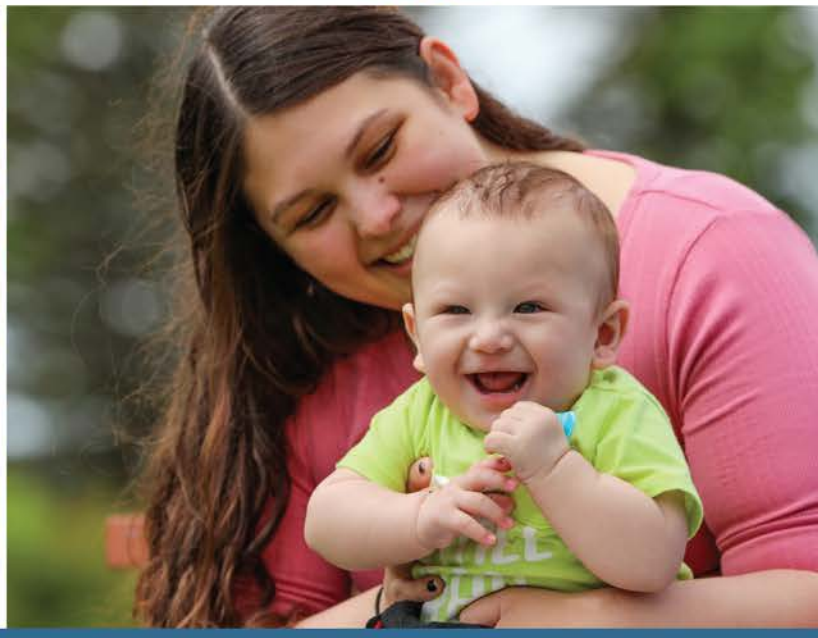

Assessing Effectiveness of Early Childhood Home Visiting Models Implemented with Tribal Populations

October 2022

Home Visiting Evidence of Effectiveness (HomVEE) Review

Rachel Bleiweiss-Sande, Emily Sama-Miller, Carla Chavez, Rebecca Coughlin, and Andrea Mraz Esposito

OPRE Report #2022-268

OPRE

HomVEE

This page has been left blank for double-sided copying.

Submitted to:
Shirley Adelstein, Project Officer
Jesse Coe, Project Specialist
Office of Planning, Research and Evaluation
Administration for Children and Families
U.S. Department of Health and Human Services

Contract Number:
HHSP233201500035I/75N98021F00368

Submitted by:
Emily Sama-Miller, Project Director
Mathematica
1100 1st Street NE, 12th Floor
Washington, DC, 20002
Telephone: (202) 484-4512
Fax: (202) 863-1763

This report and other reports sponsored by the Office of Planning, Research and Evaluation are available at https://www.acf.hhs.gov/opre.

Original report published February 2011 and updated August 2011, November 2012, September 2013, September 2014, August 2017, and December 2020.

Connect with OPRE

This page has been left blank for double-sided copying.

This volume and the main report companion volume are available at https://homvee.acf.hhs.gov/tribal.

Contents

Tables

This page has been left blank for double-sided copying.

Appendix A:

HomVEE Review Process for Research with Tribal Populations

This page has been left blank for double sided copying.

For its review of research with tribal populations, HomVEE includes research about early childhood home visiting models in which the study population includes 30 percent or more tribal participants. The main review activities are the same as those HomVEE uses for its annual review in the general population.[1] For HomVEE's review of research in tribal communities, the review team searches and screens the literature is each year. In years when the volume of unreviewed research is large enough, and project resources are available, the review team rates manuscripts identified since the last review of research in tribal communities, and then assesses the evidence and reports findings in an updated set of products about research with tribal populations. To conduct a thorough and transparent review of the tribal early childhood home visiting research literature, HomVEE performed seven main activities, described in more detail below:

1. Conducted a broad literature search.
2. Screened manuscripts for relevance.
3. Rated the quality of manuscripts about impact studies.
4. Assessed the evidence of effectiveness for each model.
5. Reviewed implementation information for each model, including those without impact studies.
6. Addressed potential conflicts of interest.
7. Updated HomVEE's report assessing the research on early childhood home visiting models with tribal populations with new impact study review findings and implementation information.

1. Literature search

HomVEE conducted a broad search for literature on early childhood home visiting models implemented in tribal communities or research with samples that included a sizeable share (30 percent or more) of tribal participants. To increase the chance of identifying research that would be relevant to tribal communities, HomVEE included literature on early childhood home visiting models conducted in indigenous communities outside the United States. The populations that were the focus of the models included pregnant women or families with children from birth to kindergarten entry. HomVEE limited the search to research on models that used early childhood home visiting as the primary service delivery strategy and offered home visits to most or all participants. The review team excluded models that provided services primarily in centers and used only supplemental home visits. The review team also limited the search to research on early childhood home visiting models that aimed to improve outcomes in at least one of eight domains specified in the MIECHV-authorizing statute: (1) Child development and school readiness; (2) Child health; (3) Family economic self-sufficiency; (4) Linkages and referrals; (5) Maternal health; (6) Positive parenting

[1] More information about HomVEE's annual review process for the general population is available at https://homvee.acf.hhs.gov/publications/methods-standards.

practices; (7) Reductions in child maltreatment; and (8) Reductions in juvenile delinquency; family violence, and crime.

HomVEE's literature search included two main activities:

- Database searches. HomVEE searched on relevant keywords in a range of research databases. Keywords included terms related to the service delivery approach, population served, and outcome domains of interest. In addition to the key terms eligible for the general HomVEE literature search, this search included keywords aimed at identifying research conducted in tribal communities or with tribal families and children, including tribe, tribal, Indian, Native American, Alaska Native, Native Hawaiian, Aboriginal, indigenous, and First Nation(s). The original keyword search was limited to manuscripts published since 1989 and HomVEE updated this search annually through 2021. For the current report, HomVEE retained older manuscripts, but limited keyword searches to research published since 2001.
- Call for research. HomVEE issued a tribal-specific call for research in 2010 and issues an annual call for research for research on early childhood home visiting models. In screening these submissions, HomVEE looks for models implemented in tribal communities or evaluated with tribal families.

At the time of this report, HomVEE's review of research with tribal populations identified 1,038 unduplicated manuscripts to consider for screening.

2. Screening manuscripts

HomVEE used a two-step screening process. In Step 1, the review team screened all manuscripts identified through the literature search, and screened out all citations that were not manuscripts or were not relevant (Table A.1). In Step 2, HomVEE examined the remaining citations for relevance and screened out studies for the reasons listed in Table A.1; HomVEE screened out some manuscripts for multiple reasons.

Table A.1. Results of the tribal literature search and screening process (manuscripts published from 1989 through September 2021)

Screening disposition	Total number of manuscripts in this report
Total number of unduplicated manuscripts identified through the literature search	1,038
Screening Step 1	
Screened in	261
Screened out	777
Non-studies	80
Off-topic studies[a]	697
Screening Step 2	
Screened in	98
Screened out [b]	163
The manuscript examines a study that did not use an eligible design.	26
The manuscript did not examine an early childhood home visiting model.	15
The program did not serve an eligible population (pregnant women and families with children from birth to kindergarten entry, from a tribal population).	51
Home visiting was not the primary service delivery strategy.	56
The manuscript did not examine any findings in HomVEE's eight eligible outcome domains.	6
The manuscript was not published in English.	2
The manuscript was published outside the 20-year search window.	3
The manuscript did not present findings from primary research.	27

Source: HomVEE tribal literature search conducted in October 2021 to identify manuscripts released through the end of September 2021 and the HomVEE call for research that closed in early January 2022.

[a] Off-topic manuscripts include manuscripts about medical studies unrelated to early childhood home visiting as well as other unrelated content (for example, education topics or elder care with a home visitation component).

[b] Some manuscripts were screened out for multiple reasons.

This review added 7 more manuscripts about impact studies: 6 NEDs and 1 RCT. It also added 2 manuscripts about implementation studies. In this update, we also reflected any changes that emerged when HomVEE retroactively applied its Version 2 standards to selected manuscripts as part of the annual review. We also removed manuscripts that no longer meet the screening criteria for the tribal review, including those that use a descriptive research design and those that examine a study population that is between 10 and 30 percent tribal. Thus, the current report is based on reviews of manuscripts about 48 impact studies and the appendix also includes information from 29 implementation studies, for a total of 77 manuscripts about 32 early childhood home visiting models eligible for review in this report.

3. Rating the quality of impact studies

The HomVEE review rated manuscripts about impact studies on their ability to produce unbiased estimates of a model's effect on its participants. Assessing whether a model is effective requires a study design that can establish that findings are caused by the model or, in other words, that the study has *internal validity.* To link a model and findings, a study tries to establish two conditions: (1) the intervention condition, or being offered services of the early childhood home visiting model, and (2) the counterfactual condition, or what would have happened had the same individuals not been offered the services of the early childhood home visiting model. The ideal—and impossible—method for determining the counterfactual is to observe the same participants simultaneously participating in the intervention and counterfactual conditions. This is not possible, so studies use a counterfactual comparison group to represent what would have happened to the intervention group in the absence of the early childhood home visiting model. A study has the potential for strong internal validity if the initial characteristics of the comparison group are very similar to those of the intervention group. If the groups are not similar initially, one cannot be certain whether differences in findings that emerge between the groups are due to the effect of the early childhood home visiting model or to initial differences between the two groups.

HomVEE's rating system helps distinguish between manuscripts about studies in which we have higher confidence that the observed findings were caused by the early childhood home visiting model and manuscripts in which the observed findings may be the result of differences between the intervention and comparison conditions. Only study designs where the selection process for these conditions is completely controlled by the researcher—including RCTs, single-case designs, and regression discontinuity designs—can receive the highest rating. HomVEE's review of tribal research includes manuscripts about impact studies that use three designs: RCTs, single-case designs, and NEDs.[2]

- RCTs assign participants to the intervention or comparison groups by chance and have the potential for strong internal validity. The primary advantage of randomly assigning participants is that the randomization process balances the groups, on average, for characteristics that are known, such as race and ethnicity and education, and characteristics that may be unknown, such as patience or motivation. When groups are similar on known and unknown characteristics before entering the intervention, any post-intervention differences between the groups that are too large to be due to chance are likely attributable to the early childhood home visiting model. However, certain factors—such as the number of participants who drop out of the study—can compromise the balance between the groups and weaken researchers' ability to draw causal conclusions.

[2] To date, none of the manuscripts that were eligible for HomVEE's review of research with tribal populations examined studies that used a regression discontinuity design. Details of HomVEE's standards for those designs and for all other impact study designs discussed here are available on the HomVEE website: https://homvee.acf.hhs.gov/publications/methods-standards.

