Home Visiting: A Service Strategy to Reduce Poverty and Mitigate Its Consequences

Cynthia S. Minkovitz, MD, MPP; Kay M. G. O'Neill, MSPH; Anne K. Duggan, ScD

From the Department of Population, Family and Reproductive Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, Baltimore, MD
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Address correspondence to Cynthia S. Minkovitz, MD, MPP, Departments of Population, Family and Reproductive Health and Pediatrics, Johns Hopkins Bloomberg School of Public Health, 615 N Wolfe St, E4636, Baltimore, MD, 21205 (e-mail: cmink@jhu.edu).

ABSTRACT

Home visiting programs are increasingly recognized as an important part of the early childhood system of care in the United States. The objectives of this report are to review the rationale for home visiting; characterize the Federal Home Visiting Program; highlight the evidence of home visiting effectiveness, particularly for low income families; identify opportunities to promote coordination between medical homes and home visiting programs; and explain the critical role of research, evaluation, and quality improvement to strengthen home visiting effectiveness. Home visiting programs offer voluntary home-based services and other supports to meet the needs of vulnerable pregnant women and young families. Home visiting intends to address poverty in 2 ways. First, it promotes economic self-sufficiency directly by building parents' knowledge, skills, and motivation related to employment opportunities and by linking families with community services such as adult education and job training. Second, it mitigates the effects of poverty through direct service and community linkages to enhance parents' capacity for positive parenting and for their own health and family functioning. Home visiting has shown effectiveness in multiple domains, including family economic self-sufficiency, birth outcomes, maternal health, child health and development, and positive parenting practices. Authorized as part of the Affordable Care Act in 2010 and reauthorized in 2015, the Federal Home Visiting Program invests an unprecedented $1.9 billion in the form of grants to states to expand home visiting programs and support rigorous research. As part of the early childhood system of services, home visiting programs must coordinate with other community services and supports. Programs will be most effective when resources are used efficiently, duplication of services is avoided, and alignment and reinforcement of other providers' messages are achieved. The Federal Home Visiting Program has established 4 mechanisms of research, evaluation, and quality improvement to enhance home visiting implementation and effectiveness.

KEYWORDS: early childhood; home visiting; poverty; program evaluation; quality improvement

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HOME VISITING IS a unique and increasingly important part of the early childhood system of care. Home visiting is a preventive service that aims to meet the needs of vulnerable expectant families and families with young children through voluntary home-based services and linkages with needed community resources. Home visiting services vary according to program model and may include: screening for parental depression, substance use and family violence; teaching parenting skills; promoting early learning; and connecting parents to educational and job training programs, drug treatment and mental health services, and supplemental food programs. These issues are particularly important for low-income families who might experience greater need and more barriers to accessing these services than high-income families. A growing body of research supports home visiting's potential to improve a broad array of outcomes, such as preventing child maltreatment, supporting positive parenting, improving maternal and child health, and promoting child development and school readiness.[1]

Home visiting has a long tradition in Europe, having first been introduced in Elizabethan England with services delivered to the poor.[2] In the United States, the concept of home visiting was first introduced through "friendly visitors" as part of the organized charity movement that began in the late 1800s. That initial approach to home visiting was unsuccessful[3]; however, interest in home visiting re-emerged in the second half of the 20th century with the development of specific models in the early education, child welfare, and health services sectors. Developers began to disseminate their models in the mid-1980s. Also beginning in the 1980s, researchers began building a body of literature on home visiting efficacy, effectiveness, and implementation, and professional societies issued policy statements advocating home visiting. (For examples, see American Academy of Pediatrics, Council on Child and Adolescent Health,[4] National Commission to Prevent Infant Mortality,[5] and the US Advisory Board on Child Abuse and Neglect.[6])

Now the United States is engaged in an unprecedented scale-up of evidence-based home visiting as a 2-generation preventive intervention for vulnerable families with young children. This scale-up was first authorized via the federal Maternal, Infant and Early Childhood Home Visiting Program (Federal Home Visiting Program) as part of the Affordable Care Act of 2010[7] and reauthorized as part of the Medicare Access and CHIP Reauthorization Act in 2015.[8] The legislation specifies that federally supported home visiting services target high need communities, including those with concentrated poverty. As states have developed programs of home visiting, they draw on multiple, diverse models to align with each family's unique constellation of strengths, needs, and goals.

