



# Home Visiting's Impact on Parental Capacity and Child Development: Measurement Options and Recommendations

This brief builds on an [earlier summary of the Pew Home Visiting Data for Performance Initiative](#) by highlighting work on two outcome areas—parental capacity and child development. The Pew Charitable Trusts led the initiative, part of its home visiting campaign, in collaboration with noted home visiting researchers such as Deborah Daro, Ph.D., Chapin Hall at the University of Chicago; Sacha Klein, Ph.D., School of Social Work at Michigan State University; Tiffany Burkhardt, Ph.D., Chapin Hall at the University of Chicago; and Kay Johnson, M.Ed., Johnson Group Consulting. Authored by Drs. Daro, Klein, and Burkhardt, the brief shares measurement options and recommendations resulting from Pew's support.

## Introduction

State investments in early childhood home visiting are long standing. Over the past 40 years, a variety of funding streams have supported home visiting programs. Typically, states used federal funding from maternal and child health care resources, early education funding, and child abuse prevention dollars. Some states developed and funded their own home visiting initiatives to support the replication of national home visiting models or the development and dissemination of state-specific models. These state efforts greatly expanded home visiting's availability in many communities between 1990 and 2010.

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Home visiting's biggest growth, however, occurred with the authorization of the federal Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV). In addition to expanding home visiting services across the country, MIECHV established a set of common expectations with respect to participant experiences and outcomes.

Like MIECHV, the Pew Data for Performance Initiative (Pew DPI) sought greater consistency in documenting the effects of home visiting. Specifically, we set out to develop a standardized, research-based approach for measuring the performance of home visiting programs regardless of model or funding stream.

Our initial work specified 9 indicators and 16 descriptive factors as common home visiting performance indicators.<sup>1</sup> We then drilled down to identify measurement options and recommendations for monitoring the effects of home visiting in two critical areas: (1) parental capacity and (2) child development (see sidebar). This brief summarizes Pew DPI's process for identifying and reviewing measurement options for parental capacity and child development. It then shares details on recommended measures.

## Process

We started with a comprehensive literature review of measurement options, which identified 35 parenting measures and 30 child development measures. After eliminating measures deemed too expensive or administratively complex, we interviewed researchers and instrument developers to explore which remaining measures could work for home visiting programs. Drawing on this information, we created tables outlining the advantages and limitations of the 21 parenting and 12 child development measures still under consideration.<sup>2</sup> Each measure was then rated on a scale of 1 to 3 based on 10 criteria (see exhibit 1).

### Exhibit 1. Criteria for Rating Measures of Parental Capacity and Child Development

- ✓ Length
- ✓ Cost
- ✓ Sensitivity to change over time
- ✓ Potential value for program use
- ✓ Measures of family protective factors (strength-based framework)

### Why Focus on Parental Capacity and Child Development?

- Both are central to the mission of nearly all home visiting programs.
- Decisions on how to measure related outcomes may influence how policy makers and funders view home visiting's utility.
- Many home visiting programs have already developed ways to define and measure these concepts; these methods are often different, however, and do not always complement one another.

- ✓ Ease of administration
- ✓ Psychometrics
- ✓ Comprehensiveness/narrowness
- ✓ Existing use among home visiting programs
- ✓ Availability in multiple languages

To further refine our ratings, we held a 2-day meeting with representatives from three key stakeholder groups: (1) state home visiting leads; (2) representatives from the Parents as Teachers, Nurse-Family Partnership, and Healthy Families America home visiting models; and (3) researchers familiar with the measures' application in home visiting programs. Our final ratings are available in a [phase II final report](#) published on the Chapin Hall website.

## Recommendations

### Measuring Parental Capacity

Three pieces of feedback guided our recommendations on measuring parental capacity. First, our advisors emphasized tracking changes in specific parenting behaviors instead of attitudinal changes. Second, there was consensus that we should gather multiple perspectives on the nature and quality of the parent-child relationship. Finally, we were advised to capture personal and contextual factors impacting parents' ability to recognize and meet children's needs. For example, we could assess parental knowledge or understanding of caretaking responsibilities, available resources, and the ability to access such resources. Exhibit 2 shares several measures that home visiting programs can use to track changes in parental capacity.

