Supporting Evidence-Based Home Visiting to Prevent Child Maltreatment: Overview of the Cross-Site Evaluation

October 30, 2009
Introduction

In 2007, 3.2 million referrals of alleged acts of maltreatment involving 5.8 million children were made to child protective services agencies. An estimated 794,000 children were victims of substantiated maltreatment, and, tragically, an estimated 1,760 children died because of maltreatment (U.S. Department of Health and Human Services 2009). Despite recent declines in the number of substantiated cases of neglect, physical abuse, and sexual abuse (Finkelhor 2007; Finkelhor and Jones 2006), child fatalities increased 15 percent during the most recent reporting period, and children younger than age 1 continue to demonstrate victimization rates two to four times the rate experienced by older children. Collectively, these findings underscore the need for strategies to prevent child maltreatment in order to improve outcomes for families and communities. Given the limited funding available to support human services programs and the push towards more accountability for outcomes, policymakers have become much more selective and insistent that funding support evidence-based programs that have demonstrated positive results. Over the last several years there has been sustained growth in the focus on identifying and using evidence-based programs and practices for a variety of disciplines. There is a growing body of evidence that some home visitation programs can be a successful child maltreatment prevention strategy (Bilukha et al. 2005; Gomby 2005; Olds et al. 2004; Olds et al. 2007; Prinz et al. 2009; Sweet and Appelbaum 2004). By providing models of positive parenting skills that focus on improving the parent-child relationship, home visiting programs give at-risk families the knowledge and skills they can use to support their children’s development and learning, and, ultimately, improve their children’s well-being (Appleyard and Berlin 2007; Berlin et al. 2008; Daro 2006; Wolfe 2004).

With the increased emphasis on identifying evidence-based programs and practices, equal attention also must be placed on mechanisms and support needed for the successful dissemination of research-based programs, and their adoption and implementation in direct practice. Interventions cannot be fully successful without taking into account the systems in which families are served (Foster-Fishman et al. 2007). Service delivery systems are important because they define who will be served and how they will receive services. Furthermore, systems define how services will be funded, monitored, and staffed. Over the last several years, state health and human services officials have demonstrated an interest in implementing evidence-based programs and practices within their systems, but have been constrained by limited resources in their ability to develop the knowledge base of how such programs can fit within their systems. For home visiting interventions to have the greatest effects possible, the systems in which home visiting programs operate must be integrated,
supportive, and conducive to service delivery. Knowledge is needed about how to build the infrastructure and service systems necessary to implement and sustain evidence-based home visiting (EBHV) programs with fidelity to their models, and whether and how to scale up these programs and adapt them for new target populations.

In 2008, the Children’s Bureau (CB) within the Administration for Children and Families (ACF) at the U.S. Department of Health and Human Services funded 17 grants with the goal of supporting the implementation of home visiting programs that may prevent child maltreatment. Grantees are to focus on supporting implementation of, scaling up, and sustaining home visiting programs with high fidelity to their evidence-based models. In addition, grantees will contribute to the knowledge base about large-scale implementation with fidelity by conducting local implementation and outcome evaluations, along with analyses of program costs.

CB/ACF has funded Mathematica Policy Research and Chapin Hall at the University of Chicago, along with consultant Brenda Harden Jones from the University of Maryland, to conduct a six-year cross-site evaluation of the grantees’ programs. As in the cooperative agreements, the first year of the cross-site evaluation was a planning year. Mathematica-Chapin Hall, in collaboration with the 17 EBHV grantees and their local evaluators, will conduct the cross-site evaluation during the remaining five years. The primary purpose of the cross-site evaluation is to identify successful strategies for adopting, implementing, and sustaining high-quality home visiting programs to prevent child maltreatment. The evaluation was designed to be participatory and utilization-focused, engaging the grantees and other stakeholders at key points in the process and incorporating information gathered back into the program models and evaluation framework. To achieve these goals, the Mathematica-Chapin Hall team will support rigorous local evaluations carried out within a Peer Learning Network (PLN), and use data from local evaluations and cross-site research to document implementation and fidelity to the home visiting models and assess systems, program, and participant outcomes. The cross-site evaluation will focus on domains central to the implementation and monitoring of home visiting programs: systems change, fidelity to the grantee-selected home visiting program model, costs of home visiting programs, and family and child outcomes. The cross-site evaluation also will analyze the process that each grantee uses to implement the grant.

