



Parent-Child Interaction and Home Visiting



Introduction

Observation of parent-child interaction (PCI) is one of 19 performance measures on which Maternal, Infant, and Early Childhood Home Visiting (MIECHV)-funded programs are required to report. This brief highlights the importance of PCI, presents strategies home visitors can use to support parents in strengthening these interactions, and offers tips for using Continuous Quality Improvement (CQI) to improve PCI efforts. It also includes a table of frequently used PCI observation instruments, a tool awardees and local implementing agencies (LIAs) can use to assess the fit of their PCI observation tools, and a sample test of change to strengthen their current PCI efforts.

MIECHV awardees can use this resource to reflect on their current PCI tools and improve their progress on Performance Measure 10, the percent of primary caregivers enrolled in home visiting who receive an observation of caregiver-child interaction by the home visitor using a validated tool. LIAs can use this resource to help home visitors understand the importance of PCI and use their observations to strengthen PCI.

The Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Program supports voluntary, evidence-based home visiting services for at-risk pregnant women and parents with young children up to kindergarten entry. Home visiting helps prevent child abuse and neglect, supports positive parenting, improves maternal and child health, and promotes child development and school readiness.



[Visit the MIECHV Program website to learn more!](#)

What Is PCI and Why Is it Important?

The bond between a parent and a child, known as attachment, helps children feel safe and secure. It also helps them regulate their emotions. Attachment lays the foundation for trust and provides the secure base that allows children the freedom and safety to explore their world. PCI is the back-and-forth social interaction between a parent¹ (or other caregiver) and their child that helps build this attachment.

PCI begins in infancy, when a baby gazes at her mother's eyes, turns her head towards sounds, and smiles. It continues as a toddler looks back at his parents as they try something new, and as a preschool child describes to their parent what they see during a walk around the block. When parents pick up and rock a crying baby, smile encouragingly at their two-year-old trying to put the last puzzle piece in a place, or play Candyland™ with their preschooler, they are engaging in PCI.

Positive PCI is a critical factor in a child's social-emotional and cognitive development and school readiness. The Harvard Center on the Developing Child uses the term "serve and return" to describe this interaction and stresses its importance in building brain architecture: "When an infant or young child babbles, gestures, or cries, and an adult responds appropriately with eye contact, words, or a hug, neural connections are built and strengthened in the child's brain that support the development of communication and social skills."²

Interventions focused on improving PCI can support both short-term PCI behaviors and long-term child outcomes. When parents respond with warmth and affirmation to their child's cues, children learn that they can rely on their parent as



1 Throughout this resource we will use the term "parent" to include a child's primary caregiver. This language is consistent with MIECHV Performance Measure 10: Parent-Child Interaction.

2 Harvard University, Center for the Developing Child. Serve and Return. Downloaded 4/27/21 from: <https://developingchild.harvard.edu/science/key-concepts/serve-and-return/>

a caregiver who will meet their needs. Secure attachment is critical to a child’s social-emotional development: it affects their emotional regulation—that is, their ability to effectively manage their emotional responses—and future relationship building and can buffer trauma. Children who experience positive nurturing interactions with parents in infancy and early childhood develop strong and positive attachments and are significantly better prepared to succeed in school.^{3 4}

Home Visiting and PCI

Home visitors bring a unique perspective to a parent or caregiver’s life and the home environment. By observing PCI, home visitors can see how parents naturally interact with their child. They can then use their observations to provide support and feedback to improve the quality of these interactions.

Many factors influence how parents interact with their children. Some are internal, including a caretaker’s knowledge, values, and beliefs. These may be rooted in cultural beliefs, practices and lived experiences of how they were raised. For instance, parents raised in a culture that values interdependence may choose to feed their child for a longer period of time rather than encouraging self-feeding. Understanding these values and norms, and reflecting on how they may shape interactions, can enable a home visitor to support PCI in a culturally attuned way.

