



Father Engagement in Home Visiting: Benefits, Challenges, and Promising Strategies

Introduction

Early father involvement is important for young children's development and learning. Most early childhood home visiting programs target mothers for enrollment, but engaging fathers in services can help families achieve desired program outcomes. For example, mothers may be more engaged in and stay enrolled in home visiting services longer when fathers participate in visits and display positive attitudes.^{1,2}

At least 79 percent of children in the United States under age 6 live with their fathers,³ and other children may have contact with their nonresidential fathers. Research shows that when fathers participate in home visiting, they learn new parenting skills, are more confident in their parenting, and have stronger relationships with their children and partners.⁴ Evidence suggests that home visiting programs should intentionally engage fathers, when possible, to optimize positive child and family outcomes.

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This brief summarizes the existing research to answer four questions:

- ✔ What are the benefits of father involvement for children?
- ✔ What outcomes are associated with father engagement in home visiting?
- ✔ What common challenges do programs face engaging fathers in home visiting?
- ✔ What strategies are home visiting programs using to overcome common obstacles?

What Are the Benefits of Father Involvement for Children?

Establishing healthy father-child interactions early on supports the quality of their relationships in the long term.⁵ Engaging fathers during pregnancy helps fathers begin bonding with their children before birth. Fathers involved prenatally are more likely to be present at the birth and to stay involved in their babies' lives.⁶

Early father involvement also impacts their partners' behaviors and birth outcomes.^{7,8} When fathers are involved prenatally, mothers are less likely to smoke and use alcohol while pregnant and more likely to receive prenatal care. Babies are less likely to be born preterm, have a low birthweight, or die before their first birthday.^{9,10,11,12,13,14,15}

During early childhood, father involvement supports secure attachment and promotes children's emotional regulation and cognitive development.^{16,17,18,19} Specifically, fathers often expose children to a different style of play than mothers, characterized by more "rough and tumble" and physical activities.²⁰ Complex play interactions between children and fathers support advancements in childhood cognition, language, and emotional growth.²¹

Father involvement is also associated with longer-term outcomes, such as positive peer relationships and decreased odds of incarceration, crime, and teen pregnancy.²² Positive benefits exist as long as fathers stay involved (see sidebar), regardless of whether or not they live with their children.²³

How Is Father Involvement Measured?

Father involvement is measured in multiple ways:

- At a basic level, involvement includes how present fathers are in their children's lives, either living with or visiting them.
- At a deeper level, involvement includes the quality of the father-child relationship and interactions, such as the extent to which fathers engage in caretaking, teaching, and children's play.

Research on child support payments also points to the importance of fathers' financial contributions for their children's well-being.²⁴

What Outcomes Are Associated With Father Engagement in Home Visiting?

Because home visiting begins early in a child's development and offers parenting support right in the home, it has an advantage over other two-generation and family service programs delivered outside of the home. The flexible approach of meeting families "where they are" helps home visitors engage with fathers and support their goals while promoting healthy father-child relationships.

Fathers who engage in home visiting programs self-report—

- ✔ Improved knowledge of child development and positive parenting practices
- ✔ Better anger management, resulting in less physical discipline
- ✔ Stronger communication with their partners
- ✔ Greater connections to employment, educational opportunities, and other community services and resources²⁵

Fathers report seeing home visitors as trusted sources of information and valuing their services.²⁶ Positive outcomes stem from both the direct support and information that home visitors provide and the peer support offered by other participating fathers and male program staff (e.g., fatherhood coordinators).²⁷

What Common Challenges Do Programs Face Engaging Fathers in Home Visiting?

Studies show that home visiting programs often face multiple barriers trying to encourage father participation:

- ✔ **Misperception that home visiting is not for men.** Fathers often believe that home visiting is only for mothers, particularly when program staff are female and do not reach out directly to them.²⁸ Focusing on the mother-child dyad can thwart fathers' interest.²⁹ Men's views on fatherhood, unresolved issues with their own fathers, and other social pressures may further impede participation.
- ✔ **Staff resistance.** Home visitors have their own perceptions of fatherhood and the role of fathers based on personal experiences and relationships with men.³⁰ Stereotypes that men are emotionally impaired and do not care about fatherhood can make home visitors protective of their female clients.