#### Exhibit 2. Recommended Measures for Assessing Parental Capacity

Measure	Point of view	Notable details
Healthy Families Parenting Inventory <sup>3</sup>	Parent self-assessment	Requires completion of three (of nine) subscales: mobilizing resources, parent-child interaction, and quality of home environment
Home Observation Measurement of the	Home visitor assessment and observation	Recommended by interviewees for assessing

Measure	Point of view	Notable details
Environment-Short Form (HOME-SF) <sup>4</sup>		children's immediate environments despite some criticisms of being outdated, lacking sensitivity to cultural and socioeconomic differences
Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO) <sup>5</sup>	Home visitor observation of parent-child interactions	Allows users to assess the positivity, sensitivity, and responsiveness of parent-child interactions with nuance and comprehensiveness
Dyadic Assessment of Naturalist Caregiver-Child Experiences (DANCE) <sup>6</sup>	Home visitor observation of parent-child interactions	Allows users to assess the positivity, sensitivity, and responsiveness of parent-child interactions with nuance and comprehensiveness

We recommend that measures be collected multiple times—beginning at program intake and at subsequent points during and at the end of enrollment—to capture a range of parenting behaviors known to create environments that support healthy child development.

## Measuring Child Development

There are several challenges to identifying measures that assess children's development from birth through age 5, the timeframe served by home visiting.

- ✓ Very few measures cover this broad age range.
- ✓ Child development includes multiple domains (e.g., gross motor, fine motor, language, cognition, social-emotional), each of which can be tracked separately or via a single assessment.
- ✓ Most psychometrically sound instruments are proprietary, costly, time consuming to administer, and/or dependent on substantial training and ongoing supervision to ensure quality and reliability.

We agreed that it would be best to focus on measuring one or two developmental domains commonly recommended by our advisors: speech/language development and/or social-emotional development. The advisors expressed a slight preference toward assessing speech/language development, which often supports positive outcomes in other developmental

domains.<sup>7,8</sup> We also focused on identifying subscales from more comprehensive measures for capturing changes in child development over time.

In keeping with current recommendations on early childhood assessment, we recommend that home visiting programs regularly assess children's development beginning at 18 months. We also recommend that programs monitor the parent-child relationship, which offers the best early indication of home visiting's effects on infant development,<sup>9</sup> instead of directly measuring infant development (which can be uneven and change rapidly).

Exhibit 3 includes several measures that home visiting programs can use to track changes in child development between 18 and 36 months of age. Programs adopting these measures should consider assessing children at 18, 24, 30, and 36 months.

### Exhibit 3. Recommended Measures for Assessing Child Development

Measure	Construct(s) assessed	Notable details
Brief Infant Toddler Social Emotional Assessment <sup>10</sup>	Clinical and empirical considerations, including externalizing behaviors (activity, aggression); internalizing behaviors (separation, depression); dysregulation (sleeping, eating); maladaptive behaviors; atypical behaviors; social relatedness; and competence (attention, compliance)	Focuses on development of competencies (hugs or feeds dolls and stuffed animals) and problem behaviors (avoids physical contact)
MacArthur-Bates Communicative Development Inventories—Short Form <sup>11</sup>	Receptive and expressive language development in infants and toddlers	Available at three levels depending on child's age: 8–18 months for infant form (level I); 16–30 months for toddler form (level II); 30–37 months for CDI-III (level III)

**Note:** We also recommend exploring use of the Ages and Stages Questionnaire and Ages and Stages Questionnaire-Social Emotional to monitor changes in children's development. These tools are designed for screening only and are best used to identify children in need of further developmental assessment. Nevertheless, a consensus emerged among our Advisory Board members that the communication subscale and social emotional screener are useful indicators of whether home visiting services help children stay on track developmentally.

