



What the Evidence Says: Intimate Partner Violence and Home Visiting

PURPOSE

Home visiting services geared toward pregnant women and families with young children offer an opportunity to intervene and support mothers at risk for intimate partner violence (IPV). In theory, effective services might reduce the incidence of IPV and thereby reduce the likelihood that children witness family violence. Research has demonstrated that some home visiting models can improve child and maternal health outcomes in general,¹ but less is known about the effectiveness of home visiting in reducing IPV outcomes in particular. To address this research gap, the Home Visiting Evidence of Effectiveness (HomVEE) project² summarized the IPV findings from research on home visiting models HomVEE has classified as “evidence-based” according to U.S. Department of Health and Human Services (HHS) criteria.

Separately from the analysis in this brief, HomVEE conducts an annual, systematic review of research on prioritized models and determines which models are evidenced-based. That annual review is described in detail on the [HomVEE website](#). It uses criteria developed by HHS to rate models based on, among other things, the number of favorable, statistically significant impacts the model has on outcomes in several areas.

Among the evidence-based models that HomVEE has already identified, this brief focuses on “well-designed” effectiveness studies. Well-designed studies are those for which the designs suggest that some or all of the effects observed on IPV were due to the home visiting model rather than other factors.³ The team identified and examined key characteristics of these studies including: population served, duration of intervention, and timing of follow-up. This brief presents the findings, including recommendations for future research. A section at the end summarizes the process and methods for this brief.

WHY FOCUS ON INTIMATE PARTNER VIOLENCE AND HOME VISITING?

Nearly 1 in 3 women and 1 in 10 men in the United States have experienced physical violence, rape, stalking, and/or other forms of IPV.⁴ Children exposed to IPV can experience trauma and are more likely to engage in an ongoing cycle of violence. For instance, men who witnessed IPV and other violence as children are nearly four times more likely to engage in IPV as adults than those who did not. The prevalence of IPV is higher for women around the time of pregnancy than at any other time, and IPV is associated with miscarriage, substance use, smoking, depression, and post-traumatic stress disorder.⁵ Considering the greater risk that pregnant women and new mothers face, home visiting services provided during pregnancy and soon after a child’s birth may provide an important opportunity to deliver interventions intended to improve IPV outcomes.

IPV REVIEW RESULTS

The HomVEE study team identified 16 studies of evidence-based home visiting models that have examined outcomes related to IPV. These studies related to 4 different models: Early Start, Healthy Families America (HFA), Nurse-Family Partnership (NFP) and Healthy Steps. Fourteen of the 16 studies were well designed. Among the 14 well-designed studies, HomVEE's review found statistically significant favorable effects on outcomes in 3 studies, examining 2 evidence-based models (Table 1). The remaining studies found no effect on IPV. Taken together, the HomVEE team concluded that limited evidence exists that the reviewed home visiting models effectively reduce the occurrence of IPV.

Both the sample sizes and the impact estimates in the studies of evidence-based models were fairly large. Across the 3 studies that found evidence home visiting improved IPV outcomes, the sample sizes ranged from 424 to 640 mothers. The average effect size (a way of translating the magnitude of the difference between treatment and comparison groups) in the two studies that reported it was 0.30.⁶ This favorable effect is fairly large relative to typical effect sizes for home visiting models, which tend to be below 0.25.⁷ While an effect size was not available for the third study, the incidence rate ratio was 0.66, meaning the study found a 34 percent lower rate of IPV perpetration in the group receiving home visiting services than in the comparison group.

The four favorable impacts reported in the two evidence-based home visiting models reviewed for this brief were collected either immediately after services ended or while mothers were still receiving services. Specifically, researchers measured most outcomes at or before 24 months after birth – see Table 1. Additional high-quality research is needed to know whether evidence-based home visiting models have longer-term effects on IPV, including effects after home visits end.

BOX 1. CATEGORIZING HOME VISITING OUTCOMES: KEY TERMS

HomVEE first identifies whether an effect on an outcome is based on a well-designed study before assessing its significance and direction.

Statistical significance – Indicates whether the difference between measured and expected effects on outcomes is likely or unlikely due to chance. The degree of significance is evidenced by a p -value representing the proportional likelihood that the difference is due to chance. A p -value of less than 0.05 indicates strong evidence that the difference is not due to chance.

Favorable outcomes – A statistically significant ($p < 0.05$) effect on an outcome in a direction that benefits parents, children, or both. For this review, favorable outcomes most frequently indicate a reduced occurrence of IPV. The brief also refers to these as *improved IPV outcomes*.

Unfavorable outcomes – A statistically significant effect on an outcome in a direction that might cause harm to parents, children, or both.

