenge to a culturally informed understanding of child neglect is to distinguish clearly what portion of neglect is related to cultural differences and what to other multiple factors. This task is exceedingly complex and does not lend itself to easy solutions (Korbin & Spilsbury, 1999, p. 71, 82).

In highlighting the need to focus on populations of highly vulnerable young children, the Children's Bureau (2008, p. 5-6) pointed out:

> The Abandoned Infants Assistance Act, as reauthorized by the Keeping Children and Families Safe Act of 2003, highlights

the unique needs of a special population of vulnerable infants and young children. Studies have indicated that a number of factors contribute to the inability of some parents to provide adequate care for their infants and young children and that a lack of suitable homes have led to the abandonment of such children in hospitals for extended periods of time. Infants and children with life threatening conditions and other special needs, including those who are infected with HIV, those who have AIDS, and those who have been exposed to dangerous drugs, are at the greatest risk for abandonment and abuse or neglect and merit special attention.

The Need for Effective Maltreatment Prevention Collaborations

Researchers, practitioners, and policymakers agree that child maltreatment is much too complex for one organization, agency, or service system to successfully address on its own. Further, many children and families at high risk for maltreatment have a variety of physical, health, emotional, and educational needs. Thus, broad collaborations among key stakeholders are viewed as vital to the provision of needed services to children and families; to the success of child maltreatment prevention efforts; and to improved outcomes for children and families. Pollard (2005) described a fundamental issue regarding effective collaborations: distinguishing between coordination, cooperation, and collaboration.

Table 2: Pollard's Distinction between "Coordination," Cooperation," and "Collaboration"

	Coordination	Cooperation	Collaboration
Preconditions for Success ("Must-Haves")	■ Shared objectives ■ Need for more than one person to be involved ■ Understanding of who needs to do what by when	■ Shared objectives ■ Need for more than one person to be involved ■ Mutual trust and respect ■ Acknowledgment of mutual benefit of working together	■ Shared objectives ■ Sense of urgency and commitment ■ Dynamic process ■ Sense of belonging ■ Open communication ■ Mutual trust and respect ■ Complementary, diverse skills and knowledge ■ Intellectual agility
Enablers (Additional "Nice to Haves")	■ Appropriate tools (see below) ■ Problem resolution mechanism	■ Frequent consultation and knowledge-sharing between participants ■ Clear role definitions ■ Appropriate tools (see below)	■ Right mix of people ■ Collaboration skills and practice collaborating ■ Good facilitator(s) ■ Collaborative "Four Practices" mindset and other appropriate tools (see below)
Purpose of Using This Approach	■ Avoid gaps and overlap in individuals' assigned work	■ Obtain mutual benefit by sharing or partitioning work	■ Achieve collective results that the participants would be incapable of accomplishing working alone
Desired Outcome	■ Efficiently-achieved results meeting objectives	■ Same as for Coordination, plus savings in time and cost	■ Same as for Cooperation, plus innovative, extraordinary, breakthrough results, and collective "we did that!" accomplishment
Optimal Application	■ Harmonizing tasks, roles and schedules in *simple* environments and systems	■ Solving problems in *complicated* environments and systems	■ Enabling the emergence of understanding and realization of shared visions in *complex* environments and systems
Examples	■ Project to implement off-the-shelf IT application ■ Traffic flow regulation	■ Marriage ■ Operating a local community-owned utility ■ or grain elevator ■ Coping with an epidemic or catastrophe	■ Brainstorming to discover a dramatically better way to do something ■ Jazz or theatrical improvisation ■ Co-creation
Appropriate Tools	■ Project management tools with schedules, roles, critical path (CPM), PERT and GANTT charts ■ "Who will do what by when" action lists	■ Systems thinking ■ Analytical tools (root cause analysis, etc.)	■ Appreciative inquiry ■ Open Space meeting protocols ■ Four Practices ■ Conversations ■ Stories
Degree of inter-dependence in designing the effort's work-products (and need for physical co-location of participants)	■ Minimal	■ Considerable	■ Substantial
Degree of individual latitude in carrying out the agreed-upon design	■ Minimal	■ Considerable	■ Substantial

Pollard views "collaboration" as both structure and process.

> Collaboration entails finding the right group of people. . . ensuring they share commitment to the collaboration task at hand, and providing them with an environment, tools, knowledge, training, process, and facilitation to ensure they work together effectively. . . . Cooperation and coordination are less elaborate and less ambitious collective undertakings (p. 1).

Social service collaborations have a variety of names including integration of services, services integration, integrated services, array of services, systems of care, or services partnerships; Gardner and Young (2009) used the phrase "services partnerships." They pointed out that while

> Overlapping risk factors establish a need for services partnerships, they also present major barriers to providing those services. These families are at times geographically distant from services, in denial about their need for services, and unable to overcome the chaos of their lives to keep appointments and participate actively in treatment. To the extent that "front end," preventive services are voluntary, a significant portion of these families choose not to participate in voluntary services. . . . Harder-to-serve children and families by definition have greater needs, but are more likely to fail to benefit from services partnerships, or not even be able to enter such services (p. 2)

Based on their research, Gardner and Young (2009) offered these recommendations for fostering effective maltreatment prevention collaborations for young children and their families:

1. Collectively clarify the nature of the collaboration, including the roles, responsibilities, and expectations of each partner.
2. Collectively determine shared content and outcomes, in addition to shared processes, and how outcomes will be measured for their impact across agencies.
3. Collaborations should occur at both the policy and practice levels. "Changes in practice without policy support will become isolated and partial; changes in policy. . . that do not reflect practice realities will remain paper decrees with little impact on children and families" (p. 4).
4. Client engagement and retention must be major features of collaborations.
5. Effective accountability mechanisms must be included in collaborations to assess which families are entering services and are being helped and which are not.
6. The role of parents in several arenas related to service provision across the collaborating agencies is vitally important.
7. "The content of services partnerships matters as much as the process. . . . (Services) must address (families') co-occurring problems as a closely linked set, rather than as isolated categorical pieces" (p. 4). Screening tools should assess the co-occurrence of problems, rather than having families separately screened for different problems (e.g., substance abuse,

domestic violence) by different partnering agencies.

8. "Integration in time matters more than integration of services at a single place, especially for younger children" (p. 5). That is, it is very important to share/pass on the results of screening, identification, and intervention "from one service, stage, or developmental review to another" (p. 5).
9. Providing staff training about how to effectively collaborate with others is an important intervention. "By itself, training does not change systems—it only equips workers with new skills. . . If the systems don't change, the workers will find it difficult to use their new skills in their daily practice, and client outcomes are unlikely to improve" (p. 5).
10. The various costs of the services partnerships are vitally important and should be assessed, such as: what it will cost to sustain the partnership, how many children and families can be served within a given budget, what each added element will add to the total costs, and what savings are possible.
11. Collaborative service partnerships should consider both of the following approaches in order to be effective: "It takes data-driven accountability to bring partners to the table and prove to them that it is worthwhile to stay there and it takes strong relationships and trust built over time to keep the informal glue of the partnership working and to get past turf, barriers, and personal and institutional narrowness" (p. 9).

Garder and Young (2009) also identified four challenges in determining the effectiveness of collaborations/services partnerships:

- Ascertaining adequate baseline measures to determine whether the services partnerships made a difference.
- Measuring whether the short-term and intermediate outcomes are sustained over time and "whether dosage is adequate to make sustained impact an appropriate measure of the program's effectiveness" (p. 4).
- Determining which of the services within the collaboration "creates value (and makes a difference) and which are just involving new players who may not be critical" (p. 4).
- Evaluating the "efforts to secure wider cooperation among a network of independent
- agencies" than simply evaluating a single agency's "efforts to organize multiple services under a single roof" (p. 4).

Advancing a Promotion-Prevention Continuum Approach

The growing body of research on developmental pathways and trajectories has contributed to reframing child maltreatment prevention efforts to include both prevention (i.e., reducing risk factors) and promotion (i.e., increasing protective factors) (e.g., DePanfilis & Dubowitz, 2005; Wulzyn, 2008).

> Individual developmental pathways throughout the life cycle are influenced by interactions among risk factors that increase the probability of a poor outcome and protective factors that increase the probability of a positive outcome . . . Risk factors may be found within the individual (e.g., a temperamental difficulty, a chromosomal

> abnormality) or the environment (e.g., poverty, family violence). Protective factors also may be constitutional (e.g., good health, physical attractiveness) or environmental (e.g., loving parents, a strong social network). The cumulative burden of multiple risk factors is associated with greater developmental vulnerability; the cumulative buffer of multiple protective factors is associated with greater developmental resilience (Shonkoff & Phillips, 2000, p. 30)

Support for the promotion-prevention continuum approach was articulated by Surgeon General Richard Carmona in 2005: "I believe it is time for critical thinking to formulate a new national public health priority, preventing child maltreatment and promoting child well treatment" (p. 1). Over the past five years, the Strengthening Families Approach and Protective Factors framework have spurred a significant first step toward a national child maltreatment prevention approach based on promoting family strengths rather than focusing solely on reducing risk factors in individual families. A 2009 RAND Corporation study of the child abuse prevention field showed that the Strengthening Families Approach and Protective Factors Framework was the most recognized child maltreatment strategy even though it had only been developed in the past five years (Shaw & Kilburn, 2009). As this perspective has gained momentum, early childhood programs and other systems providing services for young children have come to see their roles as encompassing the prevention of child maltreatment as part of supporting optimal development.

