OPRE Report #2019-93

Home Visiting Evidence of Effectiveness Review: Executive Summary

September 2019; Updated December 2019*

*Track 1 findings were released in September (and remain unchanged). This updated release includes findings from Track 2.

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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 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 on behalf of the U.S. Department of Health and Human Services (HHS).

The HomVEE review provides information about which home visiting models have evidence of effectiveness as defined by HHS, as well as detailed information about the samples of families who participated in the research, the outcomes measured in each study, and implementation features of 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. As of 2019, HomVEE divides reviews into two tracks:

- Track 1 is for models that HomVEE has not previously found to be evidence based (that is, models that either have never been reviewed by HomVEE before or were reviewed but did not meet the criteria for evidence of effectiveness). HomVEE releases results in September of each year for models in Track 1.
- Track 2 updates the review of literature on models that HomVEE has previously found to be evidence-based. Updates to models in Track 2 are released in December.

A. 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 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 models. Thus reviews of new models and updates of existing models systematically include all of the aforementioned steps.

1. Literature search

Each year, the HomVEE team conducts a broad search for literature on home visiting 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 home visiting as the primary service delivery strategy and offered home visits to most or all participants. 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 HomVEE team also performs focused searching, by model name, for models with the highest prioritization scores in each year. The initial search was limited to studies published since 1989; a more focused search on prioritized models included studies published since 1979 (see "Prioritizing home visiting models for the review" below). This search is updated annually to identify new literature released from the previous October through the end of September.

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[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 HomVEE, 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 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].

2. **Call for studies.** Since 2009, HomVEE has issued an annual call for studies, sent to approximately 40 relevant electronic mailing lists for dissemination. The call for studies is released in November and open through early January and may include unpublished studies or studies published through December of the previous year.

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

1. **Review of existing literature reviews and meta-analyses.** In 2009, 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 ensured that our search terms identified relevant studies; after confirming the validity of the search terms, we did not repeat the process in subsequent years.
2. **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. However, results of this search largely overlapped with the results of the first two activities, so the team discontinued this activity in subsequent years.

By the time of the 2019 review, the literature search yielded approximately 31,019 unduplicated citations, including 446 articles submitted through the HomVEE calls for studies.

2. 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 model.
- The study was not published in English.

- The study was published before 1989.[3]

3. Prioritizing home visiting models for the review

Each year, HomVEE releases new review results for models. This includes reviews of studies on models that have not previously been reviewed, updates to previously reviewed models, or both. Decisions on the number of models to review depend on (1) the number of studies that are identified for review about each model and (2) the available project resources.

HomVEE selects models for the annual review by calculating a prioritization score for each model, based on six steps:

1. **Identify studies eligible for review.** This first step includes the HomVEE literature search (https://homvee.acf.hhs.gov/review-process/Literature%20Search) and screening studies (https://homvee.acf.hhs.gov/review-process/Screening%20Studies) activities described in the previous section.
2. **Apply study-level criteria.** HomVEE assigns up to 5.75 points per study, based on HomVEE's prioritization criteria (listed in Table 1), for studies that have priority information listed in their title or abstract.
3. **Apply model-level criteria.** HomVEE assigns up to 4 model-level points, based on information from study titles and abstracts, model websites, and previous HomVEE reviews, for factors related to the MIECHV Program. (For more information on model-level criteria and other aspects of HomVEE prioritization, please see https://homvee.acf.hhs.gov/review-process/Prioritizing%20Models%20for%20Review.)
4. **Calculate prioritization scores.** Next, HomVEE sums the points for all studies about each model to calculate a model's total score. For models that are not evidence based (Track 1), the total is the final model prioritization score. For models that are evidence based (Track 2), there is one additional step: HomVEE weights the score relatively more heavily if more years have elapsed since the model was last reviewed. This increases the likelihood that a model that has not been reviewed recently will be prioritized for review.
5. **Adjust prioritization scores.** Then, HomVEE sorts models from highest to lowest score within each track. And, the team conducts a second, focused database search on model names to identify additional studies about top-scoring models in each track. The model's prioritization score is adjusted based on: (1) newly identified studies and (2) information related to study-level points that is reported in study texts.
6. **Prioritize models.** HomVEE re-sorts models from highest to lowest using the adjusted prioritization scores and identifies models with the highest scores as priorities for review.

[3] For models prioritized in 2018 and earlier, HomVEE also did a focused search reaching back to 1979. Because so few studies published before 1979 related to models prioritized in recent years, HomVEE limited the focused search to studies reaching back to 1989 or later starting with the 2019 review. For the 2019 review, HomVEE searched literature published through September 2018. It also considered submissions of unpublished studies or studies published through December 2018 to the call for studies that ended in early January 2019.

