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Home Visiting Evidence of Effectiveness Review: Executive Summary August 2017

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Executive Summary

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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. HomVEE provides an assessment of the evidence of effectiveness for home visiting program models that serve families with pregnant women and children from birth to kindergarten entry (that is, up through age 5). The HomVEE review is conducted by Mathematica Policy Research on behalf of the Department of Health and Human Services (DHHS).

The HomVEE review provides information about which home visiting program models have evidence of effectiveness as 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, each year HomVEE performs seven main activities:

1. Conducts a broad literature search.
2. Screens studies for relevance.
3. Prioritizes program models for the review.
4. Rates the quality of impact studies with eligible designs.
5. Assesses the evidence of effectiveness for each model.
6. Reviews implementation information for each model.
7. Addresses potential conflicts of interest.

For 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 kindergarten entry (that is, up through age 5).[1] The team limits the search to research on models that used

[1] The Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) provides funds to states, territories, and tribal entities for home visiting programs for at-risk pregnant women and families with children from birth to kindergarten entry. For the purposes of the MIECHV, home visiting models have been defined as models in which home visiting is the 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

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 is also limited to research on home visiting models that aimed to improve outcomes in at least one of the following eight domains:[2]

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 searches on relevant key words in a range of research databases. Key words include terms related to the service delivery approach, target population, and outcome domains of interest. The initial search is limited to studies published since 1989; a more focused search on prioritized program models includes studies published since 1979 (see Prioritizing home visiting program models for the review below). This search is updated annually to identify new literature released the previous year.
2. **Call for Studies.** Since 2009, HomVEE has issued annual calls for studies, sent 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 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.

participant outcomes that 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.

[2] These domains were selected to align with the outcomes specified in the legislation authorizing MIECHV (Social Security Act, Section 511 [42 U.S.C. 711].

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.

By the time of the 2017 review, the literature search yielded approximately 26,018 unduplicated citations, including 375 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 (that is, not a randomized controlled trial, quasi-experimental design, or implementation study).
- The study did not report results for an eligible target population: pregnant women and families with children from birth to kindergarten entry (that is, up through 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.[3]

Prioritizing home visiting program models for the review

Each year, HomVEE releases new review results for program models. This includes reviews of studies on additional models and/or updates to previously reviewed models. Decisions on the number of models to review depend on available resources.

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:

[3] Research that was published or released through December of the preceding year is eligible for inclusion in the 2017 review, as is unpublished material provided through the HomVEE call for studies that ended in early January.

- The number and design of impact studies (three points for each randomized controlled trial, single-case design, or regression discontinuity design; and two points for each matched comparison group design)

- Sample sizes of impact studies (one point for each study with a sample size of 250 or more; before 2013, a sample size of 50 earned one point)

- Studies that examined an outcome of interest (starting in 2013, one point for each impact study that had an outcome in selected domains: child maltreatment; juvenile delinquency, family violence, or crime; linkages and referrals; and family economic factors. These domains are of particular interest because, to date, fewer studies reviewed for HomVEE have focused on them.)

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. [4]

As HomVEE proceeds, this prioritization effort may yield more models in the highest point category than can be reviewed within an annual review cycle. Beginning in 2017, HomVEE applied a weighting formula to the prioritization score[5]. The weighting scheme places more emphasis on identifying additional models that could rate as evidence-based while still making sure that models with older reports get occasional updates. Specifically:

- A model that is not yet evidence-based (regardless of whether previously reviewed) gets a weight of 2.

- A model that is already evidence-based gets a weight of $[1+0.1*(\text{current year- prior report release date})]^2$. For example, a model being considered in 2017 that had a report released in 2013 would get a weight of $[1 + 0.1*(2017 – 2013)]^2 = 1.96$.

HomVEE then sorts the list so that models with the highest weighted score are first on the list and models with the lowest weighted score are last, and works in that order to allocate review resources. This effort may include contacting study authors or model developers to confirm publicly available information. The team will review information on as many eligible models as possible each year. Eligible models that are not reviewed will be returned to the pool for future consideration, following the same procedures stated above. Also, to support policy or

[4] For the initial review in 2009, the HomVEE team compared the list of prioritized models to information on the prevalence of implementation (Johnson, Kay. State-Based Programs: Strengthening Programs Through State Leadership. National Center for Children and Poverty, New York, 2009). The team conducted this step to check that the most prevalent models were included in the review even if the models did not have a sufficient number of causal studies to be prioritized for review.

