

Recent Research on Home Visiting

Conducted by CPRD November 2015

<p>1. Avellar, S., Paulsell, D., Sama-Miller, E., Del Grosso, P., Akers, L., & Kleinman, R. (2014). Home visiting evidence of effectiveness review: Executive summary. <i>Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, US Department of Health and Human Services,</i></p>	<p><u>Overview:</u> MIECHV, ACA Evidence-based models</p> <p>• Outcome domains</p> <p>Meta Outcomes</p>	<p>Home visiting reaches pregnant women and families with children birth through school-entry. Some are universal, while others target families at high risk for poor health, development, and economic outcomes. Most home visiting models have a structured protocol, materials, and goals. They use a combination of direct information sharing or service provision and case management with referral to community resources. Most address child health and development by focusing on parenting; for example, encouraging sensitive caregiving, increasing parent knowledge on development, or recognizing child illnesses.</p> <p>In conjunction with the \$1.5 billion funding of Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) through the Affordable Care Act, the federal government launched Home Visiting Evidence of Effectiveness (HomVEE) in 2009, in order to review the research literature on home visiting program models. This intra-agency effort was conducted by Mathematica Policy Research. Among the 32 models reviewed, 17 met Department of Health and Human Services criteria for an evidence-based delivery model. Among these were Child FIRST, Early Head Start-Home Visiting, Healthy Families America®, Healthy Steps, Nurse Family Partnership, and Parents as Teachers®.</p> <p>The approved program models aimed to improve outcomes in at least one of eight domains:</p> <ul style="list-style-type: none"> • Child health • Child development and school readiness • Family economic self-sufficiency • Linkages and referrals • Maternal health • Positive parenting practices • Reductions in child maltreatment • Reductions in juvenile delinquency, family violence, and crime <p>These and other program models meeting the review’s criteria were characterized by:</p> <ul style="list-style-type: none"> • Multiple behavioral effects • Sustained impacts • Results that were not limited to subgroups • Few unfavorable effects
<p>2. Azzi-Lessing, L. (2011). Home visitation programs: Critical issues</p>	<p><u>Research Background</u></p>	<p>For the past 30 years, the potential for home visiting services has been spurred by research on:</p> <ul style="list-style-type: none"> • brain development and early childhood learning in relation to prenatal and post-natal child health

<p>and future directions. <i>Early Childhood Research Quarterly</i>, 26(4), 387-398.</p>	<p>Brain development Adverse experiences Parent-Child Interaction/SEL</p> <p><u>Mediating factors</u></p>	<ul style="list-style-type: none"> the effects of childhood neglect, abuse, and trauma the possibilities for improving parents' capacities to interact with children at social, cognitive, and emotional levels. <p>Crucial factors related to implementation fidelity and outcomes of home visiting programs include:</p> <ul style="list-style-type: none"> service context, dosage, and family engagement home visitor characteristics, training, and supervision engagement of family members beyond mother-child dyad family risk factors
<p>3. Avellar, S. A., & Supplee, L. H. (2013). Effectiveness of home visiting in improving child health and reducing child maltreatment. <i>Pediatrics</i>, 132 Suppl 2, S90-9.</p>	<p><u>HomVEE</u> <u>General outcomes</u></p> <p>Target population</p>	<p>Most of the 17 models provided evidence of favorable effects on child development. Other common positive effects included health care usage and reductions in child maltreatment. Less common, however, were favorable effects on birth outcomes.</p> <p>This comprehensive and rigorous review concluded by stressing the value of home visiting in serving high-risk families which are otherwise difficult to engage in supportive services.</p>
<p>4. Olds, D. L., Donelan-McCall, N., O'Brien, R., MacMillan, H., Jack, S., Jenkins, T., . . . Beeber, L. (2013). Improving the Nurse-Family partnership in community practice. <i>Pediatrics</i>, 132(Supplement 2), S110-S117.</p>	<p><u>NFP Research</u> <u>Background for MIECHV</u></p>	<p>The NFP is based on 3 decades of randomized controlled trials, with consistent and enduring effects on maternal and child health. Families in the control groups of these trials were provided free transportation for prenatal and well child care and referral of children with developmental needs to other health and human services in their communities; therefore, the NFP benefits estimated in these trials have to be understood as being above and beyond whatever good is derived from facilitated access to office-based care and other community services for children. The results of these trials have served as the primary evidentiary foundation for the Maternal, Infant, and Early Childhood Home Visitation Program supported by the US federal government. Today, the NFP is operating in 440 counties throughout the United States, serving 26,000 families per year.</p>
<p>5. Harding, K., Galano, J., Martin, J., Huntington, L., & Schellenbach, C. J. (2007). Healthy families</p>	<p><u>HFA review of evaluations</u></p> <ul style="list-style-type: none"> Parent & child 	<p>Researchers conducted a review of 33 multi-site evaluations of Healthy Families America sites across the country, including over 200 sites evaluated from 1996 to 2005, many using control or comparison groups. They concluded that parenting outcomes—that is, parental attitudes—showed the most consistent positive impacts. Moreover, the majority of studies reviewed by the authors confirmed at least one significant impact on child</p>

