

# **Home Visiting Evidence of Effectiveness Review:**

## **Executive Summary October 2012**

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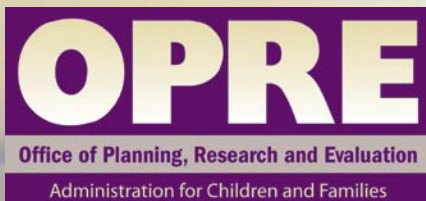
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## HOMVEE EXECUTIVE SUMMARY

Home Visiting Evidence of Effectiveness (HomVEE) was launched in fall 2009 to conduct a thorough and transparent review of the home visiting research literature and provide an assessment of the evidence of effectiveness for home visiting program models that serve families with pregnant women and children from birth to age 5. The HomVEE review was conducted by Mathematica Policy Research under the guidance of a Department of Health and Human Services (DHHS) interagency working group composed of representatives from:

- The Office of Planning, Research, and Evaluation (OPRE), Administration for Children and Families (ACF)
- The Children’s Bureau, ACF
- The Centers for Disease Control and Prevention (CDC)
- The Health Resources and Services Administration (HRSA)
- The Office of the Assistant Secretary for Planning and Evaluation (ASPE)

The Patient Protection and Affordable Care Act established a Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) that provides \$1.5 billion over five years to states to establish home visiting program models for at-risk pregnant women and children from birth to age 5. The Act stipulates that 75 percent of the funds must be used for home visiting programs with evidence of effectiveness based on rigorous evaluation research. The HomVEE review provides information about which home visiting program models have evidence of effectiveness as required by the legislation and defined by DHHS, as well as detailed information about the samples of families who participated in the research, the outcomes measured in each study, and the implementation guidelines for each model.

This executive summary provides an overview of the HomVEE review process, a summary of the review results, and a link to the HomVEE website for more detailed information.

### Review Process

To conduct a thorough and transparent review of the home visiting research literature, HomVEE performs seven main activities:

1. Conducted a broad literature search.
2. Screened studies for relevance.
3. Prioritized program models for the review.
4. Rated the quality of impact studies with eligible designs.
5. Assessed the evidence of effectiveness for each model.
6. Reviewed implementation information for each model.
7. Addressed potential conflicts of interest.

To have a complete understanding of possible program effects, the review must include all relevant research to date on program models. Thus reviews of new models and updates of existing models systematically include all of the aforementioned steps.

## Literature Search

Each year, the HomVEE team conducts a broad search for literature on home visiting program models serving pregnant women or families with children from birth to age 5.<sup>1</sup> The team limits the search to research on models that used home visiting as the primary service delivery strategy and offered home visits to most or all participants. Program models that provide services primarily in centers with supplemental home visits are excluded. The search was also limited to research on home visiting models that aimed to improve outcomes in at least one of the following eight domains specified in the legislation:

1. Child health
2. Child development and school readiness
3. Family economic self-sufficiency
4. Linkages and referrals
5. Maternal health
6. Positive parenting practices
7. Reductions in child maltreatment
8. Reductions in juvenile delinquency, family violence, and crime

HomVEE's literature search includes two main activities:

1. **Database Searches.** The HomVEE team searched on relevant key words in a range of research databases. Key words included terms related to the service delivery approach, target population, and outcome domains of interest. The initial search was limited to studies published since 1989; a more focused search on prioritized program models included studies published since 1979 (see *Prioritizing Programs* below). This search is updated annually to identify new literature.
2. **Call for Studies.** HomVEE issued two annual call for studies and sent it to approximately 40 relevant listservs for dissemination.

In addition to these two activities, in the first year of the review, HomVEE also included the following:

3. **Review of Existing Literature Reviews and Meta-Analyses.** In the first year, the HomVEE team checked initial search results against the bibliographies of recent literature reviews and meta-analyses of home visiting models and added relevant missing

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<sup>1</sup> For the purposes of the MIECHV, home visiting program models have been defined as programs or initiatives in which home visiting is a primary service delivery strategy and in which services are offered on a voluntary basis to pregnant women, expectant fathers, and parents and caregivers of children from birth to kindergarten entry, targeting participant outcomes that may include improved maternal and child health; prevention of child injuries, child abuse, or maltreatment, and reduction of emergency department visits; improvement in school readiness and achievement; reduction in crime or domestic violence; improvements in family economic self-sufficiency; improvements in the coordination and referrals for other community resources and supports; or improvements in parenting skills related to child development.

citations to the search results. This check was conducted to ensure our search terms identified relevant studies; once the validity of the search terms was confirmed we did not repeat the process in subsequent years.