In the HomVEE review, manuscripts about an RCT can receive a high, moderate, or low rating depending on the presence of these factors.

- NEDs use a nonrandom process to assign participants to intervention or comparison groups. The nonrandom process of selecting groups can result in groups that are not balanced on known and/or unknown characteristics. The HomVEE review standards require that NEDs establish baseline equivalence between the two groups on key measures. However, the weakness of a NED is that it can never rule out differences in unmeasured characteristics. Therefore, the conclusions from an NED that meets HomVEE's published standards for well-designed research are suggestive of an intervention's effectiveness but cannot definitively determine causality. In the HomVEE review, a NED can receive a moderate or low rating.
- Single-case designs often involve repeated, systematic measurement of an outcome before, during, and after the active manipulation of an independent variable (for example, toggling exposure to early childhood home visiting model on and off). These designs can provide a strong basis for understanding whether an early childhood home visiting model caused the observed findings. In this design an individual "case," such as a person or family, receives services from the early childhood home visiting model, and that case serves as its own comparison. The outcome must be measured repeatedly within and across different conditions or levels of the independent variable (early childhood home visiting). This differs from the pre-post design, which simply examines data once before and once after participation in a program.

Trained reviewers assessed the research design and methodology of each study examined in the manuscript using a standard protocol. Reviewers assigned each manuscript a rating of high, moderate, or low to indicate the capacity of its study's design to provide unbiased estimates of model impacts. In brief:

- The high rating is reserved for manuscripts examining random assignment studies with low attrition of sample members and no later reassignment or compromised randomization, as well as for single-case and regression discontinuity designs that meet the standards of the What Works Clearinghouse.[3]
- The moderate rating applies to manuscripts examining any of the following:
  - Random assignment studies that, because of flaws in their design, execution, or analysis (for example, high sample attrition), do not meet all the criteria for the *high* rating
  - NEDs that establish baseline equivalence on key measures defined in HomVEE's standards

[3] The What Works Clearinghouse, established by the Institute for Education Sciences in the U.S. Department of Education, reviews education research. The version of its standards used for this update of the HomVEE review of research with tribal populations is available at https://ies.ed.gov/ncee/wwc/Docs/referenceresources/wwc_procedures_v2_1_standards_handbook.pdf.

  - Single-case and regression discontinuity designs that meet What Works Clearinghouse design standards with reservations

- The low rating is given to manuscripts examining studies that do not meet all the criteria for either the high or the moderate rating.

HomVEE considers studies with manuscripts that rate moderate or high to meet the review's published standards for well-designed research. Additional information about the review criteria is available on the HomVEE website (https://homvee.acf.hhs.gov/publications/methods-standards).

4. Assessing evidence of effectiveness

After completing all impact reviews for research evaluated with a tribal population, HomVEE identified manuscripts about each model that reported about a study meeting HomVEE's published standards for well-designed research and reported findings in at least one of the eligible domains and evaluated the evidence to determine if the model met the criteria for "an evidence-based early childhood home visiting service delivery model" in tribal populations.

To meet the HHS criteria for an "evidence-based early childhood home visiting service delivery model," models must meet at least one of the following criteria:

- At least one high- or moderate-rated impact study of the model finds favorable (statistically significant) impacts in two or more of the eight outcome domains.
- At least two high- or moderate-rated impact studies of the model (using non-overlapping analytic study samples) find one or more favorable (statistically significant) impacts in the same domain.

In both cases, the impacts considered must either (1) be found for the full sample for the study or (2) if found for subgroups but not for the full sample for the study, be replicated in the same domain in two or more studies using non-overlapping analytic study samples. Additionally, following the MIECHV-authorizing statute, if the model meets the above criteria based on findings from RCTs only, then two additional requirements apply. First, one or more favorable (statistically significant) impacts must be sustained for at least one year after program enrollment. Second, one or more favorable (statistically significant) impacts must be reported in a peer-reviewed journal.[4]

Box A.1. Definition of an "evidence-based early childhood home visiting service delivery model" in tribal populations

A model that meets the HHS criteria for an "evidence-based early childhood home visiting service delivery model" with tribal populations does so based on research from either (1) a sample composed entirely of tribal participants or (2) at least two distinct subgroups composed entirely of tribal participants.

[4] Section 511(d)(3)(A)(i)(I).

To meet the HHS criteria for an "evidence-based early childhood home visiting service delivery model" in tribal populations, a model must meet the above criteria based on research from either (1) a sample composed entirely of tribal participants or (2) at least two distinct subgroups composed entirely of tribal participants (see Box A.1).

5. Implementation reviews

To provide descriptive information about the early childhood home visiting models of potential relevance to tribal communities, HomVEE aimed to collect information that described model requirements from manuscripts about impact studies that meet HomVEE's published standards for well-designed research or manuscripts about implementation studies. This included information about prerequisites for implementation and program frequency and duration.

6. Addressing conflicts of interest

All members participating in the HomVEE search, screening, and review signed a conflict-of-interest statement in which they declared any financial or personal connections to developers, studies, or products being reviewed, and confirmed their understanding of the process by which they must inform the project director if such conflicts arise. The project leadership team assembled signed conflict-of-interest forms for all project staff and subcontractors and monitored for possible conflicts over time.

7. Updating the review

HomVEE released its first report assessing the research on early childhood home visiting models with tribal populations in February 2011. HomVEE updated the report each year through 2014, and again in 2017 and in 2020. This publication is the seventh update, or eighth version, of the report.

Based on the tribal search and screening process, HHS identifies whether sufficient new research with tribal populations exists and whether project resources can support an update to the review. At the time of the update, HomVEE reviews each manuscript and assesses the evidence of effectiveness for each model with new research (steps 3 through 6 above). HomVEE adds findings from newly identified manuscripts to the previous body of research, and the updated report represents the cumulative findings from HomVEE's review of all manuscripts identified to date.

Re-reviewing manuscripts requires meaningful effort. Therefore, the review team generally examines manuscripts about impact studies that HomVEE reviews solely for the tribal review under the standards in place at the time of that tribal review update. In the annual review, HomVEE is not re-reviewing manuscripts about impact studies that were reviewed under Version 1 standards if a model is already evidence based; for models that are not evidence based, the team re-reviews those manuscripts under Version 2 standards when the model is next prioritized for review in HomVEE's annual review. (This means that many manuscripts reviewed under Version 1 standards for earlier versions of this report have retained their

original rating because they have not been re-reviewed). There are two exceptions where HomVEE applied Version 2 standards to already reviewed manuscripts:

- The annual review already updated the rating of a manuscript reviewed under Version 1
- A model already in the tribal report but not yet evidence based for tribal populations has new impact studies with a tribal population

In this version of the report, HomVEE retained the original Version 1 review for 37 manuscripts with impact research and reviewed 9 new manuscripts with impact research for the first time under Version 2 standards. HomVEE re-reviewed 2 manuscripts previously reviewed under Version 1 using Version 2 standards.

Appendix B:

Overview of Early Childhood Home Visiting Models Identified in HomVEE's Review of Research with Tribal Populations

This page has been left blank for double sided copying.

I. Introduction

This appendix discusses each of the early childhood home visiting models eligible for HomVEE's review of research with tribal populations and the associated manuscripts. This appendix is organized by model. Two sets of models are related: (1) Nurse-Family Partnership and a version, the Australian Nurse-Family Partnership Program and (2) Parents as Teachers/PAT and two versions, Bureau of Indian Affairs' Baby Family and Child Education Program (Baby FACE program) and Parents as First Teachers (New Zealand). Related versions of models are grouped together. Therefore, the appendix summarizes 32 models organized into 29 groups. This includes the 21 models with impact studies, and 11 additional models that had implementation research conducted with a tribal population (but no manuscripts about impact studies).

In this appendix, for each model explored in the report, we include the following information:

Evidence of effectiveness. A statement about whether the model is evidence based for tribal populations and, if not, the reasons why. A model that meets the HHS criteria for an "evidence-based early childhood home visiting service delivery model" with tribal populations does so based on research from either (1) a sample composed entirely of tribal participants or (2) at least two distinct subgroups composed entirely of tribal participants. For more information, see Appendix A of this report.

Extent of evidence. The number of manuscripts examining impact studies that were eligible for review (if any) and the ratings they received.[5]

Summary of findings. A summary statement of the number of favorable and unfavorable findings and their domain. If there are any manuscripts that received at least a moderate rating, the summary statement is followed by a list of the HomVEE domains and the number of findings reviewed in each domain.[6]

Description. Descriptive information about the model based on HomVEE's review of implementation information across all manuscripts on that model that were eligible for HomVEE's review of research in tribal communities (including those about implementation studies and impact studies). This information is based on information available from the manuscripts; when manuscripts did not include the information, it is not reported in the HomVEE review.

[5] HomVEE assigns each manuscript it reviews about an impact study a rating of high, moderate, or low. These ratings reflect the extent to which the study's design could provide unbiased estimates of the intervention's impacts. For additional information see Appendix A.
[6] For more information about HomVEE domains, see https://homvee.acf.hhs.gov/outcomes.

Details of manuscripts eligible for HomVEE's review of research in tribal communities.

Information about each manuscript eligible for HomVEE's review for each model, including the citation, study design, and manuscript rating. For manuscripts that contained at least one finding that received a high or moderate rating, these details also describe domains measured and where to learn more.

1. Aboriginal Cradle to Kinder

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because no manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations.
Extent of evidence:
No manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of Aboriginal Cradle to Kinder identified no such manuscripts.

Table B.1. Aboriginal Cradle to Kinder: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
O'Donnell, R., Bamblett, M., Johnson, G., Hunter, S. A., Stringer, K., Croisdale, S., Pizzirani, B., Ayton, D., Savaglio, M., & Skouteris, H. (2020). Evaluation of the Cradle to Kinder programme for Aboriginal mothers and their children: Perspectives from the women and their workers. *Children Australia*, *45*(4), 305–311.	Implementation	n.a.	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received low ratings, nor for implementation research.

n.a. = not applicable.

2. Aboriginal peer-led home visiting programme

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because no manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations.
Extent of evidence:
No manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of the Aboriginal Peer-Led Home Visiting Programme identified no such manuscripts.