<p>America® effectiveness: A comprehensive review of outcomes. <i>Journal of Prevention & Intervention in the Community</i>, 34(1-2), 149-179.</p>	<p>outcomes</p> <p>Mediating variables: Implementation Family risk Program design</p>	<p>health.</p> <p>However, less consistent impacts in other domains, such as child abuse and neglect, indicate the need to better understand factors related to implementation quality, family risk levels, and potential improvements in program design.</p>
<p>6. Haynes, G. W., Neuman, D., Hook, C., Haynes, D. C., Steeley, J., Kelley, M., . . . Paine, M. (2015). Comparing child and family outcomes between two home visitation programs. <i>Family and Consumer Sciences Research Journal</i>, 43(3), 209-228.</p>	<p>Agency Collaboration</p> <ul style="list-style-type: none"> • Child outcomes 	<p>Researchers compared a home visiting program that was a collaborative effort between a local non-profit and public health department (Partnership Program) with a home visiting program operated only through the public health department. They found that while children in both groups made similar amounts of progress, those in the Partnership Program were significantly more likely to show progress in communication, gross motor, fine motor, and personal/social development than children in the non-collaborative Public Health Home Visiting program.</p>
<p>7. Innocenti, M. S. (2016). Considerations on the implementation, innovation, and improvement of evidence-based home visiting programs. <i>Home visitation programs</i> (pp. 135-153) Springer.</p>	<p>Innovation & improvement process: aspects</p> <p>Supervision vs. coaching</p>	<p>The author of a recent and comprehensive overview of home visiting programs emphasizes the importance of evidence-based innovation and its incorporation into home visiting logic models. Given this emphasis on innovation, evaluations of home visiting programs are better able to consider effects of the provision of new services, the influence of risk factors, and the role of Continuous Quality Improvement.</p> <p>The author finds of particular interest the relationship between the supervision process and innovation. The adult learning literature suggests that better outcomes result from training strategies that more actively involve the learner in using, processing, and evaluating the mastery of newly acquired skills, and that coaching is a technique that best makes use of these strategies. He recommends the use of dedicated coaches, who have no role in determining job advancement and pay, over supervisors, whose authority may inhibit home visitors from honestly addressing their weaknesses.</p>
<p>8. Landy, C. K., Jack, S. M., Wahoush, O., Sheehan, D., Macmillan, H. L., & NFP Hamilton Research</p>	<p>Nurse-client relationship</p> <p>Therapeutic</p>	<p>Researchers employed a purposeful sample of 18 low-income, young first-time mothers participating in a pilot study of the Nurse-Family Partnership program in Hamilton, Ontario, Canada (2008-2010). These subjects partook in one to two face-to-face in-depth interviews exploring their experiences in the program. The researchers' findings support the theory that good therapeutic relationships are developed between home</p>