4. **Website Searches.** The HomVEE team used a custom Google search engine to search more than 50 relevant government, university, research, and nonprofit websites for unpublished reports and papers. Results of this search, however, largely overlapped with the results of the first two activities and this activity was dropped in subsequent years.

As of August 2012, the literature search yielded approximately 14,114 unduplicated citations, including 249 articles submitted through the HomVEE call for studies.

### **Screening Studies**

Each year, the HomVEE review team screens all new citations identified through the literature search for relevance. The team screens out studies for the following reasons:

- Home visiting was not the primary service delivery strategy.
- The study did not use an eligible design (randomized controlled trial, quasi-experimental design, or implementation study).
- The program did not include an eligible target population (pregnant women and families with children from birth to age 5 served in a developed world context).
- The study did not examine any outcomes in the eight eligible outcome domains (child development and school readiness; child health; family economic self-sufficiency; linkages and referrals; maternal health; positive parenting practices; reductions in child maltreatment; and reductions in juvenile delinquency, family violence, and crime).
- The study did not examine a named home visiting program model.
- The study was not published in English.
- The study was published before 1989 for the initial search or 1979 for the focused search on prioritized program models.

### **Prioritizing Home Visiting Program Models for the Review**

To prioritize home visiting models for inclusion in the review, the HomVEE team created a point system for ranking models. This point system was developed as a means of ranking models by the extent of rigorous research evidence available on their effectiveness. Points are assigned to models based on:

- The number and design of impact studies (three points for each randomized controlled trial and two points for each quasi-experimental design)
- Sample sizes of impact studies (one point for each study with a sample size of 50 or more; starting in 2013, this cutoff will change to 250)

During the prioritization process the HomVEE team also tries to determine whether the program appears to be currently operational and identify the availability of implementation information on the model. This information, which may be gleaned from websites, DHHS partners

or other sources, helps inform the decision of which models to review in each cycle, especially when deciding among several models with a similar point value.

To be useful to the home visiting field, the review should include information about the most prevalent home visiting program models currently funded and implemented. Some frequently used program models, however, may not have a sufficient number of causal studies to receive priority for review. To ensure that the initial review conducted in 2009 included the most prevalent models, we compared the prioritized list of models to an objective data source on the prevalence of implementation.<sup>2</sup> Each year, HomVEE releases new review information on up to 10 additional models and updates the results for up to 5 previously reviewed models.

Through this process, as of August 2012, the team has prioritized 32 program models for the review (see Appendix for complete list). The first phase of the review included models that were among those with the highest rankings based on HomVEE's point system—these models were the most rigorously and extensively evaluated—and were among the most widely used models. As the review continued, we included program models with fewer points, but at least one rigorous study, as determined in the initial screening. In addition, HomVEE accepted submissions from states that wanted a particular model reviewed to determine whether it met the legislation requirements for an evidence-based model.

HomVEE reviewed 202 impact studies and 164 implementation studies about the 32 models.

### **Rating the Quality of Impact Studies**

For each prioritized model, HomVEE reviews impact studies with two types of designs: randomized controlled trials (RCTs) and quasi-experimental designs (QEDs)<sup>3</sup> (including matched comparison group designs, single case designs, and regression discontinuity designs). Trained reviewers assess the research design and methodology of each study using a standard review protocol. Each study is assigned a rating of high, moderate, or low to provide an indication of the study design's capacity to provide unbiased estimates of program impacts.

In brief, the high rating is reserved for random assignment studies with low attrition of sample members and no reassignment of sample members after the original random assignment, and single case and regression discontinuity designs that meet What Works Clearinghouse (WWC) design standards (Table 1).<sup>4</sup> The moderate rating applies to random assignment studies that, due to flaws in the study design, execution, or analysis (for example, high sample attrition), do not meet all the criteria for the high rating; matched comparison group designs that establish baseline equivalence on selected measures; and single case and regression discontinuity designs that meet WWC design standards with reservations. Studies that do not meet all of the criteria for either the high or moderate ratings are assigned the low rating.

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<sup>2</sup> Stoltzfus, E. & Lynch, K. (2009). Home visitation for families with young children. Washington, DC: Congressional Research Service.

<sup>3</sup> HomVEE defines a quasi-experimental design as a study design in which sample members (children, parents, or families) are selected for the program and comparison conditions in a nonrandom way.

<sup>4</sup> The What Works Clearinghouse (WWC), established by the Institute for Education Sciences in the U.S. Department of Education, reviews education research.

