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Indicators for Child Maltreatment Prevention Programs

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Introduction

The Center for the Study of Social Policy (CSSP) asked Child Trends to identify indicators for use in evaluating demonstration programs aimed at preventing child maltreatment among children ages 0 to 5. The assessment of such programs is essential, but evaluations of child maltreatment prevention programs raise thorny ethical, methodological, and empirical issues. Traditional indicators for child maltreatment have significant validity problems that make their use inappropriate for program evaluation in this context.

To inform the design of maltreatment prevention program evaluations, we recommend a combination of indicators that measure risk and protective factors for child maltreatment along four dimensions: parenting capacity, substance use, financial solvency, and family conflict. In addition, we recommend that CSSP consider indicators in two other areas: child well-being, and home and community. Indicators of child well-being should address the domains of physical health, education and cognitive development, and social and emotional well-being. From among the

several dimensions of home and community factors, we recommend including indicators in the domains of home safety and social connectedness.

We begin this paper by discussing the sources that we drew upon, our assumptions about the programs that will be evaluated, and a general definition of indicators and desirable indicator characteristics in the context of maltreatment prevention program evaluations. We recommend and describe indicators for each of the three areas, as delineated in Table X below. As the central and most challenging section, the discussion of child maltreatment is the most detailed.

Throughout this paper, we also provide examples of instruments that can be used to operationalize each indicator that we have recommended. Readers should note that the specific instruments we recommend represent examples of appropriate measures. We have not conducted an exhaustive review of all relevant instruments; many more certainly exist, including some that may be preferable to those described here.

| Domain | Concept measured |
|-----------------------------------|-------------------------------------|
| <i>Child well-being</i> | Health |
| | Education and cognitive development |
| | Social and emotional well-being |
| <i>Home and community factors</i> | Home safety |
| | Social connectedness |
| <i>Child maltreatment</i> | Parenting capacity |
| | Substance use |
| | Financial solvency |
| | Family conflict |

Fig. 1: Domains and concepts for assessment of child maltreatment prevention programs

Background

Basis of this paper

The authors relied on several resources in writing this paper. The authors drew upon the years of experience of Child Trends in using validated indicators, working with national surveys and evaluating programs, including several papers, compendia, and articles produced by Child Trends. Among the range of published resources that the authors reviewed, we consulted many evaluations of the Healthy Families America initiatives, the instruments used in the Evaluation Data Coordination Project and its 22 associated studies, the American Humane Association website materials on chronic neglect, material on the methodology used in the National Incidence Study of Child Abuse and Neglect studies, the work of the National Resource Center on Community-based Child Abuse Prevention and papers by Fred Wulczyn and colleagues at the Chapin Hall Center for Children. We also consulted informally with colleagues at Child Trends and with other experts in the child welfare field.

Definition of child maltreatment

Consensus on a single definition of child maltreatment does not exist.ⁱ For purposes of this paper, we define child maltreatment as physical abuse, neglect, and emotional abuse of a child 0 to 5 years old committed or allowed by a caregiver. Each type of maltreatment in this definition encompasses many scenarios that each has different implications for children and parents. A single episode of parental neglectful behavior, for example, is different from a situation of chronic neglect where a child's basic needs are unmet over a long period of time. Chronic neglect also involves a range of different situations.ⁱⁱ Moreover, some definitions restrict maltreatment to actual harm experienced by a child (“the harm standard”), while other definitions include

circumstances where a child is placed at significant risk of harm by a caregiver, but no harm actually occurs (“the endangerment standard”). Definitions of child maltreatment differ both in the research literature and in the laws and regulations of states.

The definition we use here omits some types of child maltreatment, including sexual abuse. This omission is not meant to downplay the significance of sexual abuse for children. Rather, this aspect of child maltreatment is less salient to the prevention programs for the general population of 0- to 5-year-olds than other types of maltreatment for several reasons. First, sexual abuse is a rarely reported phenomenon that is hard to assess and may have different correlates than other forms of child maltreatment. Though sexual abuse can involve children in the 0-5 age range, it is likely less prevalent among this group than among older children.ⁱⁱⁱ Programs to prevent sexual abuse focus primarily on reporting the abuse to authorities instead of ameliorating factors that may be contributing to abuse. Finally, the co-occurrence of sexual abuse and other forms of child maltreatment is hard to estimate. In addition, the definition used in this paper does not distinguish between different forms of neglect, such as medical neglect and educational neglect, but both often overlap with general neglect and educational neglect usually involves children older than 5 years.^{iv}

The lack of a consensus definition for child maltreatment is one factor that complicates measuring maltreatment. Many of the debates about what constitutes child maltreatment take place at the margins, as there is often agreement about a core set of behaviors to which each of these terms refer. In addition, the indicators described here are measures of concepts where there often is consensus on what constitutes positive or negative outcomes.

Characteristics of indicators

Program evaluations aim to inform the field about the efficacy of an intervention, usually by examining indicators. An *indicator* is a number that measures a concept. Indicators can measure primary outcomes (such as child maltreatment) or intermediary effects, such as reducing family stress—a factor associated with child maltreatment. Indicators of intermediate outcomes are particularly important when the key outcome is difficult to measure, as is the case with maltreatment as we explain below. Even when primary outcomes are easier to measure, intermediary outcomes help determine if the theory behind a program explains the outcomes. For example, if a program that aims to reduce maltreatment by decreasing family stress reduces maltreatment *without* reducing family stress, our understanding of how the program works would change.

Ideally, indicators should have some universal characteristics that extend beyond the needs of particular researchers and program operators. In identifying indicators, we kept in mind criteria aimed to maximize their usefulness. Specifically, we aimed to identify indicators that had *wide acceptance* by decision makers, researchers, practitioners, families and that are *easily understood*. In addition, we aimed to identify indicators that can be *easily implemented* in many environments and are *culturally sensitive* to race, ethnicity and context.

Two other characteristics also informed our choices. Because child maltreatment prevention programs operate throughout the nation, we aimed to identify indicators that can be used to show results for populations as well as individuals and programs and that might be used to *generate state and national data*. Indicators that are already collected in national and state surveys may yield benchmark estimates for the general U.S. population and for specific at-risk

populations. These indicators usually have the added advantage of having undergone extensive testing and validation. Finally, we aimed to identify indicators that programs might *reasonably affect in the short and medium terms*.

Most indicators involve trade-offs among these characteristics. The methods used to generate national data, such as the sentinel data generated as part of the National Incidence Study for example, are not appropriate for program evaluations.^v Some indicators are well understood, but are not malleable in the short or medium term. Where possible and appropriate, we identify options for the use of indicators in a range of circumstances. While we present indicators in the three areas (child well-being, family and community, and maltreatment) separately, evaluators may create single instruments that produce many indicators.

In addition to indicators of child well-being, family and community, and maltreatment, evaluations should collect and analyze indicators in additional areas. These include demographics, family and household composition, neighborhood safety and median or average income, and other information that researchers can use to control for background characteristics, or that are potential risks for child maltreatment but that are not malleable in the short or medium term.

Context

Our assumptions about the types of child maltreatment prevention programs to be evaluated and the level of resources available for evaluation purposes have guided our recommendations regarding indicators in this paper. Numerous types of child maltreatment prevention programs have been developed for different groups of children at risk of maltreatment.^{vi} The paper assumes that the child

maltreatment prevention programs are some combination of family support programs, such as parent education, parent skills training, family management, home visiting, or similar services; that these programs are aimed at families without prior child welfare involvement; and that they are delivered over the course of several months or longer. The intensity, duration and age at entry of programs is often associated with their effectiveness.^{vii} Programs aimed exclusively at mental health treatment, substance abuse treatment or domestic violence may have specialized assessments that go beyond the indicators described here.

Programs vary in the amount of evaluation resources available. At one end of the scale, the Nursing Family Partnership programs have been evaluated using multiple long term, large scale random assignment trials.^{viii} Most child maltreatment prevention programs, however, have far smaller budgets for evaluation. Wherever possible, we have sought to develop options that are affordable for smaller-scale evaluations.

The indicators developed in this paper are meant to be used with comparison groups, ideally control groups created through a random assignment process when such an approach is ethical and feasible.^{ix} To assess program effectiveness, evaluators need to see how changes among program participants compare to a group that received no intervention or a different intervention. This is particularly important because scores on many of the measures described below change over time independent of any interventions, as a result of natural maturation or other circumstances outside of a program's control. Changes in disease, crime and drug use patterns may cause indicators to move in both positive and negative directions independent of a program's operations. Using these

indicators in the absence of a comparison group often provides a misleading picture of a program's effectiveness.

Caution

Assessing the performance of child maltreatment prevention programs meets many widely shared goals of public policy: preventing the abuse and neglect of children, determining programmatic strengths and weaknesses, and holding programs accountable. While we applaud the effort to identify indicators and use them for these purposes, this strategy comes with a caveat: reliable, valid measures of the incidence of infant and toddler maltreatment for use in evaluations of programs of modest size, and with participants never previously involved in the child welfare system do not exist and in our estimation cannot be developed.^x The measures presented here, especially those associated with the risk of child maltreatment, are not measures of actual maltreatment. A child, parent or family with low scores on an indicator or with multiple risk factors associated with child maltreatment should not be presumed to be an indication of actual maltreatment, either in a research or programmatic context. While indicators of risks for maltreatment and of child well-being are relevant to evaluation research, they should not be used as the basis of reports of maltreatment to authorities. Rather, they should be made when program workers or researchers see actual evidence of child maltreatment that meets the definitions for reporting in their jurisdiction.

With these definitions, context, and cautions in mind, we present indicators for CSSP to consider in assessing child maltreatment prevention programs.

Child Well-being Indicators

Short history: In the late 1990s, the federal Adoption and Safe Families Act established “safety, permanency and well-being” as the goals of child welfare agencies. While safety and permanency had well-defined meanings in the child welfare context and were operationalized in the AFCARS and NCANDS data systems, the concept of well-being posed more challenges. In addition to defining and operationalizing child well-being, many feared that expanding child welfare responsibilities from preventing further maltreatment to include promoting optimum development would overwhelm an already strained system.^{xi} To some, taking responsibility for the well-being of an extremely vulnerable group of children involved developing interventions that were beyond the capacity and core competency of child welfare agencies. Others felt that the long-term nature of child well-being was at odds with the view that government intervention into family life should occur only as a last resort and for the shortest time necessary.