The QIC-EC's promotion-prevention continuum approach complements the public health approach to violence prevention articulated in the Centers for Disease Control and Prevention child maltreatment prevention program coordinated by the Division of Violence Prevention (DVP). "DVP emphasizes efforts to prevent violence before it occurs. This requires not only reducing factors that put people at risk but also increasing the factors that protect people from becoming perpetrators of violence" (Centers for Disease Control and Prevention, n.d., p. 2). Many research studies have shown that experiences in a nurturing environment and consistent, positive relationships with family and caregivers create the best chance for optimal child development. As such, the DVP has adopted a strategy for child maltreatment prevention of promoting safe, stable, and nurturing relationships (SSNRs) between children and their caregivers (Centers for Disease Control and Prevention, n.d.). SSNRs are viewed as the positive end of this relationship continuum and, therefore, the antithesis of relationships and environments that foster the risk or occurrence of maltreatment, create childhood trauma, and compromise optimal child development, health, and well-being:

Safe Relationships/Environments . . . . . Neglectful and Violent Relationships/Environments

Stable Relationships/Environments . . . . . Unpredictable and Chaotic Relationships/Environments

Nurturing Relationships/Environments . . . . Hostile/Cold or Rejecting Relationships/Environments

Designing the Delivery and Evaluation of an Intervention

The Merits and Limitations of Randomized Control Trials

There is widespread acceptance among maltreatment prevention stakeholders of the need for evidence-based practices (EBPs). The use of evidence-based practices is intended to promote the efficiency and effectiveness of practices by applying empirically supported principles (APA Presidential Task Force on Evidence-Based Practice, 2006). Nonetheless, the urgent need to identify effective child maltreatment prevention interventions and the push for evidence-based findings have generated much debate about the merits and limitations of the use of randomized controlled trials (RCTs) in child maltreatment prevention research. Some researchers support the notion of "a hierarchy of evidentiary rigor relating the design of a study to the confidence that could be placed in the findings, from the lowly, nearly valueless anecdote to the royalty of evidence, the RCT" (Berwick, 2008, p. 1182), while others take the position that RCTs are unworkable and irrelevant to real-world behavioral and psychosocial problems (Berwick). Daro (2009) asserted that this dichotomy creates an unnecessary false choice:

> A knowledge development model that places singular and preeminent emphasis on randomized clinical trials may be less appropriate today than in the past. . . A multifaceted lens is needed to provide policy makers and program planners the array of information necessary to identify and address the conceptual and adaptive changes facing efforts to expand and replicate community prevention efforts (p. 10).

Research questions must guide the selection of scientific methods. Indeed, the appropriate match between research method and research question is a fundamental premise of scientific research.

> Critical research findings are not limited to those that result in statistically significant changes on various standardized measures of narrow constructs. Useful knowledge also is gleaned from the stories participants and providers tell in response to structured interviews.... To capture these diverse data, researchers need to implement diverse strategies (Daro, 2002, p. 8).

Similarly, Rust and Cooper (2007) emphasized that researchers should, "Demand scientific rigor, but redefine scientific rigor to include new methods for measuring impact in complex, dynamic systems" (p. 110). Fundamentally, research projects must have designs that generate rigorous data about what works so that the findings may contribute to evidence-based or evidence-informed decision-making about maltreatment prevention practice and policy (Orszag, 2005).

Defining Evidence-Based and Evidence-Informed Practice

The definitions guiding the work of the QIC-EC were developed by the Community Based Child Abuse Prevention Program (CBCAP) and Outcomes Workgroup, with support from the FRIENDS National Resource Center for CBCAP (2007). These definitions are consistent with those developed by the American Psychological Association and the Institute of Medicine (APA Presidential Task Force on Evidence-Based Practices, 2006; Sackett, Straus, Richardson, Rosenberg, & Haynes, 2000):

> **Evidence-Based Practice:** The integration of the best available research with child abuse prevention program expertise within the context of the child, family, and community characteristics, culture, and preferences.
>
> **Evidence-Informed Practice:** The use of the best available research and practice knowledge to guide program design and implementation within the context of the child, family, and community characteristics, culture, and preferences.

Best available research refers to practices or programs that have been judged to be effective based on the quality, robustness, and validity of their rigorous scientific findings (Frieson & Cross, 2005). *Prevention program expertise* refers to the expertise of professionals or constituents "gained through observation, experience, reflection, and consensus" (Buysse & Wesley, 2006, p. 13). *The context of the child, family, and community characteristics, culture, and preferences* refers to the "unique preferences, concerns, and expectations" (Sackett, Straus, Richardson, & Haynes as cited in Buysse & Wesley, 2006, p. 13), "as well as local circumstances, values, and contexts that must be integrated into all practice decisions" (Buysse & Wesley, 2006, p. 13).

The Children's Bureau (CB) described the criteria within the continuum of evidence-informed to evidence-based programs and practices (Brodowski, 2008) as delineated in Table 3.

Table 3: Continuum of Evidence-Informed to Evidence-Based Practices

Emerging	Promising	Supported	Well-Supported
■ Ongoing collection of pre/post data	■ All elements of "Emerging," plus:	■ All elements of "Promising," plus:	■ All elements of "Supported," plus:
■ Peer review	■ 1 study, quasi-experimental design with control or comparison group	■ 2 randomized clinical trials or 2 between group design studies (or comparable methodology)	■ Multiple site replication
■ Document all implementation activities	■ Model fidelity	■ One-year sustained effect	
Evidence-Informed →			**Evidence-Based**

Cultural Considerations and Evidence-Based Practice

The influence of the culture of the participants in the design and delivery of maltreatment prevention strategies should not be ignored or minimized. It is arguable that the use of evidence-based practices could address the differential treatment and outcomes that diverse populations encounter within the child welfare system. "However, it is equally likely that EBPs could exacerbate and deepen existing inequities if they are implemented without sufficient attention to cultural competence and/or if policymakers fail to take into account the many practices within diverse communities that are respected and highly valued" (Isaacs, Huang, Hernandez, & Echo-Hawk, 2005, p. 4-5). Culture matters.

> Culture influences every aspect of human development.... Understanding this realm of influence is central to efforts to understand the nature of early experience, what shapes it, and how young children and the culture they share jointly influence each other over the course of development. . . . Given the magnitude of its influence on the daily experiences of children, the relative disregard for cultural influences in traditional child development research is striking (Shonkoff & Phillips, 2000, p.25).

Integrating cultural considerations into program planning decisions must go beyond the typical "culturally sensitive" practices of:

> …Delivering services in a participant's primary language, matching participants and providers on the basis of race and ethnicity, and incorporating traditional child rearing practices into a program's curriculum. Far less emphasis has been placed on testing the differential effects of evidenced-based prevention programs on racial or cultural groups or the specific ways in which the concept of prevention is viewed by various groups and supported by their existing systems of informal support (Daro et al., 2009, p.11).

Positive Self-Reflection as an Important Component of an Intervention

Positive self-reflection is the process of examining the content and impact of one's personal values, beliefs, styles of communication, and experiences by posing positive questions that focus on success. Daro et al. (2009) suggest child maltreatment prevention programs should examine "the specific way in which their innovation or strategy will strengthen a parent's ability for self-reflection in discerning appropriate options for themselves and their children" (p. 14). Positive self-reflection is considered to be a critical component of a maltreatment prevention intervention in that sociological research has shown that when people "focus on human ideals and achievements, peak experiences, and best practices, these things—not the conflicts—tend to flourish" (Mohr & Watkins, 2002, p. 2).

Complex Adaptive Systems

The focus on research in the child abuse and neglect prevention field is expanding from looking at individual programs and services to include a broader, comprehensive focus on systems and the complexity within which programs function. This does not mean that programs and services are unimportant, but that attention to the parts (programs) alone is insufficient. Attention is needed to the parts, the whole, and the greater whole. A systems orientation is valuable to support this expanded thinking.

"Systems" are defined as the parts and interconnections that form a coherent whole. Programs and services are considered within their context, paying attention to how the interconnections, relationships, and differences that exist among and between parts form a coherent whole. Although there are many issues related to a systems orientation that are important, two primary ones are the distinction between nested and networked social systems and a recognition of different dynamics within systems.

Social systems tend to be conceptualized in two ways—as either nested or networked. Most bureaucratic, hierarchical organizations build on a notion of nested systems where one level is nested within another. For example, a county agency may be nested within a state system and subject to the policies and direction of a state agency. In today's complex world, networked systems are increasingly and especially important. Partnerships and interconnections among service providers across and among organizations are examples of networked systems. Thinking in terms of a networked model of systems directs attention to the complex relationships that can exist across and among levels of the ecological model.

From Knowledge Development to Dissemination and Integration

Merely generating rigorous data is not sufficient for improving practice or shaping policy. Equally important as seeking clarity about the nature of research evidence and appropriate research methods are concerns about (a) disseminating research findings, (b) contextualizing and translating research findings into practice and policy, (c) utilizing research findings, and (d) making policy recommendations and influencing proactive change in the general public's attitudes about child abuse and neglect.

Understanding how best to disseminate and integrate new knowledge about effective prevention strategies is keenly important, but research in this area is substantially limited. "Identifying and implementing efficient and effective methods for dissemination and implementation is critical in optimizing the access and reach of evidence-based programs to prevent child maltreatment and promote safe, stable, and nurturing relationships" (Centers for Disease Control and Prevention, 2009, p. 78). Daro et al. (2009) emphasized:

> It is not enough for scholars and program evaluators, on the one hand, to learn how maltreatment develops and what interventions are effective and for practitioners, on the other, to implement

> innovative interventions in their work with families. Instead, initiatives must be implemented and assessed in a manner that maximizes both the ability of the researchers to determine the effort's efficacy and the ability of program managers and policy makers to draw on these data to shape their practice and policy decisions (p. 11).

A burgeoning field of research investigates how new knowledge is integrated into practice in complex settings. The literature includes research and theory about the diffusion of innovation, organizational learning, knowledge management, learning theory, and ways of structuring learning in complex systems. Models of how to move from knowledge development and dissemination to knowledge integration in complex systems are in the early stages of development and are emerging in many fields such as business, sociology, development, education, and public health (see Lubeck & Post, 2000; O'Dell & Grayson, 1998; Ordonez & Serrat, 2009; Parsons, 2009; Rogers, 2003; Senge, 1990; Senge, Kleiner, Roberts, Ross, & Smith, 1994; Wenger, 1999; Wenger, McDermott, & Snyder, 2002; Wenger & Snyder, 2000).