- ✔ **Maternal gatekeeping.** Home visitors may experience gatekeeping from mothers and other family members who wish to keep fathers from joining visits.³¹ Mothers may view the home visiting sessions as a time for themselves, for example, or want to keep some information they share with home visitors private. Past studies have found that mothers want fathers involved to a certain extent, but not necessarily in every visit.³²
- ✔ **Relationship and safety concerns.** Home visitors report wanting to prioritize mothers' and children's safety and well-being when there is a history of intimate partner violence, family violence, or other relationship issues. They may question whether involving the father is in everyone's best interest.
- ✔ **Scheduling conflicts.** It can be hard finding times when both parents are free to attend joint visits. Programs that only offer home visits during weekday, daytime hours often find it harder to reach fathers who are working or attending school.³³ Programs may decide to have separate activities for fathers at times when they can join to minimize scheduling issues (see box 1).
- ✔ **Inadequate curriculum and staff training to address both parents' needs.** In one qualitative study, home visitors reported not having the time, training, and resources to fully engage both parents during a home visit and address their individual and family needs.³⁴ Home visitors also reported limitations in their curricula. Meeting the needs of special populations, including nonresident, immigrant, and teen fathers, brings additional challenges that home visitors may not be equipped to address.³⁵

Box 1. Identified Challenges With Father Involvement in Early Head Start

A study of father involvement in Early Head Start found that program sites held informal support groups for fathers and organized periodic activities, such as attending local sporting events; however, services were viewed as add-ons and not integrated with home visits.³⁶ Moreover, fathers' goals were narrowly focused on employment and tacked onto family goals largely articulated by mothers, rather than integrated into the family goal-setting process.³⁷

What Strategies Are Home Visiting Programs Using to Overcome Common Obstacles?

In this section, we discuss five promising strategies for moving past challenges to father engagement in home visiting:

- ✔ Assessing and improving the father readiness of services
- ✔ Assuring recruitment, enrollment, and outreach practices are father-friendly
- ✔ Using flexible scheduling practices
- ✔ Implementing staffing practices that engage fathers
- ✔ Tailoring program content and delivery format to engage fathers

With any of these strategies, it is important to account for family context and individual circumstances (e.g., father's residence, relationship status, age, culture, fathering experience) given the importance of these factors for parent involvement.³⁸

Promising Strategy 1. Assessing and Improving the Father Readiness of Services

The National Fatherhood Initiative (NFI) reports that home visiting programs often provide services to fathers before identifying and addressing barriers to accessing and using services effectively.³⁹ Programs may not realize that barriers exist at the organizational and community levels, for example, or they may not prioritize the foundational work needed to create a supportive environment for fathers.

Assessing a home visiting program's father readiness helps determine whether it can meet fathers' needs in terms of location, physical environment, organizational philosophy, and staff attitudes.⁴⁰ NFI developed a free Father Friendly Check-Up assessment tool for programs and offers more intensive staff training and technical assistance.⁴¹ The Texas Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) partnered with NFI to assess the father readiness of home visiting programs across seven counties. NFI provided training to state home visiting staff and created a father readiness toolkit for each community.⁴²

Promising Strategy 2. Assuring Recruitment, Enrollment, and Outreach Practices Are Father-Friendly

Some programs encourage father involvement from their first contact with families. Recruitment staff can do on-the-spot outreach to assess if fathers are involved in children's lives. If appropriate, staff can explain the benefits of father participation in home visits and encourage

mothers to invite them. “Invite dad” strategies, such as direct communications with fathers about the importance of their involvement with their children, help remove the perception that home visiting programs are for mothers only.⁴³ Providing outreach materials to both parents helps convey an image that the program is for the whole family and that father involvement is encouraged.⁴⁴

In some cases, the father is enrolled in services because he is the child’s primary caregiver. In other cases, the mother is listed as the primary caregiver, and the father is also encouraged to enroll so he can be eligible for the same level of services (e.g., assessments, referrals, assistance with enrolling in school and finding stable work).

Male caregivers made up 4 percent of home visiting participants in FY 2017, according to MIECHV service data. That figure included 2,826 fathers.