Several national studies have used child well-being as an outcome measure. Though definitions and indicators vary, measures of child well-being usually fall into three domains: health; education and cognitive development; and socio-emotional development.^{xiii} The section below draws heavily on indicators developed in previous work at Child Trends, screening for measures appropriate to the age group considered here and the characteristics for indicators described above.^{xiii} This process screened out many indicators like “age of the mother at birth” that cannot change as the result of programmatic activities.^{xiv} We cross-referenced the indicators with other studies, finding them in many of the Healthy Families America evaluations and federally funded national studies.

Child Well-being: Health Indicators

1. Children with vaccinations up to date
2. Overall child health rating by caregiver is “very good” or “excellent”
3. Emergency room visits for injuries
4. Stable medical provider (person or place)
5. Yearly dental care for pre-school-age children
6. Developmentally appropriate schedules that include regular physical activity.^{xv}
7. Health insurance coverage (particularly among those children who are eligible for S-CHIP or Medicaid programs).

A potential weakness of these indicators is that they measure correlates of physical health, not *actual* physical health. For example, having a stable medical care provider and receiving regular dental care should promote good physical and dental health, but they are not direct measures of health. Having up-to-date immunizations should help children avoid certain communicable diseases and are likely indicative that parents are obtaining basic medical care for their children.

Additional health indicators exist, but they require greater effort to assess than those listed above. For example, the Early Childhood Longitudinal Studies (ECLS), track child development, school readiness, and early school experiences, contain a detailed health questionnaire that includes items on frequency and types of drinks consumed, fast food restaurants visited, and “junk” food eaten, as well as a series of questions on physician visits, diagnoses, and health screening.^{xvi} Similarly, the National Survey of Children’s Health (NSCH), a cross-sectional survey of

caregivers of children under age 18, includes many questions on health care, health behaviors, and specific disorders.^{xvii} These survey instruments and other methods of data collection may be used in situations where more detailed health information is desired. However, the amount of health data available to be collected can be overwhelming, making data collection and analysis more costly and complex. This information is most easily gathered through in-person interviews with parents or regular caregivers, as the HIPPA confidentiality law, Institutional Review Board requirements and other regulations protecting patient confidentiality complicate researchers' ability to obtain administrative records.^{xviii} Direct measurement through observation or through clinical assessment may be possible and can provide valuable data, but it is expensive.

Child Well-being: Education and Cognitive Development Indicators

1. Attendance at an accredited nursery school, pre-K, or Head Start program
2. Family member regularly reads to or tells stories to child
3. Child has been evaluated for developmental delays and learning disabilities^{xix}
4. Number and percent of eligible children in early intervention programs

Versions of these indicators were used in several national studies. As with the health indicators above, a potential weakness of the education and cognitive development indicators is that they measure correlates of cognitive development, not *actual* cognitive development. For example, children in an accredited nursery school may or may not be thriving in that environment. Showing that a program improved

cognitive development is a complex task that is beyond the reach of many child maltreatment prevention programs. Tracking school readiness is one approach to this issue, though school readiness overlaps with other domains discussed in this paper.^{xx} Some programs have used standardized intelligence tests as measures of program effectiveness, though these tests are controversial and are not widely accepted.^{xxi}

Child Well-being Socio-emotional Indicators

Socio-emotional well being refers to a child's mental and behavioral health. It includes a variety of facets, including externalizing behavior ("acting out") and internalizing problems (such as depression). Socio-emotional well-being encompasses not just problems, but positive social behavior as well. One approach to measuring socio-emotional well being is to examine efforts to screen for potential socio-emotional problems. Such a set of indicators might look similar to the health indicators listed above:

1. Child has been screened for socio-emotional problems (may be restricted to those exhibiting symptoms of socio-emotional problems)
2. Receipt of appropriate services from licensed providers among children who have had positive screens for socio-emotional problems
3. Direct measures of socio-emotional well-being

The first two indicators on this list have two major weaknesses. First, that a screen took place provides no information on actual well-being. Like other indicators of this type discussed below, the screen is a measure of program performance, not child well-being. A second concern is that creating an incentive for a program to screen all participants for socio-emotional well being may be equated with universal

mental health screening. A recommendation for universal mental health screening for school age children made by a presidential commission in 2005 created a major controversy, with critics concerned that mandated mental health screening would stigmatize large numbers of children and lead to an expansion of the use of psychotropic medications among young children. Program staff and researchers should be aware of the sensitivities that may exist concerning screening and, as always, insure that proper parental consent processes are in place and followed.

Another approach is to measure socio-emotional well-being directly, after obtaining parental consent. Measuring socio-emotional well-being usually involves using scales that require collecting information gathered from direct observation of the child, or information based on caregiver, clinician, or teacher responses to questionnaires or interviews. Scales are assigned an age range for which their use is appropriate and they vary in the level of detail produced when scored. Scales vary in their ease of implementation along factors such as who can complete the scale (parent, teacher, clinician), the level of training needed, cost, and time to administer.^{xxiii}

Two scales meet several of the indicator criteria outlined above: the Devereux Early Childhood Assessment (DECA) and the Behavior Problems Index. The DECA is “designed to evaluate preschool children’s social-emotional strengths that have been found in the developmental literature to be associated with resiliency.”^{xxiii} The DECA’s advantages include:

1. Measurement of both “behavioral concerns” and “protective behaviors,”
2. National norms and easy scoring,
3. Parents, teachers or childcare providers can complete the DECA with no specialized training,

4. Low burden on respondent (takes approximately 10 minutes to administer),
5. Low cost,
6. Available in Spanish, and
7. Used in many studies of preschool effectiveness across the country.

The DECA, however, is not recommended for children under two years of age and the behavioral concerns scoring for the instrument is limited—the scale shows if behavioral concerns are present or not, but does not break down the concern into component types such as depression, anxiety, or other behaviors.^{xxiv}

The Behavior Problems Index (BPI) has many of the same advantages as the DECA, including low cost, short administration time, little training needed and use in some national studies (including the National Longitudinal Survey of Youth). It is a 28-item parent-report rating scale designed to assess six types of behavioral problems, including anxiety, hyperactivity and peer conflict in children ages 4 and older.^{xxv} It was developed as an adaptation of Thomas Achenbach’s Child Behavioral Checklist (CBCL), a measure that is much longer, but that also has versions appropriate for 2- to 3-year-olds.^{xxvi} Achenbach also derived a global Mental Health Indicator (MHI) for 2- to 3-year-olds and for 4- to 17-year-olds based on the CBCL for the 1998 National Health Interview Survey, consisting of only 4 items. Due to the small number of items, Achenbach recommends that the scale can be used in quantitative analyses in relation to other variables, but it should not be used as a categorical mental health indicator.^{xxvii}

For children one to two years old, two related psychometric instruments are available. The Infant-Toddler Social and Emotional Assessment (ITSEA) and an adaptation, the Brief ITSEA (BITSEA).^{xxviii}

The ITSEA takes approximately 30 minutes to complete while the BITSEA takes approximately seven minutes to complete. Both instruments are available at no cost from the developers and can be completed by caregivers with sixth-grade reading levels. The samples for the scales came from New Haven and thus are not nationally normed. The developers recommend that a trained mental health

professional, pediatrician, or nurse practitioner score the scale and discuss the results with parents.

We did not locate scales suitable for socio-emotional well-being for children less than 12 months old.

Home and Community Protective Factors

Short history: Sociologists have emphasized the importance of home and community factors on children for decades.^{xxxix} Similarly, developmental psychologists have posited an ecological model in which children are nested within and are affected by a variety of environments, with the geographically closest contexts often having the strongest effects.^{xxx} For example, children are nested within families, which are nested within communities, which are nested within societies. The environment that is the most salient changes over the life course; for very young children, the family is the most salient.^{xxxii}

The research focus on home and community factors among high risk populations increased in the late 1980s following the publication of *The Truly Disadvantaged* by William Julius Wilson. Wilson found that the social and economic isolation of people living in areas of concentrated poverty (over 40 percent) causes a range of social problems and severely constrains socio-economic mobility.^{xxxiii} In the 1990s, Robert Putnam asserted that family and community connections are a form of “social capital” that can accumulate and be drawn upon during times of need.^{xxxiiii} At the turn of the millennium, a large study aimed at determining the effect of community and neighborhood factors on a wide range of outcomes, the Project on Human Development in Chicago Neighborhoods, found that neighborhood factors played a role in child maltreatment, mental health, and other outcomes.^{xxxv} To balance the emphasis on the deficits of high-poverty communities, some scholars and advocates developed strength-based approaches that focus on family and community assets.^{xxxvi}

Identifying community protective factors *that programs can reasonably influence* is a challenge. We know of no child maltreatment prevention programs, for example,

that can be reasonably expected to reduce neighborhood poverty or crime rates on their own in the short or medium term. As part of a network of integrated programs, however, a prevention program could be expected to increase access to other services.^{xxxvii} A prevention program might also improve social connectedness—an especially important concern as social isolation is correlated with child maltreatment. In addition, a child maltreatment prevention program could be expected to help make home environments safer.

Indicators of social connectedness

Measures of social connectedness were limited or non-existent in many of the evaluations and national surveys we examined. In contrast, measures of social capital, such as the World Bank’s Social Capital Assessment Tool, or SOCAT, are too detailed for the purposes discussed in this paper (the SOCAT is also designed to be used developing countries).

Child maltreatment prevention programs could reasonably and usefully influence several dimensions of social connectedness, including:

- **Emergency support.** The ECLS includes an item that asks who a parent would contact in the event of an emergency in the middle of the night and lists various family, community members and professionals as options.
- **Group membership.** Social capital surveys include items regarding membership and level of interactions in support groups, civic organizations, religious organizations, informal networks, and other local groups.

Service access. The ECLS includes an item that asks if a parent has accessed services pertaining to job training, housing, parenting, energy assistance, or mental health. The Protective Factors Survey lists a broad range of services that could be used to document changes in service access: xxxvii

1. Parent Education
2. Parent Support Group
3. Parent/Child Interaction
4. Advocacy (self, community)
5. Fatherhood Program
6. Planned and/or Crisis Respite
7. Homeless/Transitional Housing
8. Resource and Referral
9. Family Resource Center
10. Skill Building/Ed for Children
11. Adult Education (i.e. GED/Ed)
12. Job Skills/Employment Prep
13. Pre-Natal Class
14. Family Literacy
15. Marriage Strengthening/Prep
16. Home Visiting

The ECLS asks only about access to a service. For evaluation purposes, we recommend that respondents be asked why they did not access a service, as program participants may not access a service because they determine that they do not need it.

