

New Research Strengthens Home Visiting Field

The Pew Home Visiting Campaign

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Pew Home Visiting Campaign

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Voluntary home visiting matches parents with trained professionals to provide information and support during pregnancy and throughout a child's first few years. Properly designed and delivered home visiting programs improve short- and long-term child and family outcomes, including reducing the number of children in social welfare, mental health, and juvenile corrections systems. Those outcomes, in turn, result in considerable cost savings for states and taxpayers.

In 2008, The Pew Charitable Trusts launched a campaign to educate policymakers about the proven value of home visiting, provide solid research, and promote state investment in programs that achieve the strongest outcomes for children and families.

The federal Maternal, Infant, and Early Childhood Home Visiting Program was established in 2010 as part of the Patient Protection and Affordable Care Act (2010) to provide grants to support state home visiting programs. At least 75% of federal funding to each state must be spent on "evidence-based" models—those with a proven record of effectiveness. Up to 25% may be spent on promising programs that have not yet been subject to rigorous evaluation.

Iowa, Maryland, and Michigan all enacted laws in 2012 to ensure that their home visiting dollars produce maximum results for new parents and their babies and also a solid return on taxpayers' investment. These reforms require that most of the states' home

visiting funds go to evidence-based programs. They also mandate that states set up the data and tracking systems necessary to ensure programs actually help achieve stated goals, such as reduced infant mortality or improved school readiness.

Over the coming months, the Pew Home Visiting Campaign will continue to partner with states to help them develop and implement high-quality, effective home visiting policies and practices. One key to those efforts is continued research. The Doris Duke Charitable Foundation understood that a major investment in the evidence base for this work was needed. With their leadership support, and key additional funding from the Children's Services Council of Palm Beach County (Florida), the Campaign has been able to enhance the evidence base underpinning home visiting and identify areas in need of further investigation. This issue of *Zero to Three* provides an opportunity to share five new studies that represent the

next generation of home visiting inquiry.

The articles in this issue show how home visiting research has progressed in the past few years. When a field first moves toward identifying and developing evidence-based practices, the initial question is "What works?". As practitioners gain more experience implementing proven models, study questions become more nuanced, such as, "What works for whom and under

Abstract

Extensive research has shown that home visiting parental education programs improve child and family outcomes, and they save money for states and taxpayers. Now, the next generation of research is deepening understanding of those program elements that are essential to success, ways to improve existing models, and factors to consider in tailoring home visiting to local contexts and particular target populations. All new parents need good information about their child's development to help them through the stress and uncertainty that come with having a baby. Years of research have shown that this vital support can be provided, in part, by formal parent-education programs called "home visiting."



PHOTO: JAMES KIGLEY

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what circumstances?" Researchers and practitioners develop an understanding that even evidence-based models do not always achieve the same outcomes when expanded to new contexts or different populations than those for which they were initially tested.

States need an ongoing process to:

- Choose home visiting models on the basis of evidence of effectiveness in similar contexts with similar populations.
- Adapt the model by applying its core principles to that state's context.
- Routinely monitor and analyze the impact on desired program outcomes of each adjustment to the base model. In other words, which adaptations maintain fidelity to the model and which don't? Which adaptations lead to improved results, which actually reduce effectiveness, and which make no difference at all?

Good metrics are essential to this process, both to measure outcomes and to assess how programs are actually being delivered.

The articles that follow deepen the home visiting field's understanding of those aspects of evidence-based programming that are essential to success. They also suggest approaches to further improve these models and tailor them to local contexts.

The first article describes a new instrument to measure and compare program quality from various home visiting models. The next two articles find evidence of effectiveness for programs that expand the target

population beyond first-time, at-risk mothers. One such program is accessible to all new parents, while the other serves at-risk mothers who are having second or subsequent babies. The fourth article presents findings on home visiting's positive impact on children's school readiness. The fifth article uses data from the Early Head Start program evaluation to examine relationships between participant and service characteristics, and ultimate outcomes for various groups of children and families.