Monetary incentives can also help improve recruitment. Past program examples include free diapers, gift cards or gas cards when fathers attend a minimum number of visits, lottery drawings for professional sporting events when fathers complete the program, and meals at fatherhood group meetings.^{45,46}

Promising Strategy 3. Using Flexible Scheduling Practices

Some programs adjust home visitors’ schedules or offer flex schedules so staff can be available during evening or weekend hours. As a broader strategy, home visitors are intentional in asking for fathers’ availability and scheduling visits accordingly.^{47,48} In a survey of mothers across seven Texas communities, respondents indicated that flexible scheduling and direct outreach to fathers could increase participation in home visits. “Invite dad” strategies were perceived to be more effective than father-only events.

Promising Strategy 4. Implementing Staffing Practices That Engage Fathers

Hiring male staff to work with fathers can promote fathers’ interest and engagement in services (see box 2 on the next page). One study found that male home visitors served as mentors to fathers and offered individualized case management targeting their unique needs and personal goals.⁴⁹ While some programs hire male home visitors, others employ a fatherhood coordinator responsible for organizing father-focused activities and events. Fatherhood coordinators may accompany female home visitors to meet fathers in the home and schedule one-on-one meetings with fathers as needed. In one study, male program staff accompanied home visitors on visits to actively recruit fathers.⁵⁰

Box 2. Staffing Practices for Connecticut's MIECHV-Funded Home Visiting Services

Connecticut's MIECHV program employs 12 male home visitors who deliver Parents as Teachers services directly to fathers and cohabiting partners. Home visits with fathers are offered separately from home visits with mothers. Male home visitors focus on father-specific topics, including their employment, education, and sense of self.

Promising Strategy 5. Tailoring Program Content and Delivery Format to Engage Fathers

In some programs, staff actively work to engage fathers in child-focused home visits, with the goal of viewing the father as a coparent and “getting the dad down on the floor to play with his infant or toddler.”⁵¹ Various curriculum enhancements better engage fathers in home visiting services (see exhibit A-1 in the appendix for more details):

- ✔ Dad to Kids is an adapted version of the Parent-Child Interaction module of SafeCare, an evidence-based home visiting model targeting families with a history of or at risk for child maltreatment.⁵² It includes six sessions focused on positive parenting with fathers and sports-themed, video-based modules to help them practice and reinforce new skills.
- ✔ Developers of the Parents as Teachers model created the Dads in the Mix adaptation as part of a project on promoting responsible fatherhood.⁵³ The adaptation combines home visits targeted toward fathers with fatherhood group meetings, father-child meetings, and family-oriented meetings. Dads in the Mix employs multiple strategies to successfully attract and retain fathers, including hiring male home visitors and group facilitators with extensive knowledge of the community and experience serving fathers.
- ✔ Dads Matter is a service enhancement designed to fit a variety of home visiting models to fully incorporate fathers before and after birth.⁵⁴ Dads Matter complements content covered in traditional home visiting, adapts to varying family contexts, and allows for meetings in person or over the phone—both with and without maternal participation.

Evidence suggests that fathers also benefit from peer support groups that give them a safe space to share their experiences and learn from other fathers. “It takes a dad to involve other dads” was a key theme in focus groups conducted for an evaluation of the Texas Home Visiting Program. That evaluation explored how father engagement can improve home visiting retention.⁵⁵ A study of Early Head Start found that fathers' groups should not be treated as add-on activities, but rather, connect to what fathers learn during home visits.⁵⁶

What Are the Implications for Practice and Future Research?

This brief identifies opportunities and challenges for engaging fathers in home visiting. There are several key implications for practice and research:

- ✔ Recent research challenges the way the home visiting field defines and measures father engagement. Attending a home visit focused on the mother or child is quite different for fathers than focusing on their own goals and skills and applying what they learn. Fathers may also engage differently depending on their background and circumstances. Research measures should be in tune with their individual contexts and sensitive to multiple dimensions of father engagement.
- ✔ Fathers' needs are different from mothers' needs. Attending to both requires more work by the home visitor, who may need training and support to effectively engage and interact with fathers. Programs may or may not have the capacity to enroll both parents as primary clients.
- ✔ Existing curricula may not be sufficient for meeting fathers' unique needs and building coparenting skills. Future research may test how well existing home visiting curricula address fathers' needs and the effectiveness of various enhancements and program formats. For example, do fathers benefit more from having a male home visitor acting as a fatherhood mentor and coach or from participating in a peer group with other fathers? How does this compare to a combined approach? Is there an added benefit to conducting home visits with mothers and fathers separately versus together?
- ✔ The mother-father relationship is integral to the success of father engagement in home visiting. Mothers can be both gatekeepers and facilitators. Home visitors must be trained on how to navigate delicate situations (e.g., family violence, immigration status) to balance promoting father involvement and keeping mothers and children safe and comfortable.