[5] Earlier, HomVEE randomly ordered models in the highest points category and worked through the list in that random order.

programmatic needs, the Department of Health and Human Services (HHS) may direct HomVEE to prioritize a certain model in a certain year.

As of 2013, results for previously reviewed models will not be updated every year. Models are only considered for updates every two years at the earliest. For example, if the review results for a model were updated in 2015, that model will not be considered for additional updating until 2017. However, HHS can request that a model be considered for updating ahead of schedule.

Through this process, as of June 2017, the team has prioritized 45 program models for the review (see Appendix for complete list).

HomVEE completed impact reviews of 363 studies and implementation reviews of 274 studies about the 45 models. In conducting the review on newly prioritized or updated models, the team focused only on research that was published or released through December of the preceding year or unpublished material provided through the HomVEE call for studies that ended in early January. The review of research on prioritized models may be updated, but not all models are updated annually.

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)[6] (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).[7] The moderate rating is also possible for 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. Impact studies that do not meet all of the criteria for either the high or moderate ratings are assigned the low rating.

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

[6] Johnson, Kay. State-Based Programs: Strengthening Programs Through State Leadership. National Center for Children and Poverty, New York, 2009.

[7] The What Works Clearinghouse (WWC), established by the Institute for Education Sciences in the U.S. Department of Education, reviews education research.

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, 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.[8]

For results from single-case designs to be considered toward the DHHS criteria, three additional requirements must be met:

- At least five studies examining the intervention meet the WWC's pilot single-case design standards without reservations or standards with reservations (equivalent to a "high" or "moderate" rating in HomVEE, respectively).

- The single-case designs are conducted by at least three research teams with no overlapping authorship at three institutions.

- The combined number of cases is at least 20.

[8] This criteria is consistent with the MIECHV legislation: Section 511 (d)(3)(A)(i)(I).

Table 1. Summary of study rating criteria for the HomVEE review

HomVEE research design and criteria				
HomVEE study rating	**Randomized controlled trials**	**Quasi-experimental designs Matched comparison group**	**Quasi-experimental designs Single-case design[b]**	**Quasi-experimental designs Regression discontinuity design[b]**
High	- Random assignment - Meets WWC standards for acceptable rates of overall and differential attrition[a] - No reassignment; analysis must be based on original assignment to study arms - No confounding factors; must have at least two participants in each study arm and no systematic differences in data collection methods - Baseline equivalence established on tested outcomes and demographic characteristics **OR** controls for these measures[c]	Not applicable	- Timing of intervention is systematically manipulated - Outcomes meet WWC standards for interassessor agreement - At least three attempts to demonstrate an effect - At least five data points in relevant phases	- Integrity of forcing variable is maintained - Meets WWC standards for low overall and differential attrition - The relationship between the outcome and the forcing variable is continuous - Meets WWC standards for functional form and bandwidth
Moderate	- Reassignment **OR** unacceptable rates of overall or differential attrition[a] - Baseline equivalence established on tested outcomes and demographic characteristics AND controls for baseline measures of tested outcomes, if applicable[c] - No confounding factors; must have at least two participants in each study arm and no systematic differences in data collection methods	- Baseline equivalence established on tested outcomes and demographic characteristics **AND** controls for baseline measures of tested outcomes, if applicable[c] - No confounding factors; must have at least two participants in each study arm and no systematic differences in data collection methods	- Timing of intervention is systematically manipulated - Outcomes meet WWC standards for interassessor agreement - At least three attempts to demonstrate an effect - At least three data points in relevant phases	- Integrity of forcing variable is maintained - Meets WWC standards for low attrition - Meets WWC standards for functional form and bandwidth
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.

[a]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).

[b]For ease of presentation, some of the criteria are described very broadly. Additional details are available for single case design standards in Appendix F of the WWC version 2.1 standards (http://ies.ed.gov/ncee/wwc/Docs/referenceresources/wwc_procedures_v2_1_standards_handbook.pdf) and in a specific document about regression discontinuity designs (http://ies.ed.gov/ncee/wwc/Document/258).

