

**Oregon Program Evaluation for
Maternal, Infant, and Early Childhood Home Visiting (MIECHV)
D89MC28286**

MIECHV Oregon Retention Evaluation (MORE) Plan

Prepared for
**US DHHS Administration for Families and Children
Office of Planning, Research and Evaluation (OPRE)**

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D89MC28286

DRAFT MIECHV Oregon Retention Evaluation (MORE)

I. INTRODUCTION

Passage of the Patient Protection and Affordable Care Act in 2010 authorized the U.S. Department of Health and Human Services (DHHS) to support the implementation of home visiting programs through the Maternal Infant and Early Childhood Home Visiting (MIECHV) program. The statutory purposes of MIECHV are to “(1) strengthen and improve the programs and activities carried out under Title V of the Social Security Act; (2) improve coordination of services for at-risk communities; and (3) identify and provide comprehensive services to improve outcomes for families who reside in at-risk communities” (Social Security Administration, n.d.). Grants are awarded to states and tribal entities to implement evidence-based home visiting programs. Models deemed evidence-based were highlighted in the U.S. Department of Health and Human Services’ Home Visiting Evidence of Effectiveness (HomVEE) review (Avellar, et al, 2012). Grantees are also required to conduct a rigorous evaluation of their MIECHV program such that the findings will contribute to the larger home visiting knowledge base (Social Security Administration, n.d.).

The Federal MIECHV program represents an intervention strategy rather than a particular intervention program, and a number of specific home visiting programs exist. Previous research on the three home visiting program models that Oregon has funded through its MIECHV grant (Early Head Start, Healthy Families America and Nurse-Family Partnership) has shown positive effects on a variety of parent and child outcomes, with specific program characteristics enhancing positive results even further (Love et al., 2002; Avellar, et al, 2012; Sweet and Appelbaum, 2004; Filene, 2012; Filene et al., 2013).

The State of Oregon has been awarded four MIECHV grants, the most recent of which was the D89MC28286 award in February 2015. This document contains the proposed MIECHV Oregon Retention Evaluation ‘MORE’ plan, a multi-component and mixed methods design. This includes the work of the independent evaluators contracted from Portland State University, the Regional Research Institute (PSU/RRI). This plan contains the following: 1) overview and rationale for the work, 2) descriptions of three MIECHV funded programs included in this evaluation, 3) selected program retention literature and rationale of the evaluation’s contribution to the home visiting knowledge base, 4) overview of preliminary work that will guide and inform the subsequent evaluation components, and 5) summary of the research questions, data collection methods, and analysis approaches. The document concludes with presentation of the evaluation timeline, budget, and staffing.

Overview of Rationale and Proposed Evaluation Study

“If we know why and how individuals make decisions to use voluntary services, we can begin to form new approaches to service delivery that increases retention rates and the effectiveness of parenting programs.” McCurdy & Daro, 2001, P 113

The premise of home visiting is that establishing one-on-one relationships between

professional, trained home visiting staff and targeted families using a tested curriculum will improve outcomes for parents and children, including a parent's relationship with their child. The combination of enriched parenting practices, referrals to community resources, and improved supports, in turn, will result in improved child development outcomes for infants and young children. Most of the home visiting curricula are geared to infant and child developmental milestones overtime as children grow. Program developers intend for the components of the intervention (dosage) to be provided throughout a timespan ranging from the prenatal period to upwards of 3 years of age, depending on the program. When parents leave programs early, the intervention is not implemented as intended and families do not receive the full program dosage. Keeping parents actively engaged in programs is important to all home visiting models. Relatively high documented attrition rates and gaps in program services and expected visits for home visiting programs has been the focus of much concern, with upwards of 50% of families regularly leaving programs early (Ammerman et al, 2006; McCurdy & Daro, 2001; Daro et al, 2003). Better understanding the factors linked to participant enrollment and short and long term retention is growing (O'Brien, et al, 2013; Ammerman, 2011, *Final Report R40MC06632*; Daro, et al, 2005; McCurdy & Daro, 2001; Fraser, 2000, Duggan, 2000, Damashek 2011; Alonso-Marsden, 2013), yet findings to date are mixed and somewhat inconclusive. The purpose of the proposed evaluation is to contribute to the growing body of information about factors supporting successful family retention in home visiting programs through the implementation of two complementary studies.

This document represents the MIECHV Oregon Retention Evaluation (MORE) plan for the 3rd Competitive MIECHV grant awarded to the State of Oregon. Our team will do some preliminary work to better understand retention in home visiting programs specific to Oregon, and will also enlist the help of an ongoing advisory committee as the evaluation unfolds. We describe this preliminary work, as well as the two main areas of inquiry for this evaluation, utilizing both quantitative and qualitative research methodology. The first, guided by an ecological model, is a quantitative analysis utilizing the MIECHV data system to explore multi-level factors to predict retention. Survey data from home visiting staff will allow for important home visitor and program level nested data to be added to this database. The second inquiry includes an in-depth qualitative interview study looking at the perceptions of enrollment and experiences of retention and leaving services across triads (mother, home visitor and supervisor).