## Summary

Pew DPI offers a starting point for building a consistent and well-researched approach to evaluate the effects of home visiting on parental capacity and child development. Our recommended measures, coupled with the full suite of outcome and process measures identified in our [final report](#), offer a strong foundation to document the collective benefits of home visiting across models; they also contribute to our understanding of how different families—each facing unique challenges—respond to different home visiting interventions.<sup>12</sup>

The core domains and related indicators highlighted by Pew DPI reflect growing consensus on the ways in which investments in high-quality home visiting programs improve the life trajectory of participating children, parents, and families. Maximizing the return on investments in more rigorous measurement approaches, however, requires comparable investments in training home visitors to administer these measures, careful supervision and support to ensure consistent practice around data collection, and maintenance of a participant-level database that allows programs to examine outcomes for specific subpopulations.

## References and Notes

- <sup>1</sup> The Pew Charitable Trusts (2015). *Using data to measure performance: A new framework for assessing the effectiveness of home visiting*. Philadelphia, PA: Author.
- <sup>2</sup> Tables summarizing the information gathered on reviewed measures are available by contacting [ddaro@chapinhall.org](mailto:ddaro@chapinhall.org).
- <sup>3</sup> Krysik, J., & LeCroy, C. W. (2012). Development and initial validation of an outcome measure for home visitation: The Healthy Families Parenting Inventory. *Infant Mental Health Journal*, 33(5), 496–505.
- <sup>4</sup> HOME-SF is available at the website for the National Longitudinal Survey of Youth (NLSY79): <https://www.nlsinfo.org/content/cohorts/nlsy79-children/other-documentation/codebook-supplement/appendix-home-sf-scales/page/0/1/#AppendixA2A>
- <sup>5</sup> Roggman, L. A., Cook, G. A., Innocenti, M. S., Norman, V. J., Christiansen, K., & Anderson, S. (2013). Parenting interactions with children: Checklist of observations linked to outcomes. Baltimore, MD: Brooks. While the tool is currently limited to children 10–47 months, work is underway to apply the tool to infants.
- <sup>6</sup> DANCE is applicable for children from birth to 2 years of age and is currently used within the context of Nurse-Family Partnership. The measurement developer, Nancy Donelan-McCall, has indicated that the tool can be adopted for other home visiting models. She is currently developing a distance-learning approach to make it more accessible and feasible and less costly.
- <sup>7</sup> Marchman, V. A., & Fernald, A. (2008). Speed of word recognition and vocabulary knowledge in infancy predict cognitive and language outcomes in later childhood. *Developmental Science*, 11(3), F9–F16.
- <sup>8</sup> Petersen, I. T., Bates, J. E., & Staples, A. D. (2015). The role of language ability and self-regulation in the development of inattentive–hyperactive behavior problems. *Development and Psychopathology*, 27(1), 221–237.
- <sup>9</sup> Daro, D., Klein, S., & Burkhardt, T. (2017). *The Pew Home Visiting Data for Performance Initiative: Phase II final report on parental capacity and child development indicators*. Chicago, IL: Chapin Hall at the University of Chicago. Available at <https://www.chapinhall.org/research/parent-perspectives-key-to-measuring-effectiveness-of-early-home-visiting/>
- <sup>10</sup> Carter, A. S., & Briggs-Gowan, M. (2005). ITSEA BITSEA: *The Infant-Toddler and Brief Infant Toddler Social Emotional Assessment*. San Antonio, TX: PsychCorp.
- <sup>11</sup> Fenson, L., Pethick, S., Renda, C., Cox, J. L., Dale, P. S., & Reznick, J. S. (2000). Short-form versions of the MacArthur Communicative Development Inventories. *Applied Psycholinguistics*, 21(1), 95–116.

<sup>12</sup> The full list of recommended indicators and descriptive variables is available on the Chapin Hall website: <https://www.chapinhall.org/project/improving-early-home-visiting-programs>