Tanzer (2009) addressed how to more effectively frame the child abuse prevention message and engage policymakers, prevention partners, and the general public in prevention work. He extrapolated the following "deficiencies in public understanding" (p. 8) about child abuse and neglect prevention from a report commissioned by Prevent Child Abuse America; these deficiencies also support the need for reframing the prevention message.

1. The cause of child abuse and neglect is due to bad parenting, bad people (e.g., "stranger danger"), or the failure of Child Protective Services.
2. The family is an autonomous unit. Thus, child rearing takes place in a private space so outside intervention is equivalent to interfering with family affairs.
3. Lack of understanding about how children develop and how the effects of abuse and neglect can be overcome through intentional effort.
4. Lack of understanding about the role of the broader society in prevention efforts.
5. Feelings of inadequacy to competently address the problem of child abuse and neglect which are reinforced when government/outside forces begin to address the problem.
6. The message is overshadowed by sensationalized extreme cases of child abuse and neglect.

Table 4 provides a summary of Tanzer's (2009) recommendations for engaging policymakers, prevention partners, and the general public in the work of child abuse and neglect prevention.

Table 4: Recommendations for Engaging Stakeholders in Child Maltreatment Prevention Work

Stakeholders	Recommendations
State and Federal Policymakers	■ Promote a prevention policy agenda that focuses on enhancing child development, engaging communities, supporting families, and preventing child abuse and neglect before it occurs ■ Articulate the impact of not preventing child abuse and neglect and explain the return on investment in preventing child abuse and neglect ■ Nurture a diverse pipeline of champions and provide them with solid evidence
Prevention Partners	■ Provide partners with evidence about what works and the tools for implementation ■ Develop prevention leaders who can advance the prevention message ■ Help partners to enhance their advocacy, organizational, and communication skills ■ Determine the central prevention theme(s)/value(s) that will be promoted ■ Expand the pool of partners to include diverse fields/disciplines
General Public	■ Focus prevention efforts on enhancing child development, engaging communities, supporting families, and preventing child abuse and neglect before it occurs ■ Articulate the impact of not preventing child abuse and neglect and explain the return on investment in preventing child abuse and neglect ■ Build on existing networks ■ Clearly articulate the roles the general public can play

Characteristics of Effective Maltreatment Interventions

Daro et al. (2009, p. 2) reviewed child maltreatment intervention programs for children birth-5 that met three important criteria:

- Programs had to reflect relevant theory that draws on a descriptive etiologic framework.
- Programs had to be evidence-based, demonstrating significant results in the core domains of interest (e.g., promoting optimal child development, increasing protective factors, reducing risk and preventing child maltreatment).
- Where applicable, programs had to be rated as "promising" or "proven" by at least one independent review system.

Overall, the researchers identified several common characteristics of the effective intervention under review:

1. Theoretical integrity: "All follow a clear logic model: definition of the problem, examination of etiology and context, identification of measureable goals, and construction of an intervention with a cohesive structure. . . The pivotal element for success was not the

effective execution of individual program components but rather the conceptual framework on which the program rests" (p. 4).

2. Intervention targets the earliest stages: Since learning begins at birth, effective interventions focus on maximizing a child's developmental potential by offering assessment and support starting during pregnancy, immediately after birth, or during pre-school.
3. Impact the bi-directional interaction between individuals and their families: "Successful programs approach prevention with the view that both children and parents (as individual actors) and the family (as a cohesive unit) should be served by interventions" (p. 5)
4. A multi-tiered program structure: "Many proven/promising programs stagger services so that those most in need receive an intensive level of service, while those with less need receive a decelerated level of service.... Ultimately, a staggered program design can contribute to greater program efficacy, efficiency, and cost-effectiveness, and is consistent with the public health model of 'minimal sufficiency" (p. 5).
5. Supplement and link prevention programs to the existing local network of social support services: "By conceptualizing programs as new components within a preexisting system, programs developers can enhance both the potential impacts of their own efforts as well as increase the probability that these impacts will be sustained over time" (p. 6).
6. Systematically examines the needs of the target population across a number of domains: The effects of many successful interventions "often fade over time in part because local communities and public institutions fail to reinforce the parenting practices and choices these programs promote. They also fade because too much emphasis has been placed on the structure and content of the intervention and too little emphasis has been placed creating a mechanism within families as well as organizations to effectively discern their needs and efficiently utilize those resources that are available to them" (p.13).
7. Builds relationships: "The strength and quality of the participant-provider relationship is often viewed as one of the most, if not the most, important determinants of proximate and distal outcomes. Personal contact is certainly a key feature of successful programs, particularly with families who are extremely isolated and disconnected from formal and informal supports" (p. 11-12).
8. Builds a context that offers ongoing support and access to other interventions: "Many of the most successful programs offered a variety of service components, including child development (e.g., home visits). . . family development (e.g., comprehensive health and mental health services). . . and community building" (p. 6).

Challenges Facing the Maltreatment Prevention System

There are numerous challenges facing the child maltreatment prevention system (Goldman, Salus, Wolcott, & Kennedy, 2003). Right now, the gulf between what is known about effective prevention programs and implementation of prevention programs remains wide. Research on effective primary and secondary prevention programs for

young children at risk of child welfare involvement and their families points to critical risk factors such as poverty and caregiver interpersonal violence. Largely absent from this research are effective strategies to address neglect (Klevens & Whitaker, 2007). Among secondary prevention strategies, researchers identify the importance of parent-child interaction and environmental factors (Geeraert, den Noortgate, Grietens, & Onghena, 2004). These factors are further compromised by parental substance use (Eiden, Leonard, Hoyle, & Chavez, 2004). Although many prevention programs address these factors, their implementation with consistency and fidelity is limited, they are not widely available, and there is too little attention to outcomes (Geeraert et al.).

Research suggests that while some policies are supportive of prevention efforts, there are also many policy-linked limitations that restrain more comprehensive approaches. For example, despite research that demonstrates the efficacy of mental health interventions for young children, some policies undermine attempts to make these interventions widely available. Certain state and federal fiscal policies require a mental health diagnosis in order for young children to access needed mental health services, while others do not reimburse for services provided in non-office based settings, such as child care centers (Cooper, 2008).

An often overlooked challenge to prevention programs relates to the individuals implementing the program; that is, identifying professionals who (a) have the ability to demonstrate unconditional positive regard and respect for the individuals and families they serve; (b) believe that individuals have inner strengths that can facilitate change; and (c) are willing to customize services and service delivery approaches to reflect the characteristics, culture, context, strengths, and needs of each family (Goldman et al., 2003). Few studies have examined the impact of these and other factors such as program quality assurance and participant satisfaction on the effectiveness of prevention approaches.

Other overlooked factors that contribute to the effectiveness of the delivery of a maltreatment prevention intervention are staff preparation and organizational capacity. Elliott and Mihalic (2004) pointed out that even when programs have robust designs and rigorous evaluation plans, they may not have the organizational capacity to effectively deliver the program, such as marketing capability, technical assistance, and a data management system. Similarly, Daro et al. (2009) addressed the importance of professional development vis-à-vis the successful implementation of a prevention program:

> When new practice reforms are introduced at an agency, staff need to be given sufficient time to work with the model and build confidence in their ability to deliver the intervention with fidelity. Similarly, management. . . needs to consider how best to orient staff to the new component and its relationship to other programs operate by the agency. It is important. . . to place a higher level of priority on developing the workforce and creating strategic plans for training and development. This will improve the ability of the organization to sustain robust services" (Daro et al., 2009, p. 8).

The Strengthening Families Approach & the Protective Factors Framework

Typically, families are targeted for child abuse and neglect prevention programs on the basis of various risk factors known to be correlated with child maltreatment such as low maternal age, presence of substance abuse in the household, and low income (Thomas et al., 2003). Singularly focusing on risk factors to identify families seems appropriate if the goal is to provide services to families most in need, but this strategy has several key drawbacks.

First, the prediction of which families may maltreat their children on the basis of identified risk factors is relatively unreliable. The notion of "risk" itself implies both an increased likelihood that maltreatment may occur due to various factors and the possibility of variability in reaction to the same factors (Fraser, Kirby, & Smokowski, 2004). This suggests that many families with child, parent, family, or community risk factors do not actually maltreat their children; other factors operate to mitigate their risks (Fraser, 2004).

Second, some of the risk factors such as maternal age or a premature birth, are static, so they are not amenable to an intervention's influence (Ross & Vandivere, 2009). Thus, the program's strategies can only have limited impact on reducing the overall risk for a given family.

Third, targeting families according to risk factors may have the unintended effect of discouraging them from participating; families do not want to be labeled as "high-risk" or potential child abusers. This stigmatization no doubt contributes to the difficulty that many prevention programs experience in recruiting families and keeping them engaged once they are enrolled in the program (Daro et al., 2009; Daro & Donnelly, 2002; Olds & Henderson, 1991). The challenge is to normalize prevention strategies so that needs are assessed and relevant supports are provided to all families served (Daro & Donnelly).

Fourth, Kirk, Firman, & Baker (2004) pointed out:

> Proving a negative, in this case proving that child maltreatment did not occur because of the specific program or service is, if not an impossible task, an extremely difficult one. . .
>
> However, a program that facilitates positive change in risk factors increases the likelihood of greater safety for children (p. 10).

Finally, an exclusive or primary focus on risk factors may interfere with engaging a broad array of partners in child abuse prevention. The orientation of many child and family serving programs is to promote healthy physical, social, emotional, and cognitive development; to enhance their children's early experiences; and to approach families from a proactive perspective, rather than a deficit/risk-based perspective. This inherent strengths-based orientation is conducive to engaging programs around a resiliency framework and helping them to see how their work can be effective in preventing child maltreatment.

Both researchers and practitioners are aware that reducing risks is not enough to ensure that infants and young children in vulnerable families are on a trajectory to optimal development. Identifying

and understanding protective factors are equally as important as researching risk factors; but protective factors have not been studied as extensively or rigorously as risk factors (Centers for Disease Control and Prevention, http://www.cdc.gov/print. do?url=http%3A//www. cdc.gov/ncipc /dvp/ CMP/CMP-risk-p-factors.htm).