Table B.2. Aboriginal peer-led home visiting programme: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
Munns, A., Toye, C., Hegney, D., Kickett, M., Marriott, R., & Walker, R. (2016). The emerging role of the urban-based Aboriginal peer support worker: A Western Australian study. *Collegian*, *23*(4), 355–361.	Implementation	n.a.	n.a.
Munns, A., Toye, C., Hegney, D., Kickett, M., Marriott, R., & Walker, R. (2017). Peer-led Aboriginal parent support: Program development for vulnerable populations with participatory action research. *Contemporary Nurse*, *53*(5), 558–575.	Implementation	n.a.	n.a.
Munns, A., Toye, C., Hegney, D., Kickett, M., Marriott, R., & Walker, R. (2018). Aboriginal parent support: A partnership approach. *Journal of Clinical Nursing*, *27*(3–4), e437–e450.	Implementation	n.a.	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received low ratings, nor for implementation research.

n.a. = not applicable.

3. Baby Basket program

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because there were no manuscripts about impact studies that received a high or moderate rating.
Extent of evidence:
One manuscript about an impact study was eligible for HomVEE's review of research with tribal populations; it received a low rating.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of the Baby Basket program identified no such manuscripts.

Table B.3. Baby Basket program: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
McCalman, J., Searles, A., Edmunds, K., Jongens, C., Wargent, R., Bainbridge, R., . . . Doran, C. (2014). Evaluating the Baby Basket program in North Queensland: As delivered by Apunipima Cape York Health Council, 2009 to 2013, qualitative and quantitative evaluation. Victoria, Australia: Lowitja Institute.	NED	Low (Version 1 standards)	n.a.
McCalman, J., Searles, A., Bainbridge, R., Ham, R., Mein, J., Neville, J., Campbell, S., & Tsey, K. (2015). Empowering families by engaging and relating Murri way: A grounded theory study of the implementation of the Cape York Baby Basket program. *BMC Pregnancy & Childbirth*, *15*(1), 1.	Implementation	n.a.	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received low ratings, nor for implementation research.

n.a. = not applicable.

4. Baby One Program

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because no manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations.
Extent of evidence:
No manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of the Baby One Program identified no such manuscripts.

Table B.4. Baby One Program: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
Campbell, S., McCalman, J., Redman-MacLaren, M., Canuto, K., Vine, K., Sewter, J., & McDonald, M. (2018). Implementing the Baby One Program: A qualitative evaluation of family-centered child health promotion in remote Australian Aboriginal communities. *BMC Pregnancy and Childbirth*, *18*(1), 73.	Implementation	n.a.	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received low ratings, nor for implementation research.

n.a. = not applicable.

5. Early Start (New Zealand)

The findings reported below are for a subgroup made up of Māori participants and have not been replicated in a distinct subgroup consisting entirely of tribal participants. The HomVEE website only includes findings from replicated subgroups, therefore these findings are not presented in the Early Start (New Zealand) report on the HomVEE website alongside the findings from the full sample described in the manuscript.

Evidence of effectiveness:

This model does not meet criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations but does meet the criteria for the general population. The model does not meet criteria for tribal populations because although effects were reported separately for a tribal subgroup, the findings have not been replicated in a non-overlapping sample.[7]

Extent of evidence:[8]

One manuscript about an impact study was eligible for HomVEE's review of research with tribal populations; it received a moderate rating.

Summary of findings:

Early Start (New Zealand) showed favorable effects for the Child Development and School Readiness, Positive Parenting Practices, and Reductions in Child Maltreatment domains. The following table summarizes findings examined across manuscripts that received high or moderate ratings.

Domain	Findings
Child Development and School Readiness	Favorable: 2 No effect: 2 Unfavorable or ambiguous: 0
Child Health	Favorable: 0 No effect: 3 Unfavorable or ambiguous: 0
Family Economic Self-Sufficiency	*Not measured*
Linkages and Referrals	*Not measured*
Maternal Health	*Not measured*
Positive Parenting Practices	Favorable: 2 No effect: 1 Unfavorable or ambiguous: 0
Reductions in Child Maltreatment	Favorable: 1 No effect: 1 Unfavorable or ambiguous: 0
Reductions in Juvenile Delinquency, Family Violence, and Crime	*Not measured*

Note: Summarizes subgroup findings for Māori participants.

[7] To meet HHS criteria for an "evidence-based early childhood home visiting service delivery model" for tribal populations, findings must be reported (1) in a sample composed entirely of tribal participants or (2) at least two distinct subgroups composed entirely of tribal participants.
[8] These counts include only those manuscripts with studies in which at least 30 percent of study participants were from tribal or indigenous communities.

Description	
Frequency and length of home visits	4 levels of service intensity; started with up to 3 hours per week; graduated to 1 hour of contact per 3 months
Duration of program	To age 5 years
Study participants	At-risk families with newborn children up to age 5
Location of services	Christchurch area of New Zealand
Type of implementing agency	Early Start Project Ltd., a charitable nongovernmental organization
Home visitor qualifications	Home visitors with educational backgrounds in nursing, social work, early childhood education, teaching, or related fields; home visitors were also required to have an awareness of cultural issues, experience with high-risk families, and evidence of good interpersonal skills and sound judgment.
Home visitor training and technical assistance	Home visitors underwent four weeks of initial training and received a minimum of 20 hours of in-service training per year; the Ministry of Development and Family and Community Services provided technical assistance.
Goals	Early Start is a voluntary early childhood home visiting program designed to improve child health; reduce child abuse; improve parenting skills; support parental physical and mental health; encourage family economic well-being; and encourage stable, positive partner relationships.
Components	Early Start provides services through home visiting. Families are offered several additional services based on need: infant and child safety awareness; linkages to supportive services in the community, including budget, health, and relationship services; advice and support concerning healthy lifestyle choices, including family and child nutrition; and household and time management services.
Content	All Early Start families receive services based on four established curricula: (1) Partnership in Parenting Education (PIPE) "Listen, Love, Play," which focuses on listening, trust, language, problem solving, feelings, and how babies learn; (2) Triple P Positive Parenting Program®, which focuses on positive parenting practices and means to address childhood behavior problems; (3) Getting Ready for School, focused on 4-year-olds; and (4) Incredible Years.
For more information	Please see HomVEE implementation profile for this model: https://homvee.acf.hhs.gov/effectiveness/Early%20Start%20(New%20Zealand)/In%20Brief

Table B.5. Early Start (New Zealand): Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
Fergusson, D. M., Horwood, L. J., Grant, H., & Ridder, E. M. (2005). *Early start evaluation report.* Christchurch, NZ: Early Start Project Ltd.	RCT	Moderate (Version 1 standards)	HomVEE website: https://homvee.acf.hhs.gov/study-detail?title=WWHV014620 The website reports findings for the full study. A summary of subgroup findings for the Māori participants is reported above.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts received low ratings, nor for implementation research.

RCT = randomized controlled trial.

6. Even Start

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because there were no manuscripts about impact studies eligible for HomVEE's review of research with tribal populations.
Extent of evidence:
No manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of Even Start identified no such manuscripts.

Table B.6. Even Start: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
Levin, M., Moss, M., Swartz, J., Khan, S., & Tarr, H. (1997). *National evaluation of the Even Start Family Literacy program: Report on Even Start projects for Indian tribes and tribal organizations.* Bethesda, MD: Abt Associates and Fu Associates.	Implementation	n.a.	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received low ratings, nor for implementation research.

n.a. = not applicable.

7. Families First (Canada)[9]

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because no manuscripts about impact studies received a high or moderate rating.
Extent of evidence:
One manuscript about an impact study was eligible for HomVEE's review of research with tribal populations; it received a low rating.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of Families First (Canada) identified no such manuscripts.

Table B.7. Families First (Canada): Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
Chartier, M. J., Brownell, M. D., Isaac, M. R., Chateau, D., Nickel, N. C., Katz, A., Sarkar, J., Hu, M., & Taylor, C. (2017). Is the Families First home visiting program effective in reducing child maltreatment and improving child development? *Child Maltreatment, 22*(2), 121–131.	NED	Low (Version 2 standards)	n.a.
Chartier, M. J., Nickel, N. C., Chateau, D., Enns, J. E., Isaac, M. R., Katz, A., Sarkar, J., Burland, E., Taylor, C., & Brownell, M. (2018). Families First home visiting programme reduces population-level child health and social inequities. *Journal of Epidemiology and Community Health, 72*(1), 47–53.	NED	Low (Version 2 standards)	n.a.
Chartier, M. J., Enns, J. E., Nickel, N. C., Campbell, R., Phillips-Beck, W., Sarkar, J., Lee, J. B., Burland, E., Chateau, D., Katz, A., Santos, R., & Brownell, M. (2020). The association of a paraprofessional home visiting intervention with lower child maltreatment rates in First Nation families in Canada: A population-based retrospective cohort study. *Children and Youth Services Review, 108,* 104675.	NED	Low (Version 2 standards)	n.a.

[9] The Families First program in Canada is based on the Healthy Families America model described elsewhere in this appendix, though at present not formally affiliated.

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
Enns, J. E., Chartier, M. J., Nickel, N., Chateau, D., Campbell, R., Phillips-Beck, W., Sarkar, J., Burland, E., Lee, J. B., Katz, A., Santos, R., & Brownell, M. (2019). Association between participation in the Families First home visiting programme and First Nations families' public health outcomes in Manitoba, Canada: A retrospective cohort study using linked administrative data. *BMJ Open, 9*(6), e030386.	NED	Low (Version 2 standards)	n.a.
Healthy Child Manitoba Office. (2010). *Families First program evaluation: Evaluating the effectiveness of the families first home visiting program in improving the well-being of at-risk families with preschool children*. Winnipeg, Manitoba: Healthy Child Manitoba.	NED	Low (Version 2 standards)	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received low ratings, nor for implementation research.

NED = non-experimental comparison group design; n.a. = not applicable.

8. Family Spirit

Evidence of effectiveness:
This model meets the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations and for the general population.
Extent of evidence:
Five manuscripts about impact studies were eligible for review; 2 received high ratings, 2 received moderate ratings, and 1 received a low rating.
Summary of findings:
Family Spirit showed favorable effects for the Child Development and School Readiness, Maternal Health, and Positive Parenting Practices domains. The following table summarizes findings examined across manuscripts that received high or moderate ratings.