[c]The variables that must be used to establish equivalence depend on whether (1) it is possible to collect the measure at baseline vs. (2) it is difficult or impossible to collect the measure at baseline. See http://homvee.acf.hhs.gov/Review-Process/4/Review-Process/19/5/#ReviewProcess-ProducingStudyRatings-StudyRatings for more details.

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 study authors indicated that self-reported data were collected using a standardized (normed) instrument. Other self-reported measures are classified as secondary.

- **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.

- **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 collected 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 conducted Internet searches to find implementation materials and guidance available from home visiting program developers and national program offices. The HomVEE team used this information to develop detailed implementation profiles for each prioritized model that included an overview of the program model and information about prerequisites for implementation, materials and forms, estimated costs, and program contact information. National program offices were invited to review and comment on the profiles before their release. The team also extracted 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 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 20 home visiting models that meet the DHHS criteria for an evidence-based early childhood home visiting service delivery model: (1) Attachment and Biobehavioral Catch-up (ABC) Intervention, (2) Child First, (3) Early Head Start-Home Visiting, (4) Early Intervention Program for Adolescent Mothers (EIP), (5) Early Start (New Zealand), (6) Family Check-Up,® (7) Family Connects, (8) Family Spirit,® (9) Health Access Nurturing Development Services (HANDS), (10) Healthy Beginnings, (11) Healthy Families America (HFA),® (12) Healthy Steps (National Evaluation 1996 Protocol), (13) Home Instruction for Parents of Preschool Youngsters (HIPPY),® (14) Maternal Early Childhood Sustained Home Visiting Program, (15) Minding the Baby,® (16) Nurse Family Partnership (NFP),® (17) Oklahoma's Community-Based Family Resource and Support (CBFRS) Program, (18) Parents as Teachers (PAT),® (19) Play and Learning Strategies (PALS) Infant,[9] and (20) SafeCare® Augmented.[10] 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, the review showed the following (Table 2):

- **Models have multiple favorable effects.** Most program models have numerous favorable impacts on primary and secondary measures. The number of outcomes showing favorable

[9] PALS Toddler and PALS Infant + Toddler did not meet the DHHS criteria for an evidence-based program model.

[10] Project 12-Ways/SafeCare did not meet the DHHS criteria for an evidence-based program. Only the adaptation, SafeCare Augmented, met the DHHS criteria.

effects ranged considerably across models, as did the number of total outcomes measured (not shown).

- **Program models have sustained impacts.** All of the models that met the DHHS criteria have favorable impacts at least one year after program enrollment. For longer programs, families may still have been receiving services at the time the outcomes were measured.

- **Replication is uncommon.** Only 8 of the 20 models that met the DHHS criteria had favorable effects in the same domain in two or more samples. In other words, for most models that met DHHS criteria, favorable impacts were shown in only one sample or in two or more samples that each had favorable effects in different domains.

- **Results are not limited to subgroups.** All of the 20 models that met the DHHS criteria did so by showing results for a total study sample, rather than a subgroup based on particular characteristics. For most models, the study samples were racially, ethnically, and socioeconomically diverse.

- **Few unfavorable effects were reported.** Nine of the 20 models reported at least one unfavorable or ambiguous impact. It is not always clear whether an impact is unfavorable; for example, increased use of health care may reflect poorer health (an unfavorable effect), a better connection to the health care system (a favorable effect), or both, so the HomVEE review classifies these outcomes as unfavorable or ambiguous.

In addition to the 20 home visiting models described above, HomVEE reviewed 25 other home visiting program models (see Appendix for full list). Six models had a high or moderate quality study, but not two favorable, statistically significant impacts in two or more of the eight outcome domains for different study samples or in two domains for the same sample.[11] Therefore, these program models did not meet the DHHS criteria for an evidence-based model. Two models had 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.[12] For the remaining 17 models, no high- or moderate-quality studies were identified and consequently HomVEE was unable to assess their effectiveness.[13]

[11] Those models were: Childhood Asthma Prevention Study; Computer Assisted Motivational Intervention; Home-Start; MOM Program; Parent-Child Home Program; and Resources, Education and Care in the Home.

[12] Those models were Child Parent Enrichment Project and REST Routine.

[13] We identified high or moderate rated studies on components and adaptations of Triple P-Positive Parenting Program, but not on the main model.