The State's proposed evaluation of retention in MIECHV-funded home visiting programs will contribute to the home visiting knowledge base by using a stakeholder informed approach to examine the (a) patterns and reasons for attrition across MIECHV funded programs, (b) participant, home visitor, program, and/or community level factors that predict short and long term program retention, and (c) stakeholder (mother, home visitor, supervisor) experiences of home visiting as they relate to both initial program enrollment and leaving the program early or continuing services over-time. Oregon's current retention evaluation work will further elucidate issues related to enrollment and retention factors with the potential for guiding programs in practices that will keep families active for the full range of services provided during programs.

II. OREGON MIECHV-FUNDED MODELS IN BRIEF

“Monitoring participant attrition, identifying factors that might contribute to it, and developing strategies to reduce it are crucial for the successful scaling of evidence-based programs.” (O’Brien, Moritz, Luckey, McClatchey, Ingoldsby, & Olds, 2012; p 220)

Oregon’s MIECHV program is funding and supporting three evidence-based home visiting models: Early Head Start (EHS), Healthy Families America (HFA), and Nurse-Family Partnership (NFP). Each of these models provides comprehensive home visiting services including parenting education with model specific curriculum and schedules used to deliver parenting education. There are 21 local implementing agencies (LIAs) covering 25 locations that coordinate the referral and implementation of the three MIECHV funded models across 13 counties in Oregon. There are a number of supports to the LIAs in their implementation of the three models including model-specific Home Visiting Consultants, a parent engagement specialist, workforce development coordinator, system/network development and continuous quality improvement staff, as well as resources provided through the national service offices of the three models.

In 2013, the Oregon MIECHV Program began to emphasize the priority of retention as well as enrollment of eligible families. Oregon continues to build on existing recruitment and retention strategies across the three models that include the development of a community referral network that includes educators, healthcare professionals, Public Health, WIC, law enforcement, child protective services, and other support service providers serving at-risk families. Oregon plans to continue to use the comprehensive frameworks of Collective Impact and Early Childhood Systems of Care (ECSOC) to embed home visiting as a service strategy within an early childhood comprehensive system, promote parent partnerships, and encourage integrated early childhood workforce improvements. The Oregon MIECHV Program has met or exceeded enrollment expectations for the Formula and Competitive grants, and high retention for the first five months of services for the former. Although initial enrollment appears promising, as in other programs across the country, retention of families in services is a challenge. Just over half (51%) the parents originally enrolled in MIECHV funded programs are still active in the programs at 12 months (according to a preliminary analysis of MIECHV clients). Oregon is closely monitoring the MIECHV funded program initial enrollment wave expectations, as well as patterns of retention for the subsequent follow-up periods. The purpose of the proposed study is to help all three models, and the home visiting field at large, to better understand the community, programmatic, home visitor, and family characteristics that support (or hinder) retention in services. A brief description of the three MIECHV funded models in Oregon, as informed by documentation from the national models, is provided below.

Early Head Start

Conceptual basis. Early Head Start (EHS) stresses positive relationships and continuity, with an emphasis on the role of the parent as the child’s most important relationship. This program attempts to identify atypical development as early as possible and acknowledges

the role of culture in infant and early childhood development.

Visit schedule and curriculum. EHS clients receive one visit per week, and a minimum of 48 visits per year. Visits are 90 minutes long. The program also provides two optional socialization experiences for both the parent and the child each month. Early Head Start programs are required to include specific elements of child development and early learning in their visits, but local programs select their own curricula. Most Oregon Early Head Start sites use Creative Curriculum or Partners for a Healthy Baby.

Target population. EHS serves pregnant women and families at or below the federal poverty level up to age three. At least 10 percent of its enrollment is available to children with disabilities.

Healthy Families America

Conceptual basis. The HFA model is based on human attachment theory, dyadic theory, and bio-ecological systems theory. It pays particular attention to a child's interrelated environmental systems.

Visit schedule and curriculum. Families can receive visits for three years, and in some places to five years. They receive one visit per week for six months after birth. After 6 months, families may receive a reduced schedule of home visits depending on family need. Visits are to last a minimum of one hour. Each local Healthy Families America site selects its own parenting curriculum. Many use the Parents as Teachers curriculum. Other commonly used options are Growing Great Kids and Partners for a Healthy Baby.

Target population. The target populations addressed by Healthy Families America include low income families and single parents. Program materials state that the program “. . . is designed to work with overburdened families who are at-risk for adverse childhood experiences, including child maltreatment.” Its home visitors are trained to work with families with mental health, substance abuse, and intimate partner violence risks. Local program sites design services and activities to meet specific local needs. This program provides services for children up to age three and, in some cases, up to age five. Most eligible families are ‘screened in’ using a screening tool of family and child-related risk factors.

Nurse-Family Partnership

Conceptual basis. The NFP model is based on the theories of human attachment, human ecology and self-efficacy. It uses a variety of model-specific resources coupled with the principles of motivational interviewing to help clients clarify their goals. The focus of this program is on personal growth and development.

Visit schedule and curriculum. Clients in this program enroll early in pregnancy (early in the second trimester) and receive their first home visit no later than the end of the woman's 28th week of pregnancy. Clients can receive visits until the child is age two. They receive visits every week for the first month after enrollment and then every other week until the baby is born. After the birth of the child, the client receives one visit per week for the first six weeks, and then every other week until the baby is 20 months of age. The last four visits are

monthly until the child is 2 years old. Each visit lasts from 60 to 75 minutes.