Domain	Findings
Child Development and School Readiness	Favorable: 10 No effect: 30 Unfavorable or ambiguous: 0
Child Health	*Not measured*
Family Economic Self-Sufficiency	*Not measured*
Linkages and Referrals	*Not measured*
Maternal Health	Favorable: 5 No effect: 47 Unfavorable or ambiguous: 0
Positive Parenting Practices	Favorable: 7 No effect: 11 Unfavorable or ambiguous: 0
Reductions in Child Maltreatment	*Not measured*
Reductions in Juvenile Delinquency, Family Violence, and Crime	*Not measured*

Description	
Frequency and length of home visits	Manuscripts 1 and 2: 25 home visits over 9 months; 1.5-hour visits. Manuscripts 3, 4, and 5: weekly visits during pregnancy, biweekly visits for the first four months postpartum, monthly from 4 to 12 months postpartum, and bimonthly from 12 to 36 months postpartum.
Duration of program	Manuscripts 1 and 2: 28 weeks' gestation to 6 months postpartum. Manuscripts 3, 4 and 5: less than 32 weeks' gestation to age 3 years
Study participants	Pregnant American Indian adolescents ages 12 to 19 at conception and at 28 weeks or earlier gestation. One study examined by the manuscript enrolled women up to age 22. Two manuscripts enrolled participants at 32 weeks or earlier gestation.

Description	
Location of services	Manuscripts 1 and 2: Four American Indian health service catchment areas on the Navajo and White Mountain Apache reservations in New Mexico and Arizona; Manuscripts 3, 4, and 5: Four tribal communities across three reservations in Arizona.
Type of implementing agency	Not specified
Home visitor qualifications	Bilingual American Indian women who had a job history in tribal health and human services, passed a background screening, and had been teen mothers themselves or had a special interest in this population.
Home visitor training and technical assistance	The home visitors participated in more than 80 hours of training and were tested to ensure they had mastered lesson content and delivery strategies before delivering services. In two manuscripts, ongoing training occurred bimonthly throughout the study.
Goals	The Family Spirit program was developed to address newborn care and maternal life skills among young American Indian pregnant and parenting mothers living on reservations. The program's goals are to (1) increase mothers' parenting knowledge and involvement, infants' social and emotional behavior, and the quality of the home environment; and (2) reduce stress, depression, and substance use among mothers.
Components	Families participating in Family Spirit participate in home visits.
Content	The program was modeled on Healthy Families America (HFA), a national program founded on 12 research-based principles to ensure quality of home visiting interventions for at-risk families. The content of the home-visiting intervention was derived from extensive community input on what teen parents needed to learn and was based on the *American Academy of Pediatrics Guide to Baby Care: Caring for Your Baby and Young Child: Birth to Age 5*. Cultural adaptations—including style, graphics, delivery, and content—were achieved through a community-based participatory process.
For more information	Please see HomVEE implementation profile for this model: https://homvee.acf.hhs.gov/implementation/Family%20Spirit%C2%AE/Model%20Overview

Table B.8. Family Spirit: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
Barlow, A., Mullany, B., Neault, N., Billy, T., Hastings, R., Lorenzo, S., ... Walkup, J. T. (2014). A randomized controlled trial of a paraprofessional-delivered, home-visiting intervention: Three-year outcomes for American Indian teen mothers and their children. Manuscript under review.	RCT	Moderate (Version 1 standards)	HomVEE website: https://homvee.acf.hhs.gov/study-detail?title=WWHV040826

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
Barlow, A., Mullany, B., Neault, N., Compton, S., Carter, A., Hastings, R., Billy, T., CohoMescal, V., Lorenzo, S., & Walkup, J. T. (Jan 2013). Effect of a paraprofessional home-visiting intervention on American Indian teen mothers' and infants' behavioral risks: A randomized controlled trial. *The American Journal of Psychiatry*, 170(1), 83–93.	RCT	High (Version 1 standards)	HomVEE website: https://homvee.acf.hhs.gov/study-detail?title=WWHV029496
Barlow, A., Mullany, B., Neault, N., Goklish, N., Billy, T., Hastings, R., … Walkup, J. T. (2015). Paraprofessional-delivered home-visiting intervention for American Indian teen mothers and children: 3-Year outcomes from a randomized controlled trial. *American Journal of Psychiatry*, 172(2), 154–162.	RCT	High (Version 1 standards)	HomVEE website: https://homvee.acf.hhs.gov/study-detail?title=WWHV047724
Barlow, A., Varipatis-Baker, E., Speakman, K., Ginsburg, G., Friberg, I., Goklish, N., … M., Walkup, J. (2006). Home-visiting intervention to improve child care among American Indian adolescent mothers: A randomized trial. *Archives of Pediatrics & Adolescent Medicine*, 160(11), 1101–1107.	RCT	Low (Version 1 standards)	n.a.
Haroz, E. E., Ingalls, A., Wadlin, J., Kee, C., Begay, M., Neault, N., & Barlow, A. (2020). Utilizing broad-based partnerships to design a precision approach to implementing evidence-based home visiting. *Journal of community psychology*, *48*(4), 1100–1113.	Implementation	n.a.	n.a.
Walkup, J. T., Barlow, A., Mullany, B. C., Pan, W., Goklish, N., Hasting, R., C… Reid, R. (2009). Randomized controlled trial of a paraprofessional-delivered in-home intervention for young reservation-based American Indian mothers. *Journal of the American Academy of Child & Adolescent Psychiatry*, 48(6), 591–601.	RCT	Moderate (Version 1 standards)	HomVEE website: https://homvee.acf.hhs.gov/study-detail?title=WWHV004065

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received low ratings, nor for implementation research.

RCT = randomized controlled trial; n.a. = not applicable.

9. Family Spirit Nurture

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because the findings from high- or moderate-rated effectiveness studies of the model do not meet all required criteria.
Extent of evidence:
One manuscript about an impact study was eligible for HomVEE's review of research with tribal populations; it received a high rating.
Summary of findings:
Family Spirit Nurture (FSN) showed favorable effects for the Child Health domain. The following table summarizes findings for the manuscript that received a high rating.

Domain	Findings
Child Development and School Readiness	*Not measured*
Child Health	Favorable: 1 No effect: 5 Unfavorable or ambiguous: 2
Family Economic Self-Sufficiency	*Not measured*
Linkages and Referrals	*Not measured*
Maternal Health	*Not measured*
Positive Parenting Practices	Favorable: 0 No effect: 1 Unfavorable or ambiguous: 0
Reductions in Child Maltreatment	*Not measured*
Reductions in Juvenile Delinquency, Family Violence, and Crime	*Not measured*

Description	
Frequency and length of home visits	Visits occurred every 2 weeks during the period that mothers were 3 to 6 months postpartum
Duration of program	3 months
Study participants	Navajo mothers age 13 years or older with infants younger than 14 weeks
Location of services	Home visiting only
Type of implementing agency	Pediatric clinic and local Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) locations
Home visitor qualifications	Paraprofessionals (L.C., L.N., K.S-Y., S.Y.)
Home visitor training and technical assistance	Not specified

Description	
Goals	To assess the effect of a brief home-visiting approach, FSN, on sugar-sweetened beverage (SSB) consumption, responsive parenting and infant feeding practices, and optimal infant growth through 12 months postpartum. Ultimate goal was to improve healthy growth in the first year of life.
Components	Home visiting only
Content	Curriculum included 6 lessons delivered 3 to 6 months postpartum by Navajo paraprofessionals covering the following: optimal infant feeding practices, responsive feeding, avoiding SSBs, optimal complementary feeding practices, and whole family healthy eating practices. The curriculum content followed American Academy of Pediatric guidelines for feeding infants. Paraprofessionals taught lessons to mothers and other invited caregivers using table-top flip charts in participants homes or other private locations. Lessons were highly visual and interactive and incorporated cultural teachings related to infant feeding and nutrition that support study aims.
For more information	https://www.jhsph.edu/research/affiliated-programs/family-spirit/curriculum/family-spirit-nurture/

Table B.9. Family Spirit Nurture: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about study[a]
Rosenstock, S., Ingalls, A., Cuddy, R. F., Neault, N., Littlepage, S., Cohoe, L., Shephard-Yazzie, K., Yazzie, S., Alikhani, A., Reid, R., Kenney, A., & Barlow, A. (2021). Effect of a home-visiting intervention to reduce early childhood obesity among Native American children: A randomized clinical trial. *JAMA Pediatrics, 175*(2), 133–142.	RCT	High (Version 2 standards)	Table B.10

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received low ratings. nor for implementation research.

RCT= Randomized controlled trial; n.a. = not applicable.

Table B.10. Study characteristics for Rosenstock et al. 2021 manuscript

Citation	Rosenstock, S., Ingalls, A., Cuddy, R. F., Neault, N., Littlepage, S., Cohoe, L., ... & Barlow, A. (2021). Effect of a home-visiting intervention to reduce early childhood obesity among Native American children: A randomized clinical trial. *JAMA Pediatrics, 175*(2), 133–142.
Study participants	Navajo mothers 13 years or older with infants younger than 14 weeks
Setting	Shiprock, New Mexico
Home visiting services	The Family Spirit Nurture curriculum consisted of 6 lessons that were provided at 3 to 6 months postpartum by trained Navajo paraprofessionals. The curriculum consisted of the following topics: optimal infant feeding practices, responsive feeding, avoiding SSBs, optimal complementary feeding practices, and whole family healthy eating practices. All intervention services were offered in home and were delivered by trained Navajo paraprofessionals. The paraprofessionals taught lessons using table-top flip charts to the mothers and other invited caregivers in participants' homes or other private locations. Lessons included cultural teachings related to infant feeding and nutrition. Lessons were mainly visual based and interactive, including hands-on activities focused on goal setting and self-esteem. Lessons were 45 minutes and included the following activities: a warm-up, lesson content and activities, a question and answer period, referrals as needed, and summary handouts. Home visits and lessons were provided every 2 weeks during the period that mothers were 3 to 6 months postpartum.
Comparison condition	Injury prevention lessons
Funding source	The primary funder of this study was Healthy Eating Research, a national program of the Robert Wood Johnson Foundation (grant 74132). Secondary funders include the Navajo Area Indian Health Service (grants HHSI245201501072P and HHSI245201801201P), the Osprey Foundation (grant 132271), the McCune Charitable Foundation, and another private donor.
Author affiliation	Center for American Indian Health, Department of International Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland (Rosenstock, Ingalls, Foy Cuddy, Neault, Littlepage, Cohoe, Nelson, Shephard-Yazzie, Yazzie, Alikhani, Reid, Kenney, Barlow); Department of Behavioral and Social Science, Brown School of Public Health, Providence, Rhode Island (Alikhani)
Link to manuscript	This study is not on the HomVEE website.

10. Halls Creek Community Families Program

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because no manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations.
Extent of evidence:
No manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of the Halls Creek Community Families program identified no such manuscripts.

