The Chiles Center for Healthy Mothers and Babies: Florida MIECHV 2016-2018 Evaluation Plan (D90:X10MC29478)

Evaluation Overview

The USF Evaluation Team has been conducting a comprehensive evaluation of current MIECHV programs for three years (D90 Florida MIECHV evaluation plan) and thus has developed relationships with the 15 MIECHV-funded home visiting programs that facilitate evaluation implementation. While maintaining neutrality, the Evaluation Team has incorporated the principles of participatory program evaluation, such as: strong collaboration between the USF Evaluation Team, the Florida Association of Healthy Start Coalitions (FAHSC), and the selected communities; focus groups with key informants including home visiting program participants, home visitors, and administrators; and dissemination of results to programs for further planning. The coordinated activities described below will ensure continued independence of the evaluation while also providing consistency in evaluation methods, communications, and management of staff burden. This consistency will facilitate MIECHV programs' collaborative participation in the evaluation activities and use of results for program improvements. In Years 4 and 5 (2016-2018), the Evaluation Team will continue to participate in statewide, regional, and national activities, including CQI efforts, planning meetings, calls, and workgroups. Beginning in year 4 the Florida MIECHV evaluation will focus on community, organizational, and participant level characteristics and practices relate to engagement and retention in the program, employing a mixed-methods, multilevel research design, and an iterative and participatory approach with the state team and program sites. Figure 1 below displays each level of evaluation and corresponding activities. The engagement and retention study consists primarily of process evaluation activities to increase understanding of the complexity of factors related to participant engagement and retention; wisdom gained through process evaluation results can facilitate replication in other sites and states.[1,2] Furthermore, while process evaluation examines and documents implementation, it can also monitor and describe the contextual elements affecting engagement and retention, such as organizational structure, leadership and culture, staff perceptions, and the characteristics of program participants nested within families and communities; these elements will be examined in several ways throughout the evaluation.[3]

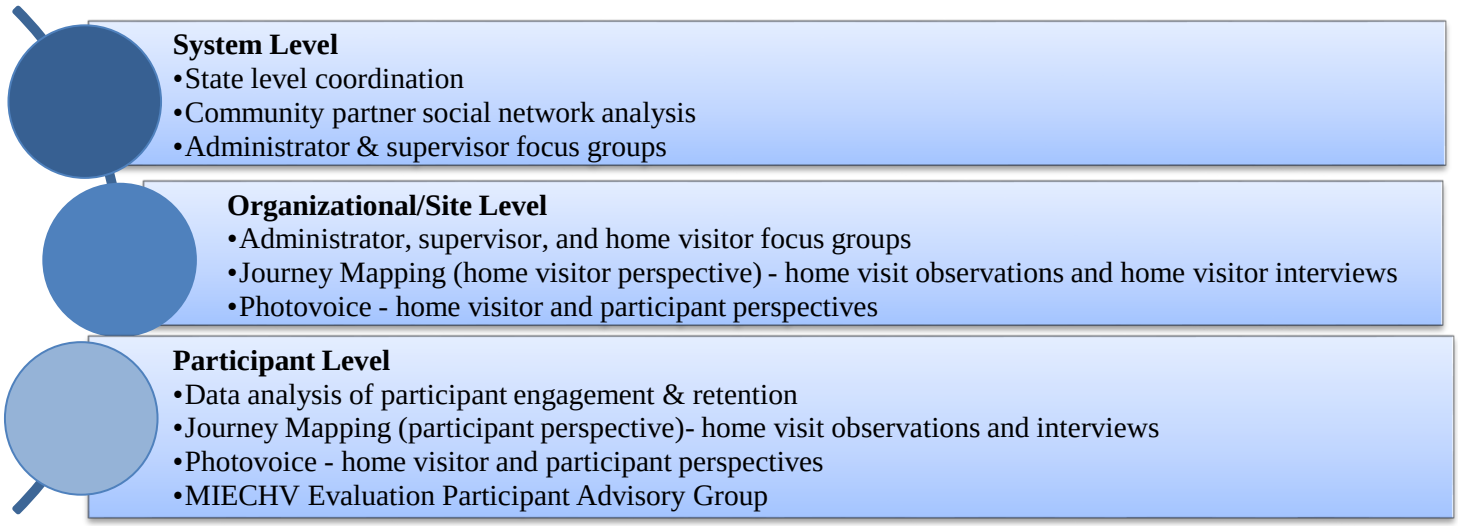


Figure 1: Year 4-5 Engagement & Retention Evaluation Overview

Theory-based Evaluation

A theory-based process evaluation provides credibility and consistency in the constructs measured through surveys, observational tools, and interview/focus group guides. Several practical frameworks and models are available to practitioners to guide the development of a comprehensive evaluation plan, including process evaluation for collaborative community initiatives. The theoretical frameworks utilized in this evaluation to inform survey development and focus group guides include: Community Coalition Action Theory (CCAT)[4]; Integrated Theory of Family Engagement[5]; and the Connecting People Intervention Model.[6]

Neutrality

Although Florida MIECHV promotes and maintains a culture of collaboration and transparency among all grantee sites, the benefit of using an external/independent evaluation team (rather than FAHSC conducting all evaluation activities) is that program staff and participants can provide feedback in a confidential environment. Individual participants are not identifiable and study results are not linked to individual participants. The USF Evaluation Team follows the American Evaluation Association Guiding Principles for Evaluators[7] including systematic inquiry, competence, integrity/honesty, respect for people, and responsibility for general public welfare. In particular, the principle of integrity/honesty mandates that evaluators: 1) are explicit about their own, the participants', and other stakeholders' interests and values concerning the conduct and outcomes of an evaluation; 2) do not misrepresent their procedures, data or findings, and attempt to prevent or correct misuse of their work by others; and 3) identify and immediately address any concerns in the event that certain procedures or activities appear likely to produce misleading evaluative information or conclusions.

Valid and Reliable Measures

Where possible, existing standardized and validated measures will be utilized. Measures are selected for content and construct validity, succinctness to reduce burden on participants, reliability, and generalizability for the population of interest. Composite surveys and measures developed by the Evaluation Team will be piloted prior to dissemination. Instrument development and validation processes are described within evaluation component descriptions below.

Mixed-Methods Approach

An advantage of the mixed-methods study design of this component is the use of triangulation of results to strengthen the analysis, by a) using qualitative results to identify quantitative variables that may need to be added or modified, or clarified; b) using qualitative results to enrich or explain quantitative results; c) using survey results or findings from secondary data analysis to examine the potential generalizability of qualitative themes; d) comparing findings from the quantitative and qualitative studies to enhance data interpretation; e) using the strengths of each method to answer their corresponding research questions (i.e., using surveys to quantify and compare characteristics of organizations at baseline and over time, and using focus groups to understand the meaning that participants assign to these characteristics); and finally f) to allow participants to contribute to the validity and usefulness of quantitative analyses by reflecting on results and adding their own interpretive lens through focus group discussions.[8] Specifically, the research team will compile quantitative findings (from the survival analysis, PARTNER survey, HVORS) to identify or clarify points of discussion for Fall focus groups (e.g., unexpected, contrasting, and general results) with staff and with 2017-18 Advisory Group members. The focus groups offer an opportunity to enrich the findings from these quantitative measures (e.g., add more context) as well as help to explain or clarify results. Additionally, the focus group results

will be reviewed in conjunction with development of measurement tools and additional analysis plans in case items need to be added. Thus, the approach is iterative.

Contribution of this Evaluation to Home Visiting Knowledge and Practice

Through mixed-methods research, this evaluation will examine characteristics and processes at the individual, organizational, community, and systems levels in order to identify factors promoting positive outcomes, including participant engagement and retention. The findings from the evaluation will be presented locally, regionally, and nationally in order to contribute to home visiting knowledge and also to facilitate translation from research to practice.

First, the USF MIECHV Evaluation will work with the FAHSC Learning Collaborative to increase **state capacity** through our process evaluation of the state and local systems facilitating family resources and supports developed throughout the state, as well as MIECHV-specific activities to enhance program and staff effectiveness. The state-level social network analysis may identify areas of success, as well as provide guidance or 'lessons learned' for future efforts to support MIECHV and other communities. Second, community-level social network analysis allows for programs to visualize (though PARTNER Tool and other data representations) and reflect on their community collaborations and systems to support families (e.g., number and type of partners, levels of interaction, trust, shared vision among partners, etc.). Third, at the organizational level, site-specific results are shared, providing sites quantitative and qualitative data for program promotion, planning, and improvement. Finally, the iterative nature of the evaluation (updated as needed in response to emerging issues in home visiting, in communities, and feedback from participating program families, staff, and state MIECHV team partners), our emphasis on a collaborative approach to evaluation (i.e., evaluators solicit research questions and feedback on evaluation results from program staff), and the inclusion of process evaluation components is consistent with **empowerment evaluation**,[9] which supports continuous learning and adaptation based on changing conditions and continuous reflection on program data.

Dissemination of Evaluation Results

Results can also identify lessons learned to help guide replication or scale-up of the innovations and successful practices. Thus, evaluation results will be disseminated via reports to FAHSC which are posted on the Florida MIECHV website (http://flmiechv.com/) and the USF MIECHV Evaluation website (miechv.health.usf.edu, URL: http://health.usf.edu/publichealth/chiles/miechv/). Additionally, evaluation results will be disseminated directly to Florida MIECHV providers, participants, and stakeholders via the monthly newsletter updates developed by FAHSC and short research briefs developed by the USF Evaluation Team. Finally, results will be presented at local, statewide, and national conferences and disseminated via publication in peer-reviewed journals. These results will reflect the diversity of individual pilot sites and processes and will also provide a picture of the effects of MIECHV on child and family outcomes, and engagement in home visiting as a whole.

Participant Engagement and Retention: How do community, organizational, and participant level characteristics and practices impact engagement and retention in the Florida MIECHV program?

Overview

Engagement and retention are areas of particular interest for MIECHV nationwide[10] and for Florida at the state and local levels. Paulsell and colleagues identify three key factors in assessing home visiting quality: dosage, relationship, and content.[11] This evaluation examines retention based on the premise that sufficient intervention dosage contributes to program outcomes. While the evaluation results may describe activities during home visits to some extent, model fidelity and home visit content is not a focus of the evaluation. Participant engagement, that is reciprocal engagement and the quality of relationship between the family and home visitor[12] is also examined in the evaluation through several methods, as it has been shown to increase retention and ultimately child and family outcomes.[13] Engagement maintenance encompasses mutuality in satisfaction, perceived participation, and quality of the relationship (e.g., trust) over time.[14] Engagement influences relationship, retention, and also may affect dosage (the number of completed visits vs. cancellations). In fact, meta-analyses have suggested that programs lasting one year with an average of four or more visits per month were more likely to show positive outcomes.[15] This evaluation embraces the relational perspective proposed by Wagner et al.[16] by considering the perspectives for both participants in the relationship – the participant and the home visitor – within their respective family, community, and organizational contexts rather than simply focusing on the participant's compliance or participation. Because the project team recognizes the critical role of ongoing rapport and trust between the home visitor/parent educator and program participant in an engagement partnership, a modified social intervention model (Figure 2) adapted from Wagner et al.[17], which is a simplified version of the Connecting People Intervention Model[18] is used to frame this evaluation approach (Figure 3). This model includes family characteristics, needs, and expectations; home visitor skills, program characteristics and expectations; and the relationship between them. As the dynamic relationship between home visitors and participants evolves, and participant's needs change, the benefits of the relationship can diminish from the participant perspective if expectations and services are not aligned.