The Nurse-Family Partnership uses the Partners in Parenting Education (PIPE) curriculum to promote attachment between child and parent. Home visitors are provided a set of guidelines for each visit and printed materials for the parent for three phases: pregnancy, infancy and toddlers. The Visit to Visit Guidelines are based on six domains: personal health, environmental health, life course development, maternal role, friends and family, and health and human services (Blueprints for Healthy Youth Development, n.d.; Nurse-Family Partnership: Working Together to Ensure Healthier Families, 2011). NFP guidelines set targets of how much time to spend on each domain. The actual amount of time spent on each domain, however, is individualized through discussions between the parent and the home visitor.

Target population. The program targets low-income, first-time mothers who must be enrolled by their 27th week of pregnancy.

III. BRIEF RETENTION LITERATURE REVIEW AND RATIONALE FOR WORK

“...characteristics that both distinguish programs and have some potential to influence attrition are largely ignored. Attrition research needs to investigate both the shared environment (those factors that all programs possess) and the nonshared environment (those variables unique to each individual program) to provide a more accurate explanation of participant behavior.”
(p114, McCurdy & Daro, 2001)

Understanding both enrollment and retention in home visiting programs has long been a priority for program developers and providers alike. Not everyone eligible for programs accepts services, and once in services, high attrition rates and service gaps are seen across most home visiting models (Ammerman et al, 2006; McCurdy & Daro, 2001). Most often, studies on enrollment and retention in home visiting programs focus on individual parent factors, and sometimes provider characteristics, largely ignoring the broader context (program and community) or interactions between them (McCurdy & Daro, 2001). The most widely studied influences on program attrition are those at the individual caregiver or family level, specific to maternal and family circumstances, as defined by objective measures by researchers and found to be associated with negative parenting outcomes. Recent ecologically based conceptual work has begun to explore the primary role of participant, staff, program, and community factors related to retention in home visiting programs and potential interactions between them (McCurdy and Daro, 2001; Daro et al, 2005; Damashek, 2011; Alsonso-Marsden, 2013). Findings to date on single factors, and some multi-factor models have been inconsistent across studies and populations (Olds & Kitzman, 1993; Josten, Mullett, Savik, Campbell & Vincent, 1995; Stevens, et al, 2002; Ammerman et al, 2006; Alonzo-Marsden, et al, 2013). Highlights of findings related to participant, home visitor, program and community retention factors and the current study rationale follow.

Participant Factors (Infant, Caregiver and Family)

Studies of individual infant and caregiver factors linked to retention in home visiting programs have shown inconsistent findings. Some home visiting services have been geared specifically toward medically fragile infants as they may be at greater risk for negative outcomes (Brown, et al, 1998). Mothers of infants with high health risks or born prematurely have shown greater engagement in services in both HFA (Daro et al, 2005) and EHS (Raites, et al, 2006). In contrast, this trend was not seen in a recent study of a universal home visiting program where mothers of high health risk infants were less likely to schedule an initial visit or to complete visits (Alonso-Marsden, 2013). Often differences in program focus and population make these findings hard to compare.

Maternal risk factors such as young age of the mother, psychosocial stress (depression, substance use), and family financial challenges (low income, unemployment) have been studied as they relate to both enrollment and retention in parenting programs (Damashek, 2011; Sword, et al, 2006; Alonso-Marsden, 2013; Duggan 2000; Fraser, 2000; O'Brien, 2012). In a large retrospective analysis of 17 HFA sites, mothers who were older, those unemployed, and who enrolled early in their pregnancy had both more visits and longer stays in services (Daro et al, 2003). In a recent study of 12 month retention in NFP, those who were younger, unmarried, and African American had higher rates of attrition and fewer program home visits, while Hispanic mothers, those living with partners, and those employed at study enrollment had better retention (O'Brien et al, 2012). Model-specific eligibility and recruitment strategies vary and have included targeting individual families based on multiple risk factors. For instance, risk assessments for families have been used to 'screen in' families based on age, income, past or present substance abuse problems, and other risk factors. Those with higher demographic risk have been more likely to sign up for programs (Alonso-Marsden, 2013; Duggan et al, 2000; Fraser, et al, 2000), however, at times they have been less likely to have longer term follow-through (Alonso-Marsden, 2013). In sum, family and participant factors linked to retention have not been stable across studies.

Only a handful of studies have talked to mothers directly and in-depth about why they decide to leave services early. Although reasons for participant 'drop out' are sometimes captured in program documentation, they are often vaguely worded. For example, in HFA model implemented through the state office in Oregon, the primary reason for families leaving services early is that families are "too busy". A multitude of factors have been discussed as influencing decisions to continue to stay engaged in services including past experience with programs, level of social support, opinions of the mother's 'network' of family and friends, concern about DHS reporting, and residential stability (McCurdy & Daro, 2001; Beasley, et al, 2015). In a recent interview study of mothers who left NFP home visiting services early, caregiver/family level reasons for drop-out included that the program did not meet needs when the mother was overwhelmed with other responsibilities, and the mother/family did not want visits after their child was born (Holland, et al, 2014). A more in depth understanding of the barriers to accepting visits after children are born could be key to enhancing retention in home based service programs.