External factors can also affect PCI. For example, some parents may find it difficult to provide emotional supports to young children when they are stressed, overworked, underemployed, or living in unstable conditions.⁵ Awareness of these factors can help home visitors place the interactions they observe in context.

3 Connell, C. M., & Prinz, R. J. (2002). The Impact of Childcare and Parent-Child Interactions on School Readiness and Social Skills Development for Low-Income African American Children. *Journal of School Psychology, 40*(2), 177-193.

4 Pianta, R. C., Nimetz, S. L., & Bennett, E. (1997). Mother-child relationships, teacher-child relationships, and school outcomes in preschool and kindergarten. *Early Childhood Research Quarterly, 12*, 263-280.



Home visitors use a variety of strategies to strengthen PCI. They can provide child development and parenting information. They can model positive ways for parents to interact with their child. They can teach parents skills related to PCI, such as listening attentively; responding at the child's own level of understanding with enthusiasm, warmth, and genuineness; supporting the child's problem-solving efforts; and encouraging creativity. They can provide 'in the moment' feedback to parents, coaching them on picking up on and responding to their child's cues, and provide specific language to use with their child.⁵ They can also reinforce positive interactions by, for example, seeking permission to videotape parents interacting with their child and then viewing the video together with the parent, noting the positive interactions they are observing. This also allows the home visitor to ask and learn about any style of PCI that could be based on culture or parental experience.

Observing PCI

Performance Measure 10 requires MIECHV programs to report on the percentage of primary caregivers enrolled in home visiting who receive an observation of caregiver-child interaction by the home visitor through the use of validated tools. Use of a validated tool for observing PCI is a key part of this requirement; reliance on casual observation or parent self-reports can provide an incomplete picture of the interaction. Home visitors may not see what they need to see or draw inaccurate conclusions without the structure of a validated tool. Standardized tools allow home visitors to track and systematically monitor changes in PCI, which helps them assess whether specific intervention techniques are working. These tools also help to ensure that home visitors are consistent in the kinds of feedback they offer parents, including celebrating strengths, identifying areas for growth, and setting goals.

⁵ Peterson, C. A., Hughes-Belding, K., Rowe, N., Fan, L., Walter, M., Dooley, L., ... & Steffensmeier, C. (2018). Triadic interactions in MIECHV: Relations to home visit quality. *Maternal and Child Health Journal*, 22(1), 3-12. <https://doi.org/10.1007/s10995-018-2534-x>



HRSA does not approve or endorse specific PCI observation tools. Awardees have the discretion to select validated tools that are appropriate for their context and are in accordance with the model's guidelines. See Appendix A for information on validated tools frequently used by MIECHV Programs.

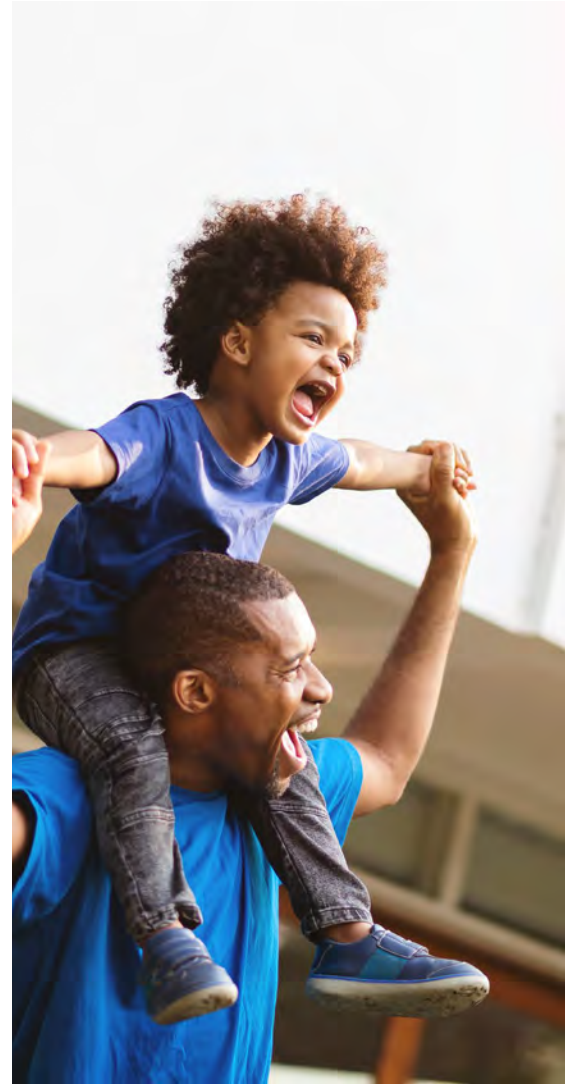
Once a tool is selected, how observation is incorporated into service delivery depends on the developer of the tool, the model within which it is being used, the awardee's guidance on how to use the tool, and how individual programs are conducting the observations. Tools differ in the specific behaviors being observed, the ages and populations for which they are designed to be used, time needed to complete the tool, and frequency with which the tool should be administered.