The objectives of this article are to review the rationale for home visiting; characterize the Federal Home Visiting Program as part of the early childhood system in the United States; highlight the evidence of home visiting effectiveness, particularly for low income families; identify opportunities to promote coordination between medical homes and home visiting programs; and explain the critical role of research, evaluation, and quality improvement to strengthen home visiting effectiveness for low income families.

RATIONALE FOR HOME VISITING

In this section we summarize how home visiting intends to address poverty, how this service delivery mechanism supports the foundations of health, and consider the theory regarding how home visiting promotes parenting behaviors. Poverty contributes to early life experiences by shaping environments in which children live[9]; it is associated with increased family stresses and decreased supports. A family's income influences children's health and development by affecting housing and neighborhood decisions, access to nutritious foods, and opportunities for physical activity, and receipt of an array of services including child care, educational offerings, and medical care.[10] Home visiting intends to address poverty in 2 ways. First, it may promote economic self-sufficiency directly by building parents' knowledge, skills, and motivation related to employment opportunities and by linking families with community services such as adult education and job training to enable them to build their financial resources. Second, it may mitigate the effects of poverty through direct service (eg, parenting education, promoting early learning in the home) and community linkages to enhance parents' capacity for positive parenting and for their own health and family functioning.

Home visiting recognizes that providing health care alone does not assure health; rather, it enhances caregiver and community capacity to support the foundations of health. These foundations include responsive caregiving (eg, being sensitive to the child's cues and responding appropriately to them[11]), safe and secure home environments, adequate and appropriate nutrition and health-promoting behavior; they contribute to child health and development and set the stage for optimizing health across the life course.[12] In this way, home visiting can disrupt the cycle by which early adversity contributes to later impairments in learning, behavior, and physical and mental well-being.[13,14]

Home visiting's approach to promoting parenting behavior can be viewed in light of theories of parenting behavior. Typically these theories include personal, interpersonal, social, and environmental determinants. The Figure provides a generalized representation of how these determinants influence responsive caregiving, an important component of parenting. The parent's relationship capacity directly influences parenting and is itself shaped by the parent's own developmental history, childhood experiences, and health. Stresses and supports moderate the influence of parental relationship capacity on parenting. Parenting, parental relationship capacity, and parental stresses and support are, therefore, the 3 main targets of home visiting and other two-generation programs to promote child health and development.

THE FEDERAL HOME VISITING PROGRAM

In this section, we review the scope of the Federal Home Visiting Program including its focus on low-income families and expectations for improvements in 6 benchmark domains. The Federal Home Visiting Program is administered by the Department of Health and Human Services (DHHS); the authorizing legislation calls for joint administration by DHHS's Health Resources and Services Administration and Administration of Children and

