

Executive Summary

The Mother and Infant Home Visiting Program Evaluation

**Early Findings on the Maternal, Infant, and
Early Childhood Home Visiting Program**

A Report to Congress

OPRE Report 2015-11



JANUARY 2015

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OPRE Report

January 2015

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Contract Number: HHSP23320095644WC

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Suggested citation: Charles Michalopoulos, Helen Lee, Anne Duggan, Erika Lundquist, Ada Tso, Sarah Crowne, Lori Burrell, Jennifer Somers, Jill H. Filene, and Virginia Knox. (2015). *The Mother and Infant Home Visiting Program Evaluation: Early Findings on the Maternal, Infant, and Early Childhood Home Visiting Program*. OPRE Report 2015-11. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

This report and other reports sponsored by the Office of Planning, Research and Evaluation are available at <http://www.acf.hhs.gov/programs/opre>.



MDRC and subcontractors James Bell Associates, Johns Hopkins University, Mathematica Policy Research, the University of Georgia, and Columbia University are conducting the Mother and Infant Home Visiting Program Evaluation (MIHOPE) for the Department of Health and Human Services (HHS) under a contract with the Administration for Children and Families (ACF), funded by HHS under a competitive award, Contract No. HHS-HHSP23320095644WC. The project officer is Nancy Geyelin Margie.

Acknowledgments

The Mother and Infant Home Visiting Program Evaluation (MIHOPE) is a large and complex project that resulted from the collaboration of many people and organizations. From the project's inception, it has benefited greatly from the advice of a number of people at the Department of Health and Human Services. At the Office of Planning, Research and Evaluation, Lauren Supplee and Nancy Geyelin Margie have provided regular feedback to the study team, and Naomi Goldstein has provided invaluable guidance on difficult issues the team has faced. At the Health Resources and Services Administration (HRSA), Carlos Cano, Romuladus Azuine, Benjamin Margolis, Kathleen Kilbane, and Julie Ross have also weighed in on various project issues.

MIHOPE's ability to investigate the Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) comes from the states and local programs that are participating in the study, and we are grateful for their participation. We also thank the project's site recruitment team, which was led by Sharon Rowser and Dina Israel at MDRC, and had team members at MDRC (Marie Cole, Rebecca Hughes, Magdalena Mello, Alexander Vazquez, Ashley Weech, and Evan Weissman), James Bell Associates (Nicole Miller, Kerry Ryan, Lance Till, Susan Zaid, and Alexandra Joraanstad), and Mathematica Policy Research (Luke Heinkel, Jacob Hartog, and Cheri Vogel). In addition, this effort would not have been possible without the assistance of the HRSA project officers and MIECHV administrators the team consulted in the various states, and particularly in the 12 states that were eventually chosen to participate in this study.

The discussion of the national home visiting models was greatly informed by available program documentation and through surveys and discussions with the national model developers, including David Jones and Angie Godfrey for Early Head Start; Cydney Wesel, Kathleen Strader, and Kathryn Harding at Healthy Families America; Molly O'Fallon and Ely Yost at Nurse-Family Partnership; and Karen Guskin and Kerry Cavelry of Parents as Teachers.

In addition to information collected from the national model developers, this report contains a great deal of information on the local home visiting programs and families that have enrolled in the study. For that, we owe our gratitude to the local programs and families for providing the information, and to the MIHOPE data team for processing it. Desiree Alderson oversaw all aspects of the data work for MIHOPE. Electra Small developed the web surveys used with home visiting program staff members, with assistance from Melinda

Jackson and Alexandra Parma, who also assisted in analyzing the data. Kristen Faucetta led MDRC's efforts to analyze information on participating families, and directed the work of Patricia Chou and Jessica Kopsic in doing so. Martha Kovac led a large Mathematica team that included field interviewers at the 88 MIHOPE sites (who obtained consent from families in the study) and phone interviewers at the survey operations center. Ms. Kovac was assisted in her work by a number of people, including Annalee Kelly, Sara Skidmore, and Ananth Koppikar. Finally, Melane Estarziau, Kerry Ryan, and Alexandra Joraanstad from James Bell Associates helped compile information on the national home visiting models.