The Mathematica-Chapin Hall team worked closely with the 17 EBHV grantees and their local evaluators, as well as CB/ACF and other federal partners, to design the cross-site evaluation. This summary provides an overview of the EBHV grantees and their selected program models and presents an overview of the design (see Koball et al. 2009 and Del Grosso and Daro 2009 for a
detailed description of the evaluation design and for a summary of the evaluation planning year and lessons learned).

**EBHV Grantees and Their Selected Program Models**

The summer 2008 federal grant announcement required applicants to select home visiting programs that met specified criteria so as to be considered an evidence-based model. During the grant review process, an independent panel of peer reviewers was asked to evaluate applications based on the criteria listed in the announcement to determine if the program(s) proposed by the applicant met standards related to evidence-based models. The funded applications included six different models to implement (Table 1): Family Connections; Healthy Families America; Nurse-Family Partnership; Parents as Teachers; SafeCare; and Triple P. The EBHV grantee-selected models have established performance standards that not only address issues such as service dosage and duration, but also provide guidelines on who can best serve as a home visitor, the initial and ongoing training levels for home visitors and supervisors, supervisory standards, and core characteristics of a high-quality participant-provider relationship. The models also specify requirements an applicant organization must meet with respect to its management capacity and financial stability.

**Table 1 Summary of EBHV Grantee-Selected Program Models**

<table>
<thead>
<tr>
<th>EBHV Program Model</th>
<th>Target Population</th>
<th>Expected Dosage</th>
<th>Expected Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Connections</td>
<td>Families with at least one child age 5 to 11; demonstrated risk for neglect</td>
<td>Minimum 1 hour face-to-face per week</td>
<td>3 to 6 months</td>
</tr>
<tr>
<td>Healthy Families America</td>
<td>Pregnant women or new parents within two weeks of infant’s birth</td>
<td>Scaled (from weekly to quarterly)</td>
<td>Until child’s fifth birthday</td>
</tr>
<tr>
<td>Nurse-Family Partnership</td>
<td>First-time pregnant women &lt; 28 weeks gestation</td>
<td>Scaled (from weekly to quarterly)</td>
<td>Until child’s second birthday</td>
</tr>
</tbody>
</table>

1 Triple P is not by definition a home visiting program. It is a practice reform designed to alter the manner in which all providers working with families approach their program participants regarding child management and parent-child interactions. Triple P is based on a multi-faceted program model that includes five levels of increasingly intensive and targeted services that can be delivered in different formats (Prinz et al. 2009). The EBHV grantee that is implementing Triple P is using home visitors to provide the most intensive services (Levels 4 and 5) in the Triple P model.
EBHV Program Model | Target Population | Expected Dosage | Expected Duration
--- | --- | --- | ---
Parents as Teachers | Birth or prenatal to age 5 | Minimum monthly home visit and group visit | Until enrollment in kindergarten
SafeCare | Birth to age 5 | 1 to 2 hours per week | 18 to 20 weeks
Triple P | Birth to age 12 | Weekly | Varies by type of service (from 1 to 2 sessions to 8 to 11 sessions)


EBHV = evidence-based home visiting.

All EBHV grantees are working to support the development of infrastructure for high-quality implementation of existing home visiting programs to prevent child maltreatment. However, the 17 grantees vary in their planned approaches and activities for supporting this infrastructure development (Table 2). The grantees are working within diverse organizational settings to support the implementation of various home visiting models. In some situations, the grantee is the implementing agency for their selected home visiting model. In others, the grantee contracts or partners with the implementing agency to deliver services. Implementing agencies vary in the number of service delivery locations they oversee. In addition, grantees are at different stages of implementing their selected home visiting models. Through the grant, some grantees will implement a new home visiting model for their community, others will continue their implementation of a home visiting model, and still others plan to expand implementation of a model they already implement to new service delivery locations and/or new target populations. Additional diversity exists in the geographic coverage of grantees’ service areas, with grantees implementing in a targeted community, in selected areas of a state, or statewide.

As part of the EBHV initiative, all grantees must conduct a local implementation and outcome evaluation and an analysis of program costs. The local evaluations vary in planned rigor, from descriptive studies that focus on implementation, to randomized control trials of family and child outcomes resulting from participating in an EBHV program, to rigorous assessments of the added value to families and children of specific enhancements to the home visiting models.
Cross-Site Evaluation Design

The EBHV cross-site evaluation design process was to be participatory and utilization-focused. Therefore, soliciting and incorporating input from grantees and other stakeholders was essential throughout the process.