<p>Team. (2012). Mothers' experiences in the nurse-family partnership program: A qualitative case study. <i>BMC Nursing, 11</i>, 15-6955-11-15.</p>	<p>relationship</p>	<p>visiting nurses and mothers when the nurses are non-judgmental and help mothers to become empowered to increase control over their lives and health.</p>
<p>9. Ingoldsby, E., Baca, P., McClatchey, M., Luckey, D., Ramsey, M., Loch, J., . . . Olds, D. L. (2013). Quasi-experimental pilot study of intervention to increase participant retention and completed home visits in the nurse-family partnership. <i>Prevention Science, 14</i>(6), 525-534.</p>	<p><u>Attrition and completed visits</u></p> <p>Nurses' adaptation</p> <ul style="list-style-type: none"> • Parent & child outcomes 	<p>Researchers conducted an experimental study of Nurse-Family Partnership programs, with 6 intervention and 11 control sites, collecting data during a 9 month pre-intervention and a 9 month post-intervention period in 2003 and 2004. Data were collection from more than 100 nurses and more than 1,000 program participants.</p> <p>This examination of patterns of participant retention and numbers of completed home visits showed that training nurse home visitors to promote adaptation of program dosage and content to meet families' needs is a promising way to increase participant engagement.</p> <p>Engagement is a key mediating factor that is integrally related to the proven success of NFP in relation to women's prenatal health (e.g., reductions in prenatal tobacco use, pregnancy-induced hypertension), reductions in childhood injuries, increases in interpregnancy intervals, reductions in women's use of welfare, and improvements in cognitive, language, and academic achievement outcomes for children born to mothers with low psychological resources.</p>
<p>10. O'Brien, R., Moritz, P., Luckey, D., McClatchey, M., Ingoldsby, E., & Olds, D. L. (2012). Mixed methods analysis of participant attrition in the nurse-family partnership. <i>Prevention Science, 13</i>(3), 219-228. doi:10.1007/s11121-012-0287-0</p>	<p><u>Attrition & completed visits</u></p> <p>Nurses' adaptation</p>	<p>Researchers examined over five years of data (1996-2001) from 66 Nurse-Family Partnership sites for participant, nurse, and site predictors of participant attrition and completed home visits. Interviews were conducted with nurses from a small number of high attrition and low attrition sites.</p> <p>On the basis of both quantitative and qualitative evidence, researchers concluded that mothers who were younger, unmarried, African American, and visited by nurses who ceased employment had higher rates of attrition and fewer home visits. Hispanic mothers, those living with partners, and those employed at registration had lower rates of attrition. Those who were living with partners and employed had more home visits. Nurses in high retention sites adapted the program to their clients' needs, were less directive, and more collaborative with them. Increasing nurses' flexibility in adapting this structured, evidence-based program to families' needs may increase participant retention and completed home visits.</p>
<p>11. Easterbrooks, M. A., Jacobs, F. H., Bartlett, J. D., Goldberg, J., Contreras, M. M., Kotake, C., . . .</p>	<p><u>Attrition</u></p> <ul style="list-style-type: none"> • Maltreatment • Service referrals 	<p>Researchers conducting a study of Healthy Families Massachusetts (HFM) included 20 months of data during 2008 and 2009 for 18 sites and over 800 participants. Results indicated that program participants who used more program services—remaining in the program longer, and completing more home visits and more secondary activities—had children with fewer substantiated reports of maltreatment than did those who were</p>