We would also like to acknowledge a number of people who offered guidance on the structure and content of this report. We received thoughtful comments on early drafts from Gordon Berlin, Michael Weiss, Shira Mattera, Alice Tufel, and Joshua Malbin at MDRC. The report also reflects suggestions from Nancy Margie, Lauren Supplee, Naomi Goldstein, and Moushumi Beltangady at the Administration for Children and Families and David Willis, A.J. Pearlman, and Benyamin Margolis at HRSA, as well as suggestions made to the Health and Human Services secretary by the Advisory Committee on MIHOPE at a meeting held in September 2013.

Finally, Katie Egan at MDRC provided excellent assistance with all aspects of producing the report. She was in turn assisted by Marie Cole, Suzanne Finkel, Theresa Kapke, Colleen McCullough, Robert Mesika, Katie Rue, Diane Singer, and Alexander Vazquez from MDRC, Alexandra Joraanstad from James Bell Associates, and Jennica Bouquet at Johns Hopkins University. Joshua Malbin edited the report and it was prepared for publication by Stephanie Cowell and Carolyn Thomas.

The Authors

Executive Summary

Children from low-income families often suffer from poor social, emotional, cognitive, health, and behavioral outcomes.¹ Children develop fastest in their earliest years, and developing early skills and abilities lays the foundation for future success in school and life.² For that reason, the most cost-effective time to intervene may be early in a child's life.³ One important approach that has helped parents and their young children is home visiting, which provides individually tailored information, resources, and support to expectant parents and families with young children.

Home visiting aims to support the healthy development of infants and toddlers and help low-income families overcome the problems they face. In general, it consists of three types of activities: assessment of family needs, parent education and support, and referral to and coordination with needed services. Home visitors use a variety of strategies to provide support and education to families, including setting goals with caregivers and creating plans for meeting those goals, helping caregivers resolve problems, helping parents and children build better relationships, intervening during crises, providing information on children's developmental stages and feedback on parenting, working to strengthen families' support networks, supporting and coordinating referrals to additional community resources, and providing emotional support, written information, or other materials.

The Patient Protection and Affordable Care Act greatly expanded the availability of home visiting in the United States when it amended Title V of the Social Security Act to create the federal Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV or the Home Visiting Program). In doing so, it allocated \$1.5 billion to states, territories, and tribal entities (which include tribes, tribal organizations, and urban Indian organizations) to fund home visiting from federal fiscal year (FY) 2010 through the middle of FY 2015.⁴ The legislation also required an evaluation of MIECHV in its early years along with a report to Congress due by March 31, 2015. To fulfill these requirements, this

¹Brooks-Gunn, Jeanne, and Greg J. Duncan, "The Effects of Poverty on Children," *The Future of Children* 7, 2 (1997): 55-71.

²National Research Council and Institute of Medicine, *From Neurons to Neighborhoods: The Science of Early Childhood Development* (Washington, DC: National Academy Press, 2000).

³Doyle, Orla, Colm P. Harmon, James J. Heckman, and Richard E. Tremblay, "Investing in Early Human Development: Timing and Economic Efficiency," *Economics and Human Biology* 7, 1 (2009): 1-6.

⁴The Protecting Access to Medicare Act of 2014 provided an additional \$400 million investment through FY 2015.

report presents the first findings from the Mother and Infant Home Visiting Program Evaluation (MIHOPE). MIHOPE was launched in 2011 by the Administration for Children and Families and the Health Resources and Services Administration within the Department of Health and Human Services (HHS). The study is being conducted for HHS by MDRC in partnership with James Bell Associates, Johns Hopkins University, Mathematica Policy Research, the University of Georgia, and Columbia University.