Exceptions are: (1) international versions of United States-based Track 2 models (which may be excluded when resources are limited), and (2) models that were prioritized in the past year.

Table 1. HomVEE study-level prioritization criteria and associated points

Criterion	Points	Notes
Number and design of impact studies	2 to 3 per study	3 points for each randomized controlled trial, single-case design, or regression discontinuity design 2 points for each matched-comparison group design[a]
Sample size	1 per study	Study sample contains 250 or more pregnant women and/or families
Outcomes of interest	1 per study	Study examines outcomes in one or more of the following domains: reductions in child maltreatment; reductions in juvenile delinquency, family violence, or crime; linkages and referrals; and family economic self-sufficiency[b]
Study sample	0.5 per study	Study sample lives in the United States or is an indigenous population in or outside of the United States
Priority population	0.25 per study	The entire sample belongs to one or more priority populations named in the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) statute[c]

Note: HomVEE applies these points at the study level based on information that study authors provide in the title and abstract. HomVEE assesses each study separately and then sums the points for all studies to create a study-level total for the model.

[a]Randomized controlled trials assign participants to the treatment or control groups by chance and have the potential for strong internal validity. Single-case designs often involve repeated, systematic measurement of an outcome before, during, and after actively manipulating an independent variable (for example, toggling exposure to a home visiting model on and off). Regression discontinuity designs assign participants to treatment groups based on a predetermined threshold. Matched-comparison group designs use a nonrandom process to assign participants to treatment or comparison groups. The nonrandom process of selecting groups can result in groups that are not balanced on known or unknown characteristics. Details of HomVEE's standards for these designs are available on the HomVEE website: https://homvee.acf.hhs.gov/review-process/Producing%20Study%20Ratings.

[b]More information about these outcomes is available at https://homvee.acf.hhs.gov/outcomes.

[c]According to 42 U.S.C. § 711 (d)(4), priority populations are as follows:

- Low-income families
- Families with pregnant women who have not reached age 21
- Families that have a history of child abuse or neglect or have had interactions with child welfare services
- Families that have a history of substance abuse or need substance abuse treatment
- Families that have users of tobacco products in the home
- Families that are or have children with low student achievement
- Families with children with developmental delays or disabilities
- Families that include individuals who are serving or formerly served in the Armed Forces, including such families that have members of the Armed Forces who have had multiple deployments outside of the United States.

HomVEE's two-track prioritization process reflects HomVEE's emphasis on identifying new evidence-based home visiting models while continuing to update reports on models that are already evidence-based. The annual prioritization effort may yield more models in the highest point category than can be reviewed that year. The number of models reviewed each year depends on the available project resources and the number of studies identified to review for each model. Regardless of whether a model is reviewed in a given year, all models will be included in the prioritization process in subsequent years. The MIECHV Program may coordinate with HomVEE to prioritize review of promising approaches implemented and evaluated under a MIECHV grant.[4] Through this process, as of June 2019, the team has prioritized 50 models for the review (see Appendix for complete list). HomVEE completed impact reviews of 440 studies and implementation reviews of 304 studies about the 50 models. In conducting the review on newly prioritized or updated models, the team focused on literature published through September 2018. The team also considered submissions to the call for studies of unpublished studies or studies published through December 2018.

4. 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)[5] (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) version 2.1 design standards (Table 2).[6] 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.

[4] Under federal law, a home visiting service delivery model that qualifies as a promising approach conforms to a "promising and new approach" to achieving specified benchmark areas and participant outcomes; has been developed or identified by a national organization or institution of higher education; and will be evaluated through a well-designed and rigorous process (see Social Security Act, Title V, § 511 (d); https://www.ssa.gov/OP_Home/ssact/title05/0511.htm).

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

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

Table 2. Summary of study rating criteria for the HomVEE review

HomVEE study rating	HomVEE research design and criteria: Randomized controlled trials	Quasi-experimental designs Matched comparison group	Quasi-experimental designs Single-case design[a]	Quasi-experimental designs Regression discontinuity design[a]
High	• Random assignment • Meets WWC standards for acceptable rates of overall and differential attrition[b] • 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[b] • 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	Studies that do not meet the requirements for a high or moderate rating	Studies that do not meet the requirements for a high or moderate rating	Studies that do not meet the requirements for a high or moderate rating

TABLE 1 (*CONTINUED*)

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

[a]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).

[b]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).

[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 https://homvee.acf.hhs.gov/review-process/Producing%20Study%20Ratings for more details.