Table B.11. Halls Creek Community Families Program: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
Munns, A., & Walker, R. (2015). The Halls Creek Community Families Program: Elements of the role of the child health nurse in development of a remote Aboriginal home visiting peer support program for families in the early years. *Australian Journal of Rural Health*, *23*(6), 322–326.	Implementation	n.a.	n.a.
Munns, A., & Walker, R. (2018). The relevance of Aboriginal peer-led parent support: Strengthening the child environment in remote areas. *Comprehensive Child and Adolescent Nursing*, *41*(3), 199–212.	Implementation	n.a.	n.a.

[b] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received low ratings, nor for implementation research.

n.a. = not applicable.

11. Healthy Children, Strong Families

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because no manuscripts about impact studies received a high or moderate rating.
Extent of evidence:
One manuscript about an impact study was eligible for HomVEE's review of research with tribal populations; it received a low rating.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of Healthy Children, Strong Families identified no such manuscripts.

Table B.12. Healthy Children, Strong Families: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about study[a]
Tomayko, E.J., Prince, R.J., Cronin, K.A., & Adams A.K. (2016). The Healthy Children, Strong Families intervention promotes improvements in nutrition, activity and body weight in American Indian families with young children. *Public Health Nutrition, 19*(15), 28.	RCT	Low (Version 1 standards)	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received low ratings. nor for implementation research.

n.a. = not applicable.

12. Healthy Families America (HFA)

Evidence of effectiveness:

This model does not meet criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations but does meet the criteria for the general population. The model does not meet criteria for tribal populations because findings were not reported separately for tribal populations.

Extent of evidence:

11 manuscripts about impact studies were eligible for review; 5 received high ratings, 1 received a moderate rating, and 5 received low ratings.

Summary of findings:[10]

Healthy Families America showed favorable effects for tribal populations in the Child Development and School Readiness, Child Health, Positive Parenting Practices, Reductions in Child Maltreatment, and Reductions in Juvenile Delinquency, Family Violence, and Crime domains. The following table summarizes findings examined across manuscripts that received high or moderate ratings.

Domain	Findings
Child Development and School Readiness	Favorable: 0 No effect: 3 Unfavorable or ambiguous: 0
Child Health	Favorable: 1 No effect: 14 Unfavorable or ambiguous: 0
Family Economic Self-Sufficiency	Favorable: 0 No effect: 4 Unfavorable or ambiguous: 0
Linkages and Referrals	*Not measured*
Maternal Health	Favorable: 3 No effect: 26 Unfavorable or ambiguous: 0
Positive Parenting Practices	Favorable: 1 No effect: 14 Unfavorable or ambiguous: 0
Reductions in Child Maltreatment	Favorable: 2 No effect: 72 Unfavorable or ambiguous: 0
Reductions in Juvenile Delinquency, Family Violence, and Crime	Favorable: 3 No effect: 13 Unfavorable or ambiguous: 0

[10] Findings reported for populations in which at least 30 percent of study participants were from tribal or indigenous communities.

Description	
Frequency and length of home visits	One home visit per week until the child was 6 months old, then local programs determined the frequency of the visits; 1-hour visits.
Duration of program	Prenatally or at birth to age 3 or 5 years.
Study participants	Families with the following risk factors: single parenthood, low income, childhood history of substance abuse, mental health issues, domestic violence, or parental dysfunction.
Location of services	Manuscript 1: Walworth County in Wisconsin, Pottawatomie County in Oklahoma, and Las Vegas Manuscript 2 through 9: Hawaii
Type of implementing agency	Not specified
Home visitor qualifications	Specific educational requirements for direct-service staff were not given. Healthy Families America (HFA) recommended selecting staff based on their personal characteristics; willingness to work in, or experience working with, culturally diverse communities; experience working with families with multiple needs; and ability to maintain boundaries between personal and professional life. Some Hawaii Healthy Start studies referenced home visitors as being trained paraprofessionals with supervisors having obtained their master's degree and having at least three years of clinical and administrative experience in human services or a bachelor's degree with five years of relevant experience.
Home visitor training and technical assistance	Hawaii Healthy Start referenced continuing staff training on relevant topics for both home visitors and supervisors. Home visitors receive a five- or six-week core training before enrolling families to their caseload.
Goals	HFA aims to (1) reduce child maltreatment; (2) increase utilization of prenatal care; (3) improve parent-child interactions and school readiness; (4) ensure healthy child development; (5) promote positive parenting; (6) promote family self-sufficiency and decrease dependency on welfare and other social services; (7) increase access to primary care medical services; and (8) increase immunization rates. Hawaii Healthy Start tailors its services according to family functioning to meet certain goals such as (1) no major crisis in the past 30 days, (2) regular use of a medical provider, (3) identifying of a positive source of support other than the home visitor, and (4) consistent participation in the home visits.
Components	To achieve its goals, enrolled families participate in home visits that include screenings and assessments.
Content	HFA is based upon a set of critical elements that serve as the framework for program development and implementation. HFA program components are theoretically rooted in a strength-based approach that recognizes that all families have strengths and that programs should build on these strengths rather than focus on correcting weaknesses.
For more information	Please see HomVEE implementation profile for this model: https://homvee.acf.hhs.gov/implementation/Healthy%20Families%20America%20(HFA)%C2%AE/Model%20Overview

Table B.13. Healthy Families America (HFA): Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
Bair-Merritt, M. H., Jennings, J. M., Chen, R., Burrell, L., McFarlane, E., Fuddy, L., & Duggan A. K. (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.	RCT	High (Version 1 standards)	HomVEE website: https://homvee.acf.hhs.gov/study-detail?title=WWHV014584
Daro, D., McCurdy, K., & Harding, K. (1998). The role of home visitation in preventing child abuse: An evaluation of the Hawaii Healthy Start project. Unpublished manuscript.	RCT	Low (Version 1 standards)	n.a.
Dew, B., & Breakey, G. (2004). Can a modest intervention prevent a major problem? Evidence from a child abuse prevention program. Unpublished manuscript.	NED	Low (Version 1 standards)	n.a.
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.	RCT	High (Version 1 standards)	HomVEE website: https://homvee.acf.hhs.gov/study-detail?title=WWHV012831
Duggan, A., McFarlane, E., Fuddy, L., Burrell, L., Higman, S. M., Windham, A., & Sia, C. (2004). Randomized trial of a statewide home visiting program: Impact in preventing child abuse and neglect. *Child Abuse & Neglect, 28*(6), 597–622.	RCT	High (Version 1 standards)	HomVEE website: https://homvee.acf.hhs.gov/study-detail?title=WWHV012830
Duggan, A. K., McFarlane, E. C., Windham, A. M., Rohde, C. A., Salkever, D. S., Fuddy, L., . . . Sia, C. (1999). Evaluation of Hawaii's Healthy Start program. *Future of Children*, *9*(1), 66–90; discussion 177–178.	RCT	High (Version 1 standards)	HomVEE website: https://homvee.acf.hhs.gov/study-detail?title=WWHV014665
El-Kamary, S. S., Higman, S. M., Fuddy, L., McFarlane, E., Sia, C., & Duggan, A. K. (2004). Hawaii's Healthy Start home visiting program: Determinants and impact of rapid repeat birth. *Pediatrics*, *114*(3), e317–e326.	RCT	High (Version 1 standards)	HomVEE website: https://homvee.acf.hhs.gov/study-detail?title=WWHV003728
Feres-Lewin, C. (2000). An analysis of the governance and administrative elements of a public-private partnership approach to community-based education. Las Vegas: University of Nevada). DAI, 61 (05A), 247–1689.	Implementation	n.a.	n.a.
King, T. M., Rosenberg, L. A., Fuddy, L., McFarlane, E., Sia, C., & Duggan, A. K. (2005). Prevalence and early identification of language delays among at-risk three year olds. *Journal of Developmental & Behavioral Pediatrics*, *26*(4), 293–303.	RCT	Moderate (Version 1 standards)	HomVEE website: https://homvee.acf.hhs.gov/study-detail?title=WWHV004008

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
McCurdy, K. (2001). Can home visitation enhance maternal social support? *American Journal of Community Psychology*, *29*(1), 97–112.	RCT	Low (Version 1 standards)	n.a.
McCurdy, K. (2005). The influence of support and stress on maternal attitudes. *Child Abuse & Neglect*, *29*(3), 251–268.	RCT	Low (Version 1 standards)	n.a.
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.	RCT	Low (Version 1 standards)	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts received low ratings. nor for implementation research.

NED = non-experimental comparison group design; n.a. = not applicable; RCT = randomized controlled trial.

13. Healthy Starts trial/Te Piripohotanga (New Zealand)

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because there were no favorable and statistically significant impacts.
Extent of evidence:
One manuscript about an impact study was eligible for HomVEE's review of research with tribal populations; it received a moderate rating.
Summary of findings:
The Healthy Starts Trial showed no favorable effects. The following table summarizes findings examined across manuscripts that received high or moderate ratings.

Domain	Findings
Child Development and School Readiness	*Not measured*
Child Health	Favorable: 0 No effect: 12 Unfavorable or ambiguous: 0
Family Economic Self-Sufficiency	*Not measured*
Linkages and Referrals	*Not measured*
Maternal Health	Favorable: 0 No effect: 2 Unfavorable or ambiguous: 0
Positive Parenting Practices	Favorable: 0 No effect: 14 Unfavorable or ambiguous: 0
Reductions in Child Maltreatment	*Not measured*
Reductions in Juvenile Delinquency, Family Violence, and Crime	*Not measured*

Description	
Frequency and length of home visits	3 home visits
Duration of program	Birth to 3 months old
Study participants	Indigenous Australian and New Zealand Māori mothers with infants from birth to age 5 weeks
Location of services	Darwin, Australia, and Auckland, New Zealand
Type of implementing agency	Not specified
Home visitor qualifications	Not specified

Description	
Home visitor training and technical assistance	Home visitors received training on motivational interviewing and program delivery.
Goals	The Healthy Starts trial was a family-centered secondhand smoke intervention that sought to reduce acute respiratory illness among indigenous infants in Australia and New Zealand by reducing their exposure to secondhand smoke.
Components	The intervention was administered through three face-to-face home visits conducted over the first three months of the infants' lives.
Content	All mothers (and present family members) who smoked received behavioral coaching about the dangers of secondhand smoke exposure to children, positive role modeling, and strategies for overcoming obstacles to making smoke-free changes. Those who smoked also received either brief advice or more intensive counseling to quit and were offered free nicotine replacement therapy and/or a quitline referral.
For more information	https://www.menzies.edu.au/page/Research/Projects/Smoking/Healthy_starts/

Table B.14. Healthy Starts trial/Te Piripohotanga (New Zealand): Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about the study
Walker, N., Johnston, V., Glover, M., Bullen, C., Trenholme, A., Chang, A., . . . Thomas, D. (2015). Effect of a family-centered, secondhand smoke intervention to reduce respiratory illness in indigenous infants in Australia and New Zealand: A randomized controlled trial. *Nicotine & Tobacco Research*, *17*(1), 48–57.	RCT	Moderate (Version 1 standards)	Table B.15

RCT = randomized controlled trial.