- Risk factors are defined here as conditions or attributes of individuals, families, communities, or the larger society that increase the probability of maltreatment and poor outcomes.
- Protective factors are defined here as conditions or attributes of individuals, families, communities, or the larger society that decrease the probability of maltreatment and increase the probability of positive, adaptive, and resilient outcomes even in the face of risk factors. (Fraser et al., 2004; Shonkoff & Phillips, 2000; Thomas et al., 2007).

The focus of the QIC-EC is on the five protective factors articulated in the Strengthening Families Approach: parental resilience, social connections, knowledge of parenting and child development, concrete support in times of need, and social and emotional competence in children. Although the framework assumes that the ability to form a warm, secure bond with a young child may be regarded as a component of "parental resilience" and of "building social emotional competence in children," for the purposes of the QIC-EC research, "nurturing and attachment" will be treated as a sixth interrelated protective factor. More empirical evidence is needed about the processes and outcomes of systematically building these Protective Factors in families at high risk for child maltreatment.

Table 5. The Strengthening Families Protective Factors, Plus One

Protective Factors	Definitions
Parental Resilience	The ability to establish positive relationships, including attachment to a child; capacity to cope with stresses of daily life and recover from challenges.
Social Connections	Having friends, family members, neighbors, and others who provide emotional support and concrete assistance to parents.
Knowledge of Parenting and Child Development	Having accurate information about child development, appropriate developmental expectations, and knowledge of alternative discipline techniques.
Concrete Support in Times of Need	Having financial security to cover basic needs and unexpected costs; formal supports like TANF, Medicaid and job training; crisis services including mental health, domestic violence and substance abuse.
Children's Social and Emotional Competence	A child's ability to interact positively with others and communicate his or her emotions effectively.
Nurturing and Attachment	The ability to respond appropriately, warmly, and consistently to the basic needs of infants and young children and to foster a strong and secure parent-child attachment.

The Overarching Research Question for the R&D Projects

The overarching research question for the R&D projects funded by the QIC-EC is:

> How and to what extent do collaborations that increase protective factors and decrease risk factors in core areas of the social ecology result in optimal child development, increased family strengths, and decreased likelihood of child maltreatment within families of young children at high risk for child maltreatment?

The Four Core Areas of the Social Ecology for the R&D Projects

The QIC-EC Team has identified a core area at each level of the social ecology as leverage points or areas of change within which R&D projects could focus their interventions: *primary caregiver and target child* (individual level), *social support* (relationship level), *community connections* (community level), and *public policy and social norms* (systems level).

Primary Caregiver and Target Child (Individual Level)

Given the enormous amount of research that demonstrates that "early experiences matter" in all domains of development, the nature of a caregiver's knowledge, attitudes, behaviors, skills, capacities, and psychological functioning, takes on great importance. Similarly, characteristics, attributes, and capacities of infants and young children influence how adults respond to them, and consequently how they grow, develop, and learn. The outcomes of focus for the R&D projects are directly tied to the primary caregiver and target child: optimal child development, increased family strengths, and decreased likelihood of child maltreatment.

Social Support (Relationship Level)

In this context, social support refers to those people who most closely surround and are involved with families and young children; who may have direct, regular contact with the child, often serving as caregivers while parents work, go to school, or engage in other activities; and who are sometimes living in the same household as the parent(s) and child. Individuals who serve as social supports—mothers, fathers, grandparents, other relatives, friends, and even co-workers—provide advice and resources about parenting and child rearing, transmit cultural values and practices, and engender feelings of connectedness and security. Several researchers have found that social support may serve as a buffer against life stressors for both the parents and children (Morisset, 1993; Jarrett, 1995).

Community Connections (Community Level)

The notion of community connections grows out of the idea that "the family is nested in a neighborhood system that provides support, or fails to provide support, for child rearing" (Fraser, Kirby, & Smokowski, 2004, p. 44). The work of Sampson, Raudenbush, and Earls (1997) suggests that the presence and involvement of supportive others outside of one's family and close friends may help to promote optimal child development even in the face of poverty and other community-level risk factors. In the context of the R&D projects, community connections include several key components within a community that may be engaged to help build protective factors and to help identify challenges that may create risk factors or interfere with the reduction of risk factors:

- Community leaders
- Organizations (e.g., faith-based organizations, parent organizations)
- Neighbor alliances (e.g., neighborhood associations, neighborhood watch groups)
- Formal support programs and service providers (e.g., early care and education centers; recreational facilities; local health, mental health, and social services)

The community connections core area also includes "social cohesion," defined as: "the degree to which members of a neighborhood share values, beliefs, and expectations and the degree to which neighbors are willing to take action on behalf of others" (Fraser, Kirby, & Smokowski, 2004, p. 44); "the degree to which (members of a neighborhood) feel their neighbors could be counted on to help each other or could be trusted" (Daro & Donnelly, 2002, p. 442).

Public Policy and Social Norms (Systems Level)

For the purpose of the R&D projects, public policy refers to:

> A course of action or inaction chosen by public...authorities to address a problem. Public policy is expressed in the body of laws, regulations, decisions (including funding decisions), and governmental action. . . . These policies can be critical in shaping the environment in which child maltreatment occurs (Centers for Disease Control and Prevention, 2009, p. 78).

Public policies should be examined to determine if they are effective in strengthening families and preventing child maltreatment. Similarly, the larger culture, as expressed in social norms, plays a significant role in how families care for their children. Given national statistics on such factors as the number of children who live in poverty, the incidence of intimate partner violence, the amount of media violence, the reliance on corporal punishment, and the maltreatment rates of infants and young children, it is important to examine and identify strategies to change social norms that reflect a societal acceptance of violence and place a low value on children. The suggestions put forth by Tanzer (2009) offer some suggestions for beginning this process.

Outcomes, Indicators, Measurement, and Instrumentation

Outcomes and Indicators

The three outcomes of focus for all QIC-EC R&D projects are: optimal child development, increased family strengths, and decreased likelihood of child maltreatment.

- The outcome "optimal child development" will be measured by pre- and post-intervention assessments of the "child well-being" domain, to include health, education/cognitive well-being, and social-emotional well-being indicators.
- The outcome "increased family strengths" will be measured by pre- and post-intervention assessments of the following domains and indicators: "home and community" (home safety and social connectedness); "parent capacity" (parenting skills, parenting knowledge of child development, and parent mental health); "substance abuse" (type, frequency, and problem behaviors associated with risky substance abuse; participation in substance abuse treatment programs); "financial solvency" (income; housing stability; food security) and "family conflict" (types and levels of family conflict).
- The outcome "decreased likelihood of child maltreatment" will be measured by pre- and post-intervention assessments of the balance between protective factors and risk factors. Assessment of risk and protective factors will be conducted.

Measuring the Outcomes

A multifactorial approach to assessment will be used by the R&D projects in accordance with Meisels' assertion that "the more sources of data that are tapped, the more adequate and useful will be the conclusions drawn from the assessment" (1992, p. 4). Even though the R&D projects have time limitations and all of the concerns about the primary caregiver, child, social support, and community connections that might arise from the multiple assessments cannot be addressed, multifactorial assessments enable data-driven and prioritized intervention plans that produce richer evaluation data.

Further, in keeping with the QIC-EC's perspective on evidence-based practice, professional judgment that is informed by knowledge of the context of the child, family, community characteristics, culture, and preferences should be factored into the interpretation of assessment results and intervention plans and decisions. This is particularly important when using standardized instruments that did not include culturally diverse populations in the norming process and when cultural or community characteristics should be factored in risk assessments.

Selecting Common Instruments

R&D projects will be required to use several common instruments to support the cross-site evaluation. Some will be standardized assessment

tools and others will be developed by the QIC-EC. Several criteria were used in recommending common standardized instruments. They should: (a) include measures for assessing infants birth-24 months; (b) not require special credentials for administration, scoring, and interpretation; (c) be easily obtainable; (d) be designed to measure multiple indicators related to the R&D project outcomes; (e) have a theoretical orientation that was empirically-based; and (f) have acceptable validity and reliability data. Preference was also given to assessment tools that have Spanish language versions and that actively engage parents in order to encourage self-reflection.

Three of the recommended common instruments are not standardized as they are currently under development by the QIC-EC Team: a demographic data tool template, the protective factors assessment tool, and the Social Support Map. While numerous instruments are described here as prospective tools for assessing indicators of the three outcomes, this does not mean that the QIC-EC Team is recommending use of all the instruments for each outcome; all listed simply are regarded as viable options. The information that follows provides an overview of recommended common instruments.

A Demographic Data Tool Template

A template for recording common demographic and other data on all participating primary caregivers, gathered via an in-person interview, is currently under development by the QIC-EC Team. This instrument will include items that assess family composition, neighborhood context, and other indicators suggested by Child Trends as most easily assessed in this format (e.g., frequency and types of "junk" food eaten, frequency of doctor visits, number of emergency room visits for injuries, service access, and reasons for accessing or not accessing services). The purpose of the template is to ensure that certain variables are recorded on all participating families. Funded R&D projects may choose to add demographic information to the template.

Measuring the Protective Factors

An extensive protective factors assessment tool is currently under development by the QIC-EC. This tool will be used by funded R&D projects as a pre-, post-, and repeated measure instrument to gather baseline, intermediate, and final data on participating families' knowledge, attitudes, and behaviors that support and reflect the identified protective factors. It might not be necessary to focus on each protective factor with each participating family. Daro et al. (2009) pointed out:

> The most salient protective factors or risk factors to target to avoid negative outcomes will vary across populations as well as communities. Finding the correct leverage point or pathway for change for a specific family requires careful assessment followed by an offer of assistance commensurate with a family's level of need. (p. 10).