Indicators of home safety

Home safety measures refer to the existence of protective conditions and practices in the home. This concept overlaps with child maltreatment in some cases, as not protecting a child from harmful substances may lead to severe harm to a child and charges of neglect in some cases.

The Family and Child Experiences Survey (FACES), an instrument used as part of an Administration for Children and Families longitudinal study of the cognitive, social, emotional, and physical development of Head Start children, included several items related to home safety: xxxviii

1. Use of child safety seats or seat belts in the car
2. Keeping medicines away from children
3. Smoke detectors in the home
4. Keeping cleaning materials away from children
5. First-aid kit at home
6. Emergency numbers posted by the telephone
7. Supervision of children in and near traffic
8. Keeping matches and cigarette lighters away from children
9. Supervision of children when bathing

These items are well understood and accepted indicators that are easily administered and analyzed. A potential weakness, however, is that they have some socio-economic bias: some families may not have the resources to own a car, buy a smoke detector and batteries, or purchase a first aid kit. The question on car ownership could be modified or made optional and it seems reasonable that many programs could afford to supply smoke detectors or first aid kits, or refer families to services that do.

A more valid but considerably more expensive approach would be to visit the homes of program participants and comparison groups to see if the conditions described in an instrument like the FACES are in place. This approach raises feasibility concerns, both in terms of cost and the willingness of program participants to allow researchers into their homes.

Several other types of community risk and protective factors not mentioned above might provide useful information in some contexts. Additional indicators might include access to play areas, libraries, or

nutritious foods. The quality of the relationships among community members is an important factor,

but we did not find a reliable and effective way to measure it.

Child Maltreatment Indicators

We begin this section with an explanation of why developing indicators is an especially difficult task in the child maltreatment field. We review traditional indicators of child maltreatment, describe the problems in using standard measures, and then suggest an approach that focuses on measuring risk and protective factors for child maltreatment. In sum, we recommend against the use of measures of child maltreatment that rely exclusively on government or hospital records *in this context*. For use with programs aimed at the general population of 0- to 5-year-olds and their families rather than at children and families with previous child welfare involvement, traditional maltreatment measures require large sample sizes to detect program effects, have questionable validity, are subject to significant biases, and usually cannot be used across jurisdictions. Instead, we recommend using a set of indicators that assess *risk and protective factors* for child maltreatment, such as parenting capacity, family conflict, substance use and financial solvency. Because of the centrality of maltreatment indicators to this project, we explain in detail why traditional measures are inappropriate to use in evaluations of the types of program envisioned.

Short History: Efforts to measure the incidence of child maltreatment have occurred at least since the inception of federal intervention in child protection in the early 1970s. Congress mandated the first National Incidence Study of Child Abuse and Neglect (NIS) in 1974 and subsequent studies in 1984, 1992 and 2003. Each study took several years to complete and though the methods used for the NIS are sophisticated and appropriate for the purpose of assessing the incidence of maltreatment in the United States, they are not appropriate for program evaluation.^{xxxix} As programs to prevent maltreatment developed, evaluators have struggled to define appropriate measures. Some

researchers used reports of child abuse and neglect made to state central registries (described below). Others used hospital and emergency room admissions data. Some used parent self reports of maltreatment or child self reports for older children. Almost universally, these studies acknowledged the shortcomings of using these measures.

Why indicators for assessing child maltreatment are difficult to develop

There are many reasons why reliable and valid indicators of child maltreatment do not exist. Maltreating a child can result in civil or criminal actions that have severe repercussions for parents and children. In addition, parents labeled as abusive or neglectful of their children bear a heavy social stigma. These qualities undermine direct observation aimed at detecting maltreatment—parents can be expected to avoid maltreating their children in the presence of a researcher. The stigma and the potential repercussions also raise questions about the validity of parent self-reports of child maltreatment, especially since many people who might ask parents about how they treat their children are under legal or ethical obligations to report suspected maltreatment to the authorities.^{xl} The unreliability and of direct observation or parent reporting has often led researchers to rely on administrative data instead.

Administrative data as indicators of child maltreatment

Program evaluations, especially of services for families already involved in the child welfare system, have used administrative data generated through official reports and investigations of child maltreatment. These data have some strengths. Government is mandated to keep data on child maltreatment reports and the results of child protective investigations. Thus, the information is routinely collected and stored in a standardized fashion. Though data on individual cases are not public, officials have authorized access to administrative databases for research purposes under strict conditions of confidentiality. The databases contain information about the number of children alleged to have been maltreated, the types of maltreatment, and the alleged perpetrators of the maltreatment.

These strengths, however, are offset by serious weaknesses that make using administrative data inappropriate for the types of programs that are the subject of this paper.

Reports of abuse/neglect

Reports of abuse/neglect are generated when a person calls a state central registry or “hotline” and alleges that one or more children are being maltreated.^{xli}

Indicators based on maltreatment reports have many weaknesses. First, they rely on a person making a report about child maltreatment. The willingness to report suspected maltreatment varies by culture and trust in government, among other factors. In some communities, a parent’s treatment of their children is considered a private matter that should only involve government in extreme cases—and thus comparatively few reports of maltreatment may be made. Some

communities have greater trust that government involvement will improve a family’s circumstances, generating comparatively more reports of maltreatment. In each case, the difference in reports is caused by community norms, not differences in the rate of maltreatment.^{xlii}

There are several other issues with using reports in this context. Reports are heavily influenced by media coverage. A high profile child maltreatment case may increase reports by 50 percent or more within a short period of time. In addition, many contend that reports have a racial bias. Members of minority groups are more likely to be the subject of abuse/neglect reports even after adjusting for income and other factors.^{xliii} Racial and ethnic bias may overlap with a socioeconomic bias in reports. Due to their involvement with other support systems and services, families with low incomes are more likely than others to come into contact with professionals who are mandated to report suspicions of child maltreatment, such as social workers and social service providers—a bias that may be amplified by stereotypes of or prejudice towards low income people. Finally, definitions of maltreatment not only vary between jurisdictions, making comparisons across geographic areas misleading, but can also change within a jurisdiction—which can make comparisons over time inaccurate.^{xliv}

These issues would be less problematic in studies that use random assignment, as the weaknesses in the indicators would be shared by both treatment and control groups. However, the use of child abuse and neglect reports raises pragmatic concerns when used for evaluation of programs that serve families without prior child welfare involvement. Even among groups that are reported to the authorities at comparatively high rates, reports of abuse/neglect are uncommon. In a Virginia study involving over 2,000 families identified as at-risk, only 1.1 percent were the subject

of maltreatment allegations. In Oregon, maltreatment report rates range between 8 and 25 per 1,000 children, even those families researchers labeled as the highest risk families did not exceed that range. To detect statistically meaningful changes in the rate of maltreatment reports at this prevalence, sample sizes need to be *at least* 1,500. On the program level, small changes in the number of abuse/neglect reports may be misleading—“statistical noise” that does not reflect program performance or changes in actual maltreatment. Most child maltreatment programs do not serve enough people for maltreatment reports to be reliable indicators.

Another weakness of the use of maltreatment reports as indicators for use in evaluation studies is the “surveillance effect.”^{xlv} Families in child maltreatment prevention programs have more contact with program staff professionals who are mandated to report child maltreatment than families not in such programs. More contact with mandated reporters—not differences in child maltreatment—may account for differences in reports received by state central registries in treatment groups when compared to families not receiving services.

Finally, the majority of reports of child maltreatment are not substantiated, meaning that the level of evidence of maltreatment did not meet the legal definition of abuse or neglect. Sometimes this may mean that children are living in less than optimal conditions, but the conditions do not meet the jurisdiction’s definition of maltreatment. In other cases, however, the maltreatment report may be deemed inaccurate—that is, the investigators determine that the child has not been maltreated.^{xlvi} Sometimes, the report may have been made maliciously—a knowingly false report made to intimidate a parent—which is most often seen in child custody cases.^{xlvii}

Substantiated reports of abuse/neglect

Though definitions vary by jurisdictions, in general, a *substantiated* report of abuse/neglect is generated when a child protective worker determines that at least one of the allegations made in a report to a state central registry is true. Indicators based on substantiated reports are used in many studies, including some of the Healthy Family America programs, the LONGSCAN longitudinal study, the Oregon Healthy Start program, and New York’s Nurse Family Partnership program. Like maltreatment reports, criteria for substantiation of abuse/neglect vary across localities both legally and in practice, making substantiated reports inappropriate for use in multiple jurisdictions in the same study.

As indicators of maltreatment, substantiated reports may be preferable to reports. Using substantiated reports as an indicator likely reduces the number of false and malicious reports. Child protective workers, however, are looking for evidence of maltreatment that reaches the jurisdiction’s legal definition of child maltreatment, a threshold that is usually higher than more common understandings of maltreatment. Therefore, some families in which maltreatment has occurred and against whom allegations were made do not have substantiated reports.

Substantiated reports have many of the weaknesses of the reports indicator. A family cannot have a substantiated report if no report is ever made, so substantiated reports contain many of the same biases as reports. In one large study, self reports of maltreatment made by older children to researchers were not highly correlated with substantiated cases of maltreatment—i.e. children reported incidents of maltreatment to researchers that were not in official reports and did not report maltreatment to researchers

that were contained in official reports.^{xlviii} Furthermore, there is evidence that decisions to substantiate reports are subject to racial bias.^{xlix} Similar bias could exist in the substantiation of reports against low-income families, as well. Because a substantiated report is less common than a report generally, studies that use this indicator need to have even larger sample sizes to find statistically meaningful results.

Court petitions for child maltreatment

A court petition is a step beyond a substantiated report of maltreatment. In some cases, an abuse/neglect report may be substantiated, but the child protective worker determines that a referral to services without court intervention is an adequate response. Indeed, only half of substantiated cases are referred to services.¹ A filing of a court petition indicates that the child protective investigator determined that the level of child maltreatment required court intervention (which might include court ordered monitoring, court ordered services, or removal of a child or children from the home).

Indicators based on court petitions may be more useful in identifying serious cases of child maltreatment than substantiated reports. In addition to the problems cited for reports and substantiated cases, drawbacks to using this indicator include gaining access to court databases. Court databases likely contain less detailed information about child protective investigations than child welfare databases. And as an even rarer occurrence, detecting program effects would require even larger samples.