Additionally, the evaluation model includes the larger context of community partnerships and resources, such as those outlined in McCurdy and Daro (Figure 4). Thus, the need for parental engagement support might look different early in the life of the program than after several months or following critical periods or events (such as child birth), and may look different from participant vs. staff perspectives. The notion of home visiting being a type of dynamic relationship revolving around participant's needs is well supported in scientific literature. For example, an analysis of Nurse-Family Partnership programs showed higher retention rates in areas where nurses were more flexible to the participants' needs and more willing to collaborate with participants.[19] Another study examining attrition in Early Head Start home-based programs suggested that families who received less engaging home visits were more likely to drop out, and the authors proposed that programs may improve retention of families by individualizing to their specific needs.[20] Another study assessed how dynamic, multi-dimensional aspects of engagement are influenced by the individual characteristics of mothers participating in Parents as Teachers programs. McCurdy, Gannon, Daro[21] found that ratings of the mother's engagement vary by mothers' age, ethnicity, level of education, and household level; thus they posited that a deeper

understanding of the relationship that builds between the home visitor and families over time may be useful for knowing how to better engage diverse families participating in home visiting programs.[22]

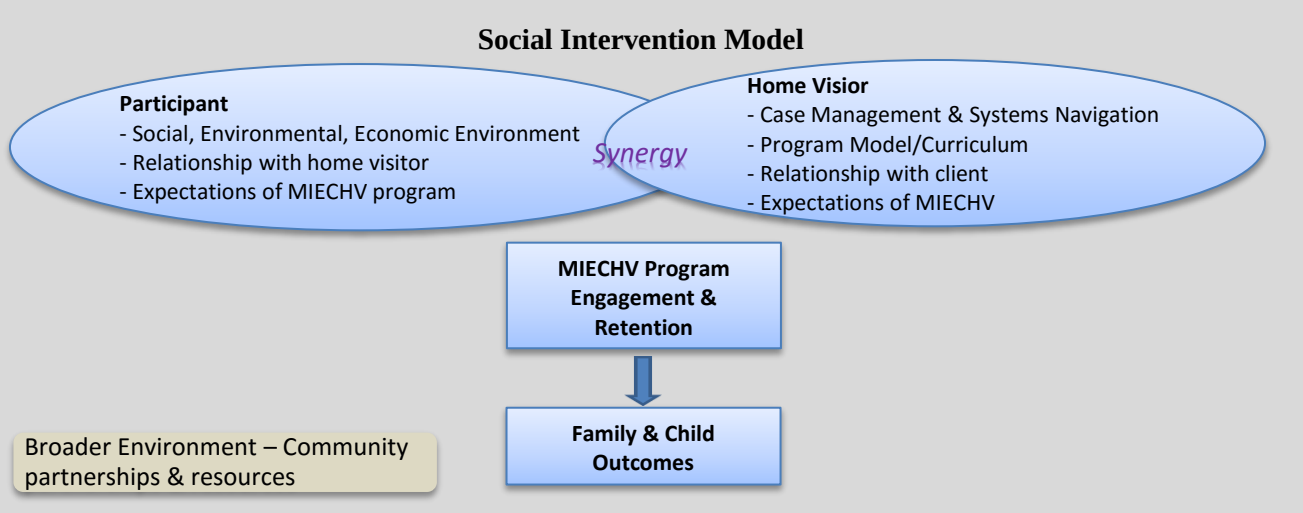


Figure 2: Adapted Social Intervention Model (Wagner, Spiker, Linn, & Hernandez, 2003).

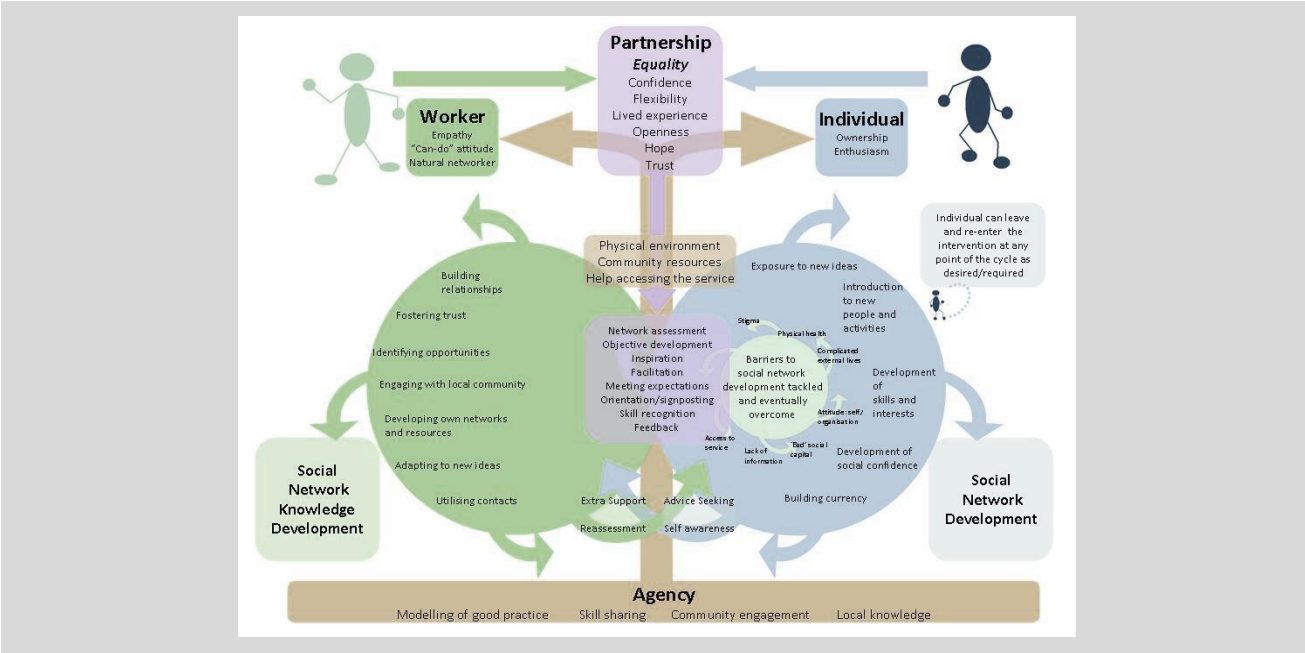


Figure 3: Connecting People Intervention Model[23]

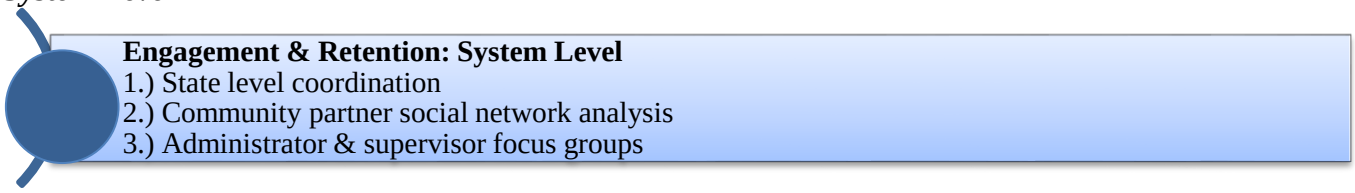
Therefore, the USF Evaluation Team will explore engagement and retention from the perspectives of the community partners, program staff (organizational level), and program participants using a theoretical framework that recognizes the developing and evolving relationship over time, as well as the synergy between participant needs and expectations and program staff requirements and expectations as a framework for the evaluation. Additionally, MIECHV staff can describe the particular needs of the community served – specifically enrolled families and certain subpopulations – and can explain how the program connects families to community partners for those various needs. At the participant/family

level, mixed-methods research examines participant enrollment and engagement through data analysis (survival analysis) and participants' perceptions through innovative approaches including Journey Mapping and Photovoice, as well as insights from an advisory group of individuals who have participated in the program. Thus, the main activities for this component of the evaluation include: 1) State-level and community-level social network analyses facilitated by use of the PARTNER Tool Survey; 2) administrator, supervisor, and home visitor focus groups; 3) data analysis of participant engagement and retention; 4) Journey Mapping – home visit observations (HVORS Tool and interviews); 5.) Photovoice project; and 6.) Participant Advisory Committee. The findings of this evaluation will help MIECHV programs to identify participant, staff, program, and community factors that support or impede successful engagement and completion in MIECHV.

Research Questions for Engagement & Retention Evaluation

1. How does collaboration and systems development occur at the state and community levels in Florida MIECHV?
    a. What role does each MIECHV program and state-level partner play in this systems work?
    b. To what extent does each community collaborative's focus align with MIECHV participant needs?
    c. What does the collaboration among agencies look like?
    d. Are those collaborations facilitating program implementation?
2. How do MIECHV program administrators and staff describe the needs of families served, in relation to community referrals and participant engagement and retention?
3. What are the patterns of engagement, home visit completion, and enrollment/retention for participants in each MIECHV community?
4. How do participants describe their own needs?
    a. Are participants receiving appropriate referrals and services?
5. How do participants and staff perceive and describe engagement and retention in MIECHV?
    a. As described through the Journey Mapping process and Photovoice project
    b. As described via the Home Visiting Observation Rating Scale (HOVRS) (Appendix A)
    c. As described by former participants [Advisory Committee]

System Level



1.) State-Level and Community-Level Coordination

2.) Community Partner Social Network Analysis

PARTNER Survey

To better understand interagency partnerships, community networks, and systems in each of the Florida MIECHV communities, surveys are administered among state level partners and also, in each MIECHV community, the community partners using the *Program to Analyze, Record, and Track Networks to Enhance Relationships* (PARTNER Tool),[24] a quantitative social network analysis and collaboration tool developed by the Robert Wood Johnson Foundation. At the state level, the PARTNER Tool will be implemented in 2016 to examine state agency leaders' and stakeholders' (e.g., MIECHV State Team,

Healthy Start Coalitions, relevant State MCH, DOE, DOH Leadership) levels of collaboration and action to support MIECHV community efforts. Within the state level survey, the Evaluation Team will capture data on the state agency leadership efforts to improve community coordination and capacity to address underlying social issues that impacting families (housing, transportation, employment, child care, etc.).