Awardees may have different protocols and processes for how observations are conducted—including how many observations are completed by home visitors, or when observations happen. They may also have different methods for how reports are analyzed. For example, an awardee that implements more than one evidence-based model might want to know whether observation scores vary based on the model used. Another example would be if observation times vary, the awardee may wish to know whether scores are correlated with the timing of the observation. These types of analyses can inform policy decisions and highlight areas where professional development may be needed. *Appendix B: Reflecting on PCI Observation Tools* includes questions to help awardees and LIAs think about how they are using the tool(s) they have selected.

Using CQI to Inform PCI Practice

Many awardees target their CQI efforts on improving the number and timeliness of PCI observations. Yet equally important is finding ways to use these observation data to improve the nature of parent-child interactions. When bringing CQI to PCI, here are some helpful considerations for maximizing the benefits of these efforts:

- **Focus on why we care about PCI.** One of the most important reasons observations may not be taking place is that home visitors don't recognize the importance of PCI. When home visitors understand why they are observing PCI and how their observations can affect how parents interact with their children, they are more



likely to conduct these observations consistently and be more accurate in their scoring, and awardees are more likely to see improvement in recorded observations. Initial training, combined with ongoing professional development, can help home visitors develop the necessary competencies.

- **Think beyond Performance Measure 10.** Performance Measure 10 focuses entirely on *how many* families are observed. While this is an important starting point (and one of many measures you should continue to observe), limiting CQI to this measure won't reveal the underlying reasons that observations may (or may not) be taking place, and won't reveal changes in PCI. Instead, consider conducting 'tests of change' that focus on the *nature* of the observation—such as changes, for example, in responsiveness and affection as a result of increased home visitor 'in the moment' feedback, as measured by the Parenting Interactions with Children (PICCOLO) PCI observation tool. A potential SMART aim might be this: "By the end of the six months, families will have improved their responsiveness and affection by 20%, as measured by the PICCOLO, as a result of increased home visitor in-the-moment feedback."
- **DO consider video-recording PCI.** In addition to being used as a coaching tool for parents, video recordings help improve the reliability and quality of the PCI observation assessment and scoring is typically more reliable when done from videos.⁶ Since both home visitors and families might have reservations about being videotaped, programs might consider introducing their use of videorecording as a test of change. (*Note:* It is important that recordings be used solely as an opportunity to learn. They should never be used as a tool for punitive supervision.)



⁶ Auer, O, and Montague, E., (2015). Using video-based observation research methods in primary care health encounters to evaluate complex interactions. *Journal of Innovations in Health Informatics*. Vol 21, Number 4

- **DON'T reinvent the wheel.** Significant research exists on ways to effectively work with families to enhance PCI, including providing in-the-moment feedback, modeling, and coaching. Build your tests of change around enhancing PCI using a research-based strategy.