Conclusion

Home visiting programs are in a unique position to connect with new parents early in their children's development. Using this opportunity to support fathers can have lifelong effects. Program leaders may want to consider assessing the father readiness of their programs and implementing strategies to encourage father participation, such as direct outreach, flexible scheduling options, and father-focused staff trainings.

Appendix

Exhibit A-1. Home Visiting Curriculum Enhancements to Promote Father Engagement

| Enhancement | Home visiting model | Curricula | Activities | Outcomes achieved |
|-------------------------------|---------------------|--|---|--|
| Dad to Kids ⁵⁷ | SafeCare | SafeCare home visiting curriculum, adapted Parent-Child Interaction module, tailored for fathers <i>Talking with Mom</i> , from the National Fatherhood Initiative, to deliver a co-parenting component | Six home visiting sessions for fathers focused on positive parenting Computer modules combined with live, hands-on practice with a provider | High father satisfaction with the program Improvement in targeted father-child interaction skills, such as giving praise and choices Potential to reduce child maltreatment behaviors |
| Dads in the Mix ⁵⁸ | Parents as Teachers | Parents as Teachers home visiting curriculum for home visits with mothers and fathers <i>Young Moms</i> , <i>Young Dads</i> to deliver peer-facilitated fatherhood group meetings | Monthly home visits targeted toward fathers combined with multiple types of group meetings At least 8 hours of skill-based parenting education over a 12-week period | Increased father involvement in children's lives Stronger communication and relationships with children and mothers Increased patience with children, more positive discipline practices, and better interactions to support children's learning |

| Enhancement | Home visiting model | Curricula | Activities | Outcomes achieved |
|---------------------------|--|---|---|--|
| Dads Matter ⁵⁹ | Any evidence-based home visiting model | Dads Matter intervention manual, training for home visitors, and topical content curriculum | <p>4–7 sessions during initial phases of home visiting, complementary to traditional home visiting curricula</p> <p>Focus on father inclusion in home visiting services and support of positive involvement with children</p> | <p>Improved mother-father relationship quality and parental stress levels</p> <p>Increased father involvement in children’s lives and confidence in parenting skills</p> <p>Decreased evidence of child neglect, physical assault, and psychological aggression toward children by fathers</p> |