No effect – An outcome without a statistically significant difference between the treatment and comparison groups.

For more information on how HomVEE assigns ratings to research, see the Methods section of this brief, and <https://homvee.acf.hhs.gov/review-process/Producing%20Study%20Ratings>.

Table 1. Models with statistically significant effects on IPV

| Home visiting model | Citation | Statistically significant impacts reported | Effect size | Timing of follow-up |
|--------------------------|---------------------------------|--|---------------|--|
| Healthy Families America | Bair-Merritt et al. 2010 | Favorable effects: <ul style="list-style-type: none"> Maternal perpetration^a of incidents as measured by a researcher-modified version of the CTS2 (3-year average) including physical assault, verbal abuse, sexual violence, and injury | Not available | Average across first 3 years of program implementation |
| | Duggan et al. 2004 ^b | Favorable effects: <ul style="list-style-type: none"> Partner incident resulting in injury as measured by a researcher-modified version of the CTS2 Partner physical abuse as measured by a researcher-modified version of the CTS2 | -0.26 | 24 months postpartum |
| | | | -0.18 | 24 months postpartum |
| Nurse-Family Partnership | Olds et al. 2004 ^b | Favorable effects: <ul style="list-style-type: none"> Maternal exposure to domestic violence as measured by items from the CTS | -0.46 | 48 months postpartum |

Note: HomVEE assigns ratings based on a comprehensive review of the model. This table displays models that (based on HomVEE standards) have at least one study rated as high or moderate quality and reported effects on IPV outcomes (well-designed studies that reported null effects are excluded). Details about this, and the effects of the other models, are reported on the HomVEE website: <https://homvee.acf.hhs.gov/>.

^a Maternal perpetration is the mother herself abusing a partner.

^b Duggan et al. examined the combined effect of HFA on IPV (and other outcomes) over a three-year period. The study also provided data on results for each year. Based on that data, HomVEE calculated the effect size and significance reported in this table.

The Conflict Tactics Scale (CTS; Straus 2007) was the only test used to measure IPV in well-designed studies of evidence-based home visiting models included in this review. Researchers used two versions of this measure —CTS and the revised CTS (CTS2)—across those studies (see Box 2).

BOX 2. CONFLICT TACTICS SCALE⁸

The **Conflict Tactics Scale (CTS)** and **Revised Conflict Tactics Scale (CTS2)** measure prevalence of psychological abuse and physical violence.

- The original CTS, developed in 1979, consists of 19 items and 3 subscales:^a
 - Violence
 - Verbal aggression
 - Reasoning
- The Revised Conflict Tactics Scale (CTS2), developed in 1996, includes 39 items and 5 subscales:
 - Negotiation (includes resolving arguments with communication)
 - Physical assault (subscale name changed from violence in original CTS)
 - Psychological aggression (includes nonverbal aggressive acts)
 - Sexual coercion (includes insistence or unwanted sexual activity)
 - Injury (includes causing pain, wounding, or a need for medical attention)

In both the CTS and CTS2 both partners are separately asked each item on each subscale. The CTS and CTS2 are scored by summing the response categories used to estimate the frequency of abuse of a partner. Higher scores indicate a higher prevalence of IPV.

^a Additional variations of the original CTS are not described in this box

METHODS: HOMVEE'S PROCESS FOR SYSTEMATICALLY REVIEWING IPV STUDIES

HomVEE special topic reviews consist of the same core steps as the HomVEE annual review: study search and screening, study reviews, and synthesis of evidence. The special topic reviews focus solely on research from evidence-based home visiting models.

STUDY SEARCH AND SCREENING

The review team identified studies for the special topic review on IPV by conducting keyword searches of electronic databases and issuing a public call for studies to solicit new and unpublished research.⁹The search focused on studies of evidence-based models published in 2001 through summer 2018 that examined IPV outcomes and might have examined additional outcomes. The search results overlapped with results from HomVEE's annual literature search, and included some additional results due to targeted search terms about IPV. More information on the HomVEE literature search and screening process is available at: <https://homvee.acf.hhs.gov/review-process/Overview>.

The review team screened each study identified through its search for the following set of pre-specified eligibility criteria that mirror those it uses for the annual review:

- Home visiting was the primary service delivery strategy. That is, home visiting services were offered to most or all participants and were essential to the model. The review excluded models that were primarily center based, with infrequent or supplemental home visiting.
- The study used one of the following designs: randomized controlled trial, comparison group, single case, or regression discontinuity.
- The study focused on the effectiveness of home visiting models geared toward pregnant women, expectant fathers, and families with children ages birth to kindergarten entry.
- The study was published in English.
- For this special topic review, the review team used additional screening criteria:
 - The study focused on a model that meets HHS criteria for evidence-based home visiting models: <https://homvee.acf.hhs.gov/review-process/HHS%20Criteria%20for%20Evidence-Based%20Models>
 - The model examines the effect of a home visiting intervention on IPV or other outcomes, for study participants who were exposed to IPV (such as physical violence, rape, or stalking carried out by a current or former spouse, boyfriend, or girlfriend of the parent who received the home visiting model).
 - The study was published in 2001 or later.