The use of this tool will allow the Evaluation Team to collect quantitative information on how well each collaborative is working in terms of identifying partners and leveraging resources; demonstrate how the local collaboratives are progressing over time and making change; and assess collaborative and participant outcomes. In collaboration with FAHSC and community sites, in 2017 key stakeholders from each community will be identified and asked to answer brief surveys online to assess the development of collaborations in their community over time. The decision regarding the timeline for implementing the tool will be made in collaboration with FAHSC, but currently the community-level PARTNER Tool is planned to be disseminated bi-annually to key stakeholders. Data are analyzed using the social network analysis tool provided by the Robert Wood Johnson Foundation, which allows the Evaluation Team to create graphic representations of the social network/collaborative model in each community; assess network scores including the number and quality of relationships; assess the roles adopted by each member of the collaborative; and assess outcome measures to indicate progress of the collaborative relationships over time. Changes over time for each of these measures will also be tracked. Additional analyses are conducted using SAS with raw data downloaded from the secure PARTNER website. The Evaluation Team will compare measures of community collaboration by pre- and post-test analyses. Trust scores calculated from the PARTNER survey at the end of year 3 (2015-16) will be compared to year 5 (2017-18) using paired t-tests. We will examine if the levels of collaboration changed over time for those programs that have data for both time periods by comparing the type of collaboration from PARTNER Tool at the end of 12 months with that at baseline. The magnitude of change will be analyzed using McNemar's tests for paired analyses of categorical data.

Research Aims: PARTNER Tool Survey

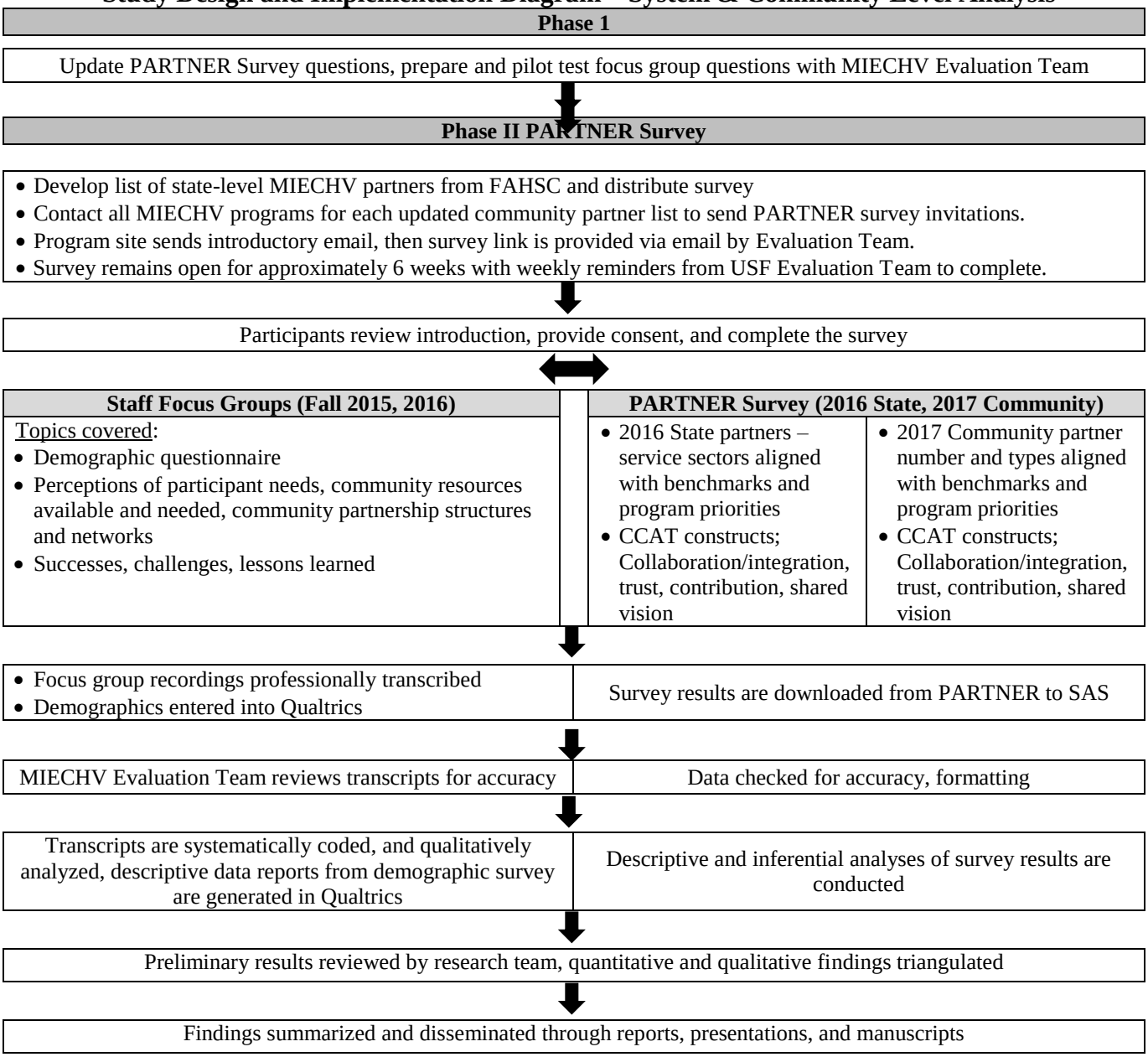
1. *To examine state-level partnerships that support the aims of the Florida MIECHV Program.*
2. *To monitor the size and growth in number of partners and their respective service sectors (e.g., early intervention, health care, child welfare, etc.) compared to 2014 and 2015 surveys.*
3. *To examine if there is a difference in trust scores (measures of organization reliability, mission congruence, and openness to discussion) within MIECHV sites compared to 2014 and 2015 surveys*
4. *To examine if the levels of collaboration (none, cooperation, coordination, and integration) change over time compared to 2014 and 2015 surveys and the magnitude of this change.*

3.) Administrator & supervisor focus groups

Qualitative Methods

Additionally, at the organizational level, focus groups are conducted with the program administrators, supervisors, and home visitors who live and work in those communities. Focus group guide questions on community partnership and collaboration (and PARTNER Tool survey for subsequent years) are drawn from Community Coalition Action Theory, which considers the lead agency and coalition membership, coalition infrastructure and maintenance, interagency relationships, and ultimately implementation and community change to benefit community capacity and health and social outcomes.[25,26]

Study Design and Implementation Diagram – System & Community Level Analysis



Organizational/Site Level

Engagement & Retention: Organizational/Site Level
1.) Administrator, supervisor, and home visitor focus groups
2.) Journey Mapping (home visitor perspective) - home visit observations, interviews, Photovoice

1.) Administrator/Supervisor and Home Visitor Focus Groups

At the program level, focus groups will be conducted with program administrators, supervisors, and home visitors (separate groups for home visitors and supervisors/administrators) at each of the 15 sites.

Qualitative methodology will be used to provide contextual information to better understand in-depth individual stakeholder perceptions of 1.) how programs are being implemented and services provided, and 2.) staff perspectives on factors impacting participant engagement and retention. First, focus group methodology provides rich, in-depth information on how participants perceive the community collaboration activities as well as how those perceptions are discussed in social groups. This will accomplish several goals, including giving greater depth and context to complement the results of the quantitative social network analysis; providing additional information about services that are being provided and received to complement the ETO and quarterly report data provided by each site; providing information on how groups discuss the home visiting programs and their collaborations in the community with each other; and providing important feedback for individual sites as well as the overall MIECHV program. Second, focus groups provide an opportunity for program staff, in their respective roles, to share their perceptions and experiences related to engagement and retention of their participants, and to explore and discuss the individual (staff and participant), family, community, and organizational factors impacting retention, such as those proposed in McCurdy and Daro's 2001 Conceptual Model of Parent Involvement (Figure 3).[27]

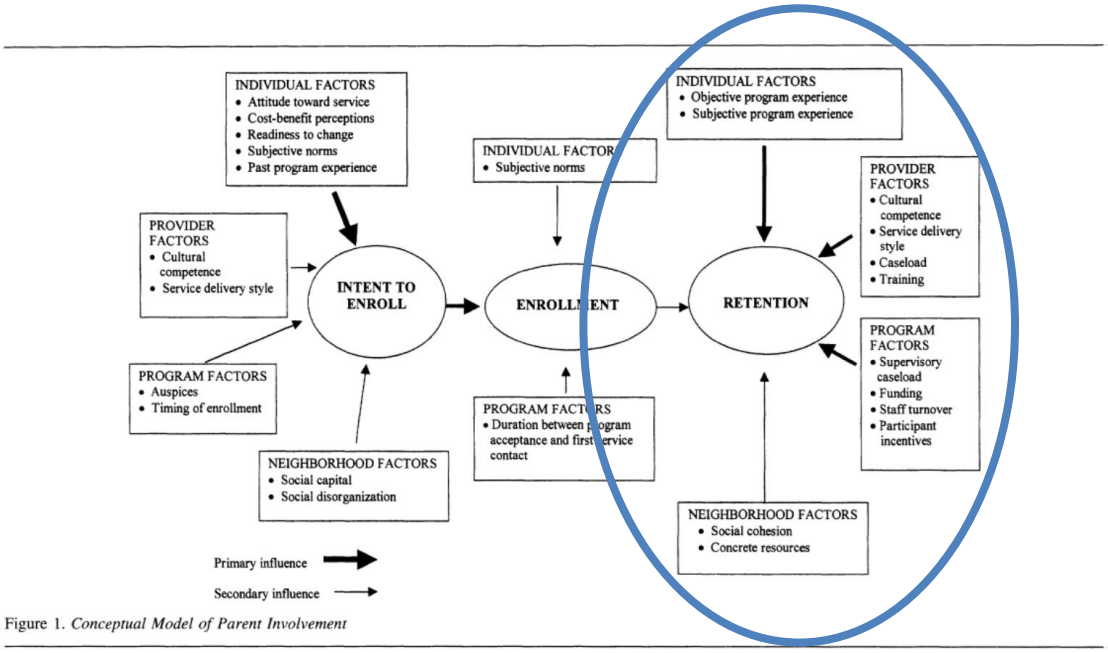


Figure 1. *Conceptual Model of Parent Involvement*

Figure 4: Conceptual Model of Parent Involvement (McCurdy & Daro, 2001)

Focus group facilitators consist of MIECHV Evaluation Team PI and Graduate Research Assistants who have been trained and experienced in focus group facilitation and qualitative research methods. Interviews and group discussions will be audio recorded using a digital voice recorder and transcribed. Qualitative data will be analyzed using qualitative data analysis software, such as Atlas.ti or MAXQDA. Prior to analysis, the Evaluation Team will develop a flexible *a priori* codebook, which will contain initial codes based on the questions and topics in the focus group guide. Data will be analyzed using the constant comparative method, through open, selective, and axial coding (using both emergent and *a priori* codes) to develop a theoretical understanding and description of engagement and retention. At least two coders will code each transcript until an appropriate level of agreement (80% percent agreement or kappa) is reached[28]. Emergent codes will be added to the codebook as appropriate.