References and Notes

- ¹ Korfmacher, J., Green, B., Staerkel, F., Peterson, C., Cook, G., Roggman, L., . . . Schiffman, R. (2008). Parent involvement in early childhood home visiting. *Child & Youth Care Forum* 37(4), 171-196. doi: 10.1007/s10566-008-9057-3
- ² Eckenrode, J., Ganzel, B., Henderson Jr., C. R., Smith, E., Olds, D. L., Powers, J., . . . Sidora, K. (2000). Preventing child abuse and neglect with a program of nurse home visitation: The limiting effects of domestic violence. *JAMA*, 284(11), 1385-1391. doi: 10.1001/jama.284.11.1385
- ³ United States Census Bureau (2016). The majority of children live with two parents, Census Bureau reports. Retrieved from <https://www.census.gov/newsroom/press-releases/2016/cb16-192.html>
- ⁴ Sandstrom, H., Gearing, M., Peters, H. E., Heller, C., Healy, O., & Pratt, E. (2015). *Approaches to father engagement and fathers' experiences in home visiting programs* (OPRE Report No. 2015-103). Washington, DC: Urban Institute. Retrieved from https://www.acf.hhs.gov/sites/default/files/opre/20151130_fahv_report_finalized_b508.pdf
- ⁵ Wakabayashi, T., Guskin, K. A., Watson, J., McGilly, K., & Klinger Jr., L. L. (2011). *The Parents as Teachers Promoting Responsible Fatherhood Project: Evaluation of "Dads in the Mix," an exemplary site*. St. Louis, MO: Parents as Teachers. Retrieved from <https://static1.squarespace.com/static/56be46a6b6aa60dbb45e41a5/t/58459b544402430206cff9ee/1480956762505/Parents+as+Teachers+Fatherhood+Project+White+Paper.pdf>
- ⁶ Meier, M. E., & Avillaneda, L. (2015). A literature review of paternal involvement in prenatal care. *Journal of Family Strengths*, 15(1). Retrieved from <https://digitalcommons.library.tmc.edu/jfs/vol15/iss1/10/>
- ⁷ Meier & Avillaneda, 2015.
- ⁸ Firouzan, V., Noroozi, M., Mirghafourvand, M., & Farajzadegan, Z. (2018). Participation of father in perinatal care: A qualitative study from the perspective of mothers, fathers, caregivers, managers and policymakers in Iran. *BMC Pregnancy and Childbirth*, 18(1). <https://doi.org/10.1186/s12884-018-1928-5>
- ⁹ Mincy, R., (2015). *Overview: Paternal involvement and pregnancy outcomes* [PowerPoint slides]. Retrieved from https://www.nichd.nih.gov/sites/default/files/about/meetings/2015/Documents/9-Mincy_Paternal_Involvement.pdf
- ¹⁰ Alio, A. P., Kornosky, J. L., Mbah, A. K., Marty, P. J., & Salihu, H. M. (2010). The impact of paternal involvement on feto-infant morbidity among Whites, Blacks and Hispanics. *Maternal and Child Health Journal*, 14(5), 735-741. doi: 10.1007/s10995-009-0482-1

- ¹¹ Alio, A. P., Mbah, A. K., Kornosky, J. L., Wathington, D., Marty, P. J., & Salihu, H. M. (2011). Assessing the impact of paternal involvement on racial/ethnic disparities in infant mortality rates. *Journal of Community Health, 36*(1), 63-68. doi: 10.1007/s10900-010-9280-3
- ¹² Ghosh, J. K. C., Wilhelm, M. H., Dunkel-Schetter, C., Lombardi, C. A., & Ritz, B. R. (2010). Paternal support and preterm birth, and the moderation of effects of chronic stress: A study in Los Angeles County mothers. *Archives of Women's Mental Health, 13*(4), 327-338. doi: 10.1007/s00737-009-0135-9
- ¹³ Ngui, E., Cortright, A., & Blair, K. (2009). An investigation of paternity status and other factors associated with racial and ethnic disparities in birth outcomes in Milwaukee, Wisconsin. *Maternal and Child Health Journal, 13*(4), 467-478. doi: 10.1007/s10995-008-0383-8
- ¹⁴ Alio, A. P., Bond, M. J., Padilla, Y. C., Heidelbaugh, J. J., Lu, M., & Parker, W. J. (2011). Addressing policy barriers to paternal involvement during pregnancy. *Maternal and Child Health Journal, 15*(4), 425-430. doi: 10.1007/s10995-011-0781-1
- ¹⁵ Padilla, Y. C., & Reichman, N. E. (2001). Low birthweight: Do unwed fathers help? *Children and Youth Services Review, 23*(4-5), 427-452. [https://doi.org/10.1016/S0190-7409\(01\)00136-0](https://doi.org/10.1016/S0190-7409(01)00136-0)
- ¹⁶ Nugent, J. K. (1991). Cultural and psychological influences on the father's role in infant development. *Journal of Marriage and the Family, 53*(2), 475-485. doi: 10.2307/352913
- ¹⁷ Yogman, M. W., Kindlon, D., & Earls, F. (1995). Father involvement and cognitive/behavioral outcomes of preterm infants. *Journal of the American Academy of Child & Adolescent Psychiatry, 34*(1), 58-66. <https://doi.org/10.1097/00004583-199501000-00015>
- ¹⁸ Guterman, N. B., Bellamy, J. L., & Banman, A. (2018). Promoting father involvement in early home visiting services for vulnerable families: Findings from a pilot study of "Dads matter". *Child Abuse & Neglect, 76*, 261-272. doi: 10.1016/j.chiabu.2017.10.017
- ¹⁹ Raikes, H., Boller, K., VanKammen, W., Summers, J., Raikes, A., Laible, D., . . . Christensen, L. (2005). Father involvement in Early Head Start programs. *Fathering, 3*(1), 29-58.
- ²⁰ Roggman, L. A., Boyce, L., Cook, G. A., Christiansen, K., & Jones, D. (2007). Playing with daddy: Social toy play, Early Head Start, and developmental outcomes. *Fathering, 2*(1), 83-108.
- ²¹ Ibid.
- ²² Wakabayashi et al., 2011.
- ²³ Guterman, N. B. (2012). *Promoting father involvement in home visiting services for vulnerable families: A pilot study*. Philadelphia, PA: Pew Charitable Trusts. Retrieved from https://www-aws.pewtrusts.org/~media/legacy/uploadedfiles/pcs_assets/2013/fatherinvolvementreportpdf.pdf