## Assessing Evidence of Effectiveness

After completing all impact study reviews for a model, the HomVEE team evaluates the evidence across all studies of the program models that received a high or moderate rating and measured outcomes in at least one of the eligible outcome domains. To meet DHHS' criteria for an "evidence-based early childhood home visiting service delivery model," program models must meet at least one of the following criteria:

- At least one high- or moderate-quality impact study of the model finds favorable, statistically significant impacts in two or more of the eight outcome domains; or
- At least two high- or moderate-quality impact studies of the model using non-overlapping analytic study samples find one or more favorable, statistically significant impacts in the same domain.

In both cases, the impacts considered must either (1) be found for the full sample or (2) if found for subgroups but not for the full sample, be replicated in the same domain in two or more studies using non-overlapping analytic study samples. Additionally, following the legislation, if the model meets the above criteria based on findings from randomized controlled trial(s) only, then one or more favorable, statistically significant impacts must be sustained for at least one year after program enrollment, and one or more favorable, statistically significant impacts must be reported in a peer-reviewed journal.<sup>5</sup>

In addition to assessing whether each model met the DHHS criteria for an evidence-based early childhood home visiting service delivery model, the HomVEE team examined and reported other aspects of the evidence for each model based on all high- and moderate-quality studies available, including the following:

- **Quality of Outcome Measures.** HomVEE classified outcome measures as primary if data were collected through direct observation, direct assessment, or administrative records; or if self-reported data were collected using a standardized (normed) instrument. Other self-reported measures are classified as secondary.
- **Duration of Impacts.** HomVEE classified impacts as lasting if they were measured at least one year after program services ended.
- **Replication of Impacts.** HomVEE classified impacts as replicated if favorable, statistically significant impacts were shown in the same outcome domain in at least two non-overlapping analytic study samples.
- **Subgroup Findings.** HomVEE reported subgroup findings if the findings were replicated in the same outcome domain in at least two studies using different analytic samples.

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<sup>5</sup> Section 511 (d)(3)(A)(i)(I)

**Table 1. Summary of Study Rating Criteria for the HomVEE Review**

HomVEE Research Design and Criteria				
		Quasi-Experimental Designs		
HomVEE Study Rating	Randomized Controlled Trials	Matched Comparison Group	Single Case Design <sup>a</sup>	Regression Discontinuity Design <sup>b</sup>
High	<ul style="list-style-type: none"> <li>- Random assignment</li> <li>- Meets WWC standards for acceptable rates of overall and differential attrition<sup>a</sup></li> <li>- No reassignment; analysis must be based on original assignment to study arms</li> <li>- No confounding factors; must have at least two participants in each study arm and no systematic differences in data collection methods</li> <li>- Controls for selected measures if groups are different at baseline</li> </ul>	Not applicable	<ul style="list-style-type: none"> <li>- Timing of intervention is systematically manipulated</li> <li>- Outcomes meet WWC standards for interassessor agreement</li> <li>- At least three attempts to demonstrate an effect</li> <li>- At least five data points in relevant phases</li> </ul>	<ul style="list-style-type: none"> <li>- Integrity of forcing variable is maintained</li> <li>- Meets WWC standards for low overall and differential attrition</li> <li>- The relationship between the outcome and the forcing variable is continuous</li> <li>- Meets WWC standards for functional form and bandwidth</li> </ul>
Moderate	<ul style="list-style-type: none"> <li>- Reassignment <b>OR</b> unacceptable rates of overall or differential attrition<sup>a</sup></li> <li>- Baseline equivalence established on selected measures</li> <li>- No confounding factors; must have at least two participants in each study arm and no systematic differences in data collection methods</li> </ul>	<ul style="list-style-type: none"> <li>- Baseline equivalence established on selected measures and controls for baseline measures of outcomes, if applicable</li> <li>- No confounding factors; must have at least two participants in each study arm and no systematic differences in data collection methods</li> </ul>	<ul style="list-style-type: none"> <li>- Timing of intervention is systematically manipulated</li> <li>- Outcomes meet WWC standards for interassessor agreement</li> <li>- At least three attempts to demonstrate an effect</li> <li>- At least three data points in relevant phases</li> </ul>	<ul style="list-style-type: none"> <li>- Integrity of forcing variable is maintained</li> <li>- Meets WWC standards for low attrition</li> <li>- Meets WWC standards for functional form and bandwidth</li> </ul>
Low	Studies that do not meet the requirements for a high or moderate rating			

Note: "Or" implies that one of the criteria must be present to result in the specified rating.