Study Design and Implementation Diagram – Staff Focus Groups

Phase I

Prepare and pilot test interview questions with MIECHV Evaluation Team (Y2)
(team review, MIECHV state team review, pilot test in paper format and online)

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Site visits are scheduled with program staff (fall 2016, 2017)

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Phase II Staff Focus Groups (Fall 2016)

Topics covered:

- Demographic questionnaire
- Participant needs and services, engagement, and retention from staff perspectives (staff, participant/family, community, and organizational factors impacting retention)
- Successes, challenges, and lessons learned

Phase III

Interview recordings sent for professional transcription, Demographic questionnaires entered into Qualtrics

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MIECHV Evaluation Team reviews transcripts, field notes, and demographic data for accuracy

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Coded transcripts from interviews/focus groups are systematically coded, and qualitatively analyzed

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Descriptive data reports from demographic survey are generated in Qualtrics

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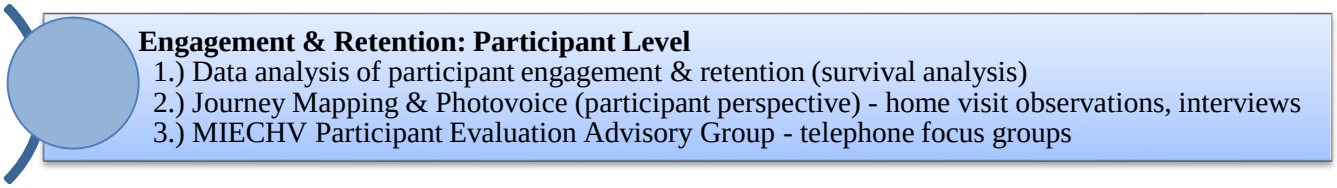
Findings summarized and disseminated through reports, presentations, and manuscripts

3.) Journey Mapping & Photovoice- home visit observations and home visitor interviews

See below

Participant Level



1.) Data Analysis of Participant Engagement & Retention

Understanding patterns in enrollment, early discontinuation, and successful completion is a first step to identifying critical periods in the life of the program for participants across programs and potential reasons for early discontinuation. As shown in a longitudinal study of Healthy Start Programs in Hawaii, keeping families early on is a struggle: 90% were still active when the child turned three months of age, 70% by six months of age, 56% by nine months of age, and 49% by the time the child was twelve months of age. Families' refusal of service was the largest reason for attrition and mostly occurred within 3 to 6 months or before the family received 3 home visits[29] (Duggan et al., 2000). Incorporating,

as we suggest, more frequent check-ins between the home visitor and the participant early on may aid in keeping families engaged by knowing that their unique needs will be addressed in the program.

The MIECHV Evaluation Team will conduct a survival analysis of all families enrolled in MIECHV during the length of the program and for each program year. The purpose will be to answer the following: 1) What are the patterns of survival (median survival time, quartiles of the survival function, and survival rates at six-months throughout eligibility? 2) Is frequency of home visits associated with attrition of participants? 3) Are certain participant or community characteristics associated with increased or decreased survival (program completion)?

Specifically, attrition at 6, 12, and 24 month time periods will be calculated. Additionally, patterns in home visit completion (dosage) will be examined. The MIECHV expectation is that the family receives two home visits per month, although this number may increase during transition into or out of the program. While variability is expected, drops in dosage may indicate a lack of engagement or may be an indicator of pending attrition. Participant or community characteristics may relate to completion, such as participant employment, successful referrals to needed services, and housing instability. Program and community level factors will also be examined using data analysis (e.g., PARTNER Tool results, secondary data analysis). Those potential factors for study will be identified through qualitative methods (staff focus groups and participant interviews).Because Florida MIECHV serves over 1,000 families per year, it is anticipated that we will have sufficient data to conduct the analyses, and because of the breadth of program models, types, locations, and diversity of families enrolled, the results may be of interest to a broad audience.

2.) <u>Journey Mapping & Photovoice – Home Visitor and Participant Perspectives</u>

Year 4 - Journey Mapping. Customer journey mapping has traditionally been used as a market research tool to help understand the customer's experience.[30,31] However, journey mapping has proved useful in health and social services research[32] as a quality improvement and advocacy tool for improving the service experience and engagement of underserved populations such as persons with disabilities,[33] individuals in the drug court system,[34] participants in mental health services,[35] and participants in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) program.[36] In year 4, Evaluation Team members will participate in 4-6 journey mapping observations at 1-2 program sites (convenience sample) to observe and better understand engagement from the home visitor's perspective and from the family's perspective. Interviews will be conducted with program participants, staff, and evaluator participating in each journey mapping exercise. Interview questions will capture the experience from each of these perspectives, in the context of home visit expectations and perceptions of success/quality, and components of the home visit that contributed or detracted from further engagement or retention, including outside factors (e.g., organizational expectations, family, community, other pressures or commitments, etc.). These interviews will be transcribed and qualitatively analyzed.

The evaluator will also observe the participant/home visitor engagement using the Home Visit Rating Scale, Adapted & Extended (HVORS A+) in this project. The HVORS A+ is an observation tool for practitioners and supervisors that measures home visitor/parent educator practices supporting a developmental parenting approach that respects each family's strengths and culture.[37,38] Frequency statistics including mean, standard deviation, and range will be calculated to describe overall quality, the seven HVORS scales (home visitor responsiveness to family, home visitor relationship with family, home visitor facilitation of parent-child interaction, home visitor nonintrusiveness, and parent-child interaction, parent engagement, and child engagement) and subscales, home visitor strategies quality and

participant engagement quality. Parents participating in the journey mapping visit and interview will receive a $25 gift card for their time. Staff are unable to receive compensation for their time as participation in the evaluation is considered part of the programmatic funds. However, participation in journey mapping is on a volunteer/self-selected basis and staff consent will be obtained.

Year 5 – Photovoice. Photovoice is a community-based participatory research method that can be altered to fit diverse participant characteristics, varies across key stages, and can result in improving community health outcomes.[39] Photography allows individuals to tell their story and show others their framing of the world around them.[40] Photographs taken by individuals in a community provide an understanding of: a) what is important to them; b) what is part of their legacy; and c) what they want to share and communicate, as pictures are a complex language of their own.[41] Members in the community can bridge their individual differences and equally share from their personal experience.[42] The photovoice approach gives members of the community power to move outsiders through their insider perspective.[43] This tool is easy to adapt in addressing a community's concerns and priorities to ultimately facilitate a change or improvement. Photovoice will be incorporated as an innovative and participatory method that will enhance the quality of discussions[44] by exploring community health priorities among participants in the Florida MIECHV program. In 2017, staff and participants who connected with the Evaluation Team through the journey mapping activity will be invited to participate in a photovoice project. Because members are dispersed throughout the state, they will be trained via a virtual meeting and webinar (e.g. project goals and timeline, how to use the camera, the topic of focus/parameters for photographs, and safety and confidentiality considerations. Those who choose to participate will be given a disposable digital camera to take pictures capturing barriers and facilitators to engagement and retention in the program. An evaluation team member will then review the pictures with the photovoice participant (family participant or staff) and gather through telephone or in-person interview, their explanations (captions) for what each photograph represents. These participants will receive a $25 gift card for their participation in the interview and a high quality printed copy of the report. Results of the photovoice activity will be reviewed with the Advisory Committee below to add further context and feedback to the project, and then the photovoice project will be compiled into a report shared with MIECHV staff and participants. The results of these three methods: journey mapping interviews with observers, staff and program participants; HVORS observational tool; and Photovoice projects will provide insight into individual, relationship, and contextual factors that influence participant engagement, and may also contribute to program participant retention.

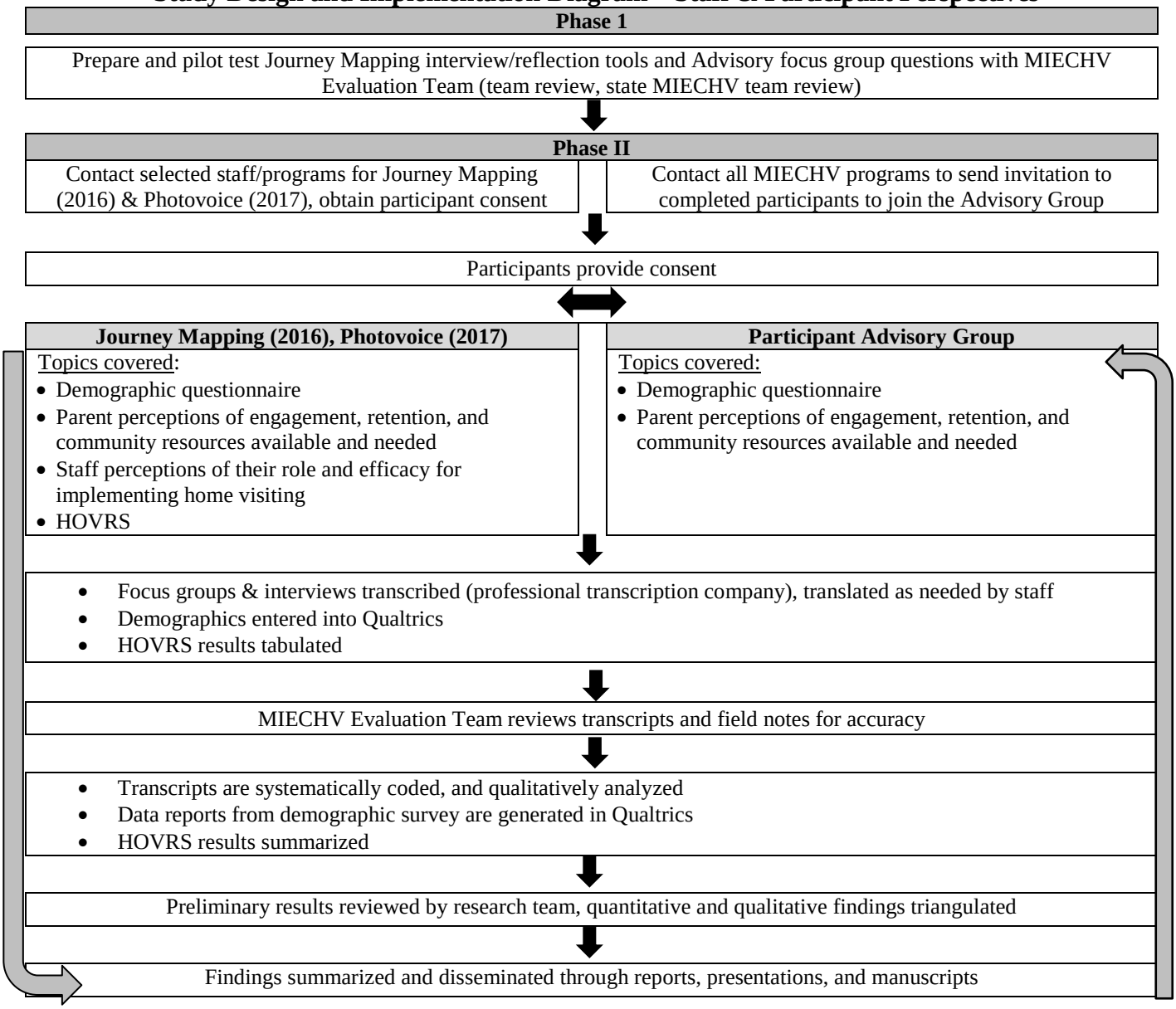
3.) MIECHV Participant Evaluation Advisory Group (Year 5)