Hospitalizations or emergency department visits related to maltreatment

Hospitalization was used as an outcome in a Hawaii evaluation that involved 1,738 children served by the

state's Healthy Start program and a control group.^{li} Hospitalization attributed to a parent's actions is strong evidence of child maltreatment. Trips to hospitals and emergency room are rigorously documented, though accessing this information requires navigating patient confidentiality laws.

Hospitalization, fortunately, is a rare outcome of child maltreatment. Of the thousands of children followed in the Hawaii study, only 42 were hospitalized for maltreatment. Relying on hospitalizations as an indicator in program evaluations will exclude most of the cases commonly defined as child maltreatment. Most child maltreatment involves neglect, not physical abuse, and only severe cases of maltreatment result in hospitalization. Even among physical abuse cases, few result in hospitalization or emergency room visits. Thus, using hospitalization as an indicator requires a large sample. Families in which abuse requires hospitalization may be qualitatively different than other families in which maltreatment is present.

Child reports of maltreatment

The weaknesses of administrative data have led some researchers to use child reports of maltreatment. The LONGSCAN study, a longitudinal study of child maltreatment and its effects that took place in five jurisdictions over 18 years, asked children who were at least 12 years old about their experiences with child maltreatment. Researchers found that children were willing to answer such questions, did not drop out of studies after reporting maltreatment, and provided specific information that gave researchers confidence in the self report. However, self reports by children ages 0 to 5 years, the focus of this paper, are not reliable or ethical.

Measuring Risk of Maltreatment

The drawbacks of using traditional indicators for assessing the incidence of child maltreatment create a dilemma across the child welfare field. Policymakers need measures to hold prevention programs accountable, yet those measures most easily accessed are unreliable.

To address this dilemma, we suggest a different approach: assessing changes in multiple risk and protective factors associated with maltreatment. This thinking is in line with the National Resource Center on Community-based Child Abuse Prevention, which after an extended process to identify outcomes for child maltreatment programs concluded that:

Proving a negative, in this case proving that child maltreatment did not occur because of a 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.^{lii}

Similarly, John Eckenrode, the Director of the National Data Archive of Child Abuse and Neglect, comments that:

The best targets for prevention are the risk/protective factors that are prevalent, have the strongest association with maltreatment and are shown to be modifiable, such as maternal depression and lack of access to community services.^{liii}

Assessing risks and protective factors for maltreatment has several pragmatic advantages for program evaluation: validated instruments are available in most instances, data can be obtained from multiple sources such as parent, teacher, and caregiver reports, direct observation, and clinical assessment, smaller sample

sizes are required, and the cost of collecting and analyzing this information is often within the range of many research and programmatic budgets. Moreover, the risk and protective factors that are linked to child maltreatment are often associated with other domains of child well-being; therefore, reducing risks and increasing protective factors for maltreatment may more broadly benefit children and families. For all these reasons, we recommend that maltreatment prevention program evaluations assess impacts on risk and protective factors for maltreatment, rather than attempting to assess impacts on the incidence of maltreatment.

There are some disadvantages to this approach. Most parents in families with risk factors do not maltreat their children, and some parents in families with no identified risk factors do maltreat their children. Reducing the risk of maltreatment is consistent with reducing actual maltreatment—but the two should not be equated. Program impacts on risk and protective factors may not be evenly distributed across program participants. It's possible that among families exhibiting risk factors for maltreatment, those least likely to maltreat their children may be the most likely to show reductions in risk factors. Risk and protective factors are only weakly predictive of maltreatment. Thus, it's possible that a program might have positive impacts on risk and protective factors for maltreatment, yet not reduce actual maltreatment.

Like using traditional measures of maltreatment, this approach has two logistical issues that researchers should consider. Because information related to child maltreatment is so sensitive, programs, government agencies, service providers and institutional review boards will require robust procedures for the protection of confidentiality and of human research subjects.^{liv} In some situations, concerns about participant confidentiality may prevent collecting

indicators pertaining to risks of maltreatment. Second, situations may arise in which program or research staff learn information that may require making an official abuse/neglect report. Procedures for how to handle these situations should be created and distributed in advance of data collection.

Types of risk and protective factors

Risk and protective factors can be divided into two types: static and malleable. Many of the factors associated with child maltreatment are static—they cannot change. For example, a scale called the New Baby Questionnaire identifies several risk factors for child maltreatment. Four are outside of programmatic influence: the mother being single at the child’s birth, the mother being 17 years or younger, not receiving early comprehensive prenatal care, and having a history of substance abuse or mental health problems.^{lv} Five other factors are malleable to greater or lesser degrees: experiencing poverty, having a spouse/partner who is unemployed, having unstable housing, experiencing marital or family conflict and having less than a high school education. Researchers in Oregon found strong associations between the number of risk factors a child had and the odds of the child being the subject of a substantiated child maltreatment report.

We sought to identify indicators that child maltreatment prevention programs might reasonably affect. This eliminated the consideration of some frequently used scales. For example, the Family Stress Checklist (also known as the Kempe Family Stress Assessment/Checklist or the Carroll-Schmidt Parenting Checklist) contains several items pertaining to parental psychiatric, criminal, and substance abuse histories that no program can change.^{lvi} Some of these scales might be modified for evaluation purposes, but

revision could threaten the psychometric properties of validated scales.

We also sought to identify indicators that could be viewed as both risk and protective factors. Each of the New Baby Questionnaire risks can be stated either as protective or risk factors. For example, while being born to a single mother who is under 18 years old increases risk, being born to a mother who is over 18 years old and married provides protection.

Risk and protective factors for child maltreatment

We identified several factors that are associated with child maltreatment.^{lvii}

1. Parenting capacity
2. Substance use
3. Economic hardship
4. Family conflict and discipline practices

Below, we describe each construct, the types of instruments that have been used to assess these construct, and some of their strengths and weaknesses.

Parenting capacity

Parenting capacity has many dimensions, including parenting skills, parenting knowledge of child development, and parent mental health. Strong parenting capacity can be a protective factor against maltreatment, while weak parenting capacity can be a risk factor. Some parents, especially young parents, may not have had the opportunity to practice parenting skills or learn about child development. This appears especially true when parents have not experienced modeling of appropriate parenting behavior. (Some studies cite child maltreatment of a parent as a risk factor for future maltreatment of a

child.)^{lviii} Mental health problems can also hamper parenting capacity, resulting in an increased risk of child maltreatment. ^{lix} Parent knowledge of child development is a protective factor for child maltreatment—and a lack of knowledge is a risk factor that can contribute to parenting practices that are not developmentally appropriate.

Three approaches to using indicators of parenting capacity in evaluating child maltreatment prevention programs include measuring the existence of screening and service access, directly observing parenting, and parent self-reports.

Screening for parenting capacity

The first approach is to measure whether parents have been screened for needs, and whether services have been accessed among those who were screened as having unmet parenting capacity needs, as shown below:

1. Parents screened for parenting skills
2. Parents screened for knowledge of development
3. Parents screened for mental health issues
4. Access of appropriate services among parents who were screened as needing services

Note that the first three indicators assess whether a screen has taken place, rather than the results of the screen.

The advantage to this approach is low cost, ease of understanding, and feasibility. A significant disadvantage is indicators pertaining to screening do not convey information about levels of parenting capacity or about *changes* in parenting capacity. Parents may be screened for their knowledge of child development, but without more information, program evaluators will not know if the screening led to improvements in parenting capacity. While data on whether screenings took place could come from

program records, parent self-reports may be the only source of data on comparison group members. Ideally, data on program and comparison group members should be collected using the same methods in order to enhance their comparability.

Direct observation of changes in parenting capacity

In many evaluations, researchers or staff directly observe parents interacting with their children. Two popular observational assessment tools are the Nursing Child Assessment Satellite Training (NCAST) and the Home Observation for Measurement of the Environment inventory (HOME).^{lx} Both instruments have been used in large studies, often together, including some of the Healthy Families evaluations and the Nurse Family Partnership program.

The HOME instrument aims to measure the **quality and quantity of stimulation and support available to a child in their home** and has been used in many studies of cognitive development, including the above-mentioned Project on Human Development in Chicago Neighborhoods.^{lxi} The instrument takes approximately an hour to complete and is administered by a trained professional at a child's home. The HOME includes six subscales and has versions appropriate for children 0 to 3 years and 4 to 6 years old.

The NCAST is typically used with children ages 0 to 3 years and, like the HOME, has known psychometric properties. The great advantage of the NCAST is its short administration time: the 73 item scale can typically be completed in less than ten minutes. However, a HOME-Short Form, consisting of 18 parent-report and interviewer-observation items intended for survey administration, is also available.

Both instruments also have weaknesses in the context of assessing child maltreatment prevention programs.

These two scales may not adequately assess parenting skills among Latino and African American groups and may also have a socio-economic bias.^{lxiii} The HOME, for example, includes items that depend on financial capacity, such as floor space and number of books in the home.^{lxiii} Another issue with both scales is the need for a trained professional to administer them. Evaluators of a Healthy Families program in Virginia, while acknowledging the strengths of the instrument, found the NCAST “expensive and difficult to implement”.^{lxiv}

Two newer methods to assessing parenting capacity directly are available. A technique called “micro-analytic observational assessments” uses videotaped sessions and a standard coding scheme to assess parent-child interactions.^{lxv} New York State is using this process in its evaluation of Healthy Families in partnership with university-based researchers. While the technique eliminates some of the issues with the HOME and NCAST, it is complex, requires specialized training and equipment, and may be too resource intensive in some contexts.

A second method is a relatively new instrument, the Keys to Interactive Parenting Scale (KIPS), which replaced NCAST and HOME assessments in Virginia. The KIPS can be administered by a range of caregivers. Initial tests of validity and reliability suggest that the instrument is not ethnically or racially biased.^{lxvi} While the KIPS also requires training, the training is provided online and scoring can be completed quickly. Tests show that front-line staff scores correlate with independent expert scoring of the same family at a high rate ($r > .9$).^{lxvii}

Parental mental health is a critical factor that can affect parenting capacity. While depression is particularly salient as a risk factor for child maltreatment, other mental health issues are associated with an increased

risk of child maltreatment.^{lxviii} Some mental health assessment instruments assess overall psychological well-being, often incorporating subscales for specific conditions. Others focus exclusively on specific conditions.^{lxix}

Among scales that measure overall psychological well-being, the General Well-Being Schedule (GWB) received high marks in a 2006 review of health and mental health rating scales.^{lxx} Originally developed for a federally funded health study, the GWB assesses both positive and negative aspects of mental health and has strong psychometric properties. Among its six subscales, the GWB is particularly effective at measuring depression.^{lxxi}

Among scales specifically designed to measure depression is the Center for Epidemiological Studies Depression scale (CES-D). The CES-D was used in the Massachusetts Healthy Families evaluation,^{lxxii} and Child Trends has recommended its use in evaluations of welfare reform initiatives.^{lxxiii}

Parent self-administered surveys

Several programs use parent self-report scales to assess parent capacity. These instruments are especially useful in evaluating programs that do not have the resources to collect observational data.