The legislation required the evaluation to include four components:

- **Analysis of needs assessments.** The legislation required states and territories to assess the needs of local communities in order to determine where home visiting resources should be spent. The legislation required the evaluation to provide an analysis, on a state-by-state basis, of the results of the needs assessments, including indicators of maternal and prenatal health and infant health and mortality, and state actions in response to the assessments.
- **Effectiveness study.** The evaluation will assess the effect of early-childhood home visiting programs on child and parent outcomes, including health, child development, parenting skills, school readiness and academic achievement, crime or domestic violence, and family economic self-sufficiency.⁵
- **Subgroup analysis.** The evaluation will assess the effectiveness of the programs on different populations, including the extent to which the ability of the programs to improve participant outcomes varies across programs and populations.
- **Analysis of effects on the health care system.** The evaluation will assess whether the activities conducted by such programs, if expanded to a broad scale, have the potential to improve health care practices, eliminate health disparities, improve health care quality and efficiency, and reduce costs.

⁵The legislation required grantees (states, territories, and tribal entities) to show improvement in six specified benchmark areas. In addition, the legislation required that MIECHV-funded programs be designed to improve individual outcomes for participating families in seven areas. Because there is considerable overlap between the benchmark areas and the individual participant outcomes, this report uses the term “outcomes” to refer to both lists. MIHOPE is designed to assess impacts relevant to all of these outcomes.

The current report presents MIHOPE's findings to date. These include information on the needs identified by states and their plans for using MIECHV funds to meet those needs, a description of where the study is being conducted, some information on the families in the study, and a discussion of whether plans for local home visiting programs reflect the requirements of MIECHV.

Home Visiting Models Studied in MIHOPE

MIHOPE is studying four national evidence-based models that, at the start of the study, were supported with MIECHV funds in 10 or more states.⁶ These are Early Head Start - Home Based Program Option, Healthy Families America, Nurse-Family Partnership, and Parents as Teachers.

In general, home visiting programs work with expectant mothers and families with young children to do three things: (1) assess family needs, (2) educate and support parents, and (3) help families gain access to services, all with the goal of improving outcomes for families throughout their children's early years and beyond. Although the four national models follow this basic framework, they differ in some important ways.

- **Goals.** All of the models try to improve child health and development, but some have historically focused more on preventing child maltreatment, others on improving maternal and child health, and others on positive parenting or school readiness.
- **Target population and age at enrollment.** The models aim to serve at-risk families, such as those with low incomes. However, each focuses on different types of risk. Nurse-Family Partnership targets first-time mothers, Healthy Families America focuses on families at risk of child maltreatment or with behavioral health issues, Early Head Start seeks to serve a broad group of low-income families, and Parents as Teachers has no specific eligibility requirements at the national level. All four models can enroll women when they are pregnant or when they have newborns,

⁶To determine which national models were considered evidence-based, HHS commissioned the Home Visiting Evidence of Effectiveness (HomVEE) review. Models met the HHS criteria for evidence of effectiveness if they had at least one study of at least moderate quality with statistically significant impacts in two or more of eight outcome domains, or at least two such studies with statistically significant impacts in the same domain.

although Early Head Start and Parents as Teachers also enroll families with toddlers.

- **Home visitor qualifications.** The four national models require different qualifications of their home visitors. Nurse-Family Partnership home visitors must be registered nurses, Early Head Start requires home visitors to have knowledge and experience in child development, Parents as Teachers requires home visitors to have at least a high school credential, and Healthy Families America does not require home visitors to have a specific educational background.

MIHOPE Study Design

MIHOPE plans to enroll more than 4,000 families through 88 local home visiting programs that are operating one of the four national evidence-based models in 12 states. The study is large enough to provide reliable information about MIECHV-funded programs' effects on the range of outcomes identified in the legislation and to provide information on the characteristics of more effective local programs. To generate the most credible estimates of those effects, families are being assigned at random to either a MIECHV-funded home visiting program or to a control group that will be referred to other appropriate services in the community.