Measuring Risk Factors

Numerous risk assessment instruments have been developed for child protection work to gauge the potential occurrence or reoccurrence of child

maltreatment. The risk assessment instruments recommended for common use by all funded R&D projects are the Child at Risk Field, the Childhood Level of Living Scale, and the Child Abuse Potential Inventory.

The Child at Risk Field

The Child at Risk Field (CARF) is designed to measure risk factors for all types of maltreatment. The CARF consists of 14 open-ended questions to rate risk influences for the child, parent, family, maltreatment, and the level of intervention needed to address the risk factors. Four additional qualifiers are included that measure the duration and pervasiveness of negative influences that may contribute to risk of maltreatment and the caregiver's acknowledgement and control of these negative influences. Practitioners rate information on a risk scale ranging from 0 – 4. A final risk score is determined by combining the average ratings on the 14 risk factors and 4 qualifiers and dividing by 2. Interpretations of risk scores range from "no likelihood" to a "high likelihood of maltreatment." (Source: Milner, Murphy, Valle, & Tolliver, 1998)

The Childhood Level of Living Scale

The assessment of risk for neglect is essential given the data on the vulnerability of infants and young children to the experience of neglect. However, the assessment of risk for or actual neglect is difficult because the practitioner has to be sensitive to questions that impose middle-class values on a client or require resources beyond that of the client. The Childhood Level of Living Scale (CLLS) is one of the few rating scales designed to assess positive and negative elements of child care and home life particularly with regard to neglect of young children under age 7. In this regard, the scale focuses on major areas of concern relative to the child's minimal health, safety, and stimulation requirements. The CLLS contains 99 items organized into two scales: Physical Care and Emotional/Cognitive Care. The Physical Care scale includes items that comprise five subscales: General Positive Care, State of Repair of House, Negligence, Quality of Household Maintenance, and Quality of Health Care and Grooming. The Emotional/ Cognitive scale includes items that comprise four subscales: Encouraging Competency, Inconsistency of Discipline and Coldness, Encouraging Superego Development, and Material Giving. (Source: Pecora, Fraser, Nelson, McCroskey, &Meezan, 1995)

The Child Abuse Potential Inventory

The Child Abuse Potential Inventory (CAP or CAPI) is a widely used self-report tool that was designed to measure both personal and interactional dimensions of parenting in order to assess the risk of perpetrating physical abuse. The CAP inventory is a 160-item questionnaire in an agree/disagree response format. The primary scale is a physical abuse scale and seven factor scales grouped as personal (Distress, Rigidity, Unhappiness, and Loneliness) and interpersonal (Problems with Child and Self, Problems with Family, and Problems from Others). The CAP takes 15-20 minutes to administer, requires a third-grade reading level, and is available in a Spanish language version. Extensive research with the CAP has revealed scores that correlate with an adult's childhood history of abuse, life stress, and psychological traits such as external locus of control, low self-esteem, high reactivity, ineffective coping, and depression. (Source: Pecora et al., 1995)

Measuring Optimal Child Development

The outcome "optimal child development" will be measured by pre- and post-intervention assessments of the domain "child well-being" identified by Child Trends to include the indicators health, education/cognitive well-being, and social-emotional well-being. Some of the instruments for making direct assessments of child well-being identified by Child Trends are included here. Health indicators will be assessed in an in-person interview using the demographic data tool, per the recommendation of Child Trends.

As the initial target population is children ages birth–24 months, two common instruments are recommended for this age group: Ages and Stages Questionnaire, Third Edition and the Denver II. Four other instruments are recommended for use with infants and young children 12 months and older: the Infant Toddler Social-Emotional Assessment, the Child Behavior Checklist for Ages 1½–5 and the Child Development Inventory, and the Childhood Level of Living Scale.

Ages and Stages Questionnaires, Third Edition (ASQ-3)

The Ages and Stages Questionnaire, Third Edition (ASQ-3) is a parent-completed developmental screening for infants and young children ages 1-66 months. The areas screened include communication, gross motor, fine motor, problem solving, and personal-social. The ASQ-3 includes a series of 21questionnaires based on age intervals by months: 2, 4, 6, 8, 9, 10, 12, 14, 16, 18, 20, 22, 24, 27, 30, 33, 36, 42, 48, 54, and 60. There are 30 items per questionnaire with six items for each of the five areas screened. The ASQ-3 requires a 4th to 6th grade reading level and can be completed by most parents in 10-15 minutes; scoring takes 2-3 minutes. Raw scores for each area are calculated and compared to cutoff points for each area, which show whether the child's development is delayed (i.e., refer for assessment), suspect (i.e., monitor and rescreen in 2–6 months), or typical. The ASQ-3 has both English and Spanish language versions.
(Source: http://www.myexpospace.com/DLQA/PAS%202009/file/ASQ-3_at_a_glance.pdf)

Denver II

The Denver II, a revision of the Denver Developmental Screening Test, is designed for use by professionals or trained paraprofessionals to monitor the development of infants and young children, 2 weeks to 6 years old. The Denver II has 125 items including a set of questions for parents and simple tasks for children on that cover four general areas: 25 personal-social items (such as smiling), 29 fine motor adaptive items (such as grasping and drawing), 39 language items (such as combining words), and 32 gross motor items (such as walking). The number of items administered during an assessment will vary with the child's age and ability.

The Prescreening Developmental Questionnaire (PDQ-II) was developed to help parents quickly identify whether their children need further assessment. The PDQ-II is a pre-screening consisting of 91 parent questions extrapolated from the DDST-II. It was created for parents to complete easily and quickly to assess whether their children have non-normal scores and need to complete the full DDST-II. The Denver II and

PDQ II have both English and Spanish language versions.
(Source:
http://www.denverii.com/denveriiarticle.html)

The Infant Toddler Social Emotional Assessment (ITSEA)

The Infant Toddler Social Emotional Assessment (ITSEA) is a tool designed to measure strengths and weaknesses related to social-emotional development and competencies in children ages 12 to 48 months old. It may also be used to identify caregivers who could benefit from additional dialogue about children's social-emotional developmental expectations. The ITSEA relies on parents' or child care providers' observations of the child in natural environments. It can be administered as a questionnaire or a structured interview. The ITSEA takes 20 to 30 minutes to complete as a questionnaire, and 35 to 45 minutes to administer as an interview. The reading level is between 4th and 6th grade. A professional with training in standardized assessment is needed to interpret the results. There is also a short version, the Brief Infant-Toddler Social and Emotional Assessment (BITSEA), which can be used as an initial screen for the ITSEA. The ITSEA and BITSEA have both English and Spanish language versions.

The ITSEA contains 166 items that measure 17 subscales related to four behavioral domains: (a) externalizing (activity/impulsivity, aggression/defiance, and peer aggression subscales); (b) internalizing (depression/withdrawal, general anxiety, separation distress, and inhibition to novelty subscales); (c) dysregulation (sleep, negative emotionality, eating, and sensory sensitivity subscales); and (d) competence (compliance, attention, imitation/play, mastery motivation, empathy, and prosocial peer relations/empathy subscales.
(Source:http://www.acf.hhs.gov/programs/opre/ehs/perf_measures/reports/resources_measuring/res_meas_cdix.html)

The Child Behavior Checklist for Ages 1½–5

The Child Behavior Checklist for ages 1½–5, referred to as the CBCL/1½–5 or the CBCL Preschool, is completed by parents, parent surrogates, and others who see children in homelike contexts. This instrument contains 99 problem items plus an open-ended item for adding other problems not listed on the form. The form requires a respondent to rate each item on a scale from 0 – 2 based on current behavior or behavior within the last two months: 0 = not true, 1 = somewhat or sometimes true, 2 = very true or often true. The CBCL 1½–5 solicits descriptions of behavior, illnesses, disabilities, what concerns the respondent most about the child, and the best things about the child. Thus, the form yields both quantitative scores for each problem item and a qualitative description of the child's functioning in the respondent's own words.

The CBCL 1½–5 requires only a fifth-grade reading level and can be completed by most respondents in 15-20 minutes. If there are concerns about a respondent's ability to complete the form independently, a recommended procedure is provided that avoids embarrassment while still maintaining the standardization of the assessment process. The CBCL 1½–5 has both English and Spanish language versions. A computerized scoring version is available. (Source: DelCarmen-Wiggins & Carter, 2004)

The Child Development Inventory

The Child Development Inventory (CDI) is a parent-report measure for the assessment of developmental status of children 15 months to 6 years. The CDI is a revised version of the Minnesota Child Development Inventory that was in widespread use for many years. The CDI was designed to be easily understood by parents and to intentionally involve them in the assessment process. It can be completed in 20-30 minutes.

The CDI consists of 270 developmental items and a 30-item problem checklist organized in a "yes-no" format ("yes" the child performs the item, "no" the child does not yet perform the item). The developmental items load into nine scales: Social, Self-Help, Gross Motor, Fine Motor, Expressive Language, Language Composition, Letters, Numbers, and General Development. A child's raw scores are plotted on the CDI Profile and results are interpreted as falling in the normal, borderline, or delayed range. Items on the problems checklist are not scored but should be reviewed for the presence or absence of the problem. (Source: Naar-King, Ellis, & Frey, 2004)

Measuring Family Strengths

The outcome "increased family strengths" will be measured by pre- and post-intervention assessments of the domain "home and community" identified by Child Trends to include the indicators home safety and social connectedness. This outcome also will be measured by pre- and post-intervention assessments of the domains "parent capacity, substance abuse, financial solvency, and family conflict" identified by Child Trends to include the following indicators: parenting skills; parenting knowledge of child development; parent mental health; type, frequency, and problem behaviors associated with risky substance abuse; income; housing stability; food security; and types and levels of family conflict.

Fourteen (14) instruments or measures are described here as potential tools for use by all funded R&D projects to provide a comprehensive assessment of the above indicators: the Family and Child Experiences Survey Safety Measures; the Keys to Interactive Parenting Scale; the Knowledge of Infant Development Inventory; the Knowledge of Child Development Inventory; the General Well-Being Scale; Parenting Stress Index; the Center for Epidemiologic Study Depression Scale; the Brief Symptom Inventory; the Family Relationship Index from the Family Environment Scale; a Social Support Map; the Addiction Severity Index; the CRAFFT Drug Screen Instrument; the Fragile Families and Child Well-Being Economic Hardship Indicators Scale; and the Conflict Tactics Scale.