The Knowledge of Infant Development Inventory (KIDI) is an example of a scale that measures parent knowledge of development, is self-administered by parents, and is easily scored. Like all self-administered surveys, the KIDI requires that parents meet some basic literacy requirements (usually having at least a 4th- to 6th-grade reading level). As of 2005, the KIDI had not been translated into Spanish or other languages.

A more generic parent self-report instrument is the Family Support Program Outcome Survey developed

specifically for assessing child maltreatment prevention programs when direct observation is not possible. This survey was tested on a geographically, demographically, and programmatically diverse group of participants in prevention programs.^{lxxiv} The test group and program staff found the survey to be easy to understand and useful. The Family Support Program Outcome Survey, however, assesses parent experiences with a program, not parent skills.

Substance Use

Substance use is implicated in the majority of official reports of maltreatment.^{lxxv} In some cases, substance abuse is the primary cause of maltreatment, leading to neglect in the form of inadequate guardianship, physical and psychological abuse during periods of intense substance use or its aftermath, and sapping family financial resources. In other cases, substance use is a contributing but not the primary factor in child maltreatment. Despite its frequency as a contributing factor among maltreatment cases, it is important to note that only a small fraction of substance-using parents maltreat their children.

Three approaches might be taken to assess programmatic influence on substance use: assessing whether parents have been screened for substance use, assessing the results of substance use screens, and assessing substance use based on interviews with parents.

Screening for substance use

A set of indicators pertaining to substance-use screens might include:

1. Whether parents were screened for substance use
2. Referral to appropriate substance use programs among parents whose screen indicated risky substance use

An additional indicator might include information describing how often referred parents used the service. However, this indicator would likely have the reliability issues associated with a parent self-report: substance use programs only reveal identities of participants with their permission or under court order.

Screening indicators in this context are primarily measures of program performance. They do not provide information about the riskiness of substance use. Also, as with other screening measures, the only available source of comparison group data may be parent self-reports.

Assessing the results of substance-use screens

Screening instruments are usually short, easy to administer, and simple to score. At least two screening instruments have been used in the context of child maltreatment prevention programs, the CAGE and the CRAFFT. While both have been

- C** Have you ever ridden in a car driven by someone (including yourself) who was "high" or had been using alcohol or drugs?
- R** Do you ever use alcohol or drugs to *relax*, feel better about yourself, or fit in?
- A** Do you ever use alcohol or drugs while you are by yourself, *alone*?
- F** Do you ever *forget* things you did while using alcohol or drugs?
- F** Do your family or *friends* ever tell you that you should cut down on your drinking or drug use?
- T** Have you ever gotten into *trouble* while you were using alcohol or drugs?

Figure 2: CRAFFT Drug Screening Instrument

validated in testing, the CRAFFT asks about drugs other than alcohol, was developed to be developmentally appropriate for adolescents, and has been validated with a diverse group of teens.^{lxxvi} Given that teen single mothers are often encouraged to enroll in child maltreatment prevention programs, this provides a significant advantage for the CRAFFT.

Pediatricians and programs frequently use the CRAFFT as a screening tool. To use the instrument as a research tool would require inserting references to time periods in the questions because as constructed, the answers cannot be changed by programmatic interventions. For example, the first question in the CRAFFT might need to change to “Have you ridden in a car driven by someone (including yourself) who was “high” or had been using alcohol or drugs *in the last year?* (or since the time of the last screening).”

The Healthy Families evaluation in Arizona replaced the CAGE screening instrument with the CRAFFT in its study. After two years, the use of the CRAFFT was reviewed. Researchers reported “dissatisfaction with the implementation and relevance for use with these families.”^{lxxvii} The program continued to use the CRAFFT, but started to look for a replacement in 2007.

Assessing substance use

Information about actual substance use could be obtained based on the results of drug screens. Screens such as the Drug Use Screening Inventory (DUSI) ask respondents about the types of substances used, the frequency of use, and problem behaviors associated with use over a specified time. The DUSI takes approximately 20 minutes to administer, does not require specialized training to score, is available at minimal cost, has been tested for reliability and validity, and is appropriate for use with teens as well as adults.^{lxxviii}

An example of a longer instrument is the Global Appraisal of Individual Needs (GAIN), which has been used in many federally funded substance abuse treatment program evaluations and contains detailed questions on use of alcohol, prescription pills, and several types of illegal substances as well as screening questions that allow for diagnoses of abuse and

dependence using DSM-IV criteria.^{lxxix} The entire GAIN is a complex psychometric instrument that takes approximately an hour to administer and requires specialized analytic skills to interpret. These qualities make the GAIN an unlikely candidate for use in evaluations of many child maltreatment prevention programs.

Economic Hardship

Researchers and policy makers frequently use poverty status as a risk factor for many types of negative outcomes. The connection between poverty status and child maltreatment is contentious.^{lxxx} Some research suggests that poverty is a risk factor for child maltreatment and deep poverty is associated with increased risk.^{lxxxi} Poverty may be a partial or full cause of neglect allegations. A parent who cannot afford to feed a child or live in an environmentally safe home may become the subject of a neglect complaint even in the absence of other safety concerns. However, the vast majority of people in poverty do not maltreat their children.

We prefer the construct economic hardship rather than poverty. Economic hardship incorporates dimensions such as housing stability and food security and avoids many of the problems associated with measuring income.^{lxxxii} Furthermore, economic hardship measures can identify specific events that might increase risk to a child.

A way to assess economic hardship is to measure whether or not a family faces risky conditions because of financial problems. This approach avoids monetizing social services and relying on salary and income information and it acknowledges that families with incomes at all levels may experience financial solvency problems. Many lower-income families have financial skills, non-monetary assets, or make financial choices that protect children from risk, while others

with greater incomes may not have these characteristics. An example of an economic hardship measure appears in the Fragile Families and Child Well-being study, and many of the same items appeared in the National Survey of America's Families.

Sample items from the Fragile Families and Child Well-Being Economic Hardship Indicators scale:

1. Was there any time in the past 12 months when (YOU/YOUR HOUSEHOLD) did not pay the full amount of the rent or mortgage?
2. In the past 12 months (WERE/WAS) (YOU/ANYONE IN YOUR HOUSEHOLD) evicted from your home or apartment for not paying the rent or mortgage?
3. How about not paying the full amount of the gas, oil, or electricity bills?
4. In the past 12 months did the gas or electric company turn off service, or the oil company not deliver oil?
5. In the past 12 months was there a time (YOU/ANYONE IN YOUR HOUSEHOLD) needed to see a doctor or go to the hospital but did not go?
6. In the past 12 months, was there a time when your [child][children] went hungry because there wasn't enough money to buy food?
7. In the past 12 months, did you ever move in with other people even for a little while because of financial problems?
8. In the past 12 months, did you ever stay at a shelter, in an abandoned building, an automobile or any other place not meant for regular housing even for one night because you didn't have enough money for a place to live?

Family conflict and discipline practices

Nurturing parenting is a protective factor for child maltreatment. The use of nonviolent and nonaggressive methods for resolving conflicts between partners and for disciplining children, for example, are protective factors. Conversely, aggressive methods for resolving conflict, including threatening and abusive language as well as physical confrontation and punishment, are risk factors. In some cases, aggression in family conflict and disciplinary practices reaches levels that constitute child maltreatment. Because witnessing violence between parents or a parent and a significant other is traumatic for children, it can be considered child maltreatment even when children are not physically harmed.^{lxxxiii}

Program evaluators can consider assessing whether screenings for family conflict and problems with discipline practices have taken place, as well as whether actual family conflict and inappropriate discipline have occurred.

Screening for family conflict and inappropriate discipline practices

A set of indicators pertaining to screenings would include:

1. Whether families have been assessed for family conflict
2. Whether families have been assessed for appropriate discipline practices
3. Referrals to appropriate services, among families identified as having family conflict or using inappropriate discipline
4. Participation in services among families referred to them

As with other measures of screening alone, these indicators tell evaluators nothing about the level of family conflict or the types of discipline practices used. Obtaining comparable data for comparison groups would be difficult.

Measuring levels of family conflict

The most widely used and accepted instrument for measuring family conflict is the Conflicts Tactics Scale (CTS), originally developed in the late 1970s and revised periodically in the past three decades.^{lxxxiv} The CTS comes in two versions, one that measures conflict between domestic partners and another that measures conflict between parents and children.

The CTS focuses on the occurrence of events, not opinions or attitudes. The parent-child version starts by asking parents if they have engaged in different types of discipline strategies associated with positive development. These include reassurance, redirecting a child to different activities when they become frustrated or confrontational and using “time-outs.” The instrument then asks a series of questions concerning the incidence and frequency of increasingly harsh disciplinary strategies, such as yelling, spanking, using an implement such as a hairbrush on child’s bottom, and using an object on other parts of the child’s body. In each case, the CTS includes items on how frequently these events occur.

The CTS has known psychometric properties, is easy to administer and score, and has been used in numerous studies, including studies of child maltreatment prevention programs.^{lxxxv} One drawback of the CTS is that it does not take the context in which events occur into consideration, including provocative behavior or external events that may have influenced parental or partner behavior. Another drawback of the CTS is that scores on the instrument are skewed: most parents do not use physical punishments most of the time. Thus, most parents have low CTS scale scores—making changes in behavior hard to detect. In some contexts, parents may filter what they report on the CTS, though repeated testing suggests that this is not a major drawback of using the instrument.

Another instrument that assesses physical conflict between parents and children is the Child Abuse Potential Index (CAPI). The CAPI is designed to assess parents and caregivers under suspicion of physical child abuse and is commonly used by child protective workers. Researchers have used the CAPI successfully in program evaluations, including in some of the Healthy Families studies.^{lxxxvi} The CAPI has undergone psychometric testing and is quickly administered.^{lxxxvii}

Summary and Conclusion

This paper describes a set of indicators that could be used to assess the effectiveness of child maltreatment prevention programs. While we feel strongly about the constructs that such efforts should measure, we are less prescriptive in the specific instruments that evaluators should use—though some instruments have track records or characteristics that make them particularly appropriate or inappropriate for this use. The selection of specific indicators and how they are operationalized may vary across evaluations, depending partly on available resources.