Table B.15. Study characteristics for Walker et al. 2015 manuscript

Citation	Walker, N., Johnston, V., Glover, M., Bullen, C., Trenholme, A., Chang, A., Morris, P., Segan, C., Brown, N., Fenton, D., Hawthorne, E., Borland, R., Parag, V., Von Blaramberg, T., Westphal, D., & Thomas, D. (2015). Effect of a family-centered, secondhand smoke intervention to reduce respiratory illness in indigenous infants in Australia and New Zealand: A randomized controlled trial. *Nicotine & Tobacco Research, 17*(1), 48–57.
Study participants	Mothers were recruited by community workers through antenatal clinics and identification through hospital birth records and randomized in a 1:1 ratio to the intervention or comparison group. The study used blocked randomization in which families were stratified by country (Australia or New Zealand). Overall, 321 eligible mother/infants were randomized (n = 161 intervention , n = 160 comparison). Post-randomization—but before baseline data collection and before implementation began—28 dyads dropped out, leaving 145 mothers in the intervention group and 148 in the comparison group; all of these mothers completed the baseline assessment. At 4-month follow-up, 134 mothers were in the intervention group and 132 in the comparison l group; at 12 months, 126 were in the intervention group and 128 in the comparison group. Eligibility criteria were: (1) infant from birth to age 5 weeks; (2) mother self-identified as Māori or Australian Aboriginal/Torres Strait Islander; (3) mother was at least 16 years old; (4) mother was a current smoker or at least one other household member was a smoker; (5) mother permanently resided with the infant; (6) mother lived in Darwin/Greater Darwin area in Australia or in the Counties Manukau District Health Board region in New Zealand; (7) infant was a singleton or the first born if a multiple delivery; and (8) mother spoke English and/or Māori. At baseline—excluding 28 mothers/infants who were assigned but did not contribute to baseline data—about three-fourths of the mothers were from New Zealand; mothers (in both countries) were, on average, 26 years old; infants were about 6 weeks old; and most mothers (about 75 percent) at most had a secondary school level of education. Most mothers identified as current smokers (intervention = 72 percent, comparison = 60 percent). About 80 percent of mothers breastfed at least partially.
Setting	Darwin, Australia, and Auckland, New Zealand
Home visiting services	The intervention group received usual care plus three home visits during the infant's first three months. All mothers (and other present family members) who smoked received behavioral coaching about the dangers of secondhand smoke exposure to children, smoking restrictions in the home and car, positive role modeling, and strategies to overcoming obstacles to making smoke-free changes. Those who smoked also received brief advice on quitting, or more intensive counseling depending on how receptive the participant was, and free nicotine replacement therapy and/or a quitline referral (unless the participant was clearly not interested in these options). The intervention was based on Māori and Aboriginal holistic health models. Both the intervention and comparison groups also received brief health promotion messages from community workers at baseline and when infants were 4 and 12 months old. Messages focused on immunization, infant nutrition/breastfeeding, and safe infant sleeping.

Citation	Walker, N., Johnston, V., Glover, M., Bullen, C., Trenholme, A., Chang, A., Morris, P., Segan, C., Brown, N., Fenton, D., Hawthorne, E., Borland, R., Parag, V., Von Blaramberg, T., Westphal, D., & Thomas, D. (2015). Effect of a family-centered, secondhand smoke intervention to reduce respiratory illness in indigenous infants in Australia and New Zealand: A randomized controlled trial. *Nicotine & Tobacco Research, 17*(1), 48–57.
Comparison condition	The comparison group received usual care from hospital and primary care providers. Both the intervention and comparison groups also received brief health promotion messages from community workers at baseline and when infants were 4 and 12 months old. Messages focused on immunization, infant nutrition/breastfeeding, and safe infant sleeping.
Funding source	Two authors have consulted for manufacturers of smoking cessation medications. All authors declared that they did not receive support from any companies for the paper and that the trial was designed, conducted, and analyzed by researchers independent of all funders. The funding sources for the trial or paper are not reported.
Author affiliation	Authors David Thomas, Anne Chang, and Vanessa Johnston conceived the original idea for the trial. Others were involved in the trial. Authors are affiliated with universities and/or public health entities.
Link to manuscript	This study is not on the HomVEE website.

14. Home Activity Program for Parents and Youngsters (HAPPY) Rural Outreach Project

Evidence of effectiveness:
This model does not meet criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population. The model does not meet criteria for tribal populations because no manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations.
Extent of evidence:
No manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of the Home Activity Program for Parents and Youngsters (HAPPY) Rural Outreach Project identified no such manuscripts.

Table B.16. Home Activity Program for Parents and Youngsters (HAPPY) Rural Outreach Project: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
Nevada State Department of Human Resources, Early Childhood Services. (1997). *HAPPY Rural Outreach Project. Final report.* Reno, NV: Author.	Implementation	n.a.	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received low ratings, nor for implementation research.

n.a. = not applicable.

15. Home Interaction Program for Parents and Youngsters (HIPPY)

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because no manuscripts about impact studies received a high or moderate rating.
Extent of evidence:
One manuscript about an impact study was eligible for HomVEE's review of research with tribal populations; it received a low rating.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of HIPPY identified no such manuscripts.

Table B.17. HIPPY: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about study[a]
Barnett, T., Roost, F. D., & McEachran, J. (2012). Evaluating the effectiveness of the home interaction program for parents and youngsters (HIPPY). *Family Matters,* (91), 27–37.[b]	NED	Low (Version 2 standards)	n.a.
Beatch, M., & Le Mare, L. (2007). Taking ownership: The implementation of a non-aboriginal early education programme for on-reserve children. *Australian Journal of Indigenous Education,* 36, 77–87.[c]	Implementation	n.a.	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received low ratings, nor for implementation research.

[b] The study population is described as "mostly Indigenous Australian parents and children," so we assume the population is greater than 30 percent tribal in this report

[c] Manuscript did not report percentage tribal, but HomvEE screened this in for review based on the relevance of the title.

n.a. = not applicable.

16. Indian Family Wellness Project

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because no manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations.
Extent of evidence:
No manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of the Indian Family Wellness Project identified no such manuscripts.

Table B.18. Indian Family Wellness Project: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
Fisher, P. A., & Ball, T. J. (2002). The Indian Family Wellness Project: An application of the tribal participatory research model. *Prevention Science*, *3*(3), 235–240.	Implementation	n.a.	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received low ratings, nor for implementation research.

n.a. = not applicable.

17. Inter-Tribal Council of Michigan's (ITC of Mi) Healthy Start project (Maajtaag Mnobmaadzid)

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because no manuscripts about impact studies received a high or moderate rating.
Extent of evidence:
One manuscript about an impact study was eligible for HomVEE's review of research with tribal populations; it received a low rating.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of the Inter-Tribal Council of Michigan's (ITC of Mi) Healthy Start project (Maajtaag Mnobmaadzid) identified no such manuscripts.

Table B.19. Inter-Tribal Council of Michigan's (ITC of Mi) Healthy Start project (Maajtaag Mnobmaadzid): Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about study characteristics[a]
Coughlin, R. L., Kushman, E., Copeland, G., & Wilson, M. L. (2010). Pregnancy and birth outcome improvements for American Indians in the Healthy Start project of the Inter-Tribal Council of Michigan, 1998–2008: An 11-year cohort study. Unpublished manuscript.	NED	Low (Version 1 standards)	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received low ratings, nor for implementation research.

NED = non-experimental comparison group design; n.a. = not applicable.

18. Kheth'Impilo Community-Based Adherence Support

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because no manuscripts about impact studies received a high or moderate rating.
Extent of evidence:
Two manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations; both received a low rating.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of the Kheth'impilo Community-Based Adherence Support model identified no such manuscripts.

Table B.20. Kheth'Impilo Community-Based Adherence Support: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
Fatti, G., Shaikh, N., Eley, B., & Grimwood, A. (2013). Improved virological suppression in children on antiretroviral treatment receiving community-based adherence support: A multicentre cohort study from South Africa. *AIDS Care*. Advance online publication.	NED	Low (Version 1 standards)	n.a.
Grimwood, A., Fatti, G., Mothibi, E., Malahlela, M., Shea, J., & Eley, B. (2012). Community adherence support improves programme retention in children on antiretroviral treatment: A multicentre cohort study in South Africa. *Journal of the International AIDS Society*, *15*(2), 17381.	NED	Low (Version 1 standards)	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received low ratings, nor for implementation research.

NED = non-experimental comparison group design; n.a. = not applicable.

19. Nurse-Family Partnership (NFP)®

The HomVEE review of research with tribal populations included research from two models related to Nurse-Family Partnership: Nurse-Family Partnership itself and the Australian Nurse-Family Partnership Program (ANFPP). The next two sections discuss each in turn.

a. Nurse-Family Partnership

Evidence of effectiveness:
Nurse-Family Partnership (NFP) does not meet criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations but does meet the criteria for the general population. The model does not meet criteria for tribal populations because there are no high- or moderate-rated effectiveness studies of the model implemented with a tribal population.
Extent of evidence:
One manuscript about an NFP impact study was eligible for review; it received a low rating.
Summary of findings:
Nurse-Family Partnership (NFP) showed no favorable effects. The following table summarizes findings examined across manuscripts that received high or moderate ratings.

Table B.21. Nurse-Family Partnership (NFP)®: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about study characteristics[a]
Chomos, J. C., Evans, W. P., Bolan, M., Merritt, L., Meyer, A., & Novins, D. K. (2018b). Using single-case designs to evaluate components of tribal home-visitation programs: Tribal community two. *Infant Mental Health Journal*, *39*(3), 335–346.	Single-case design	Low (Version 2 standards)	n.a.
Holland, M. L., Olds, D. L., Dozier, A. M., & Kitzman, H. J. (2018). Visit attendance patterns in nurse-family partnership community sites. *Prevention Science, 19*(4), 516–527.	Implementation	n.a.	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received low ratings, nor for implementation research.

n.a. = not applicable.

b. Australian Nurse-Family Partnership Program (ANFPP)*

**ANFPP is a version of Nurse-Family Partnership (NFP)*

Evidence of effectiveness:
ANFPP does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because no manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations.
Extent of evidence:
No manuscripts about impact studies about ANFPP were eligible for HomVEE's review of research with tribal populations.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of ANFPP identified no such manuscripts.