<p>Chaudhuri, J. H. (2013). Initial findings from a randomized, controlled trial of Healthy families Massachusetts: Early program impacts on young mothers' parenting.</p>		<p>less engaged in the program. Thus greater understanding of which mothers become engaged and stay involved in which constellations of service components would be of great benefit to programs. The authors suggest that such an understanding would require moving beyond a concern with home visiting program dosage to a consideration of related services and the community context in which services are delivered.</p>
<p>12. Meghea, C. I., Raffo, J. E., Zhu, Q., & Roman, L. (2013). Medicaid home visitation and maternal and infant healthcare utilization. <i>American Journal of Preventive Medicine</i>, 45(4), 441-447.</p>	<ul style="list-style-type: none"> • Pre-natal visits • Post-natal visit • Well-child visits 	<p>Researchers found that Michigan Maternal and Infant Health Program participants over a 2-year period (2009-2010) had higher odds of receiving any prenatal care when compared to matched women not participating in MIHP. They also had higher odds of receiving adequate prenatal care, and of receiving an appropriately timed postnatal visit. Infants participating in MIHP had higher odds of receiving any well-child visits over the first year of life, and of receiving the appropriate number of well-child visits over their first year of life compared to matched nonparticipant infants.</p>
<p>13. Lee, E., Mitchell-Herzfeld, S. D., Lowenfels, A. A., Greene, R., Dorabawila, V., & DuMont, K. A. (2009). Reducing low birth weight through home visitation: A randomized controlled trial. <i>American Journal of Preventive Medicine</i>, 36(2), 154-160.</p>	<ul style="list-style-type: none"> • Low birth weight 	<p>Researchers conducted a 7-year randomized control trial in three communities of Healthy Families New York, focusing on social support, health education, and access to services. They found that home-visited mothers were approximately half as likely as mothers assigned to the control group to deliver LBW babies.</p>
<p>14. Sadler, L. S., Slade, A., Close, N., Webb, D. L., Simpson, T., Fennie, K., & Mayes, L. C. (2013). Minding the baby: Enhancing reflectiveness to improve early health and relationship</p>	<p><u>Psychotherapeutic home visiting</u></p> <ul style="list-style-type: none"> • Immunization • pregnancy intervals 	<p>Minding the Baby, an interdisciplinary, mentalization-based intervention in which home-visiting services are provided by a team which includes a nurse practitioner and a clinical social worker. A 2-year randomized control trial with 60 intervention subjects and 45 control subjects revealed that intervention families were more likely to be on track with immunization schedules at 12 months, had lower rates of rapid subsequent childbearing, and were less likely to be referred to child protective services. In addition, mother–infant interactions were less likely to be disrupted at 4 months when mothers were teenagers, and all intervention infants were more likely to be securely attached and less likely to be disorganized in relation to attachment at 1 year of age. Finally,</p>