5. Assessing evidence of effectiveness

After completing all impact study reviews for a model, the HomVEE team evaluates the evidence across all studies of the models that received a high or moderate rating and measured outcomes in at least one of the eligible outcome domains. To meet HHS' criteria for an "evidence-based early childhood home visiting service delivery model," 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.[7]

For results from single-case designs to be considered toward the HHS 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.

In addition to assessing whether each model met the HHS criteria for an evidence-based early childhood home visiting service delivery model, the HomVEE team examines and reports 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 classifies outcome measures as primary if data were collected through direct observation, direct assessment, or administrative records; or if

[7] These criteria are consistent with the MIECHV legislation: Section 511 (d)(3)(A)(i)(I).

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 classifies 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 reports 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 reports 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 reports the funding source for each study and whether any of the study authors were model developers.
- **Magnitude of impacts.** HomVEE reports effect sizes when possible, either those calculated by the study authors or HomVEE computed findings.

6. 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 model developers and national model offices. The HomVEE team uses this information to develop detailed implementation profiles for each prioritized model that included an overview of the model and information about prerequisites for implementation, materials and forms, estimated costs, and model contact information. National model offices are invited to review and comment on the profiles before their release. For models that meet HHS criteria for an evidence-based home visiting model, the team also extracts and reports information about implementation experiences from the studies reviewed, including the characteristics of program participants, location and setting, staffing and supervision, model components, model adaptations or enhancements, dosage, and lessons learned.

7. Addressing conflicts of interest

All members of the HomVEE team sign a conflict of interest statement in which they declare 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 assembles 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 models previously evaluated by Mathematica are conducted by contracted reviewers who are not Mathematica employees.

B. Summary of review results

The HomVEE review produces 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 models with evidence of effectiveness, and a discussion of gaps in the home visiting research literature.

1. Evidence of effectiveness by model

Overall, HomVEE identified 21 home visiting models that meet the HHS criteria for an evidence-based early childhood home visiting service delivery model (Table 3). 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 of evidence-based models, the review showed the following:

- **Models have multiple favorable effects.** Most models have numerous favorable impacts on primary and secondary measures. The number of outcomes showing favorable effects ranged considerably across models, as did the number of total outcomes measured (not shown).
- **Models have sustained impacts.** All but one of the models[8] that met the HHS criteria have favorable impacts at least one year after program enrollment. For models that provide services for more than one year, families may still have been receiving services at the time the outcomes were measured.
- **Replication is uncommon.** A total of 9 of the 21 models that met the HHS criteria had favorable effects in the same domain in two or more samples. In other words, for many models that met HHS criteria, favorable impacts were shown in only one sample.[9]
- **Results are not limited to subgroups.** All of the 21 models that met the HHS 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.

[8] The requirement for sustained findings only applies to models for which all findings are from randomized controlled trials. The Maternal Infant Health Program (MIHP) does not have sustained impacts, but the research supporting that model is all from studies with a quasiexperimental design.

[9] If a model shows favorable impacts in only one sample, those impacts must be in two or more of the eight outcome domains for the model to meet HHS criteria for an evidence-based model.

- **Few unfavorable effects were reported.** Ten of the 21 models reported at least one unfavorable or ambiguous impact, but the number of unfavorable impacts reported overall is small relative to the number of favorable impacts. 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.

Table 3. Home visiting review update timing for models that have met HHS criteria

Model	Review last updated
Attachment and Biobehavioral Catch-up (ABC) Intervention	April 2017
Child First	July 2011
Early Head Start–Home-Based Option (EHS-HBO)	July 2016
Early Intervention Program for Adolescent Mothers Implementation support is not currently available for the model as reviewed.	July 2011
Early Start (New Zealand)	July 2014
Family Check-Up® For Children	June 2017
Family Connects	Oct. 2014
Family Spirit®	May 2016
HANDS	July 2015
Healthy Beginnings	June 2015
Healthy Families America (HFA) ®	September 2018
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.	July 2011
HIPPY®	May 2013
Maternal Early Childhood Sustained Home Visiting Program (MECSH)	May 2013
Maternal Infant Health Program (MIHP)	May 2019
Minding the Baby®	Nov. 2014
Nurse-Family Partnership (NFP) ®	Oct. 2019
Oklahoma CBFRS Implementation support is not currently available for the model as reviewed.	Oct. 2012
Parents as Teachers (PAT) ®	Oct. 2019
PALS Infant	Oct. 2019
SafeCare Augmented[a]	July 2018

Notes:

[a]Safecare did not meet HHS criteria for an evidence-based model. Only SafeCare Augmented (an adaptation of SafeCare) meets HHS criteria for an evidence-based model. In addition, Planned Activities Training (a SafeCare module) and Cellular Phone Enhanced Planned Activities Training (a SafeCare module with an add-on) showed evidence of effectiveness. See the model page (https://homvee.acf.hhs.gov/effectiveness/SafeCare®/In%20Brief) for more details on the module and module with an add-on.