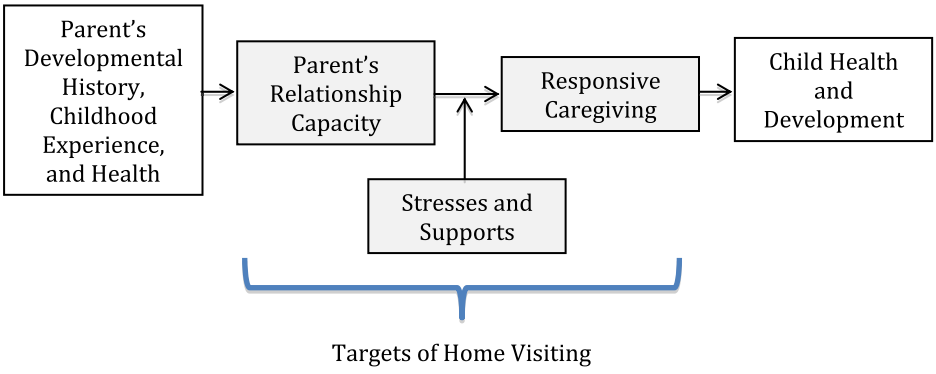

Figure. *Home Visiting Interventions and Parenting.*

Families.[7] Thus far, DHHS has invested $1.9 billion in the program. In 2014, the program provided 746,303 visits to 115,545 children and parents across all 50 states, the District of Columbia, and 5 territories.[15]

States and territories are awarded formula funding proportional to need, determined in part by poverty. States are to focus on high-need communities characterized by poverty, poor birth outcomes, crime, domestic violence, high rates of high-school dropouts, substance abuse, unemployment, or child maltreatment. Program data show that 48% of participating families report household incomes at or below 50% of the federal poverty level, 31% are between 51% and 100% of the federal poverty level, and 34% of adult participants have less than a high school education.[15]

Grantees are to allocate most of their funding to evidence-based home visiting programs; currently 19 models are designated as evidence-based.[16] States, territories, and tribal organizations can compete for additional grant funding to increase home visiting availability further and to build infrastructure to strengthen home visiting quality and effectiveness; nearly all states and 25 tribal organizations have done so successfully.

Services are to be voluntary and tailored to each family, on the basis of individual family assessments. For low-income families, home visiting programs offer an array of services to promote family economic self-sufficiency. Services might include referrals to educational and training programs, facilitation of activities to secure and maintain employment, and linkage to support services such as temporary cash assistance and supplemental food programs.

Regardless of the model(s) selected, states are expected to achieve improvements for participating families in at least 4 of 6 benchmark domains: improved maternal and newborn health; prevention of child injuries, child abuse, neglect, 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; and improvements in referrals to and coordination with other community resources and supports.

EFFECTIVENESS OF HOME VISITING

This section introduces and highlights findings from the Home Visiting Evidence of Effectiveness (HomVEE) initiative, supported by DHHS. This ongoing systematic review summarizes the evidence of effectiveness for specific models targeted to expectant families and those with children from birth through age 5 years.[16] HomVEE uses explicit criteria for studies sufficiently rigorous to be included in the review and for evidence strong enough to consider a model effective in improving a particular outcome. HomVEE focuses on outcomes aligned with the domains specified in the Federal Home Visiting Program's authorizing legislation (Table). To understand the effectiveness of home visiting for low-income families, we first review outcomes related to economic self-sufficiency and then the other domains.

HomVEE's review found evidence of effects on indicators of self-sufficiency for 6 models. Two models reported no effect and the remaining 11 models did not assess this domain (Table). Indicators for self-sufficiency were measured using government administrative data (such as receipt of food stamps) and parental reports (such as receipt of GED and number of months employed).[17]

HomVEE also reported evidence of effectiveness in other outcome domains for multiple models; these domains include maternal health (11 models), child development and school readiness (11 models), and positive parenting practices (14 models). A large body of epidemiologic research has established that many of these outcomes are typically worse for impoverished families (for example, Schickedanz et al[18]); this is part of the rationale for targeting home visiting to low-income communities and families. Thus, home visiting effects in other domains—such as birth outcomes, childhood injury, and school readiness—indicate its effectiveness in mitigating the adverse effects of poverty.

Home visiting models designated as evidence-based are unified in that their primary service venue is the home, they target overburdened expectant families and families with young children, and they are voluntary. However, evidence-based home visiting models vary considerably in the specifics of their service plans, that is, their target populations; their intended outcomes, providers, and services; and their underlying theories of change. They also vary in the strength of their implementation systems; some models provide nearly all infrastructure for staff professional development and monitoring of program operations while other models define critical elements and delegate larger responsibility for building the implementation system to local implementing agencies.