Though challenging, rigorous assessments of child maltreatment prevention programs are critically important. With a deep recession placing increasing stresses on families and threatening the resources available to support families, it is particularly important to invest in effective programs. We look forward to assisting the Early Childhood QIC's efforts to improve the safety and well-being of the nation's young children.

Table 1: Selected characteristics of child well-being indicators

| Child Well-being Indicators | Suitable for context | Wide acceptance | Easily understood | Easily implemented | Generate state and national data | Culturally sensitive | Malleable in short to medium term |
|--|----------------------|-----------------|-------------------|--------------------|----------------------------------|----------------------|-----------------------------------|
| <i>Health</i> | | | | | | | |
| Children with vaccinations up to date | + | + | + | + | + | + | + |
| Caregivers who rate overall child health rating as very good or excellent | + | x | + | + | + | + | x |
| Children with emergency room visits for injuries | x | x | + | + | + | + | x |
| Children with stable medical provider (person or place) | + | + | + | + | + | + | + |
| Children receiving yearly dental care | + | + | + | + | + | + | x |
| Children with dental caries | + | + | + | x | + | + | x |
| Children with health insurance | + | + | + | + | + | + | x |
| <i>Education and cognitive well-being</i> | | | | | | | |
| Children attending an accredited nursery school, pre-K, or Head Start program | + | + | + | + | + | x | + |
| Children whose families read to them or tell them stories regularly | + | + | + | + | + | + | + |
| Children evaluated for developmental delays and learning disabilities | + | + | + | + | + | + | + |
| Eligible children in early intervention programs | + | + | x | + | + | + | + |
| <i>Socio-emotional well-being</i> | | | | | | | |
| Children who are screened for socio-emotional well-being | x | x | x | x | x | x | x |
| Children with negative screens for socio-emotional well being who receive appropriate services from licensed providers | x | x | x | x | x | x | x |
| DECA | + | x | x | x | x | + | x |
| BPI | x | + | x | x | x | x | x |
| ITSEA | x | x | x | - | - | x | x |
| BITSEA | x | x | x | x | - | x | x |

Key: These subjective ratings of the suitability of each indicator along seven characteristics have the following codes:

+: Especially strong match with characteristic

x: Match with characteristic

-: Especially weak match with characteristic

Table 2: Selected characteristics of home and community indicators

| Home and Community Risk and Protective Factors | Suitable for context | Wide acceptance | Easily understood | Easily implemented | Generate state and national data | Culturally sensitive | Malleable in short to medium term |
|---|----------------------|-----------------|-------------------|--------------------|----------------------------------|----------------------|-----------------------------------|
| <i>Social connectedness</i> | | | | | | | |
| Emergency support available | + | + | + | + | x | + | x |
| Group membership | + | + | + | x | x | + | x |
| Service access | + | + | + | x | x | + | + |
| <i>Home Safety</i> | | | | | | | |
| FACES home safety questions | + | x | + | + | + | x | + |

Key: These subjective ratings of the suitability of each indicator along seven characteristics have the following codes:

+: Especially strong match with characteristic

x: Match with characteristic

-: Especially weak match with characteristic

Table 3: Selected characteristics of child maltreatment indicators

| Child Maltreatment | Suitable for context | Wide acceptance | Easily understood | Easily implemented | Generate state and national data | Culturally sensitive | Malleable in short to medium term |
|--|----------------------|-----------------|-------------------|--------------------|----------------------------------|----------------------|-----------------------------------|
| <i>Parenting capacity</i> | | | | | | | |
| Screening as an indicator* | - | - | + | + | x | x | + |
| New Baby Questionnaire | - | x | + | + | + | x | - |
| NCAST | x | + | x | - | x | x | x |
| HOME | x | + | x | - | x | x | x |
| Microanalytic observational assessments | x | - | x | - | - | + | x |
| KIPS | x | - | x | + | x | + | x |
| GWB | + | + | + | x | x | + | x |
| CED | + | + | + | x | x | x | x |
| <i>Substance use</i> | | | | | | | |
| CAGE | - | x | + | x | x | x | x |
| CRAFFT | x | x | + | + | x | + | x |
| DUSI | + | x | + | + | x | x | x |
| GAIN | x | + | x | - | x | x | x |
| <i>Economic hardship</i> | | | | | | | |
| Poverty status | - | + | + | - | + | - | x |
| Income | x | + | + | - | + | x | x |
| Fragile Families Economic Hardship Scale | + | x | + | x | x | x | x |
| <i>Family Conflict</i> | | | | | | | |
| CTS | + | + | + | x | + | x | x |
| CAPI | - | x | x | - | - | x | x |

* Refers to screening in each domain discussed

Key: These subjective ratings of the suitability of each indicator along seven characteristics have the following codes:

+: Especially strong match with characteristic

x: Match with characteristic

-: Especially weak match with characteristic

References

- ⁱ Different definitions exist within and across research, practice and law. For a discussion of the many issues related to defining child maltreatment, see Andrea Sedlak. 2001. *A History of the National Incidence Study of Child Abuse and Neglect*. Westat, Inc.: Rockville, MD. Available at https://www.nis4.org/NIS_History.pdf, pp. 21-49.
- ⁱⁱ See <http://www.americanhumane.org/protecting-children/programs/chronic-neglect/> for materials related to chronic neglect.
- ⁱⁱⁱ See Snyder, H N. (2000). *Sexual assault of young children as reported to law enforcement: Victim, incident, and offender characteristics*. National Center for Juvenile Justice, U.S. Department of Justice.
- ^{iv} Both educational and medical neglect are a small fraction of formal neglect allegations. Formal definitions of educational neglect are usually associated with children of school age, not children in the 0-5 age range. Medical neglect overlaps with general neglect so frequently that we believe the indicators we have developed would capture risks of this type of maltreatment.
- ^v This study is discussed in more detail below.
- ^{vi} One review of family support programs listed 23 different types of programs, with an additional “other” category. See ^{vi} Ray Kirk, Casandra Firman, Linda Baker. 2004. FRIENDS Outcome Evaluation Field Test: A Report on the Development of a Tool for Measuring the Outcomes of Child Abuse Prevention Programs. FRIENDS National Resource Center, p. 9. Available at <http://www.friendsnrc.org> last accessed June 9, 2009.
- ^{vii} The relationship between program intensity (such as the number of hours in a week), duration (length of time from first session to program completion), and age-at-entry (the age when a child starts the program) is complex, and seems to vary by demographics and socioeconomic status. For a discussion in the context of early child care, see Susanna Loeb, Margaret Bridges, Daphna Bassok, Bruce Fuller and Russ Rumberger. 2005. “How much is too much?; The Effects of Duration and Intensity of Child Care Experiences on Children’s Social and Cognitive Development.” Available at <http://www.stanford.edu/group/irepp/cgi-bin/joomla/docman/early-childhood-duration-and-intensity/download.html>.
- ^{viii} For more information about this program and its evaluations, see www.nursingfamilypartnership.org.
- ^{ix} Many programs are hesitant to use random assignment in evaluations, even when it is ethical and feasible to do so. In the absence of random assignment, pre-existing differences in the treatment and control groups may be responsible for differences in outcomes, not a program’s operations. Comparison groups with non-experimental designs should be used with caution.
- ^x Support for this conclusion is included in the section on child maltreatment indicators below.
- ^{xi} See Joan Shireman. 2003. *Critical Issues in Child Welfare*. New York: Columbia University Press; Richard Barth. “Outcomes after Child Welfare Services.” *Children and Youth Services Review*. 22(9/10) 763-787.
- ^{xii} E.g. Fred Wulczyn, Brittany Orlebecke and Jennifer Haight argue “As broader concerns tied to the overarching construct of well-being, health, education, and behavioral health are a clear and important concern for the child welfare system.” See *Finding the Return on Investment: A Framework for Monitoring Local Child Welfare Agencies*. 2009. Chicago: Chapin Hall Center for Children. P. 8.
- ^{xiii} In 2003, Child Trends produced a report entitled *The Development and Use of Child Well-Being Indicators in the Prevention of Child Abuse and Neglect* in a project also involved a process designed to build consensus around those indicators. This report, however, contained indicators for all children, not specifically for children 0 to 5 years old.
- ^{xiv} Programs might prevent maltreatment by delaying the onset of pregnancy, but the programs examined here are for children who are already born.
- ^{xv} This indicator does not appear in many of the studies we examined. With the rate of obesity among children having tripled over a recent 20 year period, the importance of physical activity for child health has increased. See Ogden CL, Carroll MD, Flegal KM. “High Body Mass Index for Age Among US Children and Adolescents, 2003-2006.” *JAMA*. 2008;299(20):2401-2405. For facts concerning the importance of physical activity to child development, see <http://www.cdc.gov/HealthyYouth/physicalactivity/facts.htm>. A developmentally appropriate schedule also refers to amounts of sleep, television, and other activities connected with child well-being.
- ^{xvi} The ECLS is two surveys, one for younger children (the ECLS-B) and one for school age children (the ECLS-K). For simplicity, we refer to both surveys as the ECLS.
- ^{xvii} See <http://www.cdc.gov/nchs/slats/nsch.htm> for further information regarding the NSCH. In addition to yielding national estimates for the general U.S. child population, the NSCH also has the advantage of yielding state-level estimates.
- ^{xviii} For example, some health institutions require the use of specific forms that parents must sign to waive confidentiality for children. In these situations, researchers may have to include institution-specific forms in their Institutional Review Board applications for each institution, which requires identifying each of the institutions where a child receives care in advance of the study.
- ^{xix} The Ages and Stages scale is frequently used for screening, including screenings that were done as part of the Massachusetts and Oregon Health Families America initiatives. See Squires J, Potter L, Bricker D. *The ASQ User's Guide for the Ages & Stages Questionnaire: A Parent-Completed, Child-Monitoring System*. 2nd ed. Baltimore, MD: Paul H. Brookes; 1999.
- ^{xx} For a discussion of school readiness instruments used in programs across the country, see Brown, G., Scott-Little, C., Amwake, L., & Wynn, L. (2007). *A review of methods and instruments used in state and local school readiness evaluations* (Issues & Answers Report, REL 2007–No. 004). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southeast, especially pp. 11-13. Retrieved from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/30/ac/3d.pdf.
- ^{xxi} In three random assignment longitudinal trials of the Nursing Family Partnership, researchers found differences in IQ scores. Such studies are important but rare in the field. See David L. Olds, Harriet Kitzman, Carole Hanks, Robert Cole, Elizabeth Anson,

Kimberly Sidora-Arcoleo, Dennis W. Luckey, Charles R. Henderson, Jr, John Holmberg, Robin A. Tutt, Amanda J. Stevenson, and Jessica Bondy. "Effects of Nurse Home Visiting on Maternal and Child Functioning: Age-9 Follow-up of a Randomized Trial." *Pediatrics*. Vol. 120 No. 4 October 2007, pp. e832-e845; <http://www.nursefamilypartnership.org>.