Four principles guided the design process: (1) create a participatory process for designing the evaluation, (2) build on the local evaluation plans that the grantees proposed by focusing the cross-site evaluation on common elements across grantees, (3) keep the number of outcomes for assessment and the overall data collection requirements as low as possible to reduce burden and costs for grantees, and (4) provide utilization-focused reporting at key points in the project.

<table>
<thead>
<tr>
<th>State</th>
<th>State Grantee</th>
<th>EBHV Grantee-Selected Program Model</th>
<th>EBHV Implementation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA</td>
<td>County of Solano, Department of Health and Social Services</td>
<td>NFP</td>
<td>New</td>
</tr>
<tr>
<td>CA</td>
<td>Rady’s Children’s Hospital, San Diego</td>
<td>SC</td>
<td>New</td>
</tr>
<tr>
<td>CO</td>
<td>Colorado Judicial Department</td>
<td>SC</td>
<td>New</td>
</tr>
<tr>
<td>DE</td>
<td>Children &amp; Families First</td>
<td>NFP</td>
<td>New</td>
</tr>
<tr>
<td>HI</td>
<td>Hawaii Department of Health</td>
<td>HFA</td>
<td>Continuing with enhancements</td>
</tr>
<tr>
<td>IL</td>
<td>Illinois Department of Human Services</td>
<td>NFP</td>
<td>Continuing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HFA</td>
<td>Continuing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PAT</td>
<td>Continuing</td>
</tr>
<tr>
<td>MN</td>
<td>Minnesota Department of Health State Treasurer</td>
<td>NFP</td>
<td>Expanding</td>
</tr>
<tr>
<td>NJ</td>
<td>New Jersey Department of Children and Families</td>
<td>NFP</td>
<td>Expanding</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HFA</td>
<td>Continuing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PAT</td>
<td>New</td>
</tr>
<tr>
<td>NY</td>
<td>Society for the Prevention of Cruelty to Children, Rochester</td>
<td>NFP</td>
<td>Continuing with enhancements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PAT</td>
<td>Continuing with enhancements</td>
</tr>
<tr>
<td>OH</td>
<td>St. Vincent Mercy Medical Center</td>
<td>HFA</td>
<td>New</td>
</tr>
<tr>
<td>OK</td>
<td>The University of Oklahoma Health Services Center</td>
<td>SC</td>
<td>Expanding with enhancements</td>
</tr>
<tr>
<td>RI</td>
<td>Rhode Island Kids Count</td>
<td>NFP</td>
<td>New</td>
</tr>
<tr>
<td>SC</td>
<td>The Children’s Trust Fund of South Carolina</td>
<td>NFP</td>
<td>New</td>
</tr>
<tr>
<td>TN</td>
<td>Child and Family Tennessee</td>
<td>FC</td>
<td>Continuing</td>
</tr>
</tbody>
</table>
Table 2 (continued)

<table>
<thead>
<tr>
<th>State</th>
<th>Grantee</th>
<th>EBHV Grantee-Selected Program Model</th>
<th>EBHV Implementation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>TN</td>
<td>Le Bonheur Community Outreach</td>
<td>NFP</td>
<td>New</td>
</tr>
<tr>
<td>TX</td>
<td>DePelchin Children’s Center</td>
<td>Triple P</td>
<td>New</td>
</tr>
<tr>
<td>UT</td>
<td>Utah Department of Health</td>
<td>HFA</td>
<td>Continuing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NFP</td>
<td>Continuing</td>
</tr>
</tbody>
</table>

Source: Grantee applications and plan updates.

FC = Family Connections; HFA = Healthy Families America; NFP = Nurse-Family Partnership; PAT = Parents as Teachers; SC = SafeCare; EBHV = evidence-based home visiting.

The cross-site evaluation team sought to develop a utilization-focused design by making plans to provide usable information gathered from the cross-site evaluation to key stakeholders, including the 17 grantees, other operators of home visiting programs, CB/ACF, state and county agencies, other EBHV funders, and model developers seeking to replicate or scale up their models. We have designed the data collection process to provide information to grantees at several points across the six-year evaluation\(^2\) that can support local examination of progress toward grantees’ goals. The evaluation design uses a common framework to examine grantees’ implementation and outcomes within each domain and to measure indicators of the evaluation domains that we hypothesize to be important across all grantees. At the same time, data collection and selection of measures was tailored to each grantee’s goals.