Home Visitor Factors

Provider characteristics such as age, education level, experience in the field, and personality help to contextualize home visitor attributes as they relate to program retention (McCurdy & Daro, 2001; Daro et al, 2003; Beasley et al, 2015). Important home visitor related factors linked specifically to the work environment have included work stress level, number of families on in caseloads, job changes, specific trainings, and supervision practices (Daro, et al 2003; O'Brien et al, 2012; Beasley et al, 2015). This includes looking closely at type of supervision (e.g., reflective practice) and specialized training around motivational interviewing, strength-based practices, and other techniques afforded to home visitors. Higher cultural competence levels and a successful provider-caregiver ethnic match are thought to influence caregiver interest in staying longer in programs (McCurdy & Daro, 2001; Daro, et al, 2003; McCurdy, et al, 2003; Beasley et al, 2015) and are strongly suggested as essential for home based service models (Daro, et al, 2005). Providers who are not overwhelmed in their caseloads, and who have key training to provide services in a culturally appropriate, individualized way, can provide families with the focus and time to build effective and close relationships. In addition, satisfaction with services related to the providers' service delivery or communication style has surfaced as important in retention studies (McCurdy & Daro, 2001; Beasley et al, 2015). This may include how the program content and goals are presented, as well as the home visitors' 'personal' vs. 'professional' style, or how this style fits with the needs of individual clients (Daro et al, 2005; Beasley et al, 2015). Mothers interviewed for the NFP study previously reported that they left services early if the provider did not meet their expectations (Holland, et al, 2014).

Program Factors

Further, some programs provide extensive mandated training on recruitment and retention, with specialized curriculum geared toward these efforts. Strategies may include flexible visit scheduling, individualized services based on the family's strengths and interests, and the use of motivational interviewing (Obrien et al, 2012; Beasley et al, 2015). Mothers have shared that they left services early when they had no interest in the program content (Holland, et al, 2014). The greater use of program incentives (e.g., diapers, home emergency kits) given directly to families is thought to be linked to increased retention (Damaskhek, 2011; Ingoldsby, 2010), policies around timing of recruitment (e.g., prenatal vs. after child is born) is also of interest. Another strategy that has been used to promote enrollment is to offer pre-enrollment visits and staffing in local offices where families already come for services. Other program factors thought to influence retention include those related to staff turnover, supervisor caseload, and funding disruptions (McCurdy & Daro, 2001). Incorporating these program factors in the current study will provide additional depth to our understanding of retention in home visiting programs.

Community Factors

The least studied area in home visiting retention research is around community or neighborhood factors that might influence families' choices to stay or leave services. Neighborhood factors such as social cohesion have been linked to better outcomes for children and families in various studies (Korbin & Coulton 1997). Areas of greater social cohesion, where community members have common values and trust, may see greater retention if parenting

programs are seen as an asset and important (McCurdy & Daro, 2001). Although community factors have been linked to longer term retention, teasing out which specific aspects of the broader community context contribute most to keeping families in programs needs further study (Daro, et al , 2005). Also, changes at the community or neighborhood level may result in changes over time for retention in programs. This may include changes in available resources, such as the availability of jobs and daycare and other programs and services.

Study Rationale: Studying Multiple Factors for Prediction of Retention

Using McCurdy and Daro's (2001) original ecological retention theory as a guide, a retrospective study of Healthy Families America data from 26 sites looked at the unique and interaction effects of four factor levels linked to length of retention at 3, 6, and 12 months (Daro, et al, 2005). Levels included demographic characteristics (SES and race), presenting concerns (infant risk, social support and # of concerns), program experiences (informal network support of use of services, use of incentives, home visitor relationship, judgements about home visitor activities), and community context (census block for distress/disorganization, care needed, use of other service programs). Infant risk was the only factor that had predictive power in the 3 month retention model. Infant risk remained predictive ($p=0.055$) for 6 month program retention, as well as both support from their informal network for use of services and community context. Findings pointed to more social support at enrollment linked to a lower likelihood of remaining in services at 6 months ($p=0.091$), where those with greatest social need tended to stay in the program. The most powerful predictor of 12 month program retention was the participant's self-assessment of the usefulness of the program or if they changed how they cared for their child or themselves. Infant risk status was no longer predictive. Community context also remained predictive at 12 months (Daro, et al, 2005).

These results strongly suggest the need for a deeper understanding of the factors related to retention in home visiting programs. The quantitative arm of this evaluation will incorporate home visitor data into the larger MIECHV participant data set to model participant (caregiver and infant), home visitor, program, and community level factors in the prediction of short and long term family retention across three home visiting models. New to this research is looking at the home visitor and program level features (e.g., use of motivational interviewing, training specific to strengths based practices) across the 3 different MIECHV funded models. This inquiry will provide program guidance at the implementation and practice levels both locally and nationally. In addition, in-depth qualitative interviews with mothers and home visitors will help us better understand, through multiple perspectives, the experiences and perceptions of recruitment, enrollment and program engagement as they relate to mothers' decisions to stay or to leave services early. The two inquiries will complement each other and provide further insight in the field of home visiting retention.

IV. PRELIMINARY WORK

Early stages of this work have informed the overall evaluation plan. Information from the preliminary phase of this work will help us to further clarify lines of inquiry moving forward.