^{xxii} For an inventory of psychometric instruments, see Daniel J. Berry, Lisa J. Bridges, and Martha J. Zaslow. 2003. *Early Childhood Measures Profiles*. Child Trends: Washington, DC. This section relies heavily on this source, and some updates may have occurred since its publication.

^{xxiii} Berry et al, *Early Childhood Measures Profiles*, p. 335.

^{xxiv} For more information on the DECA, see LeBuffe, P.A., & Naglieri, J.A. (1999). *Devereux Early Childhood Assessment Program: Technical Manual*. Lewisville, NC: Kaplan Press.

^{xxv} Zill, Nicholas. 1991. The Behavior Problems Index. Descriptive Material. Washington, DC: Child Trends.

^{xxvi} Achenbach, Thomas M., 1999. The Child Behavior Checklist and related instruments. p. 429-466 in *The Use of Psychological Testing for Treatment Planning and Outcomes Assessment, Second Edition*. Mark E. Maruish, ed. Mahwah, NJ: Lawrence Erlbaum Associates.

^{xxvii} ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NHIS/1998/srvydesc.pdf; see also

ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NHIS/2001/srvydesc.pdf

^{xxviii} See Carter, A. S., Briggs-Gowan, M. J., Jones, S. M., & Little, T. D. (2003). The Infant Toddler Social and Emotional Assessment (ITSEA): Factor structure, reliability, and validity. *Journal of Abnormal Child Psychology*, 31, 495-514. and Briggs-Gowan, M. J., Carter, A. S., Irwin, J. R., Wachtel, K., and Cicchetti, D. V. (2004). The Brief Infant-Toddler Social and Emotional Assessment: Screening for social-emotional problems and delays in competence. *Journal of Pediatric Psychology*, 29, 143-155.

^{xxix} Sociological concern with home and community factors dates back at least to the 1950, with Cloward and Ohlin's research on juvenile delinquency. See Cloward, R. & Ohlin, L. (1960). *Delinquency and opportunity: A theory of delinquent gangs*. Glencoe, IL: Free Press.

^{xxx} The ecological model was originally described in Bronfenbrenner, Urie. 1979. *The Ecology of Human Development*. Boston, MA: Harvard University Press. It was updated in Bronfenbrenner, Urie, and Morris, Pamela A. 1998. The ecology of developmental processes. Pp. 993-1028 in *Handbook of Child Psychology: Fifth Edition, Volume One* (W. Damon and R.M. Lerner, eds.) New York, NY: John Wiley and Sons.

^{xxxi} Elder, Glenn H. Jr. 1998. The life course and human development. Pp. 939-991 in *Handbook of Child Psychology: Fifth Edition, Volume One* (W. Damon and R.M. Lerner, eds.) New York, NY: John Wiley and Sons.

^{xxxii} William Julius Wilson. 1987. *The Truly Disadvantaged*. Chicago: University of Chicago Press.

^{xxxiii} Robert Putnam. 2001. *Bowling Alone: The Collapse and Revival of American Community*. New York, NY: Simon and Schuster

^{xxxiv} See for example, Molnar, Beth E.; Buka, Stephen L.; Brennan, Robert T.; Holton, John K.; Earls, Felton, "Multilevel study of neighborhoods and parent-to-child physical aggression: Results from the Project on Human Development in Chicago Neighborhoods." *Child Maltreatment*. May 2003, 8, (2), 84 - 97.; Xue, Yange; Leventhal, Tama; Brooks-Gunn, Jeanne; Earls, Felton J., "Neighborhood residence and mental health problems of 5- to 11-year-olds." *Archives of General Psychiatry*. May 2005, 62, (5), 554 - 563. DOI: 10.1001/archpsyc.62.5.554. For a complete list of publications from that study, see <http://www.icpsr.umich.edu/cgi-bin/CITATIONS/search?series=206&method=series&path=PHDCN>.

^{xxxv} See for example Kretzmann, John P. And McKnight John L. (1993). *Building Communities from the Inside Out: A Path toward Finding and Mobilizing a Community's Assets*. Chicago: ACTA Publications.

^{xxxvi} Coordinated networks of services are one promising approach for improving broad-based community conditions. The Harlem Children's Zone is the most well-known effort using this approach—see Paul Tough. 2008. *Whatever it takes: Geoffrey Canada's Quest to Change Harlem and America*. New York: Houghton Mifflin Company.

^{xxxvii} Information on the Protective Factors Survey is available at <http://www.friendsrc.org/outcome/pfs.htm>.

^{xxxviii} For more information on the FACES, see

http://www.acf.hhs.gov/programs/opre/hs/faces/instruments/child_instru02/instru02_index.html.

^{xxxix} The NIS researchers recruit "sentinels"—professionals such teachers, social workers, and medical staff—who may encounter children who meet the study's definition of maltreatment but who are not the subject of reports to state central registries. In its fourth iteration, the NIS methodology is a model methodology for its purpose, but far too expensive and complex to use in program evaluations. The NIS definition of child maltreatment is seven pages long; the study relies heavily on sampling and weighting, and requires intensive training of sentinels, data collectors, and other staff. See Andrea Sedlak. 2001. *A History of the National Incidence Study of Child Abuse and Neglect*. Westat, Inc.: Rockville, MD. Available at https://www.nis4.org/NIS_History.pdf.

^{xl} The first three iterations of the National Incidence Study called for a nationally representative parent survey to estimate child maltreatment. In each instance, methodological concerns and resource issues resulted in the cancellation of the survey.

^{xli} Every state has procedures for maintaining records of child abuse and neglect. Most states maintain a central registry, which is a centralized database of child abuse and neglect investigation records. Approximately 40 states, the District of Columbia, American Samoa, Guam, and Puerto Rico require central registries in statute. Registries in other states, however, may be maintained as a matter of administrative or agency policy rather than statutory mandate. For more information, see

http://www.childwelfare.gov/systemwide/laws_policies/statutes/centreg.cfm.

^{xlii} Based on prior research, the NIS methodology presumes that reported cases of child maltreatment are "the tip of the ice berg" and that actual occurrences of maltreatment far outstrip reported cases. See <https://www.nis4.org/faq.asp>.

^{xliii} See Fluke, Yaun J., Hedderson, J. & Curtis, P. 2003. Disproportionate Representation of Race and Ethnicity in Child Maltreatment: Investigation and Victimization, *Children and Youth Services Review*, 25: 359-373; U.S. Department of Health and Human

Services. 2005. *Child Maltreatment*, Washington, DC: U.S. Government Printing Office; and Hill, R.G. 2006. *Synthesis of Research on Disproportionality in Child Welfare: An Update*. Washington, DC: Casey/Center for the Study of Social Policy, Alliance for Racial Equity.

^{xliv} In New York City, for example, reports to the state central registry rose by 80 percent following the death of Nixzmary Brown at the hands of her stepfather in 2006. Reports did not return to their previous levels, in part because reporting procedures changed following this event.

^{xlv} See Susan Mitchell-Herzfield, 2005.

^{xlvi} For example, Ross et al describe a report of a child with severe bruising that investigators found to be discoloration caused by spilled grape juice.

^{xlvii} Concerning malicious reports, see Cosner, R.E., Weiner, N.A., Huang, V. et al. 1997. *Knowingly False and Malicious Reporting of Child Abuse and Neglect in Pennsylvania: Critical Questions, Findings, and Recommendations*. (Harrisburg, PA: Pennsylvania Department of Public Welfare: Office of Children, Youth, and Families).

^{xlviii} The article describing this finding is pending.

^{xlix} Ards, S., Myers, S., Malkis, A., Sugrue, E., & Zhou, L. (2003). Racial disproportionality in reported and substantiated child abuse and neglect: An examination of systemic bias. *Children and Youth Services Review*, 25(5/6), 375-392.; Fluke, J.D., Yuan, Y.Y., Hedderson, J. & Curtis, P.A. (2003). Disproportionate representation of race and ethnicity in child maltreatment: Investigation and victimization. *Children and Youth Services Review*, 25, 359-373.

^l Fred Wulczyn, Brittany Orlebeck and Jennifer Haight. 2009. *Finding the Return on Investment: A Framework for Monitoring Local Child Welfare Agencies*. Chicago: Chapin Hall Center for Children, page 15 (“Even if the allegation that led to the investigation is substantiated, the likelihood that the child will be referred for services is less than 50 percent.”)

^{li} See Dew, B., & Breakey, G. F. 2004. An evaluation of Hawaii’s Healthy Start Program using child abuse hospitalization data. Honolulu, HI: Hawaii Family Support Center. Unpublished manuscript. Also referenced at

http://www.healthyfamiliesamerica.org/downloads/hfa_fact_a.pdf

^{lii} Ray Kirk, Casandra Firman, Linda Baker. 2004. FRIENDS Outcome Evaluation Field Test: A Report on the Development of a Tool for Measuring the Outcomes of Child Abuse Prevention Programs. FRIENDS National Resource Center, p. 10. Available at <http://www.friendsnrc.org> last accessed June 9, 2009.

^{liii} Eckenrode, J. (2009, January). *Primary prevention of child maltreatment*. Slide presentation at Chronic Neglect Research Meeting of the American Humane Association, Denver, CO.

^{liv} Institutional review boards (IRBs) review study protocols to ensure that they comply with federal regulations concerning the ethical treatment of human subjects in research. The issues involved in assessing child maltreatment prevention programs are especially complex. Researchers have ethical and regulatory obligations to minimize risks to human subjects (such as parents) and an obligation to report suspected child maltreatment. See 45 CFR 46, and Brian Allen. “Are Researchers Ethically Obligated to Report Suspected Child Maltreatment? A Critical Analysis of Opposing Perspectives.” *Ethics & Behavior*, Volume 19, Issue 1 January 2009, pages 15 – 24.