Table 2. Home visiting evidence dimensions for programs that meet DHHS criteria

	Results from studies with a high or moderate rating						
	Favorable impacts on primary outcome measures[a]	Favorable impacts on secondary outcome measures[a]	Sustained?[b]	Replicated?[c]	Favorable impacts limited to subgroups?	Unfavorable or ambiguous impacts[d]	Review last updated
Attachment and Biobehavioral Catch-up (ABC) Intervention	Yes*	No	Yes*	Yes*	No*	No	April 2017
Child First	Yes*	Yes*	Yes*	No	No*	No	July 2011
Early Head Start–Home Visiting	Yes*	Yes*	Yes*	No	No*	Yes**	July 2016
Early Intervention Program for Adolescent Mothers	Yes*	Yes*	Yes*	No	No*	Yes**	July 2011
Early Start (New Zealand)	Yes*	Yes*	Yes*	No	No*	No	July 2014
Family Check-Up	Yes*	Yes*	Yes*	Yes*	No*	Yes**	June 2017
Family Connects	Yes*	Yes*	Yes*	No	No*	No	Oct. 2014
Family Spirit	Yes*	Yes*	Yes*	Yes*	No*	No	May 2016
HANDS	Yes*	No	Yes*	Yes*	No*	Yes**	July 2015
Healthy Beginnings	Yes*	Yes*	Yes*	No	No*	No	June 2015
Healthy Families America	Yes*	Yes*	Yes*	Yes*	No*	Yes**	April 2017
Healthy Steps (National Evaluation 1996 Protocol) *These results focus on Healthy Steps as implemented in the 1996 evaluation. HHS has determined that home visiting is not the primary service delivery strategy and the model does not meet current requirements for MIECHV program implementation.*	Yes*	Yes*	Yes*	No	No*	No	July 2011
HIPPY	Yes*	Yes*	Yes*	Yes*	No*	No	May 2013
Maternal Early Childhood Sustained Home Visiting Program	Yes*	Yes*	Yes*	No	No*	No	May 2013
Minding the Baby	Yes*	No	Yes*	No	No*	No	Nov. 2014
Nurse Family Partnership	Yes*	Yes*	Yes*	Yes*	No*	Yes**	May 2016

Table 2 (*continued*)

	Results from studies with a high or moderate rating						
	Favorable impacts on primary outcome measures[a]	Favorable impacts on secondary outcome measures[a]	Sustained?[b]	Replicated?[c]	Favorable impacts limited to subgroups?	Unfavorable or ambiguous impacts[d]	Review last updated
Oklahoma CBFRS *Implementation support is not currently available for the model as reviewed.*	Yes*	Yes*	Yes*	No	No*	No	Oct. 2012
Parents as Teachers	Yes*	No	Yes*	Yes*	No*	Yes**	July 2013
PALS Infant	Yes*	No	Yes*	No	No*	Yes**	Oct. 2012
SafeCare Augmented	Yes*	Yes*	Yes*	No	No*	Yes**	Aug. 2013

[a]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.

[b]Yes, if favorable impacts were sustained for at least one year after the program began.

[c]Yes, if favorable impacts (whether sustained or not) were observed in the same outcome domain for at least two non-overlapping samples across high- or moderate-quality studies.

[d]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.

Evidence of effectiveness by outcome domain

One of the home visiting models, Healthy Families America, had one or more favorable impacts in each of the eight domains (Table 3). Outcomes include primary measures—collected through direct observation, direct assessment, administrative records, or self-report using a standardized (normed) instrument—or secondary measures (all other self-reported). None of the models, however, showed impacts on a primary measure of reductions in juvenile delinquency, family violence, and crime. Most models had favorable impacts on primary measures of child development and school readiness and positive parenting practices. Healthy Families America has the greatest breadth of favorable *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 for models with evidence of effectiveness

All of the 20 models that met the DHHS criteria have minimum requirements for the frequency of home visits and have pre-service training requirements (Table 4).[14] Nineteen models are associated with a national program office or institute of higher education that provides training and support to local program sites and 18 have minimum requirements for home visitor supervision. Eighteen models each have a system for monitoring fidelity and have specified content and activities for the home visits. Seventeen models have minimum education requirements for home visiting staff. Fifteen models have fidelity standards for local implementing agencies.

[14] The results are based on available information but do not constitute a formal review of whether the models meet the MIECHV eligibility requirements.