Although HomVEE has identified a large and growing number of evidence-based models, it has also shown that reliable evidence of effectiveness is elusive. Programs often achieve some intended outcomes but not others. They improve outcomes for some targeted families but not others. These results can be traced back to deficiencies in service plans and in implementation systems.[19] As will be described later, a rigorous program of research, evaluation, and quality improvement is underway to address these shortcomings.

HOME VISITING AS PART OF THE EARLY CHILDHOOD SYSTEM

As part of the early childhood system of services,[20] home visiting programs must coordinate with other community services and supports. Home visiting uses a strengths-based approach; it aims to engage families in articulating goals and in effectively using community resources to achieve those goals. Needed resources vary by family and span a range of service sectors including health, early learning and development, education and employment, and family support.[21] Resource availability and accessibility vary according to community. Home visiting coordination with other community resources

Table. Favorable Effects of Evidence-Based Home Visiting Models According to Outcome Domain*

Home Visiting Model	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
Child FIRST	–	Yes	Yes	Yes	–	–	–	Yes
Durham Connects/Family Connects	Yes	Yes	–	–	–	Yes	–	Yes
Early Head Start-Home Visiting	No	No	Yes	Yes	–	Yes	Yes	Yes
Early Intervention Program for Adolescent Mothers	Yes	No	–	–	–	No	Yes	–
Early Start (New Zealand)	Yes	No	Yes	Yes	No	Yes	No	–
Family Check-Up	–	Yes	Yes	–	–	Yes	–	–
Family Spirit	–	Yes	Yes	–	–	Yes	–	–
Health Access Nurturing Development Services	Yes	Yes	–	Yes	–	–	Yes	–
Healthy Beginnings	Yes	Yes	Yes	–	–	Yes	–	–
Health Families America	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Healthy Steps (National Evaluation 1996 Protocol)	Yes	No	No	No	–	Yes	–	–
Home Instruction for Parents of Preschool Youngsters	–	–	Yes	–	–	Yes	–	–
Maternal Early Childhood Sustained Home Visiting Program	Yes	Yes	–	–	–	Yes	–	–
Minding the Baby	Yes	Yes	–	No	–	No	–	–
Nurse Family Partnership	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Oklahoma's Community-Based Family Resource and Support Program	No	Yes	–	–	–	Yes	–	–
Parents as Teachers	No	No	Yes	Yes	–	Yes	Yes	–
Play and Learning Strategies-Infant	–	–	Yes	–	–	Yes	–	–
SafeCare Augmented	–	No	–	Yes	No	–	No	Yes
Number of models with evidence of effectiveness	10	11	11	8	2	14	6	5

"Yes" indicates favorable, significant effects; "No", lack of significant, favorable effect or presence of significant, unfavorable, or ambiguous result; "–", domain not assessed.
*Adapted from HomVEE Report.[1]

and supports is 1 of the 6 benchmark domains in the Federal Home Visiting Program's authorizing legislation. States are accountable for monitoring and showing improvement in coordination, underscoring its roles as a core component of home visiting.

Coordination implies not just linking families with needed resources, but the efficient use of resources. This includes preventing unnecessary duplication of services and promoting providers' alignment with and reinforcement of each other's work with families to achieve goals.[22] Thus, home visiting's role in coordinating with health care need not be limited to assuring that families have access to such care, nor only that children are up to date on immunizations and well-child care. Rather, home visiting and health care can and should be aligned in promoting family health and child development. This includes alignment of the messages they give to families, facilitation of each other's work with families, and agreement on allocation of responsibilities in working with families toward goals.[23,24] Effective coordination may identify community as well as individual family needs, thereby informing strategies to promote population health.[22,25] Currently, the lack of a common vision for coordination or tools to assess its use across program models and across states limit the ability to effectively integrate home visiting into early childhood systems in local communities.