<sup>a</sup>The What Works Clearinghouse (WWC), established by the Institute for Education Sciences in the U.S. Department of Education, reviews education research (<http://ies.ed.gov/ncee/wwc/>). The WWC standard for attrition is transparent and statistically based, taking into account both overall attrition (the percentage of study participants lost in the total study sample) and differential attrition (the differences in attrition rates between treatment and control groups).

<sup>b</sup>For ease of presentation, some of the criteria are described very broadly. Additional details about standards are available for single case designs ([http://ies.ed.gov/ncee/wwc/pdf/wwc\\_scd.pdf](http://ies.ed.gov/ncee/wwc/pdf/wwc_scd.pdf)) and regression discontinuity designs ([http://ies.ed.gov/ncee/wwc/pdf/wwc\\_rd.pdf](http://ies.ed.gov/ncee/wwc/pdf/wwc_rd.pdf)).



- **Unfavorable or Ambiguous Impacts.** In addition to favorable impacts, HomVEE reported unfavorable or ambiguous, statistically significant impacts on full sample and subgroup findings. While some outcomes are clearly unfavorable (such as an increase in children’s behavior problems), others are ambiguous. For example, an increase in the number of days mothers are hospitalized could indicate an increase in health problems or increased access to needed health care due to participation in a home visiting program.
- **Evaluator Independence.** HomVEE reported the funding source for each study and whether any of the study authors were program model developers.
- **Magnitude of Impacts.** HomVEE reported effect sizes when possible, either those calculated by the study authors or HomVEE computed findings.

## Implementation Reviews

The HomVEE team collects information about implementation of the prioritized models from all impact studies with a high or moderate rating and from stand-alone implementation studies. In addition, staff conduct internet searches to find implementation materials and guidance available from home visiting program developers and national program offices. The HomVEE team uses this information to develop detailed implementation profiles for each prioritized model that include an overview of the program model and information about prerequisites for implementation, materials and forms, estimated costs, and program contact information. National program offices are invited to review and comment on the profiles before their release. The team also extracts information about implementation experiences from the studies reviewed, including the characteristics of program participants, location and setting, staffing and supervision, program model components, program model adaptations or enhancements, dosage, fidelity measurement, costs, and lessons learned.

## Addressing Conflicts of Interest

All members of the HomVEE team signed a conflict of interest statement in which they declared any financial or personal connections to developers, studies, or products being reviewed and confirmed their understanding of the process by which they must inform the project director if such conflicts arise. The HomVEE review team’s project director assembled signed conflict of interest forms for all project staff and subcontractors and monitors for possible conflicts over time. If a team member is found to have a potential conflict of interest concerning a particular home visiting model being reviewed, that team member is excluded from the review process for the studies of that model. In addition, reviews for two program models previously evaluated by Mathematica Policy Research were conducted by contracted reviewers who were not Mathematica employees.

## Summary of Review Results

The HomVEE review produced assessments of the evidence of effectiveness for each home visiting model and outcome domain, as well as a description of each model’s implementation guidelines. This section provides a summary of evidence of effectiveness by model and outcome domain, a summary of implementation guidelines for program models with evidence of effectiveness, and a discussion of gaps in the home visiting research literature.

## Evidence of Effectiveness by Program Model

Overall, HomVEE identified 13 home visiting models that meet the DHHS criteria for an evidence-based early childhood home visiting service delivery model: (1) Child FIRST, (2) Early Head Start-Home Visiting, (3) Early Intervention Program for Adolescent Mothers (EIP), (4) Early Start (New Zealand), (5) Family Check-Up, (6) Healthy Families America (HFA), (7) Healthy Steps, (8) Home Instruction for Parents of Preschool Youngsters (HIPPO), (9) Nurse Family Partnership (NFP), (10) Oklahoma's Community-Based Family Resource and Support (CBFRS) Program, (11) Parents as Teachers (PAT), and (12) Play and Learning Strategies (PALS) Infant<sup>6</sup> and (13) SafeCare Augmented.<sup>7</sup> All of them have at least one high- or moderate-quality study with at least two favorable, statistically significant impacts in two different domains or two or more high- or moderate-quality studies using non-overlapping analytic study samples with one or more statistically significant, favorable impacts in the same domain.