In addition to the 21 home visiting models described above, HomVEE reviewed 29 other home visiting models that did not meet HHS criteria for an evidence-based model (see Appendix for full list). These models did not meet HHS criteria for the following reasons:

- Nine of these 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.[10]
- One model (Child Parent Enrichment Project) had a high or moderate quality study from a randomized controlled trial with favorable, statistically significant impacts in two of the eight outcome domains, but no favorable impact was sustained for at least one year after program enrollment.
- For the remaining 19 models, no high- or moderate-quality studies were identified, and consequently HomVEE was unable to assess effectiveness.[11]

2. 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 4). None of the models, however, showed impacts on a primary measure of reductions in juvenile delinquency, family violence, and crime (although two models showed impacts on a secondary measure in this domain). 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. Both Healthy Families America and Nurse-Family Partnership had the greatest breadth of favorable *primary* findings, with favorable impacts on primary measures in six outcome domains.

3. Summary of implementation for models with evidence of effectiveness

All but one of the 21 models that met the HHS criteria have minimum requirements for the frequency of home visits and, and all 21 have pre-service training requirements (Table 5).[12] Eighteen models are associated with a national model office or institute of higher education that provides training and support to local program sites and 18 have minimum requirements for home visitor supervision. Seventeen models each have a system for monitoring fidelity and have specified content and activities for the home visits. Sixteen models have minimum education requirements for home visiting staff. Sixteen models have fidelity standards for local implementing agencies.

[10] Those models were: Childhood Asthma Prevention Study; Computer Assisted Motivational Intervention; Home-Start; MOM Program; ParentChild+® Core Model; Promoting Parental Skills and Enhancing Attachment in Early Childhood Trial; Resources, Education and Care in the Home; and Video-Feedback Intervention to Promote Positive Parenting-Sensitive Discipline.

[11] We identified high or moderate rated studies on a module and an adaptation of Triple P - Positive Parenting Program®–Variants suitable for home visiting, but not on the main model.

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

Table 4. 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-Based Option (EHS-HBO)	No	No	Yes (primary, secondary)	Yes (secondary)	Not measured	Yes (primary, secondary)	Yes (secondary)	Yes (secondary)
EIP[a]	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® For Children	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 (HFA)®	Yes (primary, secondary)	Yes (secondary)	Yes (primary, secondary)	Yes (primary, secondary)	Yes (secondary)	Yes (primary, secondary)	Yes (primary, secondary)	Yes (primary, secondary)
Healthy Steps (National Evaluation 1996 Protocol)[b]	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
Maternal Early Childhood Sustained Home Visiting Program (MECSH)	Yes (secondary)	Yes (secondary)	Not measured	Not measured	Not measured	Yes (primary)	Not measured	Not measured
Maternal Infant Health Program (MIHP)	Yes (primary)	Yes (primary, secondary)	Not measured	Not measured	Not measured	Not measured	Not measured	Not measured
Minding the Baby®	Yes (primary)	Yes (primary)	Not measured	No	Not measured	No	Not measured	Not measured

TABLE 4 (*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
Nurse-Family Partnership (NFP) ®	Yes (primary, secondary)	Yes (primary, secondary)	Yes (primary, secondary)	Yes (primary)	Yes (secondary)	Yes (primary, secondary)	Yes (primary, secondary)	No
Oklahoma CBFRS[a]	No	Yes (secondary)	Not measured	Not measured	Not measured	Yes (primary)	Not measured	Not measured
Parents as Teachers (PAT)®	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[c]	Not measured	No	Not measured	Yes (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.

[a] Implementation support is not currently available for the model as reviewed.

[b] 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.

[c] Safecare did not meet HHS criteria for an evidence-based model. Only SafeCare Augmented (an adaptation of SafeCare) meets HHS criteria for an evidence-based model. In addition, Planned Activities Training (a SafeCare module) and Cellular Phone Enhanced Planned Activities Training (a SafeCare module with an add-on) showed evidence of effectiveness. See the model page (https://homvee.acf.hhs.gov/effectiveness/SafeCare®/In%20Brief) for more details on the module and module with an add-on.