Analysis of State Needs Assessments

To receive MIECHV funding, states were required to identify the quality and capacity of existing home visiting programs and to collect information on community characteristics to determine where MIECHV funds would be best spent. With that information in hand, they developed plans for spending those funds that covered where funds would be used, for which evidence-based models, and to target which families. The legislation required MIHOPE to analyze those needs assessments and state plans. Among the findings of that analysis are:

- **States chose high-needs communities for MIECHV funds.** As intended by the legislation, states generally proposed using MIECHV funds in counties with high rates of risk indicators. For example, most states targeted communities with high poverty and unemployment rates and high rates of premature births.

- **Home visiting services were extensive prior to MIECHV.** States identified more than 5,000 local home visiting programs operating prior to MIECHV. The most widely disseminated models were the four being studied in MIHOPE, but almost half of local home visiting programs used models that were not evidence-based according to HHS's criteria.
- **MIECHV encouraged states to expand the use of evidence-based home visiting models.** In their initial plans for using MIECHV funds, states proposed to support primarily the four national models being studied in MIHOPE. In interviews for MIHOPE, state administrators confirmed that MIECHV encouraged them to expand the reach of evidence-based home visiting. As of their FY 2011 plans, 40 states planned to use MIECHV to support Nurse-Family Partnership programs, 39 for Healthy Families America programs, 29 for Parents as Teachers programs, and 17 for Early Head Start programs.

States and Local Programs Chosen for MIHOPE

As noted earlier, MIHOPE includes 88 MIECHV-funded local home visiting programs in 12 states. Since initial state plans indicated that MIECHV would support more than 500 such programs, the study had to choose which states and local programs to include.

MIHOPE selected states using several criteria:

- **They were using MIECHV funds to expand at least two of the four evidence-based models.** This would help the study distinguish between the influence of a particular state and the influence of a particular program model.
- **They were planning to support five or more eligible local programs.** Such states were considered a higher priority because they would help achieve the study's goal of choosing about 85 local programs from 12 states.
- **Collectively, they represented four geographic clusters.** These clusters corresponded to the Northeast, South, Midwest, and Mountain and West.

These criteria resulted in 12 states being selected for the study: California, Georgia, Illinois, Iowa, Kansas, Michigan, Nevada, New Jersey, Pennsylvania, South Carolina, Washington, and Wisconsin.

Within these states, MIHOPE selected local home visiting programs if they met the following criteria:

- They operated one of the four national evidence-based models.
- They had been in operation for two or more years and were thus past initial start-up challenges.
- They had enough demand for services that they could enroll at least 40 families for the study while allowing for the ethical creation of a control group.
- They helped provide an approximately equal distribution of local programs across the four national models. The local programs participating in MIHOPE include 19 operating Early Head Start, 26 operating Healthy Families America, 22 operating Nurse-Family Partnership, and 21 operating Parents as Teachers.

Family Characteristics

This section presents information on MIHOPE families using surveys of women conducted as they entered the study. Because sample recruitment continues, the findings are based on about a third of the families who will eventually be enrolled in the study. The characteristics of these families were shaped by the requirements of both the national models and of MIECHV. In particular, the legislation required states to give priority to families headed by parents who had served in the Armed Forces and to high-risk groups, including low-income, pregnant women under age 21; families with a history of child abuse or substance abuse; tobacco users; families with children who have low academic achievement; and children with developmental delays. In general, the national models aim to serve families with similar risk factors, although Nurse-Family Partnership is limited to women early in their first pregnancies, while Healthy Families America targets families at risk for child maltreatment or other negative childhood experiences.

The MIHOPE sample is young, with an average maternal age of 23 at the time of enrollment. Nearly 70 percent were pregnant, with about 43 percent in the legislation's pri-

ority population of pregnant women under age 21. The sample is also racially and ethnically diverse, with most mothers being Hispanic (34 percent), non-Hispanic white (25 percent), or non-Hispanic black (31 percent).

The information on families also provides insights into the risks and challenges faced by mothers and children in the outcome areas identified for improvement in the legislation.

- **Maternal health and well-being.** In some respects, women in MIHOPE exhibited healthy behavior and were in good health: 80 percent initiated prenatal care in the first trimester, and nearly 90 percent said they were in good or excellent health. At the same time, more than a third reported using tobacco and a third reported binge drinking in the three months before pregnancy or using illegal drugs in the month before pregnancy. Forty percent exhibited symptoms of depression or anxiety when they entered the study, and a tenth had been the victim of physical intimate partner violence in the past year.
- **Parenting.** To meet the goal of improving child health and development, all four national models emphasize positive parenting skills. Surveys of parents indicate some positive parenting practices before women entered the study, but also indicate some room for improvement. For example, nearly 80 percent of mothers had initiated breastfeeding and a similar number of pregnant women planned to breastfeed. However, only about half had at least 10 books in the home, which has been found to be an important predictor of children's ability to understand and use language and to think and understand.⁷
- **Family economic self-sufficiency.** Home visiting programs often target low-income families, and nearly all families in the study were receiving some government benefits intended for low-income families. In addition, 44 percent of mothers had not finished high school.
- **Child health and development.** Because children were very young or their mothers were pregnant when they entered the study, only a little is

⁷Linver, Miriam R., Anne Martin, and Jeanne Brooks-Gunn, "Measuring Infants' Home Environment: the IT-HOME for Infants Between Birth and 12 Months in Four National Data Sets," *Parenting* 4, 2-3 (2004): 115-137.

known about children's health and development at that time. Among the young children, about 10 percent were born prematurely and about 10 percent were born with low birth weights. Both rates are similar to national averages. Nearly every child had a usual source of health care, although about a tenth of children were not covered by health insurance.

- **Characteristics by national model.** As noted earlier, the four national models target somewhat different groups of families. In general, there were few differences in the types of families enrolled by the four models, although Nurse-Family Partnership programs enrolled only pregnant women while about half of the women enrolled by other MIHOPE programs were pregnant.

Characteristics of Home Visiting Programs

The familial risks described above underscore the challenges that home visiting programs face. This report describes how the four national models and the local home visiting programs participating in MIHOPE are planning and supporting the implementation of home visiting services. The information comes from interviews and surveys with the four national model developers, web-based surveys of 77 program managers around the time their programs entered the study, and web-based surveys with 377 home visitors around the same time.

Characteristics of Home Visiting Planned Services

This section describes whom programs intend to serve, what outcomes they intend to improve, what services they plan to deliver to achieve those improvements, and how they intend to staff programs to deliver services.

Intended Recipients

All four national models serve families at risk of poor child outcomes. All indicated to the MIHOPE team that they assume major responsibility for improving the outcomes of the child and all indicated that they assume at least some responsibility for the mother's outcomes. In general, local programs are consistent with their national models in this respect.

Intended Goals and Outcomes

When presented with a list of outcomes ranked as high priorities in the legislation that created MIECHV, all four national model developers assigned high priorities to five outcomes: promoting positive parenting behavior, preventing child abuse and neglect, fostering economic self-sufficiency, encouraging child preventive care, and promoting child development. However, the national model developers differed for other outcomes. Nurse-Family Partnership, for example, gave the highest priority to all of the outcomes, while Parents as Teachers placed a high priority on some but low priority on others. Despite differences among the national models, a majority of local program managers ranked each outcome highly. This may reflect the influence of MIECHV: some local programs claimed that MIECHV encouraged them to make a higher priority of outcomes mentioned in the authorizing legislation.

Intended Service Delivery

Home visits generally consist of information gathering, education and support, and referrals for needed services. Nearly all local programs reported that they required formal screening to identify maternal mental health issues and infant developmental delays, and about three-quarters required formal assessment of participants for maternal substance abuse, intimate partner violence, and parenting behavior. This is consistent with the requirements of the national models, which all required local programs to conduct developmental screenings but varied in their requirements for screening in other areas. Despite the widespread use of screening, many local programs lacked protocols for education and support in cases where screens detected problems. For example, when they entered MIHOPE, only about half of the local programs had protocols for responding to developmental delays and fewer than half had written protocols for the other problems that screens might detect, such as maternal substance use, intimate partner violence, or poor parenting behavior. Turning to referral policies, many local programs reported that home visitors were expected to help families gain access to necessary resources, which is consistent with national model requirements that home visitors monitor families' success in using referrals.

Regarding the approaches that home visitors use in their daily work with families, all four national models encouraged observation of parent-child interaction accompanied by both positive and constructive feedback, and all of the national models encouraged home visitors to use at least one supportive strategy such as goal setting, problem solving, or emotional support. However, only Early Head Start and Nurse-Family Partnership encouraged home visitors to demonstrate positive parenting practices, and Early Head Start, Healthy

Families America, and Nurse-Family Partnership encouraged home visitors to direct parent-child activities. In contrast to their national models, most local programs across all national models reported that they encouraged the use of all of these techniques.

Implementation System

The implementation system is the link between intended and actual service delivery. The components of the implementation system discussed in this report include staff development, clinical support, administrative support, and system support.

Staff Development

In web-based surveys, most home visitors indicated that they were expected to help mothers across the range of outcomes described earlier. The vast majority of home visitors also reported they were adequately trained to help mothers in these areas, and that local programs provided useful strategies and tools to assist them in helping mothers.

Clinical Support

Because of the complex challenges seen in disadvantaged families, local programs may provide home visitors with access to expert advice from clinical consultants. Overall, about three-quarters of local programs reported that they did provide access to expert consultants, and the availability of expert consultants was relatively uniform across outcome domains.

Links to Community Resources

Home visiting programs must work with other organizations to identify eligible families and to connect them with needed services. Overall, two-thirds of local programs had formal referral agreements with organizations in their communities, although fewer than a quarter had formal referral agreements with health-related organizations.

Administrative Support

Nearly all local home visiting programs used management information systems for internal program monitoring. Most monitored the number of referrals into their programs and their retention rates, and most home visitors could use these systems to document what happened during home visits. As required under MIECHV, the majority of local programs

had undertaken continuous quality improvement activities in the year prior to entering MIHOPE.⁸

Discussion

This report provides an early indication that MIECHV is being implemented in ways that support its intended goals. First, states developed plans to use MIECHV funds to expand evidence-based home visiting in at-risk communities. Reflecting those plans, local programs are serving a high-needs group of mothers, including some of the high-priority groups specified in the Affordable Care Act. Finally, MIECHV-funded programs appear to be designed to help families overcome the multiple and severe problems they face, and where there are gaps between families' needs and the services they provide, they appear to be paying attention to MIECHV goals and adjusting their priorities accordingly.

This report also sets the stage for future reports on the services delivered under MIECHV and the effects of the home visiting programs on family and child outcomes. It suggests that MIHOPE is well positioned to learn about the effects of home visiting for many of the high-priority groups identified in the authorizing legislation. It also suggests that MIHOPE can provide valuable information on several aspects of program implementation, including how local program implementation varies across the national models and how the quality of home visiting services varies with the priority that local programs and national models give to different outcomes.

⁸“Continuous quality improvement” is a process to ensure programs are systematically improving services and increasing positive outcomes for the families they serve. See FRIENDS National Resource Center for Community-Based Child Abuse Prevention, “Continuous Quality Improvement,” website: <http://friendsnrc.org/continuous-quality-improvement>, accessed August 12, 2014.