Based on the available high- or moderate-quality studies, findings by program model are as follows (Table 2):

- **Child FIRST** had favorable impacts in four domains (child development and school readiness, linkages and referrals, maternal health, and reductions in child maltreatment) and at least one favorable impact in all four domains was sustained at least one year after program inception. The available evidence indicated no unfavorable or ambiguous impacts and no findings were replicated in a second study sample.
- **Early Head Start–Home Visiting** had favorable impacts in three domains (child development and school readiness, family economic self-sufficiency, and positive parenting practices) and at least one favorable impact in all three domains was sustained for at least one year after program inception and lasted for at least one year after program completion. The available evidence indicated two unfavorable or ambiguous impacts in the family economic self-sufficiency domain. The available evidence did not indicate any of the findings were replicated in a second study sample.
- **Early Intervention Program for Adolescent Mothers (EIP)** had favorable impacts in two domains (child health and family economic self-sufficiency) and at least one favorable impact in the child health domain was sustained for at least one year after program inception and lasted for one year after program completion. The available evidence indicated one unfavorable or ambiguous impact in the maternal health domain. The available evidence did not indicate any of the findings were replicated in a second study sample.

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<sup>6</sup> PALS Toddler and PALS Infant + Toddler did not meet the DHHS criteria for an evidence-based program model.

<sup>7</sup> Project 12-Ways/SafeCare did not meet the DHHS criteria for an evidence-based program. Only the adaptation, SafeCare Augmented, met the DHHS criteria.

**Table 2. Home Visiting Evidence Dimensions**

	High or Moderate Quality Impact Study?	Number of Favorable Impacts on Primary Outcome Measures <sup>a</sup>	Number of Favorable Impacts on Secondary Outcome Measures <sup>a</sup>	Sustained? <sup>b</sup>	Lasting? <sup>c</sup>	Replicated? <sup>d</sup>	Favorable Impacts Limited to Subgroups?	Number of Unfavorable or Ambiguous Impacts <sup>e</sup>
Child FIRST	Yes*	16*	12*	Yes*	No	No	No*	0
Early Head Start-Home Visiting	Yes*	4*	24*	Yes*	Yes*	No	No*	2**
EIP	Yes*	8*	2*	Yes*	Yes*	No	No*	1**
Early Start (New Zealand)	Yes*	9*	2*	Yes*	No	No	No*	0
Family Check-Up	Yes*	5*	1*	Yes*	No	Yes*	No*	0
Healthy Families America	Yes*	14*	29*	Yes*	No	Yes*	No*	4**
Healthy Steps	Yes*	2*	3*	Yes*	No	No	No*	0
HIPPY	Yes*	4*	4*	Yes*	Yes*	Yes*	No*	0
Nurse Family Partnership	Yes*	28*	57*	Yes*	Yes*	Yes*	No*	9**
Oklahoma CBFRS	Yes*	1*	4*	Yes*	No	No	No*	0
Parents as Teachers	Yes*	5*	0	Yes*	No	Yes*	No*	7**
PALS Infant	Yes*	12*	0	Yes*	Yes*	No	No*	1**
SafeCare Augmented	Yes*	2*	1*	Yes*	Yes*	No	No*	1**

<sup>a</sup>In the full sample only. Primary measures were defined as outcomes measured through direct observation, direct assessment, administrative data, or self-reported data collected using a standardized (normed) instrument. Secondary measures included other self-reported measures.

<sup>b</sup>Yes, if favorable impacts were sustained for at least one year post program inception.

<sup>c</sup>Yes, if favorable impacts lasted for at least one year after the program ended.

<sup>d</sup>Yes, if favorable impacts (whether sustained or not) were replicated on at least one measure in the same outcome domain in either a high- or moderate-quality study.

<sup>e</sup>This number includes unfavorable or ambiguous impacts on both primary and secondary measures in the full sample. Unfavorable findings should be interpreted with caution because there is subjectivity involved in interpreting some outcomes; for some outcomes, it is not always clear in which direction it is desirable to move the outcome. Readers are encouraged to use the HomVEE website, specifically the reports by program model and by outcome domain, to obtain more detail about unfavorable findings.

\*Green-shaded table cell = favorable dimension of the study.

\*\*Red-shaded table cell = unfavorable or ambiguous impact.