Oregon Home Visiting Programs – Exploring Retention Patterns

Preliminary work to explore factors identified as important to parent enrollment and retention has been done using existing data from multiple programs. This has included some exploratory attrition analysis of the currently available Oregon MIECHV administrative data (n=596) and other home visiting data from the Healthy Families America model administered through the Healthy Families Oregon (HFO) state office (n=2,700). An initial review of a subset of the first enrollers (enrolled 6/2012 through 4/2014) in the Oregon MIECHV client data base showed that attrition is more common in the first six months (after program enrollment) compared to the 6 month to 12 month period. MIECHV clients had 31% attrition between enrollment and six months, and 18% attrition between 6 and 12 months after enrollment. Also, consistent with other home visiting program data, mothers who were married or older had higher retention rates compared to the younger or single mothers. A recent look at risk factors related to attrition for mothers in a separate ongoing Healthy Families America study in Oregon showed similar trends for age and marital status, and also pointed to race/ethnicity, stress, economic factors, social isolation, and relationship problems as important to explore as well (Beth Green, 2015 personal communication). Such information will help us to probe on specific areas related to the challenges faced by parents to remain engaged in services in both the key informant discussions in our preliminary work and the prospective interview study. The quantitative analysis will also provide an opportunity to look more closely at how specific demographics noted in the preliminary work (e.g., young, single) are linked to other challenges associated with lower likelihood of being retained specifically related to the home visitor or program (e.g., more flexibility in program implementation, etc).

Key Informant Discussions

PSU/RRI has worked closely with OHA and the 3 program model consultants to develop a nomination process and subsequent list of nine home visitors and supervisors to be key informants working in the field. We will have a number of ‘brainstorming’ conversations about both initial family enrollment and retention to help clarify important factors as we develop the final evaluation plan. The key informant interviews will take place over the phone and will include one or two evaluation staff, and one key informant for each call. Informants from various geographic regions (urban, coastal, rural) as well as within the three MIECHV funded home visiting models will be included [EHS (4), HFA (3), NFP (2)]. The discussion guide questions are listed in *Exhibit 1*. We will probe and ask follow-up questions specific to areas thought to be important as noted in the literature review, and listed in the subsequent evaluation and research questions sections. We will ask those questions appropriate to the informant, either supervisors or home visitor.

Exhibit 1. Key Informant Conversation Guide

Conversation Topics

1. How do families usually find out about home visiting services provided in your area?
2. Based on your experience, why do families choose to enroll in home visiting?
 - a. Are there services that seem to be especially appealing to your families?
 - b. What kinds of strategies have you observed to be most effective in keeping families enrolled and engaged?
3. What have you noticed as common factors among families who stay enrolled in home visiting for at least six months? What about families who stay enrolled for 12 months or more/complete services? Are there features of the home visiting program/ your work as a home visitor that seem to impact parents' sustained participation?
4. What reasons do parents give for choosing to discontinue receiving home visiting services? What factors do you believe lead parents to decide to exit the program?
[To supervisors: What reasons do home visitors give for parents discontinuing services?]
5. What information about enrollment would be most helpful to you in your job role?
6. Similarly, what information about retention of families would be most helpful to inform your work?
7. Is there anything else you would like to share that could help us to develop a really meaningful, useful study?
8. We would like to engage a small group of home visitors and supervisors who can represent the home visiting programs locally and provide us with ongoing consultation as we carry out the study.

We're still developing ideas about the various ways that advisory group members could be involved, but our current thinking is that members would be invited to contribute feedback and recommendations about study recruitment strategies, data collection procedures, and interview protocols. We have also been discussing the idea of convening advisory group members at various time-points throughout the study to interpret the results of the data. The costs of your travel to the advisory group meetings would be funded through the study budget.

Would you be interested in playing an on-going advisory role for this project? This by no means will be perceived as a commitment on your part- we're just in the preliminary phases of investigating who might like to be involved.

Discussion topics will align with topic areas outlined later in this study. Our general approach will be to allow the informants to drive the conversation using these open-ended questions as a guide, with probes as appropriate. For instance, in one conversation, the home visitor talked about a barrier for retaining mothers can be other family members, a grandmother or father of the baby for instance, not wanting home visitors coming into the house. We asked her to talk more this type of situation and about how comfortable she felt with engaging other family members, and if her experience or work training covered any of these practices. We anticipate that many of the specific program factors of interest in this study will come up in these conversations, including scheduling, transportation, curricula, caseload, supervision, training, program flexibility, and resources/referrals.

Involving the Field by Convening an Ongoing Advisory Group

The home visitors and supervisors we talk to in the key informant conversations will be invited to serve on an evaluation advisory committee, along with other home visitors and supervisors. We already know that most of the key informants we have spoken to would like to participate on this committee, and this includes 4 home visitors, and 5 supervisors from geographically diverse and ethnically diverse service areas across models. As with the informant group, PSU/RRRI will work closely with OHA and the 3 program model consultants to develop a nomination process as we grow this committee to be between 14-20 people. As noted, we will make sure to involve members across the three program models, and be mindful of both geographic and service catchment areas and ethnic diversity. We will also involve clients and parents and will consult with home visiting and OHA staff members to determine how to best accomplish getting their input.

Advisory group members will be invited to contribute feedback and recommendations about study recruitment strategies, data collection procedures, and interview protocols in order to guide the implementation. The group will likely convene monthly during the first six months of the project. The first meeting will be held face-to-face; subsequent meetings will occur via video or teleconference. Subsequent to the six-month kick-off phase, the group will meet quarterly.