²⁴ Amato, P. R., & Gilbreth, J. G. (1999). Nonresident fathers and children's well-being: A meta-analysis. *Journal of Marriage and the Family*, 61(3), 557-573. Retrieved from https://www.jstor.org/stable/353560?seq=1#metadata_info_tab_contents

²⁵ Sandstrom et al., 2015.

²⁶ Child and Family Research Partnership. (2013). *Involving fathers in home visiting programs: Lessons from the dads*. Austin, TX: Author. Retrieved from <https://childandfamilyresearch.utexas.edu/involving-fathers-home-visiting-programs-lessons-dads>

²⁷ Sandstrom et al., 2015.

²⁸ Child and Family Research Partnership [CFRP], 2013.

²⁹ McAllister, C. L., Wilson, P. C., & Burton, J. (2004). From sports fans to nurturers: An Early Head Start program's evolution toward father involvement. *Fathering*, 2(1), 31-59.

³⁰ Sandstrom et al., 2015.

³¹ Ibid.

³² Child and Family Research Partnership. (2014). *Increasing father participation in home visiting: Lessons from mothers*. Austin, TX: Author. Retrieved from <https://childandfamilyresearch.utexas.edu/increasing-father-participation-home-visiting-lessons-mothers>

³³ Child and Family Research Partnership [CFRP], 2014.

³⁴ Sandstrom et al., 2015.

³⁵ Ibid.

³⁶ McAllister et al., 2004.

³⁷ Ibid.

³⁸ Korfmacher et al., 2008.

³⁹ Vecere, E. (2015). Improving father engagement in Texas home visiting programs. *Policy & Practice*, 26-27. Retrieved from <https://www.questia.com/read/1G1-458804006/improving-father-engagement-in-texas-home-visiting>

⁴⁰ Ibid.

⁴¹ National Fatherhood Initiative. (n.d.) The Father Friendly Check-Up™. Retrieved from <https://www.fatherhood.org/ffcu-overview>

⁴² Vecere, 2015.

⁴³ CFRP, 2014.

⁴⁴ Meiklejohn, D. (2011). Engaging fathers in the home visiting model. St. Louis, MO: Parents as Teachers. Retrieved from <https://static1.squarespace.com/static/56be46a6b6aa60dbb45e41a5/t/5845984d3e00be2980f2914c/1480955981381/EngagingFathers.pdf>

⁴⁵ Sandstrom et al., 2015.

⁴⁶ Wakabayashi et al., 2011.

⁴⁷ Meiklejohn, 2011.

⁴⁸ Wakabayashi et al., 2011.

⁴⁹ Sandstrom et al., 2015.

⁵⁰ Wakabayashi et al., 2011.

⁵¹ Roggman et al., 2007.

⁵² Self-Brown, S., Osborne, M. C., Lai, B. S., Brown, N. D. V., Glasheen, T. L., & Adams, M. C. (2017). Initial findings from a feasibility trial examining the SafeCare Dad to Kids Program with marginalized fathers. *Journal of Family Violence*, 32(8), 751-766. doi: 10.1007/s10896-017-9940-5

⁵³ Wakabayashi et al., 2011.

⁵⁴ Guterman, 2012.

⁵⁵ CFRP, 2013.

⁵⁶ McAllister et al., 2004.

⁵⁷ Self-Brown et al., 2017.

⁵⁸ Wakabayashi et al., 2011.

⁵⁹ Guterman, 2012.