PROMOTING COORDINATION BETWEEN HOME VISITING AND PEDIATRIC CARE

This section highlights current levels of coordination and opportunities to promote coordination between home visiting and pediatric medical homes, specifically. In a national survey of home visiting programs, only 38% of respondents reported regular communication with pediatric health care providers.[26] Two-thirds of home visiting programs interviewed indicated they contacted medical homes only if there was a problem or if the family requested that they make contact. Low levels of coordination are reported despite coordination being a Federal benchmark for home visiting as well as a key component of medical homes.

Achieving higher levels of coordination will require efforts on the part of home visiting programs as well as pediatric medical homes and includes: becoming knowledgeable about the respective services provided in the community, recognizing the benefits of coordination for the patients and clients served, identifying the capacity of the providers to serve additional families and eligibility criteria for receiving those services, developing relationships with the other providers, establishing a process for making referrals, facilitating bidirectional and confidential exchange of information, identifying specified roles for each provider, identifying payment mechanisms to support care coordination, and being prepared to articulate to families and payers the benefits of such coordination. For pediatric medical homes, many of the same steps for promoting coordination with home visiting programs are essential for facilitating connections with other service providers in the early childhood system.

CRITICAL ROLE OF RESEARCH, EVALUATION AND QUALITY IMPROVEMENT TO ENHANCE HOME VISITING

This section summarizes federal investments in research, evaluation, and quality improvement, all intended to improve home visiting effectiveness. The Federal Home Visiting Program's authorizing legislation calls for a program of rigorous research and evaluation activities to increase knowledge about home visiting implementation and effectiveness. The legislation holds funded states, territories, and tribal organizations accountable for achieving benchmarks aligned with intended outcomes. It also calls for local sites to engage in continuous quality improvement. Together, a set of 4 well-aligned investigative components is advancing the field while taking home visiting to scale nationally.

One component is the Home Visiting Applied Research Collaborative (HARC), which was established in 2012 with core funding from the Health Resources Services Administration.[27] Its charge is to establish a national, stakeholder-driven, home visiting research agenda and to promote innovative research methods to carry out that agenda. In its first year, HARC identified the top 10 research priorities with input from nearly 1800 stakeholders nationally. Priorities include research to identify home visiting core components; promote family engagement; build a stable, competent workforce; and promote coordination within the early childhood system of care.[28]

Since 2013, HARC has built a practice-based research network of several hundred local home visiting programs and over 100 researchers.[29] HARC promotes agenda-driven research, in part, by securing extramural funding for transmodel studies in priority areas. One example is a set of studies to develop and use a new portfolio of observational measures to assess and explain variation in home visitor–parent communication in visits. Another example is research to achieve consensus on a cross-sector vision of home visiting coordination and to develop and disseminate a framework and measures. Other ways in which HARC promotes agenda-driven research are offering small grants for members to design studies and sponsoring conferences to share results.

Another component is the Mother and Infant Home Visiting Program Evaluation (MIHOPE), which has 2 aspects.[30] The first aspect is analysis of the needs assessments carried out by states in their planning for targeting of home visiting. The second is a large, multisite, multimodel randomized trial and implementation study to assess effects on intended outcomes, explain how multilevel forces influence service delivery, and identify program features that moderate effects on outcomes.[31]

The Home Visiting Collaborative Innovation and Improvement Network (CoINN) is the third component, and is funded by the Health Resources Services Administration to build local capacity for continuous quality

improvement. Approximately 40 local sites from several different states participate. Together, they are working with experts in continuous quality improvement methods to improve service delivery in 4 areas: breastfeeding, maternal depression, developmental screening, and family engagement.

State, territory, and tribal organization evaluations are the fourth component. Rigorous evaluation is a requirement for competitive awards to states and territories; such evaluations are aligned with the specifics of each state's objectives in building home visiting infrastructure or in adapting or enhancing home visiting models. States and territories wishing to use funding for promising programs are required to carry out a rigorous evaluation to build the evidence base for its effectiveness. All funded entities must monitor performance in relation to benchmarks.

