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National Evaluation and Evidence of Effectiveness

When the MIECHV program was established by the ACA, HHS established the HomVEE review of the research literature on home visiting.[11] Results of that review are used to identify home-visiting service delivery models that meet HHS criteria for evidence of effectiveness because, by statute, at least 75% of the funds available from the ACA are to be used for programs that use service delivery models that are evidence based. The HomVEE conducts a yearly literature search to identify promising studies of home-visiting models. It includes only studies that are considered to meet quality standards on the basis of overall design (only randomized controlled trials or quasiexperimental studies are included) and design-specific criteria. Studies that meet criteria for entry are then assessed for outcomes in the following 8 domains, as defined by HHS:

- 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; and
- Linkages and referrals.

To meet HHS criteria for evidence of effectiveness, home-visiting models must demonstrate favorable outcomes in either 1 study with results in 2 or more domains or 2 studies with significant benefits in the same domain. To be included, study designs must meet evaluation quality standards, and outcomes need to show statistically significant benefits using nonoverlapping analytic samples. As of April 2017, the 18 models that meet these standards (along with 2 programs that do not meet criteria for implementation) with target populations, ages of participants, and outcomes for which there is evidence are listed in Table 1.[11]

TABLE 1

Home-Visiting Programs Meeting HHS Criteria for Evidence of Effectiveness (as of April 2017)

Home-Visiting Program	Ages Served (With Evidence of Ef

Attachment and Behavioral Catch-Up Intervention	0–2 y
Child First	0–3 y
Durham Connects (also known as Family Connects)	0–1 y

Early Head Start Home Visiting	Pregnant women, 0–3 y
Early Intervention Programs for Adolescent Mothers	Pregnant women, 0–1 y
Early Start (New Zealand)	0–5 y

Family Check-Up	2–5 y
Family Spirit	0–3 y, begins in pregnancy
Health Access Nurturing Development Services	Pregnant women, birth–3 mo
Healthy Beginnings	Pregnant women, birth–23 mo

Healthy Families America	Pregnant women, 0–5 y (enroll pren birth)
Healthy Steps (national evaluation 1996 protocol) Note: 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.	0–3 y
Home Instruction for Parents of Preschool Youngsters	3–5 y

Maternal Early Childhood Sustained Home-Visiting Program	Pregnant women, 0–2 y
Minding the Baby	Pregnant women, 0–2 y
NFP	Pregnant women, 0–2 y (enroll early pregnancy)

Oklahoma Community-Based Family Resource and Support Program Note: Implementation support is not currently available for the model.	Pregnant women, 0–1 y
Parents as Teachers	Pregnant women, 0–5 y
Play and Learning Strategies	0–3 y
SafeCare Augmented (an adaptation of SafeCare)	0–5 y

Reference: https://www.mathematica-mpr.com/our-publications-and-findings/publications/home-visiting-evidence-of-effectiveness-review-executive-summary-april-2017. Descriptions of specific

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A rapidly expanding evidence base documents the benefits of high-quality home-visiting programs, especially when they are integrated in a comprehensive early childhood system of care.[39] Home visiting has been shown to increase children's readiness for school, promote child health (such as vaccine rates), and enhance parents' abilities to promote their children's overall development. There is evidence that home visiting reduces the risk of both child abuse and unintended injury.[16,40] Maternal health is improved by more frequent prenatal care, better birth outcomes, and early detection and treatment of depression.[41] Outcome studies have established the effectiveness of home visiting by nurses or community health workers in reducing child maltreatment,[42] improving birth outcomes,[43] and increasing school readiness.[44]

A close examination of the evidence of effectiveness published in 2015 by the HomVEE review provides additional insights about the potential benefits and limitations of current models of home visiting.[11] Of the 44 models assessed in 2015, 19 showed improvements in at least 1 primary outcome measure, and 15 had favorable effects on secondary measures. These results are consistent with both the broad scope of many of the models as well as the likelihood that improvements in 1 domain sometimes lead to benefits in another (eg, positive parenting improving child development). All 19 models that showed positive results had evidence of sustained benefits for at least 1 year after enrollment.

In addition to the 19 models approved in 2015, 8 of the 25 that were not approved had evidence of benefit, perhaps because of stringent criteria for study quality and number. Even among programs showing positive outcomes, there was not a high level of consistency across domains. For example, only 7 of 19 models demonstrated benefits in the same domain across 2 or more studies. Many effect sizes were fairly small (approximately 0.2 SDs) but comparable to those seen in many studies of programs located in other settings (eg, early child education).[45] However, modest effect sizes in studies concerning developmental delay can result in important population-level effects given the high proportion of children in low-income families (nearly 20%) meeting criteria for early intervention services.[46,47]

Longitudinal studies within the HomVEE review of the NFP have shown improvements in adolescent mental health, in middle school achievement, over substance use and/or criminality immediately after high school, as well as in overall maternal and child mortality.[48,–50] Other studies document the persistence of beneficial outcomes after population-level scaling. A study of Durham Connects (also known as Family Connects) showed more than 80% participation and 84% adherence among all mothers delivering in Durham, North Carolina, during an 18-month period.[51] Researchers in this study, using rigorous methodology, documented important and beneficial effects on child health, including a 59% reduction in emergency medical care, an increase in positive parenting, successful linkages to community services, and improved maternal mental health. In addition, a large-scale study of SafeCare home-based services showed reductions in reports to child protective services after a scale-up of the program in Oklahoma.[52] These beneficial outcomes of rigorous program evaluation counterbalance other studies that found little or no benefit after a scale-up, such as the finding of reduced implementation fidelity and limited benefit after scaling up Hawaii's Healthy Start Program.[53]

Other studies document the capacity of home visiting to successfully target specific high-risk populations and implement interventions of varying intensity specific to the intended outcome. For example, Computer-Assisted Motivational Intervention, when applied in combination with home visiting, successfully reduced subsequent pregnancies among pregnant teenagers.[54] Other 2-generational interventions, including Family Spirit (which targets American Indian teen-aged mothers) and Family Check-Up (which targets young mothers with depression), improved behavioral problems in infants and young children as well as the mental health of the young mothers.[55,–57]

Finally, the outcomes documented by the HomVEE need to be considered in the context of a number of meta-analyses and systematic reviews that have been conducted other than the HomVEE. One of the most cited is a meta-analysis that documented significant benefits across 4 broad domains, including child development, child abuse prevention, childrearing, and maternal life course.[58] Benefits were maximized when specific rather than general populations were targeted, when interventions used professionals versus

paraprofessionals, and when interventions were more specifically focused on parental rather than child wellbeing.[59,–61]