Table B.22. Australian Nurse-Family Partnership Program (ANFPP)*: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about study characteristics[a]
Massi, L., Hickey, S., Maidment, S., Roe, Y., Kildea, S., Nelson, C., & Kruske, S. (2021). Improving interagency service integration of the Australian Nurse-Family Partnership program for First Nations women and babies: A qualitative study. *International Journal for Equity in Health 20*(1), 1–15.	Implementation	n.a.	n.a.
Nguyen, H., Zarnowiecki, D., Segal, L., Gent, D., Silver, B., & Boffa, J. (2018). Feasibility of implementing infant home visiting in a Central Australian Aboriginal community. *Prevention Science*, *19*(7), 966–976.	Implementation	n.a.	n.a.
Runciman, C. (2016). Implementing the Nurse-Family Partnership with Aboriginal and Torres Strait Islander clients. *International Journal of Birth & Parent Education, 3*(2), 37–41.	Implementation	n.a.	n.a.
Zarnowiecki, D., Nguyen, H., Hampton, C., Boffa, J., & Segal, L. (2018). The Australian Nurse-Family Partnership Program for Aboriginal mothers and babies: Describing client complexity and implications for program delivery. *Midwifery*, *65*, 72–81	Implementation	n.a.	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received low ratings, nor for implementation research.

n.a. = not applicable.

20. Obesity Prevention + Parenting Support

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because no manuscripts about impact studies received a high or moderate rating.
Extent of evidence:
One manuscript about an impact study was eligible for HomVEE's review of research with tribal populations; it received a low rating.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of Obesity Prevention + Parenting Support identified no such manuscripts.

Table B.23. Obesity Prevention + Parenting Support: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about study characteristics[a]
Harvey-Berino, J., & Rourke, J. (2003). Obesity prevention in preschool Native-American children: A pilot study using home visiting. *Obesity Research*, *11*(5), 606–611.	RCT	Low (Version 1 standards)	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received low ratings, nor for implementation research.

n.a. = not applicable.

21. ParentChild+® Core Model

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population. The model does not meet criteria for tribal populations because no manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations.
Extent of evidence:
No manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of the ParentChild+® Core Model identified no such manuscripts.

Table B.24. ParentChild+® Core Model: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
Gfellner, B. M., McLaren, L., & Metcalfe, A. (2008). The Parent-Child Home Program in Western Manitoba: A 20-year evaluation. *Child Welfare*, *87*(5), 49–67.	Implementation	n.a.	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received a low rating, nor for implementation research.

n.a. = not applicable.

22. Parents as Teachers/PAT

The HomVEE review of research with tribal populations included research from three models related to Parents as Teachers/PAT: Parents as Teachers/PAT itself, the Bureau of Indian Affairs' Baby Family and Child Education Program (Baby FACE program), and Parents as First Teachers (New Zealand). The next three sections discuss each in turn.

a. Parents as Teachers/PAT

Evidence of effectiveness:
This model does not meet criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations but does meet the criteria for the general population. The model does not meet criteria for tribal populations because are no high- or moderate-rated effectiveness studies of the model implemented with a tribal population.
Extent of evidence:
One manuscript about an impact study was eligible for HomVEE's review of research with tribal populations; it received a low rating.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of Parents as Teachers/PAT identified no such manuscripts.

Table B.25. Parents as Teachers/PAT: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
Chomos, J. C., Evans, W. P., Bolan, M., Merritt, L., Meyer, A., & Novins, D. K. (2018a). Using single-case designs to evaluate components of tribal home-visitation programs: Tribal community one. *Infant Mental Health Journal*, *39*(3), 335–346.	Single-case design	Low (Version 2 standards)	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received a low rating, nor for implementation research.

n.a. = not applicable.

b. Bureau of Indian Affairs' Baby Family and Child Education Program (Baby FACE)*

**Baby FACE is a version of Parents as Teachers/PAT*

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because no favorable, statistically significant impacts were reported in a peer-reviewed journal.[11]
Extent of evidence:
Three manuscripts about impact studies were eligible for review; 1 received a moderate rating and 2 received a low rating.
Summary of findings:
Baby FACE showed favorable effects for the Child Development and School Readiness and Positive Parenting Practices domains. The following table summarizes outcomes in the manuscript that received a moderate rating.

Domain	Findings
Child Development and School Readiness	Favorable: 1 No effect: 10 Unfavorable or ambiguous: 0
Child Health	*Not measured*
Family Economic Self-Sufficiency	*Not measured*
Linkages and Referrals	*Not measured*
Maternal Health	*Not measured*
Positive Parenting Practices	Favorable: 2 No effect: 4 Unfavorable or ambiguous: 0
Reductions in Child Maltreatment	*Not measured*
Reductions in Juvenile Delinquency, Family Violence, and Crime	*Not measured*

[11] If evidence-criteria are based solely on findings from randomized controlled trial(s), one or more favorable and statistically significant impact must be sustained for at least one year after program enrollment and one or more favorable and statistically significant impacts must be reported in a peer-reviewed journal. More information is available at https://homvee.acf.hhs.gov/review-process/HHS%20Criteria%20for%20Evidence-Based%20Models

Description	
Frequency and length of home visits	Biweekly visits to each family for 60 minutes if there is one child, 90 minutes if there are two children.
Duration of program	Manuscript 1: The average length of program enrollment was based on age of child at enrollment, as follows: • Enrollment during pregnancy: 41 months • Enrollment at birth to 3 months old: 37 months • Enrollment before 6 months old: 34 months[a] • Enrollment when the child was between 6 months and one year old: 30 months • Enrollment greater when the child was more than one year old: 20 months
Study participants	American Indian families with children from birth to age 8 located on rural reservations; American Indian families with children from pre-birth to kindergarten located on rural reservations. American Indian families with children from birth to age 3 (some sites offered services up to age 5).
Location of services	Manuscript 2 (Pfannenstiel et al. 2006): 28 reservations across the United States, including locations in Cheyenne River, Chinle, Eastern Navajo, Fort Defiance, Minneapolis, Oklahoma, Pima, Portland, Shiprock, and Southern Pueblos. Manuscript 4 (Pfannenstiel 2015): The original 20 study sites were located in six states, with multiple sites in the states with large numbers of Bureau of Indian Education (BIE) schools-Arizona, New Mexico, and South Dakota.
Type of implementing agency	Manuscript 3: Elementary schools Manuscript 4: BIE schools in the Bureau of Indian Affairs
Home visitor qualifications	The minimum qualifications for the position of the parent educator included a high school degree or General Education Development (GED) diploma, the ability to read and write in English, and working toward a Child Development Associate credential or an associate degree. In the study examined in manuscript two, almost half of the parent educators reported that their highest level of education is a bachelor's degree, 38 percent had an associate degree and 13 percent had some college. In addition, 37 percent of parent educators who staffed the program throughout the grant period were American Indian and from the same tribe as the local community. American Indian staff are preferred.
Home visitor training and technical assistance	Manuscript 3: New Baby FACE staff members were offered a five-day implementation training and a three-day follow-up. Parent educators were offered two or three training conferences per year on implementing the Baby FACE program. Parent educators also had access to technical assistance offered by program technical assistance coordinators. Manuscript 4: The initial training included two sessions of training in which they reviewed home visitation curricula; supervisors also participated in the initial 2-day training and received specific training about supervising staff delivering this program. Parent educators also received four professional development sessions and monthly conference calls. Each Baby FACE program received seven on-site technical assistance visits.

Description	
Goals	Baby FACE is the home visiting component of the Bureau Of Indian Affairs' Family And Child Education Program (FACE). Baby FACE seeks to (1) increase healthy pregnancies and improve birth outcomes (when services are delivered prenatally); (2) increase parents' knowledge of their children's emerging development and age-appropriate child development; (3) improved parenting capacity, parenting practices, and parent child relationships; (4) promote early detection of developmental delays and health issues; (5) improve family health and functioning; (6) increase integration of language and culture; (7) improve child health and child cognitive development; (8) improve child socio-emotional development and protective home environment and (9) improve environment for home literacy activity.
Components	To achieve these goals, families participated in home visits that included screenings of children's development. It also included group parent meetings, referrals through a resource network, and a center-based component delivered through elementary schools.
Content	The program implemented the Parents as Teachers' Born to Learn curriculum, which was adapted to each tribal community's culture. The home visitors established trusting relationships with the families and provided services and support for families experiencing multiple crises. Other successful strategies included providing parent-child activities, developmental information, children's books, and resources to meet basic needs such as diapers and gas cards. Home visitors also taught parents to observe, monitor and support their children's development on an ongoing basis. The program provided age-appropriate books were provided to all children in a household who were 5 years of age or younger. Manuscript 1: Baby FACE was a modification of two national models: Parents as Teachers and the National Center for Family Literacy.
For more information	Please see HomVEE implementation profile for this model: https://homvee.acf.hhs.gov/implementation/Parents%20as%20Teachers%20(PAT)%C2%AE/Model%20Overview

[a] The manuscript defines this category as less than 6 months and defines the other categories as mutually exclusive.

Table B.26. Bureau of Indian Affairs' Baby Family and Child Education Program (Baby FACE)*: Details of manuscripts included in HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about study characteristics[a]
Pfannenstiel, J., Yarnell, V., & Seltzer, D. (2006). *Family and Child Education program (FACE): Impact study report.* Overland Park, KS: Research & Training Associates, Inc.	NED	Low (Version 1 standards)	n.a.
Yarnell, V., Lambson, T., & Pfannenstiel, J. C. (2008). *BIE Family and Child Education Program.* Overland Park, KS: Research & Training Associates, Inc.	Implementation	n.a.	n.a.
Lambson, T., Yarnell, V., & Pfannenstiel, J. (2006). *BIA Baby FACE program evaluation study: 2005 report.* Overland Park, KS: Research & Training Associates, Inc.	Implementation	n.a.	n.a.
Pfannenstiel, J. (2015). Evaluation of the i3 validation of improving education outcomes for American Indian children. Unpublished manuscript. Overland Park, KS: Research & Training Associates.	RCT	Moderate (Version 1 standards)	HomVEE website: https://homvee.acf.hhs.gov/study-detail?title=WWHV058030

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received low ratings, nor for implementation research.

n.a. = not applicable; RCT = randomized controlled trial.

c. Parents as First Teachers (New Zealand)*

**Parents as First Teachers (PAFT) is a version of Parents as Teachers/PAT*

Evidence of effectiveness:

This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because there were no favorable and statistically significant impacts.