A participant Advisory Committee of up to 20 participants will be recruited from all families who have left or completed the program after a minimum of 6 months participation. Through focus group discussions with a group of participants who have the opportunity to build rapport with the research team and one another over the course of 1-2 years, participants can describe their perspectives and experiences related to engagement, participation, and retention in the MIECHV program. A particular emphasis will be on participant qualities (resilience, interest, commitment) associated with participation, engagement, and retention in MIECHV. The qualitative findings from Advisory Group discussions will be triangulated with available programmatic data on participant retention and program participation. Additionally, these qualitative findings may identify new variables for further quantitative analysis.

Flyers inviting participants to participate on the Advisory Group will be sent to all eligible families by each program. Interested participants will contact the USF Evaluation Team for screening for eligibility. Up to two participants per program will be selected. For the convenience of participants, group

discussions will be conducted via telephone three times per year, scheduled at a day/time determined most convenient for the majority of participants. Discussions will be conducted by the MIECHV Evaluation Team PI and Graduate Research Assistants who have been trained and experienced in qualitative research methods. For Spanish or Haitian-Creole speakers, a translator will be available for each discussion group as needed. An interview guide will be developed by the research team, with contribution and review from the state MIECHV team to ensure questions of interest are discussed) to include introduction and informed consent script, and questions and probes related to needs, satisfaction, engagement, and retention. Participants will be provided a $25 incentive for participation in each discussion group. Interviews will be audio recorded using a digital voice recorder and transcribed into English. Any comments in Spanish or Haitian-Creole will be transcribed verbatim and translated by the research team (a fluent Spanish or Haitian-Creole staff person).

Study Design and Implementation Diagram – Staff & Participant Perspectives



Research Questions and Data Sources – Participant Engagement & Retention Study

Level/Context	Research Question	Example Variables	Data Source
System Community	*How does collaboration and systems development at the state and community levels occur in MIECHV communities?*	• open-ended responses on state PARTNER Survey • number of partners and their respective service sectors (e.g., early intervention, health care, child welfare, etc.) • open ended responses – staff interviews	• State level PARTNER Survey • Supervisor & Administrator interviews/focus groups
System Community Organizational	*What role does each MIECHV program play in this systems work?*	• open ended responses – staff interviews	
System Community Organizational	*To what extent does each community collaborative's focus align with MIECHV participant needs?*	• rating of most important outcomes of MIECHV (% agreement)	
System Community Organizational	*What does the collaboration among agencies look like? Are those collaborations facilitating program implementation?*	• number of partners and their respective service sectors (e.g., early intervention, health care, child welfare, etc.) • trust scores (measures of organization reliability, mission congruence, and openness to discussion) • levels of collaboration (none, cooperation, coordination)	PARTNER Tool Staff interviews/ focus groups
Organizational Participant	*How do MIECHV staff describe the needs of families served, in relation to community referrals and participant engagement and retention?*	• open ended responses – staff interviews • interview responses – Journey Mapping	Staff interviews/focus groups
Organizational Participant	*What are the patterns of engagement, home visit completion, and enrollment/retention for participants in each MIECHV community?*	• participant enrollment data • interview responses – Journey Mapping • HVORS – Journey Mapping • Photovoice Project	MIECHV/ETO Data Staff interviews/ focus groups Journey Mapping Interviews, HVORS
Participant	*How do participants describe their own needs?*	• Participant interview responses – Journey Mapping • Participant Advisory Committee	Journey Mapping Interviews, HVORS
Organizational Participant	*Are participants receiving appropriate referrals and services?*	• Staff interview responses • Participant, Staff, Observer interview responses – Journey Mapping • Participant Advisory Committee	Staff interviews/ focus groups Journey Mapping Interviews, HVORS
Participant	*How do participants and staff perceive and describe engagement and retention in MIECHV?*	• Participant interview responses – Journey Mapping • Participant Advisory Committee	Journey Mapping Interviews, HVORS

Staffing and Budgets

- Jennifer Marshall, PhD, MPH, Research Assistant Professor, University of South Florida (USF), College of Public Health, Provides oversight and guidance for the Florida MIECHV evaluation. Dr. Marshall is a Research Assistant Professor in the Department of Community & Family Health in the College of Public Health at the University of South Florida. She holds a BA in psychology and child development from the University of Washington, MPH and PhD in public health from the University of South Florida, and completed her post-doctoral research in special education and early intervention at the School of Education and Human Development at the University of Miami. Dr. Marshall conducts mixed-methods, community-based research in three primary areas: early identification of developmental issues; access to services and supports; and quality in health, education, and community services. Past projects include an examination of developmental screening and referral practices among health care, social services and early education agencies; parental recognition and response to developmental delays in young children; and enrollment and satisfaction with services following developmental screening.
- Pamela Birriel, Doctoral Candidate, MPH, Evaluation Coordinator has worked with the MIECHV evaluation since 2013. Pam's dissertation topic explores the Nutritional Needs, Roles, & Expectations of Hispanic/Latina Breast Cancer Survivors after Treatment using the Stress and Coping Model. Pam has extensive research experience in community & family health and is also fluent in Spanish.
- Rema Ramakrishnan, MPH, is the Data Analyst for the Florida MIECHV Evaluation Team at the University of South Florida. She is a doctoral candidate in epidemiology and biostatistics in the College of Public Health. She has more than six years' experience in analyzing quantitative data and has experience in qualitative analysis as well. She is experienced in SAS, STATA, R, WINBUGS, and ArcGIS software. Currently, she is working on her dissertation that examines the association between air pollutants and congenital diaphragmatic hernia in the state of Florida.
- Paige Alitz, BS is a Graduate Research Associate with the MIECHV Evaluation Team at the University of South Florida. She is currently earning a MPH in Epidemiology. She received a BA in International Studies with an emphasis on Global Health from the University of Iowa, and has 5 years of community building experience both nationally and internationally. Paige is also a trainer for a certified suicide prevention gatekeeper course at the University of South Florida. She has both quantitative and qualitative research experience, including SAS and ArcGIS software. Currently, she is working on a secondary data analysis project of attendance trends in a Tampa region child development class called Baby Bungalow to allow the director more leverage in receiving support from their funders.
- William Sappenfield, MD, MPH, CPH, Professor and Chair of the Department of Public Health (Co-Investigator) has over 30 years of experience in maternal and child health research and practice at a community, state and national level. As both a pediatrician and epidemiologist, this project represents exactly the type of work that he has focused on over these years directly as well as taught, mentored and supervised others to do as well. He also works on national committees for conferences, training-workshops and journals for the field.
- Marti Coulter, DrPH, MSW, Professor USF College of Public Health (Co-Investigator) - .01 FTE Provides assistance with collaboration network analysis and mental health component related to home visitor mental health, family violence, and child maltreatment; data interpretation for 4 additional sites. Dr. Coulter serves as Director of the Harrell Center for the Study of Family Violence, and is Professor in the Department of Community and Family Health, College of Public Health at the University of South Florida. Dr. Coulter's various community

relationships combined with her national and international academic and professional accomplishments provide strong leadership for The Harrell Center. She is a certified family and dependency mediator and is considered an expert in family violence and its impact on children and families. She has an extensive publication record in the area of family violence, and has taught various courses at the graduate level on violence and maternal and child health at the College of Public Health.

The evaluation will be supported by $400,000 in funding from the competitive grant award over the two year and implementation period (see Budget and Budget Justification).

Evaluation Contract Deliverables

1. Within 45 days of contract signature: detailed evaluation plan with timeline and products/output.
2. Quarterly: Detailed progress report on implementation of evaluation plan. See Timeline/Workplan
3. Quarterly: Summary analysis of demographic, service data, and progress in achieving benchmarks based on data entered into FLOHVIS.
4. Annually: A summary progress report on evaluation activities and resulting outputs; summary demographic, service and utilization data based on data entered into FLOHVIS by the implementation sites, and summary of comparison of benchmarks vs. baseline to date.

Budget Justification Y4

Year 4 Costs

Personnel

Faculty

- Jennifer Marshall, PhD, MPH Principal Investigator (0.40 FTE)
  Dr. Marshall will provide oversight, coordination, and guidance for all 3 parts of the evaluation process, including design, data collection (non-ETO data), data analysis, and report writing; administrative responsibility and supervision of graduate students; coordination with ETO administrator and communities; data quality activities; and product development.
- Bill Sappenfield, MD, MPH, Co-Investigator (0.01 FTE)
  Dr. Sappenfield will contribute to oversight for data source linkages between the ETO System and external databases for the benchmarks and metrics; will participate in data monitoring and data quality activities; and will assist in data interpretation and analysis.
- Martha Coulter, DrPH, MSW, Co-Investigator (0.01 FTE)
  Dr. Coulter will assist with the design and implementation of the collaboration and network analysis; and data interpretation for the collaboration and network analysis and required benchmarks.

Students

- Graduate Research Assistant Data Analyst (0.5 FTE)
  Funds are requested to support 1 graduate student with tuition waiver to assist with benchmark reporting and quantitative data analysis.

- Graduate Research Assistants (2 at 0.50 FTE, 2 at 0.25-.037)
  Funds are requested to support 2 graduate students with tuition waiver to assist with IRB applications; interview/focus group data collection and analysis; preparing data for reports and dissemination, including manuscript publication and conference presentations; and coordination of evaluation activities with the 14 programs.
  2 OPS research assistants (1 12-month, 1 9-month) to assist with arranging travel, data collection (interviews/focus groups), transcription checks, reporting and dissemination.
- Travel to conduct interviews in communities (5 regions) for qualitative components of evaluation.
- Travel for faculty, staff, and student conference presentation and participation (e.g., participation in Florida Public Health Association Meeting and American Public Health Association National Meeting, and National and Regional MIECHV meetings, CQI study sessions, etc.)