A Tool for Assessing Program Quality

THE ARTICLE BY JON KORFMACHER and colleagues, "Assessing Quality in Home Visiting Programs" (this issue, p. 10) describes the development and initial field testing of a new standardized instrument—the Home Visiting Program Quality Rating Tool. This is the first tool that measures overall program quality across home visiting models, eventually filling a gap in the field for the states, most of which use multiple models.

Researchers know that high-quality home visiting can yield better outcomes for families, but they know much less about which are the key "active ingredients" in different program models—the practices and activities essential to achieving improved outcomes for various populations. In order to identify these critical program elements, the home visiting field needs a shared vocabulary as well as common definitions and ways of measuring program practice. As this new

quality-rating tool moves us down this road, it will become an important self-assessment tool, allowing programs to measure how they do in the crucial areas and then tailor and target their improvement efforts. As Korfmacher et al. put it, the new rating tool will serve as a "roadmap to improvement." Korfmacher and his colleagues (this issue, p. 10) field tested the current version of the tool with 21 home visiting programs in Wisconsin and Illinois. Their report is based on preliminary results from a small field test. The tool will require additional development, but their article gives an indication of the type of analyses it will enable. Although the tool does not take the place of outcome measures, Korfmacher et al. have moved the home visiting field forward toward being able to measure and compare the quality of program process across a variety of models.

Positive Results for a Universal Access Model

A CONSISTENT CHALLENGE for states has been that home visiting models with the strongest evidence of effectiveness tend both to be intensive—prescribing regular home visits for 2 years or more—and to have high attrition rates (e.g., 40–50% of targeted participants never enroll or drop out before program completion; Daro, McCurdy, Falconnier, & Stojanovic, 2003; Harding, Reid, Oshana, & Holton, 2004; Olds, Henderson, & Kitzman, 1994). The intensity of these programs makes them expensive, and the high attrition rates make it difficult to affect overall negative outcome rates.

In their article, "Toward Population Impact From Home Visiting," Kenneth Dodge and his colleagues (this issue, p. 17) describe a well-implemented, randomized, controlled impact evaluation of Durham Connects, a universally available, voluntary nurse-conducted home visiting program for newborns and their families.

Durham Connects is designed to have low costs (\$700 per birth) and to reduce attrition. It begins with a staff visit to the family of every newborn while still in the hospital to schedule a nurse home visit if the family agrees. That initial home visit takes place when the baby is approximately 3 weeks old and is followed by one or two additional visits as needed. In addition to teaching about health and well-being, the nurse home visitor assesses the family's health and other risk factors and refers them to appropriate community services if needed.

For an 18-month period from 2009 through 2010, every even-birth-date baby in Durham County, N.C., received Durham Connects services, while every odd-birth-date baby received "services-as-usual." Durham Connects resulted in statistically significant

improvements in a range of outcomes. Although the effect sizes were generally in the low to moderate range, the reduction in infant emergency medical care for Durham Connects families by the time infants were 6 months old was large enough to create a benefit of \$1.59 per dollar spent on the program. In fact, Dodge and Goodman and their colleagues (this issue, p. 17) report that, because of the low cost of the program and the reduction in emergency medical costs, Durham Connects provides a positive return on investment by the time an infant reaches 3 months old. The researchers plan to follow participating families until the child is 6½ years old to assess what additional benefits, if any, accrue from the program over time.

One caveat is that Durham Connects is being implemented in a community with a large number of social service organizations to which families can be referred. Durham Connects spent 6 years prior to the launch of the home visiting program building a Preventive System of Care that includes almost all community agencies and providers in Durham County. It is not clear whether Durham Connects' success could be replicated in areas lacking such a comprehensive set of services. The developers intend to replicate and evaluate the model in four rural North Carolina counties to test this question.

Evidence Supporting Service for Second-Time Mothers and Beyond

IN THEIR ARTICLE, "Does Home Visiting Benefit Only First-Time Mothers? Evidence From Healthy Families Virginia," Lee Huntington and Joseph Galano (this issue, p. 24) compare outcomes of first-time (primiparous) mothers with those of mothers with second or later babies (multiparous) among Healthy Families participants in Virginia. The authors point out that because some of the most well-known findings concerning home visiting's effectiveness come from evaluations of the Nurse-Family Partnership, which serves only first-time mothers, it is often assumed that first-time mothers benefit from home visiting more than others. Yet this assumption, which they say denies services to more than 60% of families that give birth each year, has seldom been tested empirically.