- **Early Start (New Zealand)** had favorable impacts in four domains (child development and school readiness, child health, positive parenting practices, and reductions in child maltreatment) and impacts on outcomes in all four domains were sustained for at least one year after program enrollment. The available evidence did not indicate that any of the findings lasted at least one year after program completion nor were they replicated in a second study sample.
- **Family Check-Up** had favorable impacts in three domains (child development and school readiness, maternal health, and positive parenting practices) and impacts on positive parenting practices were replicated in at least one other study sample. The available evidence indicated that at least one favorable impact was sustained for at least one year after program inception but did not indicate that any of the impacts lasted for at least one year post program completion.
- **Healthy Families America (HFA)** had favorable impacts in all eight domains (child development and school readiness; child health; family economic self-sufficiency; linkages and referrals; maternal health; positive parenting practices; reductions in child maltreatment; and reductions in juvenile delinquency, family violence, and crime). The findings in child development and school readiness, child health, family economic self-sufficiency; positive parenting practices, and reductions in child maltreatment were replicated in at least one other study sample. The available evidence indicated HFA had at least one unfavorable or ambiguous finding in child health, family economic self-sufficiency, and linkages and referrals. The available evidence indicated that at least one favorable impact in all eight domains was sustained for at least one year after program inception and at least one favorable impact in two domains (child development and school readiness and reductions in child maltreatment) lasted for at least one year post program completion.
- **Healthy Steps** had favorable impacts in two domains (child health and positive parenting practices). The available evidence indicated that at least one favorable impact in positive parenting practices was sustained for at least one year after program inception, but none of the impacts lasted for at least one year post program completion or was replicated in a second study sample.
- **Home Instruction for Parents of Preschool Youngsters (HIPPI)** had favorable impacts in two domains (child development and school readiness and positive parenting practices), and both of these impacts were replicated in at least one other study sample. The available evidence indicated that at least one favorable impact in both domains was sustained for at least one year post program inception and at least one favorable impact in child development and school readiness lasted for one year or more post program completion.
- **Nurse Family Partnership (NFP)** had favorable impacts in seven domains (child development and school readiness; child health; family economic self-sufficiency; maternal health; positive parenting practices; reductions in child maltreatment; and reductions in juvenile delinquency, family violence, and crime). At least one impact in all seven domains was replicated in another study sample, was sustained at least one year post program inception, and lasted for at least one year post completion. The evidence indicated that NFP had unfavorable or ambiguous findings in five of the domains (child

development and school readiness; child health; linkages and referrals; positive parenting practices; and reductions in juvenile delinquency, family violence, and crime).

- **Oklahoma’s Community-Based Family Resource and Support (CBFRS) Program** had favorable impacts in two domains (maternal health and positive parenting practices), and at least one outcome in both domains was sustained for one year after program enrollment. The available evidence did not indicate that any of the findings lasted at least one year after program completion nor were they replicated in a second study sample.
- **Parents as Teachers (PAT)** had favorable impacts in two domains (child development and school readiness and positive parenting practices). Favorable impacts in child development and school readiness were replicated in at least one other study sample. The evidence indicated that PAT had unfavorable or ambiguous findings in three domains (child development and school readiness, family economic self-sufficiency, and positive parenting practices). The evidence available indicated that favorable impacts in child development and school readiness and positive parenting practices were sustained for at least one year post program inception but did not indicate any of the impacts lasted for at least one year post program completion.
- **Play and Learning Strategies (PALS) Infant** had favorable impacts in two domains (child development and school readiness and positive parenting practices). The evidence indicated that PALS Infant had unfavorable or ambiguous findings in one domain (positive parenting practices). At least one impact in both domains (child development and school readiness and positive parenting practices) was sustained at least one year post program inception. In addition, at least one impact in the positive parenting domain lasted for at least one year post completion. The available evidence did not indicate any of the findings were replicated in a second study sample.
- **SafeCare Augmented** had favorable impacts in two domains (linkages and referrals and reductions in child maltreatment). The evidence indicated that SafeCare Augmented had unfavorable or ambiguous findings in one domain (reductions in juvenile delinquency, family violence, and crime). At least one impact in the reductions in child maltreatment domain was sustained at least one year post program inception and at least one year post completion. The available evidence did not indicate any of the findings were replicated in a second study sample.

In addition to the 12 home visiting models described above, HomVEE reviewed 19 other home visiting program models: (1) Attachment and Biobehavioral Catch-Up (ABC) Intervention, (2) Child Parent Enrichment Project (CPEP), (3) Childhood Asthma Prevention Study (CAPS), (4) Computer-Assisted Motivational Intervention (CAMI), (5) Even Start-Home Visiting (Birth to Age 5), (6) Family Connections (Birth to Age 5), (7) Health Access Nurturing Development Services (HANDS) Program, (8) Healthy Start–Home Visiting, (9) HOMEBUILDERS (Birth to Age 5), (10) Home-Start, (11) Maternal Early Childhood Sustained Home Visiting Program, (12) Maternal Infant Health Outreach Workers (MIHOW), (13) North Carolina Baby Love Maternal Outreach Workers Program, (14) Nurturing Parenting Program (Birth to Age 5), (15) Parent-Child Home Program, (16) Resource Mothers Program, (17) Resources, Education, and Care in the Home (REACH), (18) REST Routine, and (19) Seattle-King County Healthy Homes Project. For six models—CAPS, CAMI, Home-Start, Maternal Early Childhood Sustained Home Visiting Program, Parent-Child Home Program, and REACH—there was a high or moderate quality study, but there were not two