FRINGE BENEFITS

- Fringe benefits are calculated at 16.44% of requested salary dollars and include: FICA, Medicare, workers compensation, unemployment compensation, retirement and terminal leave pool. In addition, health insurance is calculated as follows: Individual coverage-$592/month; Family coverage-$1,265/month; Spouse coverage-$715/month based on actual coverage and prorated on percent FTE. Annual increases in health insurance (10%) are calculated.
- Fringe benefits for graduate students are calculated at 0.50% of requested salary support and include workers compensation, unemployment compensation and terminal leave pool. Graduate student health insurance is calculated at $2,173 per year. Annual increases in student health insurance (10%) are calculated.

OTHER DIRECT COSTS

Other Costs

- Materials/Supplies – recorders and materials for focus groups and interviews
- Printing copies and postage for participant interview recruitment, implementation of focus groups, and reporting/dissemination
- Incentives for participation in interviews for Journey Mapping Participants (20 X 3/yr. X $25)
- Funds are requested for PARTNER Tool Survey online access (15 communities) for collaboration analysis

Graduate Student Tuition

- Tuition for three Graduate Research Assistants for Summer, Fall, Spring semester, 1 additional GRA prorated from Spring semester 2016.

Consultant Services

- Interview transcription: Interview recordings for 3 Advisory Group discussions with parent participants and 15 focus groups with staff at site visits (15 sites, separate focus groups with home visitors and with administrators/supervisors) will be sent to CiviCom (www.civi.com) for transcription.

Direct Costs, Year 5: $181,818
Indirect Costs (10%), Year 4: $18,182 (Calculated at 10% of TDC base)
Total Costs, Year 4: $200,000

Budget Justification Y5

Year 5 Costs

Personnel

Faculty

- Jennifer Marshall, PhD, MPH Principal Investigator (0.35 FTE)
  Dr. Marshall will provide oversight, coordination, and guidance for all 3 parts of the evaluation process, including design, data collection (non-ETO data), data analysis, and report writing; administrative responsibility and supervision of graduate students; coordination with ETO administrator and communities; data quality activities; and product development.
- Bill Sappenfield, MD, MPH, Co-Investigator (0.01 FTE)
  Dr. Sappenfield will contribute to oversight for data source linkages between the ETO System and external databases for the benchmarks and metrics; will participate in data monitoring and data quality activities; and will assist in data interpretation and analysis.
- Martha Coulter, DrPH, MSW, Co-Investigator (0.01 FTE)
  Dr. Coulter will assist with the design and implementation of the collaboration and network analysis; and data interpretation for the collaboration and network analysis and required benchmarks.

Students

- Graduate Research Assistant Data Analyst (0.5 FTE)
  Funds are requested to support 1 graduate student with tuition waiver to assist with benchmark reporting and quantitative data analysis.

- Graduate Research Assistants (2 at 0.50 FTE, 2 at 0.25-.037)
  Funds are requested to support 2 graduate students with tuition waiver to assist with IRB applications; interview/focus group data collection and analysis; preparing data for reports and dissemination, including manuscript publication and conference presentations; and coordination of evaluation activities with the 14 programs.
  2 OPS research assistants (1 12-month, 1 9-month) to assist with arranging travel, data collection (interviews/focus groups), transcription checks, reporting and dissemination.
- Travel to conduct interviews in communities (5 regions) for qualitative components of outcomes and engagement evaluation.
- Travel for faculty, staff, and student conference presentation and participation (e.g., participation in Florida Public Health Association Meeting and American Public Health Association National Meeting, and National and Regional MIECHV meetings, CQI study sessions, etc.)

FRINGE BENEFITS

- Fringe benefits are calculated at 16.44% of requested salary dollars and include: FICA, Medicare, workers compensation, unemployment compensation, retirement and terminal leave pool. In addition, health insurance is calculated as follows: Individual coverage-$592/month; Family coverage-$1,265/month; Spouse coverage-$715/month based on actual coverage and prorated on percent FTE. Annual increases in health insurance (10%) are calculated.
- Fringe benefits for graduate students are calculated at 0.50% of requested salary support and include workers compensation, unemployment compensation and terminal leave pool. Graduate student health insurance is calculated at $2,173 per year. Annual increases in student health insurance (10%) are calculated.

OTHER DIRECT COSTS

Other Costs

- Materials/Supplies – recorders and materials for focus groups and interviews and Photovoice project
- Printing copies and postage for participant interview recruitment, implementation of focus groups, and reporting/dissemination
- Funds are requested for incentives for participation in discussion groups for parent Advisory Group participants and Photovoice project (20 X 3/yr. X $25)
- Funds are requested for PARTNER Tool Survey online access (15 communities) for collaboration analysis

Graduate Student Tuition

- Tuition for three Graduate Research Assistants for Summer, Fall, Spring semester, 1 additional GRA prorated from Spring semester 2016.

Consultant Services

- Interview transcription: Interview recordings for 3 telephone interviews with parent Advisory Group participants and 15 focus groups with staff at site visits (15 sites, separate focus groups with home visitors and with administrators/supervisors) will be sent to CiviCom (www.civi.com) for transcription.

Direct Costs, Year 5: $181,818
Indirect Costs (10%), Year 5: $18,182 (Calculated at 10% of TDC base)
Total Costs, Year 3: $200,000

MIECHV Evaluation Workplan, Year 4
University of South Florida, Chiles Center for Healthy Mothers and Babies

Milestones and Timelines	**Apr 2016**	**May**	**June**	**July**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan 2017**	**Feb**	**Mar**
Program Organization and Management												
Hold regular weekly or biweekly meetings with Research Assistants	X	X	X	X	X	X	X	X	X	X	X	X
Hold bimonthly evaluation team meetings (or as needed)	X		X		X		X		X		X	
Continue to participate in CQI activities	X	X	X	X	X	X	X	X	X	X	X	X
Participate in State and Regional MIECHV meetings and workgroups	X	X	X	X	X	X	X	X	X	X	X	X
Notes:												
Milestones and Timelines	**Apr 2016**	**May**	**June**	**July**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan 2017**	**Feb**	**Mar**
How do MIECHV programs promote participant engagement & retention?												
Identify state-level level leaders/stakeholders	X	X	X									
Administer state-level PARTNER Tool			X	X	X							
Analyze data from state-level PARTNER Tool					X	X	X					
Report findings from state-level PARTNER Tool							X	X	X			
Analyze data from state-level PARTNER Tool										X	X	X
Report findings from PARTNER												X
Conduct interviews with home visitors, supervisors and administrators					X	X	X					
Journey mapping site visits (4-6) scheduled at convenience of programs	X	X	X	X	X	X	X					
Analyze data from interviews with staff and journey mapping observations							X	X	X			
Recruit Participant Evaluation Advisory Committee Members	X	X										
Conduct telephone discussion with advisory group members on engagement (frequency, scheduling, and content of visits), connection to services, retention			X	X			X	X			X	X

Examine participant engagement through data analysis (survival analysis) of variables associated with timing of discontinuation, reduced frequency of completed home visits, and family characteristics/variables associated with those discontinuations or reductions in frequency.	X	X	X	X	X	X	X	X	X	X	X	X
Continue to participate in CQI activities	X	X	X	X	X	X	X	X	X	X	X	X
Continue literature reviews	X	X	X	X	X	X	X	X	X	X	X	X
Prepare and submit manuscript(s) for publication	X	X	X	X	X	X	X	X	X	X	X	X
Provide Year 4 report on engagement and retention											X	X
Notes:												

MIECHV Evaluation Workplan, Year 5

University of South Florida, Chiles Center for Healthy Mothers and Babies

Milestones and Timelines	**Apr 2017**	**May**	**June**	**July**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan 2018**	**Feb**	**Mar**
Program Organization and Management												
Hold regular weekly or biweekly meetings with Research Assistants	X	X	X	X	X	X	X	X	X	X	X	X
Hold bimonthly evaluation team meetings (or as needed)	X		X		X		X		X		X	
Continue to participate in CQI activities	X	X	X	X	X	X	X	X	X	X	X	X
Participate in State and Regional MIECHV meetings and workgroups	X	X	X	X	X	X	X	X	X	X	X	X
Notes:												
Milestones and Timelines	**Apr 2017**	**May**	**June**	**July**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan 2018**	**Feb**	**Mar**
How do MIECHV programs promote participant engagement & retention?												
Identify community -level program partners	X	X	X									
Administer community-level PARTNER Tool			X	X	X							
Analyze data from community -level PARTNER Tool					X	X	X					
Report findings from community -level PARTNER Tool					X	X	X	X	X			
Conduct interviews with home visitors, supervisors and administrators					X	X	X					
Invite Journey Mapping participants to participate in Photovoice Project	X	X	X	X	X	X	X					

Conduct Photovoice trainings – online, in-person, conference call	X	X	X									
Implement Photovoice project				X	X	X						
Collect results from staff and program participants					X	X	X					
Analyze data from Photovoice							X	X	X			
Present results										X	X	X
Conduct telephone discussion with advisory group members on engagement (frequency, scheduling, and content of visits), connection to services, retention			X	X			X	X			X	X
Examine participant engagement through data analysis (survival analysis) of variables associated with timing of discontinuation, reduced frequency of completed home visits, and family characteristics/variables associated with those discontinuations or reductions in frequency.	X	X	X	X	X	X	X	X	X	X	X	X
Continue to participate in CQI activities	X	X	X	X	X	X	X	X	X	X	X	X
Continue literature reviews	X	X	X	X	X	X	X	X	X	X	X	X
Prepare and submit manuscript(s) for publication	X	X	X	X	X	X	X	X	X	X	X	X
Provide Year 5 report on engagement and retention											X	X
Notes:												

Appendix A: Home Visiting Observation Scale (HVORS)

Home Visit Rating Scales-Adapted & Extended: HOVRS-A+

Lori A. Roggman, Gina A. Cook, Vonda K. Jump, Mark S. Innocenti, Katie Christiansen, Lisa K. Boyce, Utah State University
Nikki Aikens, Kim Boller, Diane Paulsell, & Kristin Hallgren, Mathematica Policy Research

Overview:

The *Home Visit Rating Scales-Adapted & Extended* (HOVRS-A+) measure is designed for practitioners and supervisors seeking a ***high level of excellence*** in home visiting practices in programs aiming to help parents to support the early development of their infants and young children. As an extension of HOVRS-A (Roggman, et al., 2010), which was an adaptation of the original HOVRS (Roggman et al., 2008) measure, HOVRS-A+ has the improved ease of use of HOVRS-A along with the full range of rating scores of the original HOVRS. All versions of HOVRS emphasize a developmental parenting support approach that respects each family's strengths and culture. The HOVRS measures were developed with input from practitioners and supervisors in home visiting programs and rate aspects of home visiting quality that are supported by the research literature on various home visiting programs. HOVRS measures have been used to provide feedback to practitioners and supervisors for program improvement.