The Family and Child Experiences Survey Safety Measures

Indicators of home safety will be assessed via incorporating into the demographic data tool the nine items from the Family and Child Experiences Survey (FACES) cited by Ross and Vandivere (2009) as safety measures.

The Keys to Interactive Parenting Scale (KIPS)

The Keys to Interactive Parenting Scale (KIPS) is a structured observation tool developed to

measure a caregiver interacting with a child (ages 2 – 71 months) during play in a familiar environment. The KIPS focuses on 12 behaviors believed to be related to effective parenting: (a) sensitivity of responses; (b) supports emotions; (c) physical interaction; (d) involvement in child's activities; (e) open to child's agenda; (f) engagement in language; (g) experiences reasonable expectations; (h) adapts strategies to child; (i) limits and consequences; (j) supportive directions; (k) encouragement; and (l) promotes exploration and curiosity. The KIPS observation takes 20 minutes and 10 minutes to score. There are both English and Spanish language versions of the KIPS scoring forms. (Source: http://www.smartstart-nc.org/conference/2009/Handouts09/348a.pdf)

The Knowledge of Infant Development Inventory (KIDI)

The Knowledge of Infant Development Inventory (KIDI) is a self-administered 75-item inventory that takes approximately 20 minutes to complete. The KIDI was developed to assess a parent's factual knowledge of parental practices, child developmental processes, and infant norms of behavior. An individual with a seventh grade reading level can self-administer the inventory. (Source: http://www.acf.hhs.gov/programs/opre/ehs/perf_measures/reports/resources_measuring/res_meas_phir.html)

The Knowledge of Child Development Inventory (KCDI)

The Knowledge of Child Development Inventory (KCDI) is a 56-item multiple-choice test of knowledge of child development from birth to age three in the areas of emotional, cognitive, physical, and social development. Normative data were obtained on the KCDI from a sample population of 434 adolescent and adult females from varying racial backgrounds. The instrument has an eighth grade reading level and a minimum of technical terminology. The KCDI would be relevant in settings where pre- and post-assessment of knowledge of child development is desired. (Source: http://www.labmeeting.com/paper/17816826/larsen-juhasz-1986-the-knowledge-of-child-development-inventory)

The General Well-Being Scale (GWB)

The General Well-Being Scale (GWB) is a self-administered questionnaire that was developed to assess an individual's subjective feelings of psychological well-being and distress within the last month. The GWB measures six positive and negative feeling dimensions: (a) positive well-being, (b) self-control, (c) vitality, (d) anxiety, (e) depression, and (f) general health. There are English and Spanish language translations of the GWB. Ross and Vandivere (2009) reported, "Among its six subscales, the GWB has been described as particularly effective at measuring depression" (p. 23). (Source: McDowell, 2006).

The Parenting Stress Index (PSI)

The Parenting Stress Index (PSI) was developed to screen for stress in parents of infants birth to three years old. The PSI includes 101 items derived from attachment, temperament, and stress theories. The items are scored on a 5-point scale by the primary caretaker and takes about 20-30 minutes to complete; it requires a fifth-grade

reading level. The PSI yields a total stress scale score plus six child domain subscale scores and seven parent domain subscale scores. The subscale scores in the child domain are: Adaptability, Acceptability, Demandingness, Mood, Distractibility/Hyperactivity, and Reinforcement of Parent. The subscale scores in the parent domain are: Depression, Isolation, Attachment, Role Restriction, Sense of Competence, Relationship with Spouse, and Parent Health. The PSI contains an optional 19-item Life Stress Scale that provides a context for the other PSI scores. (Source: Pecora et al., 1995)

The Center for Epidemiological Studies Depression Scale (CES-D)

The Center for Epidemiological Studies Depression Scale (CES-D) is a 20-item self-report depression scale. The CES-D measures depressive feelings and behaviors within the past week. Scoring is extremely simple; higher scores suggest the presence of depressive symptoms. (Source: http://counsellingresource.com/quizzes/cesd/index.html)

Brief Symptom Inventory

The Brief Symptom Inventory (BSI) is a self-report or practitioner-administered tool that

consists of 53 items covering nine symptom dimensions: Somatization, Obsession-Compulsion, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic anxiety, Paranoid ideation and Psychoticism; and three global indices of distress: Global Severity Index, Positive Symptom Distress Index, and Positive Symptom Total. The global indices measure current or past level of symptomatology, intensity of symptoms, and number of reported symptoms, respectively. The BSI can be completed in 12-15 minutes. There is a BSI for Spanish speakers. (Source: Groth-Marnat, 2003)

Family Relationship Index from the Family Environment Scale

The Family Relationship Index (FRI) on the Family Environment Scale (FES) uses three FES subscales—cohesion, expressiveness, and conflict—to assess perceived social support among family members. All of the 90 items on the full FES are in a true/false format; the full FES can be completed in 15-20 minutes. However, a shorter form of the FES is available (27 items) that addresses only the three subscales that together comprise the Family Relationship Index. The FES is written at a sixth-grade reading level and has a Spanish language translation version. (Source: Pecora et al., 1995)

Social Support Map

In addition to obtaining a measure of perceived social support via the Family Relationship Index on the Family Environment Scale, R&D projects should work with the primary caregiver to develop a social support map, adapted from Tracy (1990), under development by the QIC-EC Team. The map solicits and provides a visual representation of information about social support or the indicator "social connectedness," per the Child Trends report. The social support map would depict the following: (a) categories of social support (i.e., family, friends, neighbors, co-workers, other); (b) the number and names of social supports in each category; (c) the nature of

the primary caregiver's relationship with the social supports in each category; (d) which of the social supports would be contacted in case of an emergency in the middle of the night; (e) frequency of use of each social support; (f) reciprocity between the primary caregiver and the various social supports; (g) membership and level of interaction in various groups (e.g., civic or religious organizations); and satisfaction with each social support.

Addiction Severity Index

Numerous research studies have shown a link between parental substance abuse and child maltreatment, so screening is important. The Addiction Severity Index (ASI) assesses seven dimensions typically of concern in addiction: medical status, employment/support status, drug/alcohol use, legal status, family history, family/social relationships, and psychiatric status. There is an ASI for adolescents and one for Spanish speakers. (Source: Groth-Marnat, 2003)

CRAFFT Drug Screen Instrument

The CRAFFT is a six-item alcohol and drug screening tool specifically designed for adolescents. For example, item one reads, "Have you ever ridden in a car driven by someone (including yourself) who was 'high' or had been using alcohol or drugs?" Ross and Vandivere (2009) reported, "To use the instrument as a research tool would likely require inserting time-delimitations in the questions. . . In a pre-test, post-test assessment, the first in the CRAFFT might need to change to "Have you ever ridden in a car driven by someone (including yourself) who was 'high' or had been using alcohol or drugs *in the last year*?" (p. 25)
(Source:
http://www.projectcork.org/clinical_tools/pdf/CRAFFT.pdf)

Fragile Families and Child Well-Being Economic Hardship Indicators Scale

Indicators of financial solvency will be assessed via incorporating into the demographic data tool the eight items from the Fragile Families and Child Well-Being Economic Hardship Indicators Scale cited by Ross and Vandivere (2009) as measures of whether or not a family faced risky conditions because of financial problems.

The Conflict Tactics Scale (CTS)

The Conflict Tactics Scale (CTS) consists of 80 items that are designed to explore intrafamily conflict and violence, focusing particularly on the adults in the family. Of these 80 items, 20 are administered to the parent about his/her relationship with the child. The next 20 questions are directed to the parent about the partner and his/her interactions with the child. If there is no partner, these questions are not asked. The last 40 questions of the measure address the interactions between the parent and the parent's partner using the same questions. The measure assesses how the parent reacts in a conflict with the child, such as trying to discuss an issue calmly, yelling at or insulting the child, threatening to spank the child, and hitting or trying to hit the child. The items gradually become more coercive and aggressive as they progress. The items are rated on a seven-point scale, ranging from 0=never to 6=almost every day.

This instrument has four scales: Parent-Child (Scale 1), Partner-Child (Scale 2), Parent-Partner (Scale 3), and Partner-Parent (Scale 4). The parent-child and partner-child conflict scales each have five subscales and the two parent-partner scales have four subscales each. The five subscales are: verbal discussion, verbal aggression, hostile-indirect withdrawal, physical aggression, and spanking. The parent-partner and partner-parent scales do not include the spanking subscale. The CTS can be administered in a self-report or interview format; the instrument is written at a sixth grade reading level. The CTS parent-child (PC) can be completed in 10 minutes and has both English and Spanish language versions. (Source: http://pubpol.duke.edu/centers/child/fasttrack/techrept/c/cft/)

Measuring Decreased Likelihood of Maltreatment

The outcome "decreased likelihood of child maltreatment" will be measured by pre- and post-intervention assessments of the balance of risk factors and protective factors. In addition, the following data related to the target child and primary caregiver will be tracked:

- Date, nature, and disposition of any reports of child abuse and/or neglect
- Child welfare services provided for the child and primary caregiver
- Self-report of primary caregiver regarding incidents of abuse and/or neglect involving
- the target child and/or other children in the household
- Self-report of primary caregiver regarding level of risk for abuse and/or neglect in their family

Similarly, the following administrative data will be tracked to determine if there were changes in child maltreatment data at the population level of the respective communities:

- Reports of child abuse and neglect for children ages birth–5 years
- Disposition of child abuse and neglect reports of (percentage substantiated and unsubstantiated)
- Emergency room visits for children birth–5, disaggregated by causes for the visit

Table 6 provides a comprehensive view of the common R&D project outcomes, the designated domains and indicators of those outcomes, and respective recommended instruments that could be used to measure the indicators.