We have also been discussing the idea of convening advisory group members at various time-points throughout the study to interpret the results of the data. Timing of these gatherings will be dependent on the enrollment timeline as this will drive collection of the interview data. Our preliminary thinking is that the group will meet at least yearly and likely twice per year for this purpose. The costs of travel to the advisory group meetings will be funded through the study budget. Although we do not have specific anticipated deliverables from this group, we will be certain to document ideas as they come together at the convenings and discussions.

We will engage with additional subject matter experts and stakeholders to seek guidance and gather recommendations for different elements of the work (e.g., data analyses, interpretations). For instance, we have had some preliminary discussion about our retention study plans with two national home visiting experts, Deb Daro and Anne Duggan, both who have done work in retention in parenting programs. In addition to the advisory group and other experts, we will actively engage with the state MIECHV team including the CQI

Coordinator, the project coordinator, the model consultants, the parent engagement specialists, and the workforce development coordinator.

V. EVALUATION DESIGN AND METHODS

This retention evaluation contains two main areas of inquiry, utilizing both quantitative and qualitative research methods. The first is a quantitative analysis utilizing the MIECHV administrative data system to examine multilevel factors to predict retention. Adding home visitor survey data to this data set will allow for important provider level nested data to be included in the analysis. Information gathered from supervisors will also contribute to this work. The second inquiry includes an in-depth qualitative interview study looking at the perceptions of enrollment and experiences of retention and leaving services across triads (mother, home visitor and supervisor). As noted earlier, the preliminary work for this evaluation involves an iterative approach to collecting and synthesizing information where information gathered in early stages may provide insights into additional inquiry. In addition, involving those in the field in an ongoing advisory capacity at various stages will provide guidance to specific measures and processes as the evaluation moves forward. *Exhibit 2* provides an overview of both study arms with advisory committee feedback on both.

1: Quantitative Multi-level Retention Study with Nested Data

“The ability to examine the relative effects of variables at different levels of influence (e.g., the participant, provider, and program) represents a distinct improvement over much of the earlier work on service utilization and retention.” Daro, et al, 2003, P 1103

Research Questions

1. What do the retention patterns (e.g., timing of participant drop out) look like over time for enrollment to 24 months for MIECHV participants?
2. To what degree do individual participant (parent and child), home visitor, program, and/or community level factors *predict* program retention (short and long term)?

Study Population/Sampling

Data is routinely collected as part of the ongoing work of the MIECHV funded program implementation and benchmark assessments in Oregon. These participant data are housed in the MIECHV client administrative data base (‘Bridge System’). Retrospective participant (caregiver and child) will be derived from the MIECHV administrative database. A limited number of program, site, and community level data may also be available in this data set. Each participant enrolled as of August 31st, 2015 will be eligible for analysis (N~ 1200). Researchers will have no direct contact with parents for this retrospective portion of the work.

In addition, current MIECHV funded home visitor and program/site level information will be collected via survey and questionnaires. Information to be collected includes data elements as identified by either prior research or in our initial work in collaborating with the field to be potentially important to program retention. Specifically, we will conduct a survey of all MIECHV funded home visitors and ask supervisors to provide other data elements. We will work with the MIECHV Oregon model consultants to develop a list of all current MIECHV funded program home visitors. We expect there to be between 60-70 MIECHV home visitors (N~65). With 25 local implementing agencies in 13 different counties, we expect to have at least 25 supervisors to ask to provide information on program/site level data. These data will later be linked with the existing MIECHV administrative data system.

Data and Data Collection Plan

Participant (Caregiver and Child) Data in MIECHV database

Our team will work with the OHA MIECHV data team to share the existing MIECHV client data system data specific to this work. This includes demographic information, as well as assessment and risk factor data for both the participating caregiver and child. We will also use this data system for information on client retention in home visiting program services, the main outcome measure for these analyses. The information on clients captured in the MIECHV system to be utilized as part of this evaluation study can be found in *Table 1a*.

Table 1a. Participant (Caregiver and Child) Level Factors and Outcome Data (in MIECHV client database 'Bridge System')

Topic	Items/Domain
Child Identification	ID #; name
Model	Which model/program (NFP, HFA, EHS)
County	County
Recruitment	Timing of recruitment (e.g., prenatal, following birth, how long?)
Referral source	Referral source/recruitment location (WIC vs. hospital)
Child prematurity	Gestation time
Child age	Age
Child gender	Gender
Child race/ethnicity	Race/ethnicity
Child insurance	Insurance status
Caregiver Identification	ID #; name
Caregiver race/ethnicity	What is your race/ethnicity?
Caregiver age	What is your age?
Caregiver education	What is your education level?
Caregiver income	Income
Caregiver marital status	Marital status
Caregiver insurance	Insurance status
Caregiver employment	Employment status
Caregiver county	County
Caregiver language	What language is your primary language?
Caregiver relationship problems	Domestic Violence (RAT measure)
Caregiver stress	Parenting Stress @ enrollment, 6 months (PSI measure)
Caregiver stress	Depression
Caregiver stress	Substance use in home
Caregiver stress	Tobacco use in home
Protective factors	Social Support
Referrals once in program	Types/number of referrals? -mental health; medical care; oral care; health insurance; substance abuse; domestic violence; services for child special health needs; job training; assistance- cash, food housing, transportation; child-care
LIA	LIA administering the HV model/program
Caregiver program participation/retention	# of days enrolled from first home visit to exit date
	@ 3 months
	@ 6 months
	@ 12 months
	@ 24 months

All measures used by the Oregon Health Authority for the MIECHV-funded programs included in this evaluation are documented on the Oregon Health Authority website. These include standardized measures used to document participant characteristics and program benchmarks (e.g. depression, substance use, infant prematurity) (Oregon Health Authority, 2015).