Keep in mind that your management information system may not have the capacity to track the data you need when testing new ideas. It is possible that the only measure you have is whether the PCI observation took place, and possibly the score. You may not have a way to track individual sub-scores or the home visitors' in-the-moment feedback. In time, you may be able to add these to your management information system. In the meantime, use a simple pen and paper, whiteboard, or Excel spreadsheet to record these data. Share these data in a timely manner with home visitors and families.

Conclusion

PCI is an important focus for all MIECHV programs. Home visitors are required to observe PCI and programs are required to report on the percent of primary caregivers who receive such an observation (Performance Measure 10). Yet while many programs focus their efforts on improving the number and timeliness of PCI observations, it is equally important for home visitors to use these observations to strengthen the interactions they see. Positive PCI is a critical factor in a child's social-emotional and cognitive development, helping them develop the relationships needed for lifelong learning, health, and behavior. Home visitors are in a unique position to help parents and caretakers learn strategies for interacting with their children in positive ways.

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Appendix A: Parent-Child Observation Validated Tools (Selected Examples)

Name of Tool	Description	Training Required or Offered
CHEERS Check-In	Healthy Family America’s proprietary tool, designed to promote attachment and positive interactions between parents and children. Observers score the following aspects of PCI on a seven-point scale: cues, holding and touching, expression, empathy, rhythm and reciprocity, and smiles.	Online training webinars followed by conversations with supervisors
<u>Dyadic Assessment of Naturalistic Caregiver-Child Experiences</u>	Nurse Family Partnership’s proprietary tool outlines 18 caregiving behaviors that support children’s healthy growth and development, organized into four caregiving dimensions: Emotional Quality, Sensitivity and Responsivity, Support of Behavioral and Emotional Regulation, and Promotion of Developmental Growth.	
<u>Emotional Availability Scale (EAS)</u>	Assesses four dimensions of parent behaviors (sensitivity, structuring, non-intrusiveness, and non-hostility) and two child behaviors (child responsiveness to adult, and child involvement of adult).	Training, developed and conducted by the <u>International Center for Excellence in Emotional Availability</u> , is required.
<u>Home Observation for the Measurement of the Environment</u>	Measures the quality and quantity of stimulation and support available to a child in the home environment. Includes 45 items organized into six subscales: parental responsiveness, acceptance of child, organization of the environment, learning materials, parental involvement, and variety in experience. Administering the tool requires both observing and interviewing.	
<u>Keys to Interactive Parenting Scale</u>	Uses a five-point scale to assess 12 key parenting behaviors, which fall into three categories: building relationships, promoting learning, and supporting confidence.	Online training and annual certification required. Onsite training also available.
<u>PCI Feeding and Teaching Scales (formerly NCAST Nursing Child Assessment Feeding Scale and NCAST Nursing Child Assessment Teaching Scale)</u>	The Parent-Child Interaction Scales may be used to observe PCI in either a feeding or a teaching situation. The scales measure both parenting behavior and child behavior. Subscales measure sensitivity, caregiver response to distress, caregiver’s social-emotional and cognitive growth fostering, and how responsive the child is to the caregiver’s behaviors.	Training is required and available from local instructors. Training to become a certified instructor is also available.
<u>Parenting Interactions with Children (Checklist of Observations Linked to Outcomes (PICCOLO™))</u>	Comprises a checklist of 29 observable, developmentally supportive parenting behaviors in four domains: affection, responsiveness, encouragement, and teaching. The tool is also available in Spanish.	<u>PICCOLO Training DVD</u> includes 14 clips of PCI to help users practice observing and scoring.

Appendix B: Reflecting on PCI Observation Tools

Use the questions below to reflect on the observation tools you are currently using and how they are being implemented. They can help you determine whether your current tools are appropriate, whether additional training is needed to support their use, and whether you are collecting appropriate data and using the analysis to make decisions that support ongoing progress on PCI.