**Cross-Site Evaluation Design Overview**

The EBHV initiative is an effort to learn what it takes to support the implementation, scale-up, and sustainability of home visiting programs with fidelity, with the intended ultimate outcome of improved family and child outcomes. As depicted in Figure 1, grantees’ efforts involve a complex array of activities and strategies to develop infrastructure to support home visiting programs. The conceptual underpinning for the EBHV initiative is that, through systems change activities, grantees will develop infrastructure capacity that improves the fidelity of implementation of the home visiting programs. Implementation of home visiting programs with fidelity, along with the operational costs

\(^2\) Year 1 (October 2008 through September 2009) of the cross-site evaluation was the planning year. The evaluation continues through September 2014.
Figure 1  EBHV National-Level Theory of Change


EBHV = evidence-based home visiting.

of the programs, affect scale-up\(^3\) and sustainability of the programs. Ultimately, the widespread adoption of home visiting programs implemented with fidelity leads to improved family and child outcomes.

Evaluation Domains and Research Questions

To capture the initiative’s complexity, the cross-site evaluation design consists of five domains relevant to (1) implementation, scale-up, and sustainability with fidelity, and (2) resulting outcomes for parents and children. The intent of each domain is to describe grantees’ efforts related to the domain. The five domains, and their primary research questions, are:

1. **Systems Change**: How did grantees build infrastructure capacity to implement with fidelity, scale up, and sustain home visiting programs?

---

\(^3\) Scale-up is defined as the expansion of services through expanding the capacity of current home visiting programs, adapting the programs for new populations, or supporting new service delivery locations for home visiting programs.
2. **Fidelity to the Evidence-Based Model:** Were the home visiting programs implemented and delivered with fidelity?

3. **Costs of Home Visiting Programs:** How much does the delivery and support of each home visiting program cost?

4. **Family and Child Outcomes:** Do home visiting programs improve family and child outcomes when programs are implemented in the “real world” and supported by investments in infrastructure?

5. **Process Study:** How did grantees plan and implement their grant initiative activities?

To address the primary and secondary research questions in each domain, the cross-site evaluation will collect and analyze data to describe grantee efforts within the domain.

**Cross-Domain Research Questions**

While the evaluation domains, as stand-alone components, are important to the cross-site evaluation, we must also look across the domains to address questions about relationships among how systems change, whether EBHV models are implemented with fidelity, the costs of home visiting programs, and the process grantees use to implement their initiatives. Specifically, the cross-site evaluation will address four cross-domain questions:

1. Are systems, and changes in those systems, related to the fidelity of implementation? What is the nature of this relationship?
2. What contextual factors were found to be barriers or facilitators to systems change and fidelity of implementation?
3. How are systems, program costs, and fidelity of implementation related to the scale-up and sustainability of home visiting programs?
4. Are systems change activities, and improvement in infrastructure capacity to support the implementation of home visiting programs with fidelity, scale-up, and sustainability related to positive family and child outcomes?

To address these questions, the cross-site evaluation will combine the data collected for each domain to analyze the relationships across domains.

**Data Collection Strategy**

The cross-site evaluation data collection strategy includes gathering both quantitative and qualitative data. The quantitative and qualitative data collection modes cut across the domains by addressing the data collection needs for multiple domains. The quantitative data will be collected primarily through data entered by grantees into a web-based system designed by the cross-site evaluation team. Through the web-based system, grantees will provide service and cost data to assess
fidelity to the EBHV grantee-selected models and the costs of implementing these programs, and
will report on progress for their system goals.

The qualitative data will be collected primarily during two site visits. The first visit will take
place in spring 2010, the second in spring 2012. Four primary types of data collection will occur
during site visits: (1) semistructured individual and small-group interviews with key informants;
(2) meeting attendance or observation of EBHV grant program activities; (3) focus groups, such as
with supervisors and frontline home visiting staff members; and (4) reviews of case files of families
participating in home visiting programs.

A partner survey will be timed to coincide with each site visit round, as well as with the end of
the grant period, and will enable us to obtain the perspectives of key players within each grantee.
Through the partner survey, we will understand grantee relationships with key partners and how
these change. Additional data sources will include documents provided by grantees, administrative
data provided by program model purveyors, and county-level maltreatment data.