Operational definitions of enrollment, retention and drop out will be developed upon further review of the literature and MIECHV data available. For the purposes of the current plan, we have developed *working definitions* of key terms: *Enrollment* is considered the choice by the caregiver (mother) to accept (i.e., enroll in) home visiting services provided by one of the three evidence-based models (Early Head Start, Healthy Families Oregon, or Nurse Family Partnership). *Retention* is considered in the context of current caregiver participation in evidence-based home visiting services, and measured over time. *Short-term retention* here is defined as active program participation for 3 and 6 months. *Long-term retention* is defined as participation for 12 and 24 months. Where possible, specific levels of retention will be given by month for individual models. Home visiting dosage will be defined as an outcome in conjunction with program retention if appropriate. We know that different models have different definitions of ‘exiting’ or leaving services and we will investigate and consider these parameters in how to look across programs for these outcomes.

Home Visitor Data from Survey

Program model consultants will be in touch with program supervisors prior to the MIECHV home visitor survey distribution via email so that participants will be aware of the evaluation efforts and their participation. The introduction to the home visitor survey will stress the importance of the participants’ unique knowledge base, as well as emphasize the ultimate goal of improving program retention for the benefit of children and families. We will include language about their ability to opt out of participation or to skip items if they want to. The survey will take approximately 30 minutes.

We have had success in engaging home visitors in Oregon on previous MIECHV evaluation activities. We believe the one time nature of the survey, and the parent retention topic area will provide an incentive to participate in this project. We will perform a number of outreach efforts to increase participation including providing individual agency supervisors with return rates for their sites with ideas for increasing participation, as well as reaching out to those home visitors that may have moved on to other sites and/or positions via email. If return rates are particularly low in specific sites, we will work with the model leads and supervisor to devise alternative strategies (e.g., site visit). We will pilot test the survey for timing and on-line logistics. Evaluation staff will contact the home visitors via email to introduce them to the survey project, describe the procedures for survey completion, and include an active link to an on-line survey. Study materials will include PSU/RRJ staff contact information in multiple formats and the offer to provide personal assistance in completing the survey, and to answer any questions related to the survey project. Evaluation staff will be available to complete the survey over the phone with the home visitor in Spanish, or answer questions, if requested. Because we cannot give incentives to individual staff in home visiting programs at this time, each local implementing agency (n=25) with at least an 80% survey completion rate will receive

a \$150.00 Visa Gift Card. We plan to use Qualtrics as the hosting platform supported by RRI/PSU. This approach has been used successfully with the most recent MIECHV evaluation work. The main *home visitor constructs* that we plan to measure are in *Table 2*. This list may be updated as our key informant discussions provide context on factors important to retention.

Table 2. Home Visitor Factors (Data Elements on Survey)

Topic	Item(s)/Domain(s)
Identification	HV ID #; name
Age	What is your age?
Race/ ethnicity	What is your race/ethnicity?
Education	What is your education level?
Language	What language is your primary language?
Model	Which model do you currently work in?
LIA	Which LIA do you work for?
County; County #	Which county do you do most of your work in? Other counties you work in?
Experience; length of time as a home visitor	How long have you been working in home visiting as a home visitor?
Other models	How many models have you worked in? Which ones?
Stress	Workplace/caseload stress
Psychosocial factors	Relationship Security; Empathy
Style	Individual practice style; Personal vs. Professional
Training; Domains	Mental health, domestic violence, parent-child interaction, other Needed trainings?
Supervision; Domains	Mental health, domestic violence, parent-child interaction, other Needed supervision?
Skills; [Make questions link to operational practice]	-Use of motivational interviewing/how much -Use of reflective practice/ reflective supervision principles -Confidence in addressing challenges/challenging issues; Domestic violence, substance abuse
Skills: Strengths-based practice	Domain of Empowerment; sub-domains of Community-Culture and Sensitivity-Knowledge [Strengths Based Practices Inventory SBPI; Green 2004; SBPI-Provider version; Douglas et al, 2014]
Use/Program Content [Make questions link to operational practice]	Enrollment approach Flexibility in curriculum delivery (order, content); freedom to 'go off' model/script; how often?; philosophy around flexibility Philosophy of incorporation of other caregivers (father/grandparents) in work -If another caregiver is in the home when you visit, how often do you include them in the discussion with the mom? Opinion about curriculum fit with parents overall?

	-How well do you think it works with young mothers? Use of incentives? Celebration of milestones? Frequency of your goals not matching with the client goals
Tracking Participants	Type/level of tracking/communication used for appointments, etc
Perceived Work Environment	Supportive work environment; organizational climate Level of support from supervisor Team coherence/culture

Home Visiting Survey Measure

Development of the survey protocol for the home visitors is in process. Decisions regarding the use of specific measures will be based in part on feedback gathered at key informant discussions in progress, and in consultation with the advisory committee and national experts. An example of one of the home visitor survey measures with specific sub-scales and items is included (*Table 3*), along with a brief description of the measure. Other measures will be detailed similarly as evaluation activities move forward.