In summary, home visiting stakeholders use evaluative research in varied and well aligned ways to advance the field in high priority areas.

CONCLUSION

Home visiting recognizes that early life experiences shape health trajectories across the life course, that parenting is the central early life experience, and that the home setting is a primary venue for interventions to promote healthy family functioning and positive parenting in early childhood. Home visiting addresses economic self-sufficiency by enhancing parents' knowledge, skills, and motivation related to employment opportunities, and by linking families to related community services such as adult education and job training. It also mitigates the effects of poverty through direct services and community linkages. Ongoing research is critical to understand variability in outcomes, how best to adapt existing models to address the needs of varied populations and communities, and to identify core elements to promote economic self-sufficiency and mitigate the consequences of poverty. However, home visiting alone will not eliminate poverty. It will be most effective in breaking the cycle of poverty when it is an integral part of early childhood systems and is part of a broader commitment to enhancing the capacity of communities and caregivers to promote child health and development.

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REFERENCES

1. Avellar S, Paulsell D, Sama-Miller E, et al. *Home Visiting Evidence of Effectiveness Review: Executive Summary.* Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, US Department of Health and Human Services; 2015. Available at: http://homvee.acf.hhs.gov/HomVEE_Executive_Summary_2015.pdf. Accessed January 10, 2016.
2. Wasik BH. Staffing issues for home visiting programs. *Future Child.* 1993;3:140–157.
3. Weiss HB. Home visits: necessary but not sufficient. *Future Child.* 1993;3:113–128.
4. American Academy of Pediatrics, Council on Child and Adolescent Health. The role of home-visitation programs in improving health outcomes for children and families. *Pediatrics.* 1998;101:486–489.
5. National Commission to Prevent Infant Mortality. *Home Visiting: Opening Doors for America's Pregnant Women and Children*. Washington, DC: National Commission to Prevent Infant Mortality; 1989.
6. US Advisory Board on Child Abuse and Neglect. *Child Abuse and Neglect: Critical First Steps in Response to a National Emergency. No. 017-092-001045*. Washington, DC: US Government Printing Office; 1990.
7. US Congress. *Patient Protection and Affordable Care Act. Pub. Law No. 111–148*. Government Publishing Office. Available at: http://www.gpo.gov/fdsys/pkg/PLAW-111publ148/pdf/PLAW-111publ148.pdf; 2010. Accessed September 7, 2015.
8. US Congress. *Medicare Access and CHIP Reauthorization Act of 2015. Pub. Law No. 114–10*. Available at: http://www.gpo.gov/fdsys/pkg/PLAW-114publ10/pdf/PLAW-114publ10.pdf; 2015. Accessed September 7, 2015.
9. Dreyer B. To create a better world for children and families: the case for ending childhood poverty. *Acad Pediatr.* 2013;13:83–90.
10. Robert Wood Johnson Foundation Commission to Build a Healthier America. *Time to Act: Investing in the Health of Our Children and Communities*. Available at: http://www.rwjf.org/content/dam/farm/reports/reports/2014/rwjf409002. Accessed September 14, 2015.
11. Atkins-Burnett S, Monahan S, Tarullo L, et al. *Measuring the Quality of Caregiver-Child Interactions for Infants and Toddlers (Q-CCIIT). OPRE Report 2015-13*. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, US Department of Health and Human Services; 2015.
12. Mistry KB, Minkovitz CS, Riley AW, et al. A new framework for childhood health promotion: the role of policies and programs in building capacity and foundations of early childhood health. *Am J Public Health.* 2012;102:1688–1696.
13. Shonkoff JP, Garner AS. AAP Committee on Psychosocial Aspects of Child and Family Health, Committee on Early Childhood, Adoption and Dependent Care, Section on Developmental and Behavioral Pediatrics. The lifelong effects of early childhood adversity and toxic stress. *Pediatrics.* 2012;129:e232–e246.
14. Garner AS. Home visiting and the biology of toxic stress: opportunities to address early childhood adversity. *Pediatrics.* 2013;132:S65–S73.
15. HRSA. The Maternal, Infant and Early Childhood Home Visiting Program: Partnering with Parents to Help Children Succeed. Available at: http://mchb.hrsa.gov/programs/homevisiting/programbrief.pdf. Accessed September 12, 2015.
16. US Department of Health & Human Services. Administration for Children & Families. Home Visiting Evidence of Effectiveness. Review Process. DHHS Criteria for Evidence-Based Program Models. Available at: http://homvee.acf.hhs.gov/Review-Process/4/-abbr-Department-of-Health-and-Human-Services-DHHS-abbr-Criteria-for-Evidence-Based-Program-Models/19/6. Accessed September 12, 2015.
17. US Department of Health & Human Services. Administration for Children & Families. Home Visiting Evidence of Effectiveness. Family Economic Self-Sufficiency. Available at: http://homvee.acf.hhs.gov/Outcome/2/Family-Economic-Self-Sufficiency/7/1. Accessed September 12, 2015.
18. Schickedanz A, Dreyer BP, Halfon N. Childhood poverty: understanding and preventing the adverse impacts of a most-prevalent risk to pediatric health and well-being. *Pediatr Clin N Am.* 2015;62:1111–1135.
19. Duggan A. Home Visiting for Vulnerable Families: Using Research to Get It Right The Second Time Around. Johns Hopkins Bloomberg School of Public Health Dean's Lecture Series. Available at: https://www.youtube.com/watch?v=sNREU2WSJBk. Accessed September 12, 2015.