In an earlier randomized controlled evaluation of the Hampton (Virginia) Healthy Start program, Galano and Huntington (1999) found that multiparous mothers and their children received benefits similar to first-time mothers and their children on measures of infant health, parent-child interaction, and the home environment.

The study that Huntington and Galano describe in this issue of *Zero to Three* (p. 24) is not a randomized controlled experiment.



PHOTO: JAMES KEGLEY

Properly designed and delivered home visiting programs improve short- and long-term child and family outcomes.

However, it builds on the earlier study by comparing program outcomes for first-time and multiparous mothers participating in Virginia's Healthy Families program from July 1999 through June 2010. Participation levels for multiparous mothers and their outcomes on measures of the home environment and child immunizations were generally similar to those for first-time mothers, after controlling for their higher levels of risk.

A limitation of Huntington and Galano's study (this issue, p. 24) is that it is based on observational data. It cannot rule out the possibility that the programs involved were systematically selecting (either consciously or unconsciously) only those multiparous mothers most likely to benefit from services. Huntington and Galano wisely call for a randomized controlled study to further test their findings. Nevertheless, the evidence presented in their article suggests that the field's presumption in favor of serving only first-time mothers should be reexamined.

Positive Effects of Home Visiting on School Readiness

STUDIES OF HOME visiting's impact on school readiness have been relatively few and have yielded mixed results. In a well-implemented, randomized, controlled study, Kristen Kirkland (this issue, p. 31) found that Healthy Families New York (HFNY) reduced first grade retention rates and improved three so-called "soft" school-readiness skills 7 years after program enrollment. (These include ability to work or play cooperatively, follow instructions or rules, and complete work on time.) It is

interesting to note, however, first-grade math and reading achievement did not show effects from the program.

HFNY targets disadvantaged expectant and new parents—those with an infant less than 3 months old—deemed at risk of maltreating their child. The program serves a poor, racially and ethnically diverse population of young, mostly first-time mothers and their children. Participating families receive a series of home visits lasting until the child enters kindergarten or Head Start. As is too often the case in home visiting programs, many families in the study did not receive the prescribed intensity of services.

Nevertheless, the program was able to cut the first-grade retention rate in half (from 7.10% to 3.54%) and to almost double the percentage of first graders demonstrating the school-readiness skills measured by the study (7.74% of the control children versus 13.15% of the HFNY children). These soft skills may be especially important because they help children to benefit from classroom environments throughout their school years.

Kirkland's (this issue, p. 31) finding of no impact on math and reading grades of HFNY first graders is disappointing, but the author speculates that the measure used (reading and math grades on first-grade report cards) may be too inaccurate to discern an effect. In addition, challenges in obtaining school records significantly reduced the sample size for this portion of the analysis, perhaps contributing to the difficulty in finding a statistically significant effect. In any case, possession of soft school-readiness skills in first grade may be a more reliable and



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Studies of home visiting's impact on school readiness have been relatively few and have yielded mixed results.

important predictor of later academic achievement.

As with many other studies, the HFNY analysis indicated that intensity of services matters. Children who received a higher percentage of expected visits were 2.28 times more likely to excel academically in first grade than their HFNY peers who received fewer of their prescribed visits.

Finally, this study found a significant pattern of differential impact by child gender, which other research has also suggested. Compared to the control group, female HFNY first graders were more likely to excel academically (32.62% versus 17.47%) and less likely to do poorly (19.71% versus 32.17%). There were no such differences for boys.

Whether this results from normal differences in developmental trajectories between boys or girls or truly a differential program impact on boys and girls is worth further exploration.

This study is an important and well-conducted piece of longitudinal research demonstrating substantive impacts on child educational outcomes 7 years after families' enrollment. It adds to the body of research that demonstrates lasting positive impacts of home visiting on families' life chances.