favorable, statistically significant impacts in two or more of the eight outcome domains. Therefore, these program models did not meet the DHHS criteria for an evidence-based model. For two models—CPEP and REST Routine—there was a high or moderate quality study with impacts in two or more of the eight outcome domains, but no favorable impact from a randomized controlled trial was sustained for at least one year after program enrollment. For the remaining 11 models, no high- or moderate-quality studies were identified and consequently HomVEE was unable to assess their effectiveness.

### **Evidence of Effectiveness by Outcome Domain**

In seven of the eight outcome domains, at least one of the home visiting models had favorable impacts on a primary measure (Table 3). None of the models, however, show impacts on reductions in juvenile delinquency, family violence, and crime, using a primary outcome measure. Most models had favorable impacts on primary measures of child development and school readiness (EIP, Healthy Steps, and SafeCare Augmented did not) and positive parenting practices (Child FIRST, EIP, Healthy Steps, and SafeCare Augmented did not). Healthy Families America has the greatest breadth of total findings, with favorable impacts on primary and/or secondary measures in all eight domains. Nurse Family Partnership had the greatest breadth of favorable primary findings, with favorable impacts on primary measures in six outcome domains.

### **Summary of Implementation Guidelines for Models with Evidence of Effectiveness**

The MIECHV legislation specifies a number of program implementation requirements.<sup>8</sup> The review of information about implementation identified a number of requirements for implementing home visiting models included in the review (Table 4). All but two of the 32 programs in the HomVEE review with evidence of effectiveness had been in existence for at least three years prior to the start of the review, 28 are associated with a national program office that provides training and support to local program sites, and 28 have minimum requirements for the frequency of home visits and for home visitor supervision. In addition, more than two-thirds of programs have pre-service training requirements, implementation fidelity standards, a system for monitoring fidelity, and specified content and activities for the home visits. Fifteen programs have fidelity standards to which local implementing agencies must adhere.

### **Gaps in the Research**

The HomVEE review identified several gaps in the existing research literature on home visiting models that limit its usefulness for matching program models to community needs. First, research evidence of program effectiveness is limited. As noted earlier, many models do not have high- or moderate-quality studies of their effectiveness; thus, policymakers and program administrators cannot determine whether those models are effective. Other models have only a few high- or moderate-quality studies, indicating that additional research on those models may be needed.

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<sup>8</sup> See section 511(d)(3)(A)(i)(I), which includes variables such as “the model has been in existence for at least 3 years...” and section 511 (d)(3)(B), which specifies variables such as “well-trained and competent staff, as demonstrated by education and training...”

**Table 3. Number of Favorable Impacts on Primary Measures, by Outcome Domain**

	Child Health	Maternal Health	Child Development and School Readiness	Reductions in Child Maltreatment	Reductions in Juvenile Delinquency, Family Violence, and Crime	Positive Parenting Practices	Family Economic Self-Sufficiency	Linkages and Referrals
Child FIRST	Not measured	10	5	1	Not measured	Not measured	Not measured	0
Early Head Start–Home Visiting	0	0	1	0	Not measured	3	0	Not measured
EIP	8	0	Not measured	Not measured	Not measured	0	0	Not measured
Early Start (New Zealand)	2	Not measured	2	2	Not measured	Not measured	Not measured	Not measured
Family Check-Up	Not measured	0	3	Not measured	Not measured	2	Not measured	Not measured
Healthy Families America	1	2	7	1	0	2	0	1
Healthy Steps	2	0	0	0	Not measured	0	Not measured	Not measured
HIPPY	Not measured	Not measured	3	Not measured	Not measured	1	Not measured	Not measured
Nurse Family Partnership	4	3	5	7	0	5	4	0
Oklahoma CBFRS	Not measured	Not measured	Not measured	Not measured	Not measured	1	Not measured	Not measured
Parents as Teachers	0	0	2	Not measured	Not measured	3	0	Not measured
PALS Infant	Not measured	Not measured	1	Not measured	Not measured	11	Not measured	Not measured
SafeCare Augmented	Not measured	0	Not measured	1	0	Not measured	0	1