Table 6: Synthesis of Outcomes, Indicators, and Proposed Instrumentation

Outcomes	Domain(s)	Indicators	Proposed Instrumentation and Methods for Measuring Indicators
Optimal Child Development	*Child Well-Being*	Health	■ Health questions on the Demographic Data Tool
		Education/Cognitive Well-Being	■ Ages and Stages Questionnaires-3 ■ Denver II ■ Child Behavior Checklist for Ages 1.5-5 ■ Child Development Inventory
		Social-Emotional Well-Being	■ Ages and Stages Questionnaires-3 ■ Denver II ■ Child Behavior Checklist for Ages 1.5-5 ■ Child Development Inventory
Increased Family Strengths	*Home and Community*	Social Connectedness	■ Social support questions on the Demographic Data Tool ■ Family Relationship Index from the Family Environment Scale ■ Social Network Analysis ■ Social Support Map
		Home Safety	■ The Family and Child Experiences Survey Safety Measures incorporated into the Demographic Data Tool
	Parent Capacity	Parenting Skills	■ Keys to Interactive Parenting Scale ■ Protective Factors Assessment Tool ■ Childhood Level of Living Scale
		Parenting Knowledge of Child Development	■ Protective Factors Assessment Tool ■ Knowledge of Infant Development Inventory ■ Knowledge of Child Development Inventory

		Parent Mental Health	■ General Well-Being Scale ■ Parenting Stress Index ■ Center for Epidemiological Studies Depression Scale ■ Brief Symptom Inventory
	Substance Use	Type, Frequency, and Problem Behaviors Associated with Risky Substance Use	■ Addiction Severity Index ■ CRAFFT Drug Screen Instrument ■ Substance use program participation questions on the Demographic Data Tool
		Participation in Substance Use Programs	■ Substance use program participation questions on the Demographic Data Tool
	Financial Solvency	Income Housing Stability Food Security	■ The Fragile Families and Child Well-Being Economic Hardship measures incorporated into the Demographic Data Tool
	Family Conflict	Types and Levels of Family Conflict	■ Conflict Tactics Scale
Decreased Likelihood of Child Abuse and Neglect	*Balance of Risk and Protective Factors*	Increase in Protective Factors and Decrease in Risk Factors	■ Protective Factors Assessment Tool ■ Assessment of Protective Factors on Other Tools ■ Child At Risk Field ■ Childhood Level of Living Scale ■ Child Abuse Potential Inventory ■ Social support questions on the Demographic Data Tool ■ Family Relationship Index from the Family Environment Scale ■ Social Network Analysis Tool ■ Social Support Map

Introduction to Evaluation Plans

Four broad categories of evaluation are involved in the QIC-EC work:

- R&D project evaluations conducted by the projects' evaluators;
- Cross-site evaluation of R&D projects conducted by the QIC-EC Evaluation Team, with support from the local R&D projects evaluators;
- Overall evaluation of QIC-EC conducted by the QIC-EC Evaluation Team; and
- Accountability and monitoring of QIC-EC responsibilities conducted by the partner organizations themselves.

This section addresses the cross-site evaluation with an introductory framework for evaluation that is relevant to all evaluation work of the QIC-EC.

General Evaluation Framework

The evaluation work of the QIC-EC is framed in light of (a) utilization-focused evaluation and (b) key conditions in the field of prevention of child maltreatment. A brief discussion of the meaning and relevance of these framing concepts for the evaluation work follows.

Utilization-Focused Evaluation

The evaluations undertaken by the QIC-EC R&D projects are to be designed as "utilization-focused" evaluations. Utilization-focused evaluations (Patton, 2008):

- focus on utility and actual use by the intended users;
- do not advocate a particular evaluation model, method, theory, or use; and
- are highly participatory to enhance learning and usability.

No evaluation covers all possible aspects of an initiative's work. Choices must be made in focus based, to a large extent, on budget and the emphasis that can be most useful for the purpose and operation of the endeavor being evaluated. In this case, the focus of the evaluation is to support the purpose and functioning of the QIC-EC.

When framing an evaluation with a utilization-focused orientation it also is important to realize that evaluation can be useful both through the *findings* of the evaluation and through the *processes* of the evaluation. The evaluation work within the QIC-EC attends to the utilization of both the findings and the processes to ensure the greatest value from resources allocated to evaluation.

Use of Evaluation Findings

Evaluation findings can be used for a variety of purposes. For example, they can be used:

- *To make judgments of overall value* to inform and support major decision making about the value and future of a program or model;
- *To improve a program* through learning more about how it is operating and the benefits that are occurring;
- *For accountability and monitoring* to demonstrate that resources are well managed, handle

routine reporting, and/or identify problems in routines or processes;

- *To develop a systemic orientation* by learning about and determining how to function within complex, emergent, and dynamic conditions; and
- *To generate new knowledge* to enhance general understandings and identify broad
- principles. (Patton, 2008)

All of the above uses of evaluation findings are involved to some extent in one or more of the evaluation activities of the QIC-EC. However, each of the categories of evaluations identified within the QIC-EC work has a different combination of uses of evaluation findings. In general, the four QIC-EC evaluations align with the above uses of evaluation findings as follows:

1. *R&D project evaluations*: Each R&D project has a local evaluator who conducts the evaluation of the R&D project. The specific local uses of the findings will be determined by the R&D projects but generally speaking the use of the findings is expected to be in the areas of *judgment, program improvement systemic orientation* and/or *generation of new knowledge* regarding their own site. The local evaluations also will contribute to *developing a systemic orientation* and *generation of new knowledge* for the broader field of child maltreatment prevention as they become part of the cross-site evaluation. Also, as R&D projects are required to track all costs, submit reports, and engage in other administrative management procedures over the life of the project, the use of these efforts align with the *accountability and monitoring* uses of evaluation.
2. *Cross-site evaluation*: The cross-site evaluation of the R&D projects is conducted by the QIC-EC Evaluation Team with data and analyses generated largely by the R&D projects. The primary uses of the findings from the cross-site evaluation are to *develop a systemic orientation* and *generate new knowledge* for use within the broader field of child maltreatment prevention. It also has secondary uses of *program improvement and developing a systemic orientation* that the QIC-EC applies to its own work.
3. *QIC-EC evaluation*: The overall QIC-EC evaluation which focuses on knowledge development, dissemination, and integration is conducted the QIC-EC Evaluation Team. The primary use of the QIC-EC evaluation is *development* and *learning* with a secondary purpose of *knowledge generation.*
4. *Accountability and monitoring evaluation*: The QIC-EC Team members, individually and collectively, have embedded within their work their own evaluation methods to use for *accountability* and *monitoring* purposes. Some of these methods also serve an *improvement* use. The leaders of the partner organizations have infused evaluative thinking into their organizations and have high-quality processes in place for accountability and monitoring purposes.

Use of Evaluation Processes

Although the *findings* of an evaluation are typically thought of as the primary use of evaluation, it is important to consider how the evaluation *process* itself can be used to support the endeavor being evaluated (Patton, 2008). For example, the evaluation process can be used to infuse evaluative thinking into the way an organization functions. It is becoming increasingly common for organizations to have certain evaluative processes as a regular part of their operation. There is a growing recognition of the importance of asking evaluative questions (e.g., Is there evidence that a program works?) into routine decision making.

Evaluation processes are also useful in enhancing shared understanding among people. Focus groups, for example, often result in new, shared understandings among those involved in the group. Such participatory evaluation processes also can increase engagement, self-determination, and ownership of an intervention. Another evaluation process that often supports the direction of a program or initiative is the process of clarifying what is to be measured and the act of measurement. What gets measured is what gets done.

As evaluation focuses on complex system and organization dynamics, the evaluation processes themselves provide key ways to bring about adjustments. Choosing who to engage in certain data collection and interpretation activities can become, for example, a means of developing, disseminating, and/or using new ways of thinking.

To increase the utility of each of the evaluations, the evaluators attend to the value of the evaluative processes by designing the evaluations to encourage and enhance learning, participation, appreciation, and integration of systems-based methodologies. Thus, the evaluators use as many opportunities as reasonable to invite and appropriately involve the QIC-EC, the QIC-EC Learning Network, TTA Network, Children's Bureau and R&D project partners and stakeholders in phases of the evaluations.

Conditions Affecting Evaluation Choices

The evaluation takes into account the state of knowledge in the field of prevention of child maltreatment and other conditions that are affecting the field. Of particular relevance are:

- emphasis on both risk and protective factors;
- shift from a program and services orientation to a complex systems orientation;
- expansion of evaluation methods and tools; and
- complexity of knowledge dissemination and integration.

Each of these conditions and their relevance to evaluation choices is described below.

Emphasis on Both Risk and Protective Factors

As previously indicated, a perspective change has been occurring regarding child maltreatment prevention. While continuing to attend to decreasing risk factors, the field is paying greater attention to preventing child maltreatment by increasing protective factors. This shift has a major influence on evaluation because some measures of protective factors are still in the early

stages of development and programs and services with this orientation are not yet as well developed or extensively studied. This has implications for the appropriate measurement and evaluation designs to use.

Shift from Programs and Services to a Complex Systems Orientation

A shift is occurring from a focus on individual programs and services to a broader, comprehensive focus on systems and the complexity within which programs function. This does not mean that programs and services are unimportant, but that attention to the parts (programs) alone is insufficient. Attention is needed to the parts, the whole, and the greater whole. A systems orientation is needed to support this expanded thinking.

As indicated earlier, the QIC-EC Team is taking an approach that recognizes and appreciates that changes for children and families happen within a web of relationships formed by social networks, community context, programs, and systems.

For the purposes of evaluation, "systems" are defined as the parts and interconnections that form a coherent whole. Programs and services are considered within their context, paying attention to how the interconnections, relationships, and differences that exist among and between parts form a coherent whole. Although there are many issues related to a systems orientation that are important, two primary ones are the distinction between nested and networked social systems and a recognition of different dynamics within systems.