Description of the HOVRS-A+ Scales

SCALE 1–HOME VISITOR RESPONSIVENESS TO FAMILY

This scale assesses the extent to which the home visitor is (1) prepared for the home visit, (2) attempts to get needed information from the parent, (3) observes and responds to the parent and child during the home visit, and (4) elicits input on the content and activities of the home visit from the parent. A high rating on this scale suggests that the home visitor is frequently engaging in responsive behaviors during the home visit.

SCALE 2–HOME VISITOR-FAMILY RELATIONSHIP

This scale examines the nature of the relationship between the home visitor and the family, as observed during the home visit. It focuses on (1) warmth between the home visitor and parent, (2) parent comfort with the home visitor, (3) positive interactions of the home visitor with the child and other members of the family, and (4) the home visitor's respect and understanding of the family as a whole. A high rating on this scale suggests that the home visitor and family are frequently engaging in warm, positive behaviors during the home visit.

SCALE 3–HOME VISITOR FACILITATION OF PARENT-CHILD INTERACTION

This scale assesses the effectiveness of the home visitor at facilitating and promoting positive parent-child interactions during the home visit. It reflects how much the home visitor (1) encourages the parent's leadership when guiding parent-child interactions, (2) involves and responds to both the parent and the child during interactions, and (3) uses materials available in the home for promoting parent-child interactions. A high rating on this scale suggests that the home visitor is frequently engaging in facilitative behaviors during the home visit.

SCALE 4–HOME VISITOR NON-INTRUSIVENESS/COLLABORATION WITH FAMILY

This scale focuses on the lack of intrusiveness by the home visitor on parent behavior and parent-child interactions during the visit. It assesses (1) home visitor control and (2) home visitor flexibility and responsiveness. A high rating on this scale suggests that the home visitor rarely engages in intrusive behaviors during the home visit and that he or she uses effective strategies to collaborate with the parent. A high rating on this scale means the home visitor is non-intrusive in a manner that promotes collaboration with the parent as a partner in supporting the child's development.

*Roggman, L. A., Cook, G. A., Innocenti, M. S., Jump Norman, V. K., Christiansen, K., Boyce, L. K., Aikens, N., Boller, K., Paulsell, D., & Hallgren, K. (2010). *Home Visit Rating Scales—Adapted and Extended (HOVRS-A+)*. Unpublished Measure.

SCALE 5–PARENT-CHILD INTERACTION DURING HOME VISIT
This scale examines the nature of the parent-child relationship, as observed during the home visit. It assesses (1) parent-child warmth and physical closeness, (2) parent attentiveness to the child, (3) parent responsiveness to the child, and (4) parent-child joint attention. A high rating on this scale suggests that the parent and child are frequently engaging in warm, positive behaviors during the home visit.

SCALE 6–PARENT ENGAGEMENT DURING HOME VISIT
This scale examines the engagement of the parent and the activities of the home visit. It focuses on (1) parent interest, (2) parent involvement and initiative, and (3) the parent's physical closeness to the home visitor and child. A high rating on this scale suggests that the parent is frequently displaying behaviors that indicate interest and engagement in the home visit activities and discussions.

SCALE 7–CHILD ENGAGEMENT DURING HOME VISIT
This scale focuses on the child's engagement in the activities of the home visit. It focuses on (1) child involvement and (2) child interest. A high rating on this scale suggests that the child is frequently displaying behaviors that indicate engagement and interest in the home visit.

Psychometric properties:
High HOVRS scores reflect high quality home visits and predictive validity is demonstrated by significant correlations with positive outcomes for parents and children in a sample of families from two Early Head Start programs. The new HOVRS-A+ scales have been used reliably, with interrater agreement within one point for all scales across 10 observed home visits and scales showing good internal consistency (see below) based on a sample of 83 home visits from various programs. All HOVRS versions include seven rating scales: four for home visiting practices and three for the family engagement and interaction during home visits.

HOVRS-A+ scales (7 scales, *alpha* = .88):

Scales of *Home Visit Process Quality (*4 scales, *alpha* = .84)*:*

- **Home Visitor Responsiveness to Family** (6 items, *alpha* = .69)
- **Home Visitor Relationship with Family** (8 items, *alpha* = .83)
- **Home Visitor Facilitation of Parent–Child Interaction** (6 items, *alpha* = .86)
- **Home Visitor Non-Intrusiveness & Collaboration** (5 items, *alpha* = .69)

Scales of *Home Visit Effectiveness (*3 scales, *alpha* = .74)*:*

- **Parent–Child Interaction during Home Visit** (7 items, *alpha* = .90)
- **Parent Engagement during Home Visit** (6 items, *alpha* = .83)
- **Child Engagement during Home Visit** (4 items, *alpha* = .91)

*Roggman, L. A., Cook, G. A., Innocenti, M. S., Jump Norman, V. K., Christiansen, K., Boyce, L. K., Aikens, N., Boller, K., Paulsell, D., & Hallgren, K. (2010). *Home Visit Rating Scales—Adapted and Extended (HOVRS-A+)*. Unpublished Measure.

1. HOME VISITOR RESPONSIVENESS TO FAMILY

Inadequate 1	2	Adequate 3	4	Good 5	6	Excellent 7
Home visitor:		Home visitor:		Home visitor:		Home visitor:
☐ 1.1 does not plan well for the visit. ☐ 2.1 does not have necessary materials for the visit.		☐ 1.3 has a plan for the visit but does not ask for parent input for next visit. ☐ 2.3 is prepared for activities of the home visit (e.g., has necessary materials).		☐ 1.5 asks parents about activities to bring to future home visit(s). ☐ 2.5 brings or does activities selected by parents.		☐ 1.7 plans next visit with parent, **and** helps parent decide on activities, materials, & who will provide them. ☐ 2.7 emphasizes parent-selected activities **and** organizes home visit around them.
☐ 3.1 rarely asks questions to get more information.		☐ 3.3 occasionally gets more information by asking open-ended or follow-up questions.		☐ 3.5 frequently gets more information by asking open-ended or follow-up questions.		☐ 3.7 gets information from open-ended or follow-up questions **and** uses the information to increase effectiveness of home visit.
☐ 4.1 is not attentive to what parent and child are doing. ☐ 5.1 persists with activity that does not meet parent or child's interests or needs.		☐ 4.3 observes parent and child but does not always respond or react to what parent and child are doing when necessary. ☐ 5.3 occasionally follows parent and child lead in activities.		☐ 4.5 observes and reacts to parent and child by making comments, providing information, or suggesting activities. ☐ 5.5 frequently follows parent and child lead in activities, changing pace or activities to meet family interests or needs.		☐ 4.7 observes, reacts, **and** provides reflective feedback, ideas, and developmental information about parent-child interactions and child's development. ☐ 5.7 follows parent and child lead in activities, **and** acknowledges parent or child interests or needs.
☐ 6.1 directs agenda and activities of home visit or does not set or follow an agenda.		☐ 6.3 allows some input from parent on agenda and activities of home visit.		☐ 6.5 sets agenda and activities for home visit after getting input from family.		☐ 6.7 follows parent-suggested agenda and activities **and** provides additional related information to supplement activities.

*Roggman, L. A., Cook, G. A., Innocenti, M. S., Jump Norman, V. K., Christiansen, K., Boyce, L. K., Aikens, N., Boller, K., Paulsell, D., & Hallgren, K. (2010). *Home Visit Rating Scales—Adapted and Extended (HOVRS-A+)*. Unpublished Measure.

2. Home Visitor-Family Relationship

Inadequate 1	2	Adequate 3	4	Good 5	6	Excellent 7
Home visitor and parent:		Home visitor and parent:		Home visitor and parent:		Home visitor and parent:
☐ 1.1 rarely interact sociably with each other.		☐ 1.3 occasionally interact sociably with each other.		☐ 1.5 are relaxed and obviously enjoy interacting.		☐ 1.7 are at ease, enjoy interacting, **and** readily discuss child's development and parenting.
☐ 2.1 seem critical, condescending, tense, or detached with each other.		☐ 2.3 interact with little to no tension but are not overly warm with each other.		☐ 2.5 are warm and respectful of each other.		☐ 2.7 show warmth, respect, **and** appreciation to each other.
☐ 3.1 do not appear to enjoy visit.		☐ 3.3 occasionally appear to enjoy home visit (positive emotions & statements).		☐ 3.5 obviously enjoy home visit (positive emotions & statements).		☐ 3.7 consistently enjoy the visit **and** show understanding, humor or familiarity.
☐ 4.1 parent appears uncomfortable or uninterested in answering questions or speaking with home visitor.		☐ 4.3 parent answers questions but does not elaborate or initiate discussion.		☐ 4.5 parent shares information, problems, or concerns openly with home visitor.		☐ 4.7 parent shares information **and** initiates discussions on problems or concerns.
☐ 5.1 home visitor ignores family members other than parent and child. ☐ N/A-No other family members present		☐ 5.3 home visitor interacts with family members other than parent and child but does not involve them in activities. ☐ N/A-No other family members present		☐ 5.5 home visitor attempts to involve everyone in the room in activities. ☐ N/A- No other family members present		☐ 5.7 home visitor involves everyone in the room in activities **and** with each other. ☐ N/A-No other family members present
☐ 6.1 home visitor shows little to no familiarity with family.		☐ 6.3 home visitor shows some familiarity with family but does not ask questions beyond those dictated by home visit.		☐ 6.5 home visitor is interested in what is happening with the family as evident by familiarity with the family as well as by asking relevant questions.		☐ 6.7 home visitor asks relevant questions **and** asks how family situations affect child.
☐ 7.1 home visitor does not show respect or acceptance of family system. ☐ 8.1 home visitor brings up issues in an insensitive or disrespectful manner.		☐ 7.3 home visitor appears to be accepting of the family system. ☐ 8.3 home visitor tries to bring up issues in a sensitive or respectful manner but not always effectively.		☐ 7.5 home visitor shows respect and acceptance of the family system ☐ 8.5 home visitor brings up issues in a sensitive or respectful manner.		☐ 7.7 home visitor shows respect, acceptance, **and** talks about family's strengths. ☐ 8.7 home visitor brings up issues respectfully **and** asks questions to help parent reflect on parenting.