Table 3. Favorable impacts on primary and secondary measures for home visiting models with evidence of effectiveness, 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
Attachment and Biobehavioral Catch-up (ABC) Intervention	Yes (primary)	Not measured	Yes (primary)	Not measured	Not measured	Yes (primary)	Not measured	Not measured
Child First	Not measured	Yes (primary, secondary)	Yes (primary)	Yes (primary)	Not measured	Not measured	Not measured	Yes (secondary)
Early Head Start– Home Visiting	No	No	Yes (primary, secondary)	Yes (secondary)	Not measured	Yes (primary, secondary)	Yes (secondary)	Yes (secondary)
EIP	Yes (primary)	No	Not measured	Not measured	Not measured	No	Yes (secondary)	Not measured
Early Start (New Zealand)	Yes (primary, secondary)	No	Yes (primary, secondary)	Yes (primary, secondary)	No	Yes (primary)	No	Not measured
Family Check-Up	Not measured	Yes (secondary)	Yes (primary, secondary)	Not measured	Not measured	Yes (primary)	Not measured	Not measured
Family Connects	Yes (primary, secondary)	Yes (secondary)	Not measured	Not measured	Not measured	Yes (secondary)	Not measured	Yes (secondary)
Family Spirit	Not measured	Yes (primary, secondary)	Yes (primary)	Not measured	Not measured	Yes (secondary)	Not measured	Not measured
HANDS	Yes (primary)	Yes (primary)	Not measured	Yes (primary)	Not measured	Not measured	Yes (primary)	Not measured
Healthy Beginnings	Yes (primary, secondary)	Yes (secondary)	Yes (secondary)	Not measured	Not measured	Yes (secondary)	Not measured	Not measured
Healthy Families America	Yes (primary, secondary)	Yes (secondary)	Yes (primary, secondary)	Yes (primary, secondary)	Yes (secondary)	Yes (primary, secondary)	Yes (secondary)	Yes (primary, secondary)
Healthy Steps (National Evaluation 1996 Protocol) *These results focus on Healthy Steps as implemented in the 1996 evaluation. HHS has determined that home visiting is not the primary service delivery strategy and the model does not meet current requirements for MIECHV program implementation.*	Yes (primary)	No	No	No	Not measured	Yes (secondary)	Not measured	Not measured
HIPPY	Not measured	Not measured	Yes (primary, secondary)	Not measured	Not measured	Yes (primary, secondary)	Not measured	Not measured

Table 3 (*continued*)

	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
Maternal Early Childhood Sustained Home Visiting Program	Yes (secondary)	Yes (secondary)	Not measured	Not measured	Not measured	Yes (primary)	Not measured	Not measured
Minding the Baby	Yes (primary)	Yes (primary)	Not measured	No	Not measured	No	Not measured	Not measured
Nurse Family Partnership	Yes (primary, secondary)	Yes (primary, secondary)	Yes (primary, secondary)	Yes (primary)	Yes (secondary)	Yes (primary, secondary)	Yes (primary, secondary)	No
Oklahoma CBFRS *Implementation support is not currently available for the model as reviewed.*	No	Yes (secondary)	Not measured	Not measured	Not measured	Yes (primary)	Not measured	Not measured
Parents as Teachers	No	No	Yes (primary)	Yes (primary)	Not measured	Yes (primary)	Yes (primary)	Not measured
PALS Infant	Not measured	Not measured	Yes (primary)	Not measured	Not measured	Yes (primary)	Not measured	Not measured
SafeCare Augmented	Not measured	No	Not measured	Yes (primary, secondary)	No	Not measured	No	Yes (primary)

Note: Outcomes are categorized as primary if data were collected through direct observation, direct assessment, or administrative records; or if study authors indicated that self-reported data were collected using a standardized (normed) instrument. Other self-reported measures are classified as secondary.