Nested vs. Networked Social Systems

Social systems tend to be conceptualized in two ways—as either nested or networked. Most bureaucratic, hierarchical organizations build on a notion of nested systems where one level is nested within another. For example, a county agency may be nested within a state system and subject to the policies and direction of a state agency.

In today's complex world, networked systems are increasingly and especially important. Partnerships and interconnections among service providers across and among organizations are examples of networked systems. Thinking in terms of a networked model of systems directs attention to the complex relationships that can exist across and among levels of the ecological model.

Systems Dynamics

Multiple dynamics operate within complex systems. These dynamics are of three types—organized, unorganized, and self-organizing.

- *Organized* dynamics are those interactions between the parts of a system that follow highly predictable patterns—cause and effect is clear and linear.
- In contrast, *unorganized* dynamics are those interactions between the parts of a system that are entirely random in nature. Cause-and-effect relationships cannot be drawn, and there are no discernable patterns.
- Between these two phenomena sits *self-organizing* dynamics. Within a self-organizing dynamic, cause and effect are not direct, linear, or predictable. Elements and agents within the system influence each other and, because of these multiple influences,

unanticipated patterns often emerge. Evaluation methods vary depending on the dynamics being studied.

Expansion of Evaluation Methods and Tools

The extensive discussions in the field about evidence-based and evidence-informed programs and practices are an important part of the context of these evaluations. The evaluations are designed to both take advantage of the expanding range of methods and tools that are deemed appropriate for developing evidence and contribute to the field regarding methods that especially recognize the complexity of systems. This provides an opportunity for learning more about research methods that use this orientation. For example, some of the evaluations use Social Network Analysis, a methodology that is increasingly being used when working in complex settings. The evaluations can contribute to this methodological learning.

The integration of complexity concepts in the evaluation design is particularly relevant now—a time of important shifts in thinking about research and evaluation. Multiple system dynamics, as discussed above, are entangled in social systems and can be operating in different parts of the same systems at one time. To further an understanding of them, one can selectively look at these dynamics using different evaluation methods and types of data. Thus, an evaluation may use a mix of qualitative and quantitative data and multiple evaluation designs to view complex systems as a whole (W.K. Kellogg Foundation, 2007).

Complexity of Knowledge Dissemination and Integration

The rapid expansion of new knowledge in nearly all fields, and its expanded dissemination through the internet and other means, is creating a new environment for both the conduct and use of research and evaluation. It is no longer sufficient to assume a simple linear progression from knowledge development to dissemination to use/integration. Models of how to move from knowledge development and dissemination to knowledge integration in complex systems are in the early stages of development and are emerging in many fields. Thus, it is prudent to use the evaluation of the QIC-EC work as an opportunity to develop a deeper understanding of knowledge development, dissemination, and integration. Such learning can both enrich the work of the QIC-EC and contribute to the growing body of understanding about knowledge dissemination and integration.

Phases of Evaluation

The four phases of the QIC-EC evaluations are: design the evaluation; plan and engage in data

collection; make meaning from the data (including analysis, synthesis, and interpretation of data); and shape practice. These phases are neither linear nor distinct. See Figure 1.

Each phase informs and influences the others throughout the life of an evaluation. As participants engage in making meaning from the data in complex situations, they often *at the same time* are reshaping their practices and perspectives. For example, barriers that arise, or learning that happens in the process of data collection will

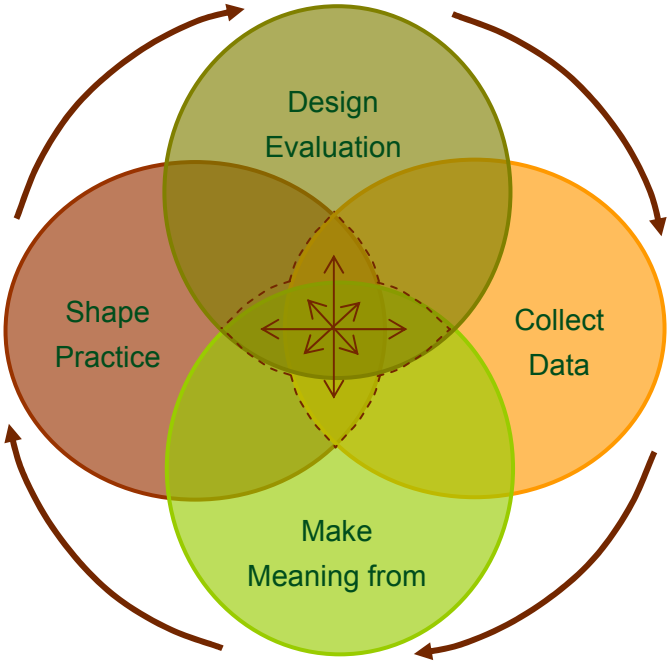

Fig. 1: Phases of Evaluation

inform the design, and will feed into meaning making. Meaning making will surface new questions, which will point to adaptation or revision in design and data collection procedures.

Cross-Site Evaluation of the Research and Demonstration Projects

Introduction

The cross-site evaluation plan presented below begins by looking at the overall design of the cross-site evaluation. It then describes how evaluators collect data, make meaning, and shape practice. The final subsection describes how the QIC-EC Team, the QIC-EC Evaluation Team cross-site evaluation team, and the R&D project principal investigators and evaluators work together to leverage the evaluation process.

Throughout the evaluation, the QIC-EC Evaluation Team works closely with the R&D project principal investigators and project evaluators as well as the QIC-EC project director to ensure the utility of the cross-site evaluation in regard to both evaluation findings and processes. The evaluation processes themselves can assist the QIC-EC and R&D projects in making decisions about the R&D interventions as they are being implemented. The processes also can help the QIC-EC and R&D projects position themselves for effective knowledge dissemination and integration in preparation for the use of the new knowledge that is generated.

Designing the Evaluation

The primary purpose of the cross-site evaluation is to conduct an analysis across the QIC-EC funded R&D projects to generate new knowledge about the key research question the QIC-EC has posed to the R&D projects in the RFP:

> How and to what extent do collaborations that increase protective factors and decrease risk factors in core areas of the social ecology result in optimal child development, increased family strengths, and decreased likelihood of child maltreatment within families of young children at high risk for child maltreatment.

Careful design of the cross-site evaluation also makes it possible for the evaluation to contribute other findings. In particular, it provides an opportunity to generate new knowledge about evaluation methodologies and the process of knowledge development, dissemination, and integration.

Cross-Site Evaluation Questions

Given the perspective above, the cross-site evaluation is framed around four questions with the primary attention directed to the first one.

1. Across the R&D projects, how and to what extent do collaborations that increase protective factors and decrease risk factors in core areas of the social ecology result in optimal child development, increased family strengths, and decreased likelihood of child maltreatment within families of young children at high risk for child maltreatment?
2. Across the R&D projects, what are the costs related to making changes within and among collaborations that increase protective factors and decrease risk factors in core areas of the social ecology?
3. Across the R&D projects, what new knowledge is gained about inquiry methods (i.e., research, evaluation, and measurement methods) related to creating evidence-based and evidence-informed practice, programs, and policies?
4. Across the R&D projects, what new knowledge is gained about patterns of knowledge development, dissemination, and integration?

Collecting Data

Each R&D project is a part of a larger cross-site study being conducted collaboratively with the other R&D projects and the QIC-EC Evaluation Team. Data for the first and second questions listed above will be collected by the R&D projects. The R&D projects will gather baseline, intermediate, and final (close of services) data. Each project also will collect data about processes and relationships that the collaborations put in place to sustain changes made beyond the life of the project. Each site will analyze the data for its own site. The specific data analysis methods will be collaboratively determined by the R&D sites and the cross-site evaluation team. The QIC-EC Evaluation Team will conduct a cross-site analysis using the data and analyses from the R&D project evaluators.

The QIC-EC Evaluation Team will be primarily responsible for gathering data about the third and fourth cross-site evaluation questions. The data will be gathered during site visits, in the meetings of the R&D Community of Practice, and through review of documents from the R&D projects.

The local evaluators will collect and analyze baseline, intermediate, final, and sustainable change data related to the first question above. They will provide their data to the QIC-EC Evaluation Team at a time and in a manner mutually agreed on by the QIC-EC Team, R&D projects, and the QIC-EC Evaluation Team following each data collection and analysis period. The local evaluators will also gather and analyze data about the second question above.

The timing of submission of the final set of data will be such that it gives the local evaluators time for their data analysis and meaning-making and the QIC-EC Evaluation Team enough time to analyze and make meaning from the data across sites. Time also needs to be allowed for dissemination and integration of findings.

Type of Data Collected

The QIC-EC Evaluation Team and the QIC-EC leadership will work with the R&D projects during the initial meeting in March 2010 to develop consensus on common methods for data collection and analysis for the first cross-site evaluation question. Measures and methods used with treatment and comparison groups in each site will be appropriate to answering question one, the site's particular research question, and the participating population. The QIC-EC Team has recommended common measurement instruments that will address question one. Final determination of the common measurement instruments will be made jointly by the R&D projects, the QIC-EC Team, and the QIC-EC Evaluation Team.

The second, third, and fourth questions above do not require common measures or methodologies. The R&D projects and the QIC-EC Evaluation Team will work together to generate an evaluation design that (a) respects the local situation and (b) generates new knowledge about those three evaluation questions that is useful and meaningful both locally and across the field as a whole. The R&D projects are responsible for IRB approval of their data collection tools and methods.

Data Collected by the QIC-EC Evaluation Team

Members of the QIC-EC Evaluation Team will visit each R&D project site at least three times (funds permitting) during the 40 months of the project to provide support and assistance; ensure/verify the quality of measures; address any issues related to the data collection and analysis that affect the cross-site evaluation; and (d) gather information for the third and fourth cross-site evaluation questions. Additionally, the site visits will help the QIC-EC Evaluation Team better understand the context of each R&D project. Such understanding will aid in refining the interpretations of cross-site data and in preparing the cross-site evaluation reports.

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