The review described here included only studies that met all of these criteria. In total, the review team identified 298 studies for review through its search. Sixteen met the screening criteria. These 16 studies evaluated a combined total of 4 models.

STUDY REVIEWS

Reviewers rated validity of studies, according to established standards for HomVEE effectiveness studies, as listed on the HomVEE website.¹⁰ Effectiveness studies, including randomized controlled trials, and studies with a single case design or regression discontinuity design, could earn a high rating if the study design met HomVEE criteria. Otherwise, the highest possible rating for eligible studies, including studies using comparison group designs, was moderate.

Reviewers rated the validity of IPV-related outcomes within a study according to established standards, and, in a study with multiple IPV-related outcomes, assigned the study the highest rating of any outcome in the study. For this brief, HomVEE focused on well-designed studies: those with at least one high- or moderate-rated IPV outcome.

Effectiveness studies that had no IPV outcomes eligible for either of these ratings were classified as low, and their findings did not contribute to the conclusions of this brief. The majority of studies (12 of the 13) rated either high or moderate. Only 3 of those studies found that the home visiting model they tested actually improved IPV outcomes, as described in this brief.

SYNTHESIS OF EVIDENCE

The review team summarized the findings of evidence-based models that reduced IPV. Key characteristics the team identified and compared across all studies included population served (timing of enrollment relative to the child's birth, demographics), duration of intervention (length and frequency of visits), and timing of follow-up (timing of data collection by outcome). HomVEE focuses on statistical significance and reports or calculates effect size for well-designed studies. For the three well-designed studies of evidence-based models that had statistically significant IPV impacts, the team also examined the type of IPV outcomes, IPV subgroups, and, when available, effect size.

REFERENCES

References for evaluations of evidence-based home visiting models included in this brief, by model. (***Studies in bold contain high- or moderate-rated impacts.***)

Early Start

Fergusson, D.M., Boden, J.M., & Horwood, L.J. (2013). Nine-year follow-up of a home-visitation program: A randomized trial. *Pediatrics*, 131(2), 297-303.

Fergusson, D.M., Horwood, L.J., Grant, H., & Ridder, E.M. (2005). Early start evaluation report. Christchurch, NZ: Early Start Project Ltd.

Healthy Families America

Bair-Merritt, M.H., Jennings, J.M., Chen, R., Burrell, L., McFarlane, E., Fuddy, L., et al. (2010) Reducing maternal intimate partner violence after the birth of a child: A randomized controlled trial of the Hawaii Healthy Start home visitation program. *Journal of the American Medical Association*, 164(1), 16-23.

Caldera, D., Burrell, L., Rodriguez, K., Crowne, S.S., Rohde, C., & Duggan, A. (2007). Impact of a statewide home visiting program on parenting and on child health and development. *Child Abuse & Neglect*, 31(8), 829-852. Note: This study used a moderator analysis to examine IPV. HomVEE does not have standards for rating moderator analyses, so the finding we describe in this brief is not included in HomVEE's review of the study on our website but is included here as it is relevant to the IPV review.

Duggan, A., Fuddy, L., Burrell, L., Higman, S.M., McFarlane, E., Windham, A., & Sia, C. (2004). Randomized trial of a statewide home visiting program to prevent child abuse: Impact in reducing parental risk factors. *Child Abuse & Neglect*, 28(6), 623-643.

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Jacobs, F., Easterbrooks, M.A., Goldberg, J., Mistry, J., Bumgarner, E., Raskin, M., Fosse, N., & Fauth, R. (2015). Improving adolescent parenting: Results from a randomized controlled trial of a home visiting program for young families. *American Journal of Public Health, 106*(2), p. 342-349.

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McFarlane, E., Burrell, L., Crowne, S., Cluxton-Keller, F., Fuddy, L., Leaf, P., & Duggan, A. (2013). Maternal relationship security as a moderator of home visiting impacts on maternal psychosocial functioning. *Prevention Science, 14*(1), 25-39.