What Worked for Whom in Early Head Start Home Visiting

CARLA PETERSON AND her colleagues, in their article "Home Visiting Processes: Relations With Family Characteristics and Outcomes" (this issue, p. 39), explore how families' participation in Early Head Start home visiting services—as measured by dosage (number of visits), service content, and mother's engagement—affected key outcomes. To do so, they made good use of long-term follow-up data available from the Early Head Start Research and Evaluation Project—a large, randomized controlled evaluation of 17 Early Head Start programs that followed the subject children until they were 10 years old. These data provided an excellent opportunity to begin to examine complicated and important questions of how home visiting content and intensity affect target populations.

The study looked at various subgroups, such as teen parents, racial and ethnic minorities, and parents at high risk. In

classifying risk subgroups for study, Peterson and her colleagues (this issue, p. 39) identified five risk factors: being a teen mother, neither being married nor living with a partner, receiving public assistance, having less than a high school education, and being neither employed nor in school or training. They also identified three degrees of risk—low, moderate, and high.

The researchers found that families at moderate risk (defined as having two to three risk factors) experienced the most positive child and family impacts from home visiting. The authors speculate that high-risk families likely face more challenges that distract parents and home visitors from focusing on the child's development.

Overall, the findings of Peterson and her colleagues (this issue, p. 39) are complicated, interesting, and sometimes counterintuitive. For example, it was not surprising that teen mothers were less engaged in home visiting than were older mothers. However, it was surprising that greater home visiting dosage and engagement with the program were generally associated with more negative outcomes for both the children and teen mothers. The authors suggest that the association between more home visits and higher rates of negative outcomes occurred because home visitors focused greater efforts on those families they identified as needing more help. The lack of a rigorous randomized controlled trial, comparing teen mothers who are assigned different levels of home visiting services, leaves open the question of why this finding occurred. Such a study is needed to investigate the validity of the authors' explanation and to explore the specific causes of these outcomes.

With regard to race and ethnicity, the relationship between mothers' program participation (e.g., dosage and engagement) and ultimate child and family outcomes varied by group. For example, while greater maternal engagement led to improved cognitive outcomes among White children, higher dosage and engagement levels were associated with poor outcomes—increased aggression and lower levels of language and cognitive development—for African American children at the time researchers assessed these skills. However, increased dosage and family engagement were associated with improved parental outcomes—such as reduced maternal depression and higher income—in African American families.

As Peterson and her colleagues (this issue, p. 39) make clear, controlled experimentation with the program content and dosage offered to various subgroups will be necessary to allow researchers to determine, with high confidence, whether relationships they found

Learn More

These articles in this issue are part of a collection of 13 new home visiting research studies. Complete reports on each study are available at the Web page of the Pew Home Visiting Campaign.
pewstates.org/homevisiting

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are causal versus merely correlational. The authors rightly point out that ongoing data collection and analysis are needed among practitioners and researchers to better understand and improve how program practice impacts ultimate outcomes for different groups of children and families. Their article is an important contribution to understanding what works for each group under particular circumstances, and highlights clear questions that warrant further research.

Looking Forward

TAKEN TOGETHER, THE five articles in this issue provide fresh evidence supporting the impact of high-quality home visiting programs on important outcomes for children, families, and society. The studies demonstrate the ongoing maturation of the home visiting field as it

turns from relatively simple inquiries about effectiveness to more nuanced explorations of the relationships between populations served, program characteristics, and outcomes.

These articles are an important contribution to the efforts by everyone in the field to improve outcomes for children and families. And these articles portend exciting advances in the quality, effectiveness, and impact of home visiting in the future.¶

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As the lead for Pew's work to advance evidence-based home visitation, Doggett oversees

a robust research agenda and works with advocates in target states to build political and public understanding and support for data-driven investments that align with federal guidance. She testifies before state legislatures and other government entities, and she is the author of numerous articles in outlets around the country, explaining the powerful potential of home visitation to improve the lives of children and families and yield strong returns to taxpayers.

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