Extent of evidence:

One manuscript about an impact study was eligible for HomVEE's review of research with tribal populations; it received a low rating.

Summary of findings: [12]

Parents as First Teachers (PAFT) (New Zealand) showed no favorable effects. The following table summarizes findings examined across manuscripts that received high or moderate ratings.

Table B.27. Parents as First Teachers (New Zealand)*: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about study characteristics[a]
Boyd, A. (1997a). Parents as First Teachers pilot project evaluation (PAFT): Report on South Auckland area. Wellington, New Zealand: Ministry of Education.	RCT	Low (Version 1 standards)	n.a.
Praat, A., Davie, S., & McGray, S. (2010). Parents as First Teachers evaluation: Phase one report. Wellington, New Zealand: Centre for Social Research and Evaluation.	Implementation	n.a.	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received a low rating, nor for implementation research.

NED = non-experimental comparison group design; n.a. = not applicable; RCT = randomized controlled trial.

[12] Findings reported for populations in which at least 30 percent of study participants were from tribal or indigenous communities.

23. Perinatal Intervention Program

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population no manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations.
Extent of evidence:
No manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of the Perinatal Intervention Program identified no such manuscripts.

Table B.28. Perinatal Intervention Program: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
Davis, C. L., & Prater, S. L. (2001). A perinatal intervention program for urban American Indians part 1: Design, implementation, and outcomes. *Journal of Perinatal Education*, *10*(3), 9–19.	Implementation	n.a.	n.a.
Prater, S. L., & Davis, C. L. (2002). A perinatal intervention program for urban American Indians: Part 2: The story of a program and its implications for practice. *Journal of Perinatal Education*, *11*(2), 23–32.	Implementation	n.a.	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received low ratings, nor for implementation research.

24. Philani Outreach Programme

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because there were no manuscripts about impact studies that received a high or moderate rating.
Extent of evidence:
Six manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations; all received low ratings.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of the Philani Outreach Programme identified no such manuscripts.

Table B.29. Philani Outreach Programme: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscripts rating	Where to learn more about the study[a]
Austin, S. A., & Mbewu, N. (2009). Philani program: A case study of an integrative approach of empowerment and social and economic development. *Social Work in Public Health, 24*(1–2), 148–160.	Implementation	n.a.	n.a.
le Roux, I. M., le Roux, K., Comulada, W. S., Greco, E. M., Desmond, K. A., Mbewu, N., & Rotheram-Borus, M. J. (2010). Home visits by neighborhood mentor mothers provide timely recovery from childhood malnutrition in South Africa: Results from a randomized controlled trial. *Nutrition Journal*, 9(56).	RCT	Low (Version 1 standards)	n.a.
le Roux, I. M., le Roux, K., Mbeutu, K., Comulada, W. S., Desmond, K. A., & Rotheram-Borus, M. (2011). A randomized controlled trial of home visits by neighborhood mentor mothers to improve children's nutrition in South Africa. *Vulnerable Children and Youth Studies, 6*(2), 91–102.	RCT	Low (Version 1 standards)	n.a.
le Roux, I. M., Rotheram-Borus, M., Stein, J., & Tomlinson, M. (2014). The impact of paraprofessional home visitors on infants' growth and health at 18 months. *Vulnerable Children and Youth Studies*, *9*(4), 291–304.[a]	RCT	Low (Version 1 standards)	n.a.
le Roux, I. M., Tomlinson, M., Harwood, J. M., O'Connor, M. J., Worthman, C. M., Mbewu, N., . . . Rotheram-Borus, M. J. (2013). Outcomes of home visits for pregnant mothers and their infants in South Africa: A cluster randomized controlled trial. *AIDS*, *27*(9), 1461–1471.	RCT	Low (Version 1 standards)	n.a.

Citation	Study design	Manuscripts rating	Where to learn more about the study[a]
Rotheram-Borus, M., Tomlinson, M., le Roux, I. M., Harwood, J. M., Comulada, S., O'Connor, M. J., . . . Worthman, C. M. (2014). A cluster randomised controlled effectiveness trial evaluating perinatal home visiting among South African mothers/infants. *PLOS ONE*, *9*(1): e105934.	RCT	Low (Version 1 standards)	n.a.
Rotheram-Borus, M. J., Tomlinson, M., Le Roux, I., & Stein, J. A. (2015). Alcohol use, partner violence, and depression: A cluster randomized controlled trial among urban South African mothers over 3 years. *American Journal of Preventive Medicine,* 49(5), 715–725.	RCT	Low (Version 1 standards)	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received a low rating, nor for implementation research.

n.a. = not applicable; RCT = randomized controlled trial.

25. Promoting First Relationships®—Home Visiting Promotion Model

Evidence of effectiveness:

This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because no manuscripts about impact studies received a high or moderate rating.

Extent of evidence:

One manuscript about an impact study was eligible for HomVEE's review of research with tribal populations; it received a low rating.

Summary of findings:

HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of Promoting First Relationships®—Home Visiting Promotion Model identified no such manuscripts.

Table B.30. Promoting First Relationships®—Home Visiting Promotion Model: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about study characteristics[a]
Oxford, M., Booth-LaForce, C., Echo-Hawk, A., Lallemand, O., Parrish, L., Widner, M., Petras, A., … the CATCH Project Team. (2020). Promoting First Relationships®: Implementing a home visiting research program in two tribal communities. *Canadian Journal of Nursing Research, 52*(2), 149–156.	Implementation	n.a.	n.a.
Booth-LaForce, C., Oxford, M. L., Barbosa-Leiker, C., Burduli, E., & Buchwald, D. S. (2020). Randomized controlled trial of the Promoting First Relationships® preventive intervention for primary caregivers and toddlers in an American Indian Community. *Prevention Science*, *21*(1), 98–108	RCT	Low (Version 2 standards)	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts received a low rating, nor for implemention research.

NED = non-experimental comparison group design; n.a. = not applicable; RCT = randomized controlled trial.

26. SHARE-ACTION

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because no manuscripts about impact studies received a high or moderate rating.
Extent of evidence:
One manuscript about an impact study was eligible for HomVEE's review of research with tribal populations; it received a low rating.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of the SHARE-ACTION program identified no such manuscripts.

Table B.31. SHARE-ACTION: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
Anand, S. S., Davis, A. D., Ahmed, R., Jacobs, R., Xie, C., Hill, A., . . . Yusuf, S. (2007). A family-based intervention to promote healthy lifestyles in an Aboriginal community in Canada. *Canadian Journal of Public Health. Revue Canadienne de Santé Publique*, *98(*6), 447–452.	RCT	Low (Version 1 standards)	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received a low rating, nor for implemention research.

n.a. = not applicable; RCT = randomized controlled trial.

27. South Australia Family Home Visiting Programme

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because no manuscripts about impact studies received a high or moderate rating.
Extent of evidence:
Two manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations; both received low ratings.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of the South Australia Family Home Visiting Programme (SA-FHV) identified no such manuscripts.

Table B.32. South Australia Family Home Visiting Programme: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
Sawyer, M. G., Frost, L., Bowering, K., & Lynch, J. (2013). Effectiveness of nurse home-visiting for disadvantaged families: results of a natural experiment. *BMJ Open*, *3*(4), e002720.	NED	Low (Version 1 standards)	n.a.
Sawyer, M. G., Pfeiffer, S., Sawyer, A., Bowering, K., Jeffs, D., & Lynch, J. (2014). Effectiveness of nurse home visiting for families in rural South Australia. *Journal of Paediatrics and Child Health*, *50*(12), 1013–1022.	NED	Low (Version 1 standards)	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received a low rating, nor for implemention research.

NED = non-experimental comparison group design; n.a. = not applicable.

28. Toddler Overweight and Tooth Decay Prevention Study (TOTS)

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because no manuscripts about impact studies received a high or moderate rating.
Extent of evidence:
One manuscript about an impact study was eligible for HomVEE's review of research with tribal populations; it received a low rating.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of the Toddler Overweight and Tooth Decay Prevention Study (TOTS) identified no such manuscripts.

Table B.33. Toddler Overweight and Tooth Decay Prevention Study (TOTS): Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
Karanja, N., Aickin, M., Lutz, T., Mist, S., Jobe, J. B., Maupome, G., & Ritenbaugh, C. (2012). A community-based intervention to prevent obesity beginning at birth among American Indian children: Study design and rationale for the PTOTS study. *Journal of Primary Prevention, 33*(4), 161–174.[c]	Implementation	n.a.	n.a.
Karanja, N., Lutz, T., Ritenbaugh, C., Maupome, G., Jones, J., Becker, T., & Aickin, M. (2010). The TOTS community intervention to prevent overweight in American Indian toddlers beginning at birth: A feasibility and efficacy study. *Journal of Community Health*, *35*(6), 667–675.	RCT	Low (Version 1 standards)	n.a.

[a] This manuscript describes a supplement to the Toddler Overweight and Tooth Decay Prevention Study intervention that includes additional nutrition and physical activity components.

n.a. = not applicable; RCT = randomized controlled trial.

29. Universal Health Home Visit offered through Families First

Evidence of effectiveness:
This model does not meet the criteria established by the HHS for an "evidence-based early childhood home visiting service delivery model" for tribal populations or for the general population because no manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations.
Extent of evidence:
No manuscripts about impact studies were eligible for HomVEE's review of research with tribal populations.
Summary of findings:
HomVEE reports results from manuscripts that have at least one finding that receives a high or moderate rating. HomVEE's review of research with tribal populations of the Universal Health Home Visit offered through Families First identified no such manuscripts.

Table B.34. Universal Health Home Visit offered through Families First: Details of manuscripts eligible for HomVEE's review of research with tribal populations

Citation	Study design	Manuscript rating	Where to learn more about the study[a]
Widdup, J., Comino, E. J., Webster, V., & Knight, J. (2012). Universal for whom? Evaluating an urban Aboriginal population's access to a mainstream universal health home visiting program. *Australian Health Review*, *36*(1), 27–33.	Implementation	n.a.	n.a.

[a] Reported only for manuscripts that received high or moderate ratings; not reported for manuscripts that received a low rating, nor for implementation research.

n.a. = not applicable.

This page has been left blank for double-sided copying.

This page has been left blank for double-sided copying.

Mathematica Inc.

Princeton, NJ • Ann Arbor, MI • Cambridge, MA
Chicago, IL • Oakland, CA • Seattle, WA
Tucson, AZ • Woodlawn, MD • Washington, DC

Mathematica®
Progress Together

mathematica.org website

EDI Global, a Mathematica Company

Operating in Tanzania, Uganda, Kenya, Mozambique, and the United Kingdom