Healthy Steps

Johnston, B.D., Huebner, C.E., Anderson, M.L., Tyll, L.T., & Thompson, R.S. (2006). Healthy Steps in an integrated delivery system: Child and parent outcomes at 30 months. *Archives of Pediatrics & Adolescent Medicine, 160*(8), 793–800. *Note: This study examines the Healthy Steps model as implemented from 1996 and 2001 which followed a national evaluation protocol. Following 2001, HHS determined that home visiting was no longer the primary service delivery strategy for Healthy Steps and, thus, later studies on the Healthy Steps model were no longer eligible for review.*

Nurse Family Partnership (NFP)

Nagle, G.A. (2002). Maternal participation, depression and partner violence in a state run child abuse prevention program: Louisiana Nurse Home Visitation, 1999-2002. (Doctoral dissertation, Tulane University, New Orleans, LA); 0235, Advisor: Chair Janet Rice. *Dissertation Abstracts International, 63* (10B), 210-4590. (UMI No.AAI3069249)

Olds, D.L., Kitzman, H., Hanks, C., Cole, R., Anson, E., Sidora-Arcoleo, K., Luckey, D.W., Henderson, C.R., Holmberg, J., Tutt, R.A., Stevenson, A.J., & Bondy, J. (2007). Effects of nurse home visiting on maternal and child functioning: Age-9 follow-up of a randomized trial. *Pediatrics, 120*(4), e832–e845.

Olds, D.L., Kitzman, H.J., Cole, R.E., Hanks, C.A., Arcoleo, K.J., Anson, E.A., Luckey, D.W., Knudtson, M.D., Henderson, C.R., Bondy, J., & Stevenson, A.J. (2010). Enduring effects of prenatal and infancy home visiting by nurses on maternal life course and government spending: Follow-up of a randomized trial among children at age 12 years. *Archives of Pediatrics & Adolescent Medicine, 164*(5), 419-424.

Olds, D.L., Kitzman, H., Cole, R., Robinson, J., Sidora, K., Luckey, D.W., Henderson, C.R., Hanks, C., Bondy, J., & Holmberg, J. (2004a). Effects of nurse home-visiting on maternal life course and child development: Age 6 follow-up results of a randomized trial. *Pediatrics, 114*(6), 1550–1559.

Olds, D.L., Robinson, J., Pettitt, L., Luckey, D.W., Holmberg, J., Ng, R.K., Isacks, K., Sheff, K., & Henderson, C.R. (2004b). Effects of home visits by paraprofessionals and by nurses: Age 4 follow-up results of a randomized trial. *Pediatrics, 114*(6), 1560–1568.

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Hellmuth, J.C., Gordon, K.C., Stuart, G.L., & Moore, T.M. (2013) Risk factors for intimate partner violence during pregnancy and postpartum. *Archives of Women's Mental Health, 16*: 19–27.

Lambert, D., Donahue, A., Mitchell, M., & Strauss, R. (2001). *Mental health outreach: Promising practices in rural areas*. Waite Park, MN: National Association for Rural Mental Health.

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Van Parys, A.-S., Verhamme, A., Temmerman, M., & Verstraelen, H. (2014). Intimate Partner Violence and Pregnancy: A Systematic Review of Interventions. *PLoS ONE*, 9(1), e85084.

What Works Clearinghouse. "Glossary of Terms." Available at <https://ies.ed.gov/ncee/wwc/Glossary>. Accessed on October 26, 2017.

ENDNOTES

- 1 Sama-Miller et al. 2019.
- 2 <https://homvee.acf.hhs.gov/>
- 3 See methods section near the end of this document for more information on how HomVEE systematically rates study design.
- 4 See the statistics in the first several sentences of this paragraph, and other IPV facts, in the Family and Youth Services Bureau's Family Violence Prevention and Services Program Overview: https://www.acf.hhs.gov/sites/default/files/fysb/fvpsa_overview_20170216.pdf, accessed May 2, 2017.
- 5 Van Parys et al. 2014; Hellmuth et al. 2013.
- 6 Effect sizes are results reported in equivalent units (in this case, the standard deviation) and therefore they can be compared across outcomes and studies (What Works Clearinghouse 2017). Effect sizes are helpful in understanding the magnitude of an effect. There is no single standard for what constitutes a "large" effect size. One approach is to apply general standards, such as Cohen's (1988) widely cited guideline that a large effect size is 0.8 or greater. Another approach, which may be more informative, is to consider magnitude in relation to findings from similar studies. In a HomVEE review, effect sizes vary by domain but are typically well below 0.25, including family violence-related outcomes (Deke et al. 2015).
- 7 Deke et al. 2015.
- 8 Information on the CTS and CTS2 was all drawn from Straus et al. 1996.
- 9 When searching, HomVEE examined 19 databases of publications, as well as specific searches of 19 additional journals that might be topically relevant but that were not included in the searched databases.
- 10 See <https://homvee.acf.hhs.gov/review-process/Producing%20Study%20Ratings>.

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