Analytic Approach

The cross-site evaluation’s analytic approach will employ mixed methods that combine
qualitative and quantitative approaches, including network analysis. The qualitative analysis will be
iterative and will involve systematic coding of the site visit data, following a coding scheme
organized by the evaluation’s research questions, to identify themes, patterns, and outliers across
grantees. For each domain, the quantitative analysis will focus on describing grantees’ activities and
outcomes during the initiative and identifying grantee similarities and differences at specific points,
as well as over time. The analysis of the partner survey will include network analysis techniques that
will measure and map relationships and communication patterns among grantees and their partners
at each data collection point and over time. The team will also analyze the partner survey data by
infrastructure level to track changes in relationships and communication patterns within and across
levels. We will also conduct a systematic review of grantees’ local evaluation findings related to child
and family outcomes to assess whether the EBHV grantee-selected programs have impacts on the
outcomes of families and children. The two goals of the systematic review are to (1) determine the
level of evidence about effects of home visiting programs on families and children; and (2) present
this evidence in a straightforward manner useful to CB/ACF, grantees, and other key stakeholders.

The cross-domain quantitative analysis will model the relationship between systems change,
costs, and fidelity. More specifically, we will analyze the relationship between infrastructure capacity
changes resulting from system activities, system attributes, program costs, and fidelity of implementation, accounting for differences in other relevant grantee and program characteristics. We will also examine the relationship between systems change, program costs, and fidelity with sustainability and scale-up of home visiting programs.

To address whether systems change activities undertaken through the grant initiative improved families’ and children’s outcomes for the grantees’ target populations, we will draw on an analytic model designed to examine intervention effectiveness (Abrams et al. 1996). This model suggests that the effectiveness of an intervention, such as the EBHV initiative, depends on the combination of the effectiveness of the program implemented (in this case, home visiting programs), as well as the reach of that program (how many are served). The ideal combination is that a program model reaches many participants and demonstrates high levels of effectiveness in achieving its outcomes. To assess this, for each grantee, we will examine the evidence of EBHV effectiveness, based on the systematic review of grantees’ local evaluations, in conjunction with measures of reach.

**Evaluation Technical Assistance**

The cross-site evaluation team offers EBHV grantees ongoing assistance to support high-quality, rigorous local evaluations and to ensure they are implementing the required components of the cross-site evaluation with rigor. From the beginning of the planning year, each EBHV grantee was assigned a cross-site evaluation liaison (a Mathematica team member) who serves as the grantee’s key contact for questions on their local evaluation design or the cross-site design. As the cross-site evaluation proceeds, these liaisons will lead site visits to EBHV grantees to promote continuity across evaluation stages. As the cross-site evaluation progresses from designing to conducting the evaluation, it will offer EBHV grantees additional training and support to ensure collection of high-quality evaluation data.

**Utilization-Focused Reporting and Dissemination**

CB/ACF intends that findings from the evaluation be shared with grantees and other audiences at regular intervals over the cross-site evaluation period. The Mathematica-Chapin Hall team will produce annual reports, policy briefs, quick-turnaround analyses, and a final report that presents findings for a broad audience that includes EBHV grantees, state and national stakeholders and
policymakers, and home visiting program administrators. Some of the products will be specific to grantees (the case study data from the process and systems domains), and some will be cross-cutting. In addition, the cross-site evaluation team will present findings at professional meetings and in CB/ACF briefings to facilitate timely dissemination. The cross-site and local evaluation data will be archived at NDACAN for use by researchers. The archive will allow for secondary analyses of the data.

**Cross-Site Evaluation Schedule**

The cross-site evaluation planning year ended in September 2009 and evaluation activities and technical assistance began in October 2009 and are scheduled to continue for five years. Site visits and the first partner survey will occur in spring 2010 and again in 2012. Cost analyses will be based on data collected in 2011. The third partner survey and is scheduled for 2013, at the end of the EBHV initiative. Ongoing web-based data collection will run from early 2010 through mid 2013. Annual reports and the final report on the evaluation findings will be available in the fall of each year through 2014. The archived data is scheduled for delivery to NDACAN by the end of 2014. Additional dissemination activities will ensure that the findings are available for use by the Children’s Bureau, grantees, local evaluators, and other stakeholders.

---

4. The Children’s Bureau is also interested in how findings from the evaluation may influence the evaluation design itself. This means that evaluation research questions and activities may be adapted to address emerging federal and grantee needs and issues.

5. This goes one year beyond the four-year grantee implementation period and allows for analyses and reporting.

6. The systematic review of evidence will be included in the final report.
REFERENCES


Healthy Families America. [Website.] Available at http://www.healthyfamiliesamerica.org/


Ruth H. Young Center for Families and Children. “Family Connections.” Available at http://www.family.umaryland.edu/ryc_best_practice_services/family_connections.htm