Name of Tool:

Reflection Questions:

- Why did you select this tool?
- In selecting the tool, what did you learn about the populations and languages used in validating the tool? How confident are you that the tool reflects your communities and programs and is the right fit for your populations?
- Is the tool available and validated in languages other than English (as appropriate for your communities)?
- How are you using this tool (e.g., to track when observation is conducted, to assess frequency of use, to provide feedback to the observer and/or family)?
- Has the developer provided guidance on using the tool virtually?
- What type of training and support do you offer to home visitors who are using this tool? How often do you provide these trainings?
- How do you ensure consistency of use across raters?
- What kinds of data do you collect? How do you collect them?
- Has your state conducted a systematic analysis of PCI scores? If so, what have you found?
- Have your LIAs conducted a systematic analysis of PCI scores? If so, what have they found?
- How do you interpret and share the results? With whom do you share that information?
- Are you satisfied with the tool(s) you are currently using? (If so, why? If not, why not?)
- How do you support home visitors in using their observations with families to strengthen PCI?
- What kinds of feedback do you get from home visitors about ease of use or challenges they experience in using the tool? How do you incorporate their feedback into the professional development you provide?

Appendix C: Selected Resources

[Co-Regulation from Birth through Young Adulthood: A Practice Brief](#)

Office of Planning, Research, and Evaluation

Presents three broad categories of support caregivers can provide to children, youth, and young adults to help them develop foundational self-regulatory skills: provide a warm, responsive relationship; structure the environment; and teach and coach self-regulation skills.

[Parent-Child Interaction—Part 1: Observing & Listening in the Virtual Environment and Part 2: Supporting Interactions and Learning in the Virtual Environment \(Webinars\)](#)

Rapid Response Virtual Home Visiting

Explores strategies to support parent-child interaction if home visits are conducted either by phone or interactive videoconferencing. Both webinars include related handouts and other resources.

[Parental Resilience: Protective & Promotive Factors](#)

Center for the Study of Social Policy

Explores each of the protective factors included in the Strengthening Families Framework, accompanied by an action sheet.

[Parenting Knowledge Among First-Time Parents of Young Children](#)

Child Trends

Highlights findings from Child Trends' study of first-time parents of children under age 3, including their knowledge about parenting and child development.

[Positive Parent-Child Relationships](#)

National Center on Parent, Family, and Community Relationships

Presents a selected summary of research, proven interventions, and program strategies to support parent-child relationships.

[Promoting Self-Regulation in the First Five Years: A Practice Brief](#)

Office of Planning, Research, and Evaluation

Provides guidelines to promote self-regulation development in children from birth through five years old.

[Self-Regulation Snap Shot #1: A Focus on Infants and Toddlers and Self-Regulation Snap Shot #2: A Focus on Preschool-Aged Children](#)

Office of Planning, Research, and Evaluation

Summarizes key concepts about self-regulation development and intervention for practitioners and educators interested in promoting self-regulation. Snap shots are based on a series of four reports on self-regulation and toxic stress prepared for the Administration for Children and Families.

[Three Principles to Improve Outcomes for Children and Families](#)

Center on the Developing Child at Harvard University

Outlines three principles that support building young children's healthy brains and bodies: support responsive relationships for children and adults, strengthen core life skills, and reduce sources of stress in the lives of children and families.

[Understanding Motivation: Building the Brain Architecture that Supports Learning, Health, and Community Participation](#)

National Scientific Council on the Developing Child

Explores the science of motivation and how positive feedback in early childhood reinforces a child's inherent feelings of satisfaction or pleasure.

[Why Becoming a Good Parent Begins in Infancy](#)

Lucile Packard Foundation for Children's Health

Offers a quick primer for family and community members, professionals, and policymakers on how the availability and quality of personal relationships are vital to the emotional and developmental growth of a child.