20. Adirim T, Supplee L. Overview of the Federal Home Visiting Program. *Pediatrics*. 2013;132:S59–S64.
21. Gebhard B, Oser C. Putting the pieces together for infants and toddlers: comprehensive, coordinated systems. Available at: http://www.zerotothree.org/public-policy/policy-toolkit/systemssinglesmarch5.pdf. Accessed September 12, 2015.
22. Willis DW. Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV): building health and early development with the pediatric family-centered medical home. *Zero to Three*. 2013;34:51–58.
23. Institute of Medicine. *Primary Care and Public Health: Exploring Integration to Improve Population Health*. Washington DC: Institute of Medicine; 2012.
24. Agency for Healthcare Research and Quality (AHRQ). Care Coordination Measures Atlas Update. Available at: http://www.ahrq.gov/professionals/prevention-chronic-care/improve/coordination/atlas2014. Accessed September 12, 2015.
25. Toomey SL, Cheng TL. APA-AAP Workgroup on the Family-Centered Medical Home. Home visiting and the family-centered medical home: synergistic services to promote child health. *Acad Pediatr*. 2013;13:3–5.
26. Belknap A, O'Neill K, Paradis H, et al. *Coordination Between Home Visiting Programs and Medical Homes*. Home Visiting Applied Research Collaborative. Available at: www.hvresearch.org/harc-projects.html; 2015. Accessed January 10, 2016.
27. Duggan A, Minkovitz CS, Chaffin M, et al. Creating a national home visiting research network. *Pediatrics*. 2013;132:S89.
28. Home Visiting Research Network. Home Visiting Research Agenda. Available at: http://www.hvrn.org/uploads/3/2/1/0/3210553/home_visiting_research_agenda_2013_10_29_final.pdf. Accessed September 12, 2015.
29. Home Visiting Applied Research Collaborative. HARC Projects. Available at: http://www.hvrn.org/harc-projects.html. Accessed January 10, 2016.
30. Michalopoulos C, Duggan A, Knox V, et al. *ACF- OPRE Report 2011-16. Design Options for the Home Visiting Evaluation: Draft Final Report*. Washington, DC: US Department of Health and Human Services; 2011.
31. Michalopoulos C, Lee H, Duggan A, et al. *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, US Department of Health and Human Services; 2015.