Table 5. 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*	No	Yes*	Yes*	Yes*	Yes*	Yes*
Child First	Yes	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*
Early Head Start–Home-Based Option (EHS-HBO)	Yes	Yes*	No	Yes*	Yes*	Yes*	Yes*	No
EIP *Implementation support is not currently available for the model as reviewed.*	No	Yes*	Yes*	No	Yes*	No	No	Yes*
Early Start (New Zealand)	Yes	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*
Family Check-Up® For Children	Yes	Yes*	No	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 (HFA)®	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 (MECSH)	Yes	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*
Maternal Infant Health Program (MIHP)	Yes	Yes*	Yes*	No	Yes*	Yes*	Yes*	Yes*
Minding the Baby®	Yes	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*
Nurse-Family Partnership (NFP)®	Yes	No	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*

TABLE 5 (*CONTINUED*)

	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?
Oklahoma CBFRS *Implementation support is not currently available for the model as reviewed.*	No	Yes*	Yes*	Yes*	No	No	Yes*	Yes*
Parents as Teachers (PAT)®	Yes	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*
PALS Infant	Yes	Yes*	No	Yes*	Yes*	No	Yes*	Yes*
SafeCare®,[a]	Yes	Yes*	No	Yes*	Yes*	Yes*	Yes*	Yes*

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.

[a]This information pertains to SafeCare; separate information is not available for SafeCare Augmented, nor for the Planned Activities Training or the Cellular Phone Enhanced Planned Activities Training modules of SafeCare.

*Shaded table cell = in compliance with implementation guidelines.

4. 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 models to community needs. First, while the volume of research is constantly increasing, research evidence of model effectiveness for many models is limited. As noted earlier, many models do not have high- or moderate-quality studies of their effectiveness; thus, it can be difficult for policymakers and program administrators to be confident about what many models might achieve in the populations they serve. 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 models for military families.

5. 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 model
- Reports on the evidence of effectiveness across models for each outcome domain
- Implementation profiles for each model
- Information on implementation experiences for evidence-based models
- 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 A
Models Reviewed by HomVEE

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A1. Models Reviewed by HomVEE

1	Attachment and Biobehavioral Catch-Up (ABC) Intervention	26	Maternal Infant Heath Outreach Workers (MIHOW)®
2	Child First	27	Maternal Infant Health Program (MIHP)
3	Child Parent Enrichment Project (CPEP)	28	Minding the Baby®
4	Childhood Asthma Prevention Study (CAPS)	29	MOM Program
5	Computer-Assisted Motivational Intervention (CAMI)	30	Mothers' Advocates in the Community (MOSAIC)
6	Early Head Start–Home-Based Option (EHS-HBO)	31	North Carolina Baby Love Maternal Outreach Workers Program
7	Early Intervention Program for Adolescent Mothers (EIP)	32	Nurse-Family Partnership (NFP)®
8	Early Start (New Zealand)	33	Nurses for New Newborns®
9	Even Start-Home Visiting (Birth to Age 5)	34	Nurturing Parenting Programs (Birth to Age 5)
10	Early Steps to School SuccessTM–Home Visiting	35	Oklahoma's Community-Based Family Resource and Support (CBFRS) Program
11	Family Check-Up® for Children	36	Parent-Child Assistance Program (PCAP)
12	Family Connections (Birth to Age 5)	37	ParentChild+® Core Model (formerly Parent-Child Home Program)
13	Family Connects	38	Parents as Teachers (PAT)®
14	Family Spirit®	39	Philani Outreach Programme
15	Following Baby Back Home (FBBH)	40	Play and Learning Strategies (PALS)
16	Health Access Nurturing Development Services (HANDS) Program	41	Pride in Parenting (PIP)
17	Health Connect One's® Community-Based Doula Program	42	Promoting First Relationships®–Home Visiting Option
18	Healthy Beginnings	43	Promoting Parental Skills and Enhancing Attachment in Early Childhood (CAPEDP) Trial
19	Healthy Families America (HFA) ®	44	Resource Mothers Program
20	Healthy Start–Home Visiting[a]	45	Resources, Education, and Care in the Home (REACH)
21	Healthy Steps (National Evaluation 1996 Protocol)	46	REST Routine
22	Home Instruction for Parents of Preschool Youngsters (HIPPY)®	47	SafeCare®
23	HOMEBUILDERS (Birth to Age 5)®	48	Seattle-King County Healthy Homes Project
24	Home-Start	49	Triple P - Positive Parenting Program®–Variants suitable for home visiting
25	Maternal Early Childhood Sustained Home Visiting Program (MECSH)	50	Video-Feedback Intervention to Promote Positive Parenting-Sensitive Discipline (VIPP-SD)

[a] HHS has determined that Healthy Start is not eligible for review by HomVEE because it is a federal grant program and not a home visiting model. Information on Healthy Start has been removed from the HomVEE website.

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