The Strengths Based Practices Inventory (SBPI) originally designed and validated in a sample of Head Start parents aims to assess provider behavior around the use of strength based practices and has shown good reliability with alphas ranging from .72–.92 (Green et al, 2004). This measure was adapted recently to be used with providers reporting three factors to be reliable (alphas .76, .84, .88); empowerment, community-culture, and sensitivity-knowledge, respectively (Douglas et al, 2014).

Table 3. Example measure for home visitor survey

Measure	Sub-scales/Items
Strengths Based Practices Inventory (SBPI) SBPI-Provider version; Douglas et al, 2014	<p>Empowerment:</p> <ol style="list-style-type: none"> 1.I help my clients to see strengths in themselves that they didn't know that they had. 2.I help my clients to use their own skills and resources to solve problems. 3.I work with my clients to meet their needs. 4.I help my clients see that they are good parents. 5.I encourage my clients to think about their own personal goals or dreams. 6.I respect my clients' families' cultural and/or religious beliefs. 7.I support my clients in the decisions that they make about themselves and their families. 8.I encourage my clients to go to friends and family when they need help or support. <p>Community-Culture</p> <ol style="list-style-type: none"> 1.I encourage my clients to learn about their culture and history. 2.I have materials for my clients' children that positively reflect their cultural background. 3.I encourage my clients to share their knowledge with other parents.

	<p>4.I provide opportunities for my clients to get to know other parents in the community.</p> <p>5.I encourage my clients to get involved and help improve their community</p> <p>Sensitivity-Knowledge</p> <p>1.I know about other programs that my clients can use if they need them.</p> <p>2.I give my clients good information about where to go for other services they need.</p> <p>3.I understand when something is difficult for my clients.</p>
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Site/Program Data from Supervisors

We will ask the three OHA program specific model consultants and each site supervisor to work together to provide detailed information on specific *program and/or system level factors* that we do not expect to vary across home visitors (*Table 4*). This will include completing a form with data elements such as average caseload size for agency and home visitors, staff turnover, hours of required home visitor trainings (required/additional training topics), overall program approaches, and structure or system changes. We are currently reviewing existing supervisor/site data collection instruments used in several large home visiting retention studies and will model our work after this successful effort (Daro et al, 2003; Duggan, personal communication).

Table 4. Site/Program Factors¹

Topic	Item(s)/Domain(s)
ID	ID#; name
Role	Supervisor/other
Demographics	What is your race/ethnicity?
Demographics	What is your education level?
Demographics	What language is your primary language?
Model	Which model? Multiple models?
Content of model	Stated focus of program (e.g., kindergarten-readiness, parent/child outcomes)
Flexibility of curriculum	Use of flexibility in the program curriculum
Incentive in model	Use of incentives (e.g., diapers for families)
Celebration in model	Program stated policy on celebration of milestones
Enrollment	Overall program enrollment approach
Caseload	Average case load for LIA; for each home visitor
Caseload type	% of caseload MIECHV vs. non-MIECHV
Staff turnover	% within designated timeframe (#/%)
Required training	# hours of required home visitor training
Other required trainings	Required trainings; topics
Other optional trainings	Additional trainings; topics
Flexibility in program	Training on use of flexibility in the program curriculum
System factor: stability of program funding	Stability of program funding
System factor: billing/productively pressures	Billing/ productively pressures

System factor: structure or system changes	Structure or system changes
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⁴If supervisor's work in more than one of the three models, specific information on each model within each site will be collected.

Community Data

If possible, we also plan to assess *community level factors* (within LIAs locations) in the areas of neighborhood poverty, safety, and residential mobility. This will be done using client census track or zip code data if available in the MIECHV data base. If this level of data is not available, we will potentially use existing county level data as appropriate. Other program and community factors will be considered following discussions with key informants in the preliminary phase of this work.

Analysis Plan

Our team will work closely with the OHA data team to ensure that the appropriate participant data elements are exported from the MIECHV administrative client data base prior to the start of analyses. Data from the home visitor survey and site supervisor data will be cleaned and merged with the existing MIECHV administrative client database. For instance, the specific home visitor data from the survey (e.g., use of flexibility in program/curriculum, training, education level) will then be able to be linked to individual participants in the MIECHV administrative client data set by using the home visitor ID#. This will give us the opportunity look at client retention data by home visitor characteristics not included in the original dataset. Because the home visitor level 'nested' variables will be added from the home visitor survey data collected as described, some analyses will be limited to only those clients in the MIECHV database that are matched to the home visitors in our survey. We anticipate that data from the survey will include 65 home visitors. Initial review of the MIECHV data set is that approximately 650 participants are linked to the currently active MIECHV home visitors. Based on preliminary analyses using the MIECHV data base, we are confident that the estimated sample size will be adequate to perform statistical models as outlined here (see below for more detail regarding power and sample size).

If appropriate, we will also create variables at the local implementing agency level (n=25) and program level (n=3). The former will be done only to the extent that there is meaningful variability between LIAs. These variables will be linked to the client data described below, resulting in a multi-level factor dataset with information at the participant, home visitor, and LIA (possibly), and program levels. We will need