^{lv} See Beth L. Green, Callie H. Lambarth, Jerod M. Tarte, and Ashley M. Snoddy. 2009. *Oregon’s Healthy Start Maltreatment Prevention Report 2007-08*. Portland, OR: NPC Research.

^{lvi} There are other issues with using the Kempe index in this context, including the need for highly trained personnel to administer and interpret the instrument. See Jon Korfmacher. “The Kempe family stress inventory: a review.” *Child Abuse & Neglect*. Volume 24, Issue 1, January 2000, Pages 129-140. For a brief synopsis of the Kempe index, see

<http://www.friendsnrc.org/download/outcomeresources/toolkit/annot/fsc.pdf> last accessed June 9, 2009.

^{lvii} In addition to the citations below related to specific risk factors for child maltreatment, the Centers for Disease Control website lists risk and protective factors related to maltreatment, referencing United States Department of Health and Human Services publications. See <http://www.cdc.gov/ncipc/dvp/cmp/cmp-risk-p-factors.htm>. For purposes of this report, we have classified risk and protective factors into a smaller number of categories than the CDC, and focused only on those factors that might change as the result of programmatic participation. In addition, factors discussed in the first two sections, such as social isolation, are not discussed again here.

^{lviii} A parent’s history of maltreatment in their childhood is one of the factors included in the Kempe index. See also Francine Jacobs and M. Ann Esterbrooks. *Healthy Families Massachusetts Final Evaluation Report*. Available at <http://ase.tufts.edu/mhfe>, page 10: “Mothers who report more physical and psychological abuse in their own childhoods, and who exhibit signs of depression, engage in more risky behaviors, and live in less healthy and safe homes and neighborhoods are more likely to be perpetrators of child maltreatment.”

^{lix} Maternal depression is frequently as a risk factor for child maltreatment. See Jonathan B. Kotch, Dorothy C. Browne, Vincent Dufort, Jane Winsor and Diane Catellier “Predicting child maltreatment in the first 4 years of life from characteristics assessed in the neonatal period.” *Child Abuse & Neglect*. Volume 23, Issue 4, April 1999, Pages 305-319.

^{lx} For origins of these instruments, see Barnard, K. (1978). *NCAST teaching scale manual*. Seattle, WA: NCAST Publications; ^{lx} Caldwell, Bettye M. and Robert H. Bradley. 1984. *Home Observation Measurement of the Environment [Administration Manual]*. Rev. ed. Little Rock: University of Arkansas at Little Rock; Bradley, Robert H., and Bettye M. Caldwell. 1979. Home Observation for Measurement of the Environment: A revision of the preschool scale. *American Journal of Mental Deficiency*, 84:235-244.

^{lxi} See NRCCAP compendium for HOME, p. 1.

^{lxii} Over the past 40 years, researchers and practitioners have used the HOME successfully in many contexts. For a discussion of the instrument’s strengths and weaknesses, see Vasiliki Totsika & Kathy Sylva. 2004. “The Home Observation for Measurement of the Environment Revisited.” *Child and Adolescent Mental Health*. Vol. 9, No. 1, 2004, pp. 25–35.

^{lxiii} For a well-referenced discussion of bias issues in the NCAST and HOME scales, see DuMont, K., Rodriguez, M., Mitchell-Herzfeld, S., Walden, N., Kirkland, K., Greene, R., Lee, E. (2008). *Effects of Healthy Families New York on Maternal Behaviors: Observational Assessments of Positive and Negative Parenting*. Rensselaer, New York: New York State Office of Children and Family Services, especially pages 7-9. See also Sugland, Barbara W., Zaslou, Martha, Smith, Judith R. (1995.) The Early Childhood HOME Inventory and HOME-Short Form in differing racial/ethnic groups: Are there differences in underlying structure, internal consistency of subscales, and patterns of prediction? *Journal of Family Issues*, 16:632-63.

^{lxiv} Joseph Galano and Lee Huntington. 2004. Healthy Families Virginia FY 2000-2004 Statewide Evaluation Report, Executive Summary.

^{lxv} See Dumont, Rodriguez, and Mitchell-Herzfeld, 2008.

^{lxvi} See Comfort, M. & Gordon, P.R. (2006). The Keys to Interactive Parenting Scale (KIPS): A practical observational assessment of parenting behavior. *NHSA Dialog: A Research-To-Practice Journal for the Early Intervention Field*, 9(1), 22-48.

^{lxvii} A note of caution: in our initial review of the literature, testing appears to be conducted exclusively by the KIPS developers—though their work was funded by the National Institute of Child Health and Development, more extensive and independent testing of the KIPS may be needed.

^{lxviii} See, for example, Michael D. De Bellis, Elsie R. Broussard, David J. Herring, Sandra Wexler, Grace Moritz and John G. Benitez. Psychiatric co-morbidity in caregivers and children involved in maltreatment: a pilot research study with policy implications." *Child Abuse & Neglect*. Volume 25, Issue 7, July 2001, Pages 923-944.

^{lxix} For a discussion of different instruments aimed at identifying the presence and extent of specific mental health issues, see McDowell, 2006.

^{lxx} See Ian McDowell. 2006. *Measuring Health: A Guide to Rating Scales and Questionnaires (3rd Edition)*. New York: Oxford University Press, p. 240-247.

^{lxxi} The other five subscales for the GWB are anxiety, positive well-being, self-control, vitality and general health.

^{lxxii} Radloff, L.S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1(3), 385-401. A previous Child Trends publication also recommended this instrument for use with low income families. See *Children and Welfare Reform: A Guide to Evaluating the Effects of State Welfare Policies on Children*. 1999. Washington: DC: Child Trends, p. 41-42.

^{lxxiii} Child Trends. (1999.) *Children and Welfare Reform: A Guide to Evaluating the Effects of State Welfare Policies on Children*. Washington, DC: Child Trends.

^{lxxiv} Ray Kirk, Casandra Firman, and Linda Baker. 2005. FRIENDS Outcome Evaluation Field Test A Report on the Development of a Tool for Measuring the Outcomes of Child Abuse Prevention Programs. Available at http://www.friendsnrc.org/download/outcomeresources/fsp_survey_report.pdf. The authors note a measurement problem that may impact this and other self-administered parent surveys called "response shift bias." Response shift bias occurs when as the result of an educational program, respondents may realize that they know less about a topic than they previously believed. As a result, pre- and post-test scores show artificial reductions in knowledge. To avoid this problem, the authors suggest that this survey be administered after the intervention, letting parents estimate their pre-test knowledge.

^{lxxv} A federal study found that 50-75 percent of all families involved with child welfare services nationally had a drug or alcohol problem. See United States Department of Health and Human Services (1999). *Blending Perspectives and Building Common Ground: A report to Congress on Substance Abuse and Child Protection*. Washington, DC: U. S. Government Printing Office.

^{lxxvi} Knight J.R., Sherritt, L., Shrier, L.A., Harris, S.K., and Chang, G. Validity of the CRAFFT substance abuse screening test among adolescent clinic patients. *Archives of Pediatric Adolescent Medicine*. 2002 Jun; 156(6):607-14. See <http://clinicaltrials.gov/ct2/show/NCT00592956> for more references to use of the CRAFFT.

^{lxxvii} LeCroy & Milligan Associates, Inc. (2006). *Healthy Families Arizona Evaluation Report 2006*. Tucson, AZ: LeCroy & Milligan Associates, Inc., p. 60.

^{lxxviii} This description of the DUSI's properties comes from the National Institute for Alcohol Abuse and Alcoholism. See http://pubs.niaaa.nih.gov/publications/Assesing%20Alcohol/InstrumentPDFs/32_DUSI-R.pdf. See also Tarter, R. (1990). Evaluation and treatment of adolescent substance abuse: A decision tree method. *American Journal of Drug and Alcohol Abuse*, 16, 1-46.

^{lxxix} The DSM-IV is the standard handbook for psychiatric diagnoses. See American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders (DSM-IV-TR)* (4th rev. ed.). Washington, DC: American Psychiatric Association.

^{lxxx} Both academics and advocates have argued that child welfare laws are part of a larger effort of exerting state control over the lives of poor people. See Jennifer Reich. 2005. *Fixing Families: Parents, Power, and the Child Welfare System*. New York: Routledge Press; and Richard Wexler. 1995. *Wounded Innocents: The Real Victims of the War Against Child Abuse*. Prometheus Books: Amherst, New York. Others argue that child welfare laws provide families in poverty with too many chances for rehabilitation at the expense of their children. These arguments helped lead to the passage of the Adoption and Safe Families Act, which mandated faster termination of parental rights.

^{lxxxi} For a literature review of the connection between child maltreatment and poverty that contains references from Britain and the United States, see Claire Dyson. 2008. *Poverty and Child Maltreatment*. London: National Society for the Prevention of Cruelty to Children.

^{lxxxii} Collecting income information is a complex undertaking. Many people do not want to reveal their income, in part because it is traditionally considered private information and because people who are receiving "off the books" income are reluctant to acknowledge that income to researchers, even after assurances of confidentiality. Survey researchers report that respondents often

refuse to answer questions pertaining to income. Proxies for poverty status, such as food stamp receipt and whether children qualify for free or reduced price school lunches are likely more reliable and easier to collect.

lxxxiii The Adverse Childhood Experiences study (ACE) funded by the CDC, for example, lists “mother treated violently” as one of nine traumatic events. Most of the other traumatic events in the ACES study are forms of child maltreatment, including physical, sexual, and emotional abuse, as well as neglect. For more information see <http://www.acestudy.org>.

lxxxiv Straus, Murray A. 2007. "Conflict Tactics Scales." Pp. 190 - 197 in *Encyclopedia of Domestic Violence*, N. A. Jackson. New York: Routledge: Taylor & Francis Group.

lxxxv For example, see Francine Jacobs and M. Ann Esterbrooks. *Healthy Families Massachusetts Final Evaluation Report*. Available at <http://ase.tufts.edu/mhfe>.

lxxxvi See Deborah A. Daro and Kathryn A. Harding. 1999. “Healthy Families America: Using Research to Enhance Practice.” *The Future of Children*. Vol. 9, No. 1, (Spring - Summer, 1999), pp. 152-176.

lxxxvii See <http://www3.parinc.com/products/product.aspx?Productid=CAP>.