**Table 4. Overview of the Implementation Guidelines for the Home Visiting Models with Evidence of Effectiveness**

	In existence for at least 3 years? <sup>a</sup>	Associated with national organization or institution of higher education? <sup>a</sup>	Minimum requirements for frequency of visits?	Minimum education requirements for home visiting staff? <sup>a</sup>	Supervision requirements for home visitors? <sup>a</sup>	Pre-service training for home visitors? <sup>a</sup>	Fidelity standards for local implementing agencies <sup>a</sup>	System for monitoring fidelity? <sup>a</sup>	Specified content and activities for home visits?
Child FIRST	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*
Early Head Start-Home Visiting	Yes*	Yes*	Yes*	No	Yes*	Yes*	Yes*	Yes*	No
EIP	Yes*	Yes*	Yes*	Yes*	No	Yes*	No	No	Yes*
Early Start (New Zealand)	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	No	Yes*
Family Check-Up	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	No	No	Yes*
Healthy Families America	Yes*	Yes*	Yes*	No	Yes*	Yes*	Yes*	Yes*	No
Healthy Steps	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	No	Yes*
HIPPY	Yes*	Yes*	Yes*	No	Yes*	Yes*	Yes*	Yes*	Yes*
Nurse Family Partnership	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*
Oklahoma CBFRS	Yes*	No	Yes*	Yes*	Yes*	Yes*	No	Yes*	Yes*
Parents as Teachers	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*
PALS Infant	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	No	Yes*	Yes*
SafeCare <sup>b</sup>	Yes*	Yes*	Yes*	No	Yes*	Yes*	No	Yes*	Yes*

Source: HomVEE implementation profiles.

Note: If the documents reviewed by HomVEE (see the implementation report reference lists) did not include information about the topic and the developer provided no additional guidance then the answer is No.

<sup>a</sup>Included in legislation.

<sup>b</sup>This information pertains to SafeCare; separate information is not available for SafeCare Augmented.

\*Blue-shaded table cell = in compliance with implementation guidelines.



Second, more evidence is needed about the effectiveness of home visiting models for different types of families with a range of characteristics. Overall, the studies included in the HomVEE review had fairly diverse study samples in terms of race/ethnicity and income. However, sample sizes in these studies are not typically large enough to allow for analysis of findings separately by subgroup. Moreover, HomVEE found little or no research on the effectiveness of home visiting program models for families from American Indian tribes, immigrant families that have diverse cultural backgrounds or may not speak English as a first language, or military families.

### **For More Information**

The HomVEE website (<http://www.acf.hhs.gov/programs/opre/homvee>) provides detailed information about the review process and the review results, including the following:

- Reports on the evidence of effectiveness for each program model
- Reports on the evidence of effectiveness across models for each outcome domain
- Implementation profiles and information on implementation experiences for each program model
- A searchable reference list that provides the disposition of each study considered for all reviewed models
- Details about the review process and a glossary of terms

## **APPENDIX**

### **PROGRAM MODELS REVIEWED BY HOMVEE**

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1	Attachment and Biobehavioral Catch-Up (ABC) Intervention	17	HOMEBUILDERS (Birth to Age 5)
2	Child FIRST	18	Home-Start
3	Child Parent Enrichment Project (CPEP)	19	Maternal Early Childhood Sustained Home Visiting Program
4	Childhood Asthma Prevention Study (CAPS)	20	Maternal Infant Health Outreach Workers (MIHOW)
5	Computer-Assisted Motivational Intervention (CAMI)	21	North Carolina Baby Love Maternal Outreach Workers Program
6	Early Head Start-Home Visiting	22	Nurse Family Partnership (NFP)
7	Early Intervention Program for Adolescent Mothers (EIP)	23	Nurturing Parenting Program (Birth to Age 5)
8	Early Start (New Zealand)	24	Oklahoma's Community-Based Family Resource and Support (CBFRS) Program
9	Even Start-Home Visiting (Birth to Age 5)	25	Parent-Child Home Program
10	Family Check-Up	26	Parents as Teachers (PAT)
11	Family Connections (Birth to Age 5)	27	Play and Learning Strategies (PALS)
12	Health Access Nurturing Development Services (HANDS) Program	28	Project 12-Way/SafeCare
13	Healthy Families America (HFA)	29	Resource Mothers Program
14	Healthy Start-Home Visiting	30	Resources, Education, and Care in the Home (REACH)
15	Healthy Steps	31	REST Routine
16	Home Instruction for Parents of Preschool Youngsters (HIPPY)	32	Seattle-King County Healthy Homes Project

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