Table 4. Overview of implementation for the home visiting models with evidence of effectiveness

	Implementation support available for model as reviewed	Minimum requirements for frequency of visits?	Minimum education requirements for home visiting staff?	Supervision requirements for home visitors?	Pre-service training for home visitors?	Fidelity standards for local implementing agencies?	System for monitoring fidelity?	Specified content and activities for home visits?
Attachment and Biobehavioral Catch-up (ABC) Intervention	Yes	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*
Child First	Yes	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*
Early Head Start–Home Visiting	Yes	Yes*	No	Yes*	Yes*	Yes*	Yes*	No
EIP	Yes	Yes*	Yes*	No	Yes*	No	No	Yes*
Early Start (New Zealand)	Yes	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*
Family Check-Up	Yes	Yes*	Yes*	No	Yes*	Yes*	Yes*	Yes*
Family Connects	Yes	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*
Family Spirit	Yes	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*
HANDS	Yes	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*
Healthy Beginnings	Yes	Yes*	Yes*	Yes*	Yes*	No	Yes*	Yes*
Healthy Families America	Yes	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	No
Healthy Steps (National Evaluation 1996 Protocol) *These results focus on Healthy Steps as implemented in the 1996 evaluation. HHS has determined that home visiting is not the primary service delivery strategy and the model does not meet current requirements for MIECHV program implementation.*	No	Yes*	Yes*	Yes*	Yes*	Yes*	No	Yes*
HIPPY	Yes	Yes*	No	Yes*	Yes*	Yes*	Yes*	Yes*
Maternal Early Childhood Sustained Home Visiting Program	Yes	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*
Minding the Baby	Yes	Yes*	Yes*	Yes*	Yes*	No	Yes*	Yes*
Nurse Family Partnership	Yes	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*
Oklahoma CBFRS *Implementation support is not currently available for the model as reviewed.*	No	Yes*	Yes*	Yes*	Yes*	No	Yes*	Yes*
Parents as Teachers	Yes	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*
PALS Infant	Yes	Yes*	Yes*	Yes*	Yes*	No	Yes*	Yes*
SafeCare[a]	Yes	Yes*	No	Yes*	Yes*	Yes*	Yes*	Yes*

Table 4 (*continued*)

Source: HomVEE implementation profiles.

Notes: 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. The results are based on available information but do not constitute a formal review of whether the models meet the MIECHV eligibility requirements. All models in this table have been in existence for at least 3 years. All models except Oklahoma CBFRS are associated with a national organization or institution of higher education.

*Shaded table cell = in compliance with implementation guidelines.

[a]This information pertains to SafeCare; separate information is not available for SafeCare Augmented.

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 model 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.

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 socioeconomic status. 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 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://homvee.acf.hhs.gov/) 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

1	Attachment and Biobehavioral Catch-Up (ABC) Intervention	24	Maternal Infant Heath Outreach Workers (MIHOW)
2	Child First	25	Minding the Baby
3	Child Parent Enrichment Project (CPEP)	26	MOM Program
4	Childhood Asthma Prevention Study (CAPS)	27	Mothers' Advocates in the Community (MOSAIC)
5	Computer-Assisted Motivational Intervention (CAMI)	28	North Carolina Baby Love Maternal Outreach Workers Program
6	Early Head Start–Home Visiting (EHS-HV)	29	Nurse Family Partnership (NFP)
7	Early Intervention Program for Adolescent Mothers (EIP)	30	Nurses for New Newborns
8	Early Start (New Zealand)	31	Nurturing Parenting Programs (Birth to Age 5)
9	Even Start-Home Visiting (Birth to Age 5)	32	Oklahoma's Community-Based Family Resource and Support (CBFRS) Program
10	Family Check-Up	33	Parent-Child Assistance Program (PCAP)
11	Family Connections (Birth to Age 5)	34	Parent-Child Home Program
12	Family Connects	35	Parents as Teachers (PAT)
13	Family Spirit	36	Philani Outreach Programme
14	Health Access Nurturing Development Services (HANDS) Program	37	Play and Learning Strategies (PALS)
15	Health Connect One's Community-Based Doula Program	38	Pride in Parenting (PIP)
16	Healthy Beginnings	39	Promoting First Relationships
17	Healthy Families America (HFA)	40	Resource Mothers Program
18	Healthy Start–Home Visiting	41	Resources, Education, and Care in the Home (REACH)
19	Healthy Steps (National Evaluation 1996 Protocol)	42	REST Routine
20	Home Instruction for Parents of Preschool Youngsters (HIPPY)	43	SafeCare
21	HOMEBUILDERS (Birth to Age 5)	44	Seattle-King County Healthy Homes Project
22	Home-Start	45	Triple P—Positive Parenting Program-Home Visiting
23	Maternal Early Childhood Sustained Home Visiting Program		