*Roggman, L. A., Cook, G. A., Innocenti, M. S., Jump Norman, V. K., Christiansen, K., Boyce, L. K., Aikens, N., Boller, K., Paulsell, D., & Hallgren, K. (2010). *Home Visit Rating Scales—Adapted and Extended (HOVRS-A+)*. Unpublished Measure.

3. Home Visitor Facilitation of Parent-Child Interaction

Inadequate 1	2	Adequate 3	4	Good 5	6	Excellent 7
Home visitor:		Home visitor:		Home visitor:		Home visitor:
☐ 1.1 rarely addresses parent-child interactions. ☐ 2.1 rarely addresses or directs parent's interaction with child, telling parent what to do.		☐ 1.3 tries to facilitate interactions, even if not always effectively. ☐ 2.3 supports parent's interactions with child, by commenting on observed parent-child interactions.		☐ 1.5 frequently facilitates parent-child interactions. ☐ 2.5 encourages parent's interaction with child, by discussing how observed interactions support child's development.		☐ 1.7 frequently facilitates parent-child interactions **and** supports interactions as needed without interrupting. ☐ 2.7 promotes parent-child interaction by describing, linking to this child's development, **and** expanding to other ways and places to do something similar.
☐ 3.1 interacts with either parent or child but not both. ☐ 4.1 rarely helps parent respond to child's cues for interaction. ☐ 5.1 does not provide encouragement or reinforcement for positive interactions between parent and child.		☐ 3.3 interacts with both parent & child but occasionally directs attention to only parent or child when there are opportunities to interact with both. ☐ 4.3 observes parent-child interactions & occasionally comments on child's cues or gives feedback to parent for interaction, but misses some opportunities. ☐ 5.3 occasionally provides encouragement or reinforcement for positive interactions between parent and child.		☐ 3.5 frequently interacts with both parent & child, excluding neither. ☐ 4.5 observes parent-child interaction and consistently provides appropriate comments on child's cues, suggestions, feedback, & questions to parent to promote parent-child interactions, rarely missing opportunities. ☐ 5.5 frequently provides encouragement or reinforcement for positive interactions between parent and child.		☐ 3.7 frequently interacts with both parent & child **and** helps sustain engagement of child with parent. ☐ 4.7 uses comments, suggestions, feedback, & questions to promote responsive parent-child interaction **and** expresses child's response by "speaking for child." ☐ 5.7 encourages or reinforces **and** prompts positive parent-child interactions.
☐ 6.1 does not bring or use materials or activities to promote parent-child interaction.		☐ 6.3 brings materials or activities to the home to promote parent-child interactions.		☐ 6.5 uses materials already in the home and/or family routines to promote parent-child interaction.		☐ 6.7 uses home's materials and routines **and** guides parents to identify new uses for household materials to support child's development.

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4. Home Visitor Non-Intrusiveness & Collaboration

Inadequate 1	2	Adequate 3	4	Good 5	6	Excellent 7
Home visitor:		Home visitor:		Home visitor:		Home visitor:
☐ 1.1 often tells parent what to do or rarely make suggestions for what parent could do. ☐ 2.1 takes over activities or fails to provide guidance for parent-child interaction. ☐ 3.1 plays with or teaches child herself or fails to hand toys or other materials to parent and child.		☐ 1.3 makes suggestions for what parent could do, but not excessively. ☐ 2.3 occasionally guides aspects of parent-child interaction (e.g., provides reinforcement to child). ☐ 3.3 occasionally hands toys or other materials to child instead of parent.		☐ 1.5 seeks and responds to parent ideas & interests for interactions. ☐ 2.5 sits back when parent-child interaction is ongoing and allows parent to control/direct interaction. ☐ 3.5 frequently hands toys and other materials for child to parent instead of to child.		☐ 1.7 seeks and responds to parent interests for interactions **and** encourages those interactions during home visit. ☐ 2.7 sits back when parent-child interaction is ongoing **and** actively observes, as evident from later reflective comments. ☐ 3.7 consistently hands toys or other materials for child to parent **and** asks how parent wants to use materials.
☐ 4.1 persists with activity too hard for or not of interest to parent or child or fails to respond to parent & child cues by changing pace or activities.		☐ 4.3 occasionally responds to parent &/or child cues (e.g., lack of interest, difficulty with task) by changing pace or activities.		☐ 4.5 frequently responds to parent &/or child cues (e.g., lack of interest, difficulty with task) by changing pace or activities when needed.		☐ 4.7 adapts pace or activities to parent &/or child cues **and** asks parent questions to help parent adapt or enrich interaction or activities with child.
☐ 5.1 is directive and frequently intrudes on or interrupts the parent-child interaction.		☐ 5.3 occasionally intrudes on or interrupts the parent-child interaction.		☐ 5.5 rarely intrudes on or interrupts the parent-child interaction.		☐ 5.7 Does not intrude on or interrupt parent-child interactions.

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5. Parent-Child Interaction During Home Visit

Inadequate 1	2	Adequate 3	4	Good 5	6	Excellent 7
Parent & Child:		Parent & Child:		Parent & Child:		Parent & Child:
☐ 1.1 interaction is minimal, negative, or nonresponsive. ☐ 2.1 have little to no positive physical contact. ☐ 3.1 are positioned away from each other during activities.		☐ 1.3 interact with some warmth (e.g., positive expressions or tone, smiling). ☐ 2.3 occasionally make positive physical contact, but touch may more often be instrumental (i.e., with purpose of accomplishing something like moving child, wiping child's nose, etc.) ☐ 3.3 are occasionally in close physical proximity during activities.		☐ 1.5 interact with a great deal of warmth (e.g., positive expressions or tone, smiling). ☐ 2.5 frequently make positive physical contact. ☐ 3.5 frequently remain in close physical proximity during activities.		☐ 1.7 interact with warmth **and** show appreciation to each other. ☐ 2.7 make positive physical contact during home visit activities **and** contact is helpful or affectionate without being intrusive. ☐ 3.7 remain in close physical proximity during activities **and** readily engage in positive interactions during activities.
☐ 4.1 parent is rarely attentive to what child is doing.		☐ 4.3 parent tries to attend to what child is doing but occasionally does not.		☐ 4.5 parent frequently attends to what child is doing.		☐ 4.7 parent consistently attends to what child is doing **and** sometimes describes child's behavior.
☐ 5.1 parent is not responsive or responds negatively to child's behavior, vocalizations, or emotional expressions during the home visit. ☐ 6.1 parent persists in activities that child is not interested in or when child is looking at or reaching for other things.		☐ 5.3 parent occasionally responds positively to child's behavior, vocalizations, or emotional expressions during home visit. ☐ 6.3 parent occasionally changes pace or activity to meet child's interest or needs (based on where child looks, what child reaches for, emotions child expresses).		☐ 5.5 parent frequently responds positively to child's behavior, vocalizations, or emotional expressions during visit. ☐ 6.5 parent frequently changes pace or activity to meet child's interest or need (based on where child looks, what child reaches for, emotions child expresses).		☐ 5.7 parent typically responds positively to child's behavior, vocalizations, or expressions **and** encourages or supports child's learning and development. ☐ 6.7 parent adapts activities to child's interest or need **and** shows enthusiasm about what child is doing.
☐ 7.1 are rarely engaged in activities together during the home visit.		☐ 7.3 are engaged in activities together on and off during the home visit.		☐ 7.5 are frequently engaged in activities together during the home visit.		☐ 7.7 are engaged together in all the parent-child home visit activities **and** consistently enjoy the interactions.

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6. Parent Engagement During Home Visit

Inadequate 1	2	Adequate 3	4	Good 5	6	Excellent 7
Parent:		Parent:		Parent:		Parent:
☐ 1.1 does not indicate interest in material or activities. ☐ 2.1 does not participate in home visit activities; is distracted or involved in another activity. ☐ 3.1 leaves the room.		☐ 1.3 indicates occasional interest in home visit material or activities. ☐ 2.3 occasionally participates in activities. ☐ 3.3 when participating in activities, is more passive than active.		☐ 1.5 frequently appears interested in home visit activities or materials. ☐ 2.5 is an active participant in activities. ☐ 3.5 engages in play and learning activities with child and/or home visitor whenever opportunity is available.		☐ 1.7 is consistently interested in visit activities and materials **and** identifies other activities and materials to try with child. ☐ 2.7 is an active participant **and** maintains focus on home visit topics and activities. ☐ 3.7 actively engages in play and activities **and** shows enthusiasm about doing activities.
☐ 4.1 does not initiate activities or conversations with child or home visitor; home visitor must prompt parent to engage in activities or interactions. ☐ 5.1 rarely asks or answers questions		☐ 4.3 occasionally initiates activities. ☐ 5.3 occasionally asks or answers questions but does not elaborate.		☐ 4.5 frequently initiates activities. ☐ 5.5 frequently asks questions, initiates discussions, or provides information related to topic of discussion.		☐ 4.7 initiates activities **and** bases activities or conversations on child's interests or behavior. ☐ 5.7 initiates conversations and offers information **and** topics that are related to child's development or family well-being.
☐ 6.1 positions self away from home visitor and child.		☐ 6.3 is in proximity to home visitor and child during most of the home visit.		☐ 6.5 remains in close proximity to child and home visitor throughout visit.		☐ 6.7 is in close proximity to child and home visitor throughout visit **and** readily interacts with both.

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7. Child Engagement During Home Visit

Inadequate 1	2	Adequate 3	4	Good 5	6	Excellent 7
Child:		Child:		Child:		Child:
☐ 1.1 does not participate in home visit activities. ☐ 2.1 cries when coaxed to participate in activities or interactions during home visit. ☐ NA for infants under 12 months ☐ 3.1 does not interact with parent and/or home visitor.		☐ 1.3 sometimes participates in home visit activities. ☐ 2.3 requires coaxing to participate in activities or interactions during home visit. ☐ NA for infants under 12 months ☐ 3.3 sometimes interacts with the parent and/or home visitor (including through body language, gaze, gestures, or vocalizations).		☐ 1.5 frequently participates in home visit activities. ☐ 2.5 tries to initiate activities or interactions during home visit. ☐ NA for infants under 12 months ☐ 3.5 frequently interacts with the parent and/or home visitor (including through body language, gaze, gestures, or vocalizations).		☐ 1.7 participates in all the child/parent-child home visit activities **and** actively engages with both materials and parent. ☐ 2.7 initiates activities or interactions **and** initiations are successful and appropriate. ☐ NA for infants under 12 months ☐ 3.7 interacts with parent and home visitor **and** sustains positive interactions.
☐ 4.1 does not appear interested in the home visit activities (for example, through gaze or body language).		☐ 4.3 indicates occasional interest in home visit activities (for example, through gaze or body language).		☐ 4.5 frequently shows interest in home visit activities (for example, through gaze or body language).		☐ 4.7 consistently shows interest in child/parent-child home visit activities **and** shows enthusiasm when doing activities.

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