<p>outcomes in an interdisciplinary Home-Visiting program. <i>Infant Mental Health Journal</i>, 34(5), 391-405.</p>	<ul style="list-style-type: none"> • Attachment reflection 	<p>mothers' capacity to reflect on their own and their child's experience improved over the course of the intervention in the most high-risk mothers.</p>
<p>15. Lowell, D. I., Carter, A. S., Godoy, L., Paulicin, B., & Briggs-Gowan, M. J. (2011). A randomized controlled trial of Child FIRST: A comprehensive home-based intervention translating research into early childhood practice. <i>Child Development</i>, 82(1), 193-208.</p>	<ul style="list-style-type: none"> • Child mental health • Mothers' mental health • Completed service referrals 	<p>Researchers conducted a randomized controlled trial of Child FIRST (Child and Family Interagency, Resource, Support, and Training). Child FIRST is a home-based, psychotherapeutic, parent-child intervention embedded in a system of care. Multi-risk urban mothers and children, ages 6–36 months (N = 157) participated. At the 12-month follow-up, Child FIRST children had improved language and fewer externalizing symptoms. Child FIRST mothers had less parenting stress at the 6-month follow-up, lower psychopathology symptoms at 12-month follow-up, and less protective service involvement at 3 years, in comparison to Usual Care mothers. Intervention families accessed 91% of wanted services relative to 33% among Usual Care. Thus researchers concluded that Child FIRST is effective with multi-risk families raising young children across multiple child and parent outcomes.</p>
<p>16. Howard, K. S., & Brooks-Gunn, J. (2009). The role of home-visiting programs in preventing child abuse and neglect. <i>Future of Children</i>, 19(2), 119-146.</p>	<ul style="list-style-type: none"> • Maternal depression • child abuse & neglect 	<p>Researchers reviewed evaluations of nine home-visiting programs: the Nurse-Family Partnership, Hawaii Healthy Start, Healthy Families America, the Comprehensive Child Development Program, Early Head Start, the Infant Health and Development Program, the Early Start Program in New Zealand, a demonstration program in Queensland, Australia, and a program for depressed mothers of infants in the Netherlands. They concluded that although there is so far little evidence that home visiting can prevent child abuse and neglect, the accumulated evidence for increased parenting skills leads them to believe that child well-being would likely increase and maltreatment therefore decrease over time.</p>
<p>17. Kirkland, K., & Mitchell-Herzfeld, S. (2012). Evaluating the effectiveness of home visiting services in promoting children's adjustment to school. <i>New York State Office of Children and Family Services, Bureau of Evaluation and Research</i>,</p>	<ul style="list-style-type: none"> • Adjustment to school at Year 7 	<p>Researchers initiated a randomized control trial of Healthy Families New York in 2000, with baseline interviews of over 1,000 women. At each of 3 sites, eligible families were randomly assigned to either an intervention group that was offered HFNY services or to a control group that was given information on and referrals to other services. By year 7, children in the home-visited group were half as likely to repeat a grade (3.54%) as those in the control group (7.10%). A higher percentage of children in the home-visited group than in the control group excelled on all three behaviors that promote learning (13.15% versus 7.74%). Researchers concluded that while there were no significant overall learning effects, in every case the pattern of results favored the home visited group.</p>

<p>18. Olds, D. L., Holmberg, J. R., Donelan-McCall, N., Luckey, D. W., Knudtson, M. D., & Robinson, J. (2014). Effects of home visits by paraprofessionals and by nurses on children: Follow-up of a randomized trial at ages 6 and 9 years. <i>JAMA Pediatrics</i>, 168(2), 114-121.</p>	<p><u>Nurses & paraprofessionals</u> Child emotional outcomes</p>	<p>Researchers of the Denver NFP compared the effects of home visiting by nurses and by paraprofessionals. The study, begun in 1994, was designed to examine the impact of the program model when delivered by paraprofessional visitors who shared many of the social characteristics of the families they visited, and to estimate the impact of the program with a sample that included a large portion of Latino families. Through child age 4 years, researchers found that the nurse-delivered version of the NFP in Denver produced effects on child development that were essentially limited to children born to mothers with low psychological resources. Nurse-visited children were less likely to be classified as having total emotional/behavioral problems at age 6 years, internalizing problems at age 9 years, and dysfunctional attention at age 9 years.</p>
<p>19. Kitzman, H. J., Olds, D. L., Cole, R. E., Hanks, C. A., Anson, E. A., Arcoleo, K. J., . . . Holmberg, J. R. (2010). Enduring effects of prenatal and infancy home visiting by nurses on children: Follow-up of a randomized trial among children at age 12 years. <i>Archives of Pediatrics & Adolescent Medicine</i>, 164(5), 412-418.</p>	<p><u>Enduring Effects on children:</u></p> <ul style="list-style-type: none"> • substance use • internalizing mental health problems • academic achievement 	<p>A randomized trial of the Nurse-Family Partnership among predominately African-American mothers in Memphis led to a longitudinal study of the outcomes of 12-year-old, firstborn children who had participated as infants (1990-1991) in this home visiting program. There were over 500 children in the control group and over 200 in the home-visited group. Researchers concluded that the program contributed to the reduction of children's use of substances and internalizing mental health problems; and to improved academic achievement of children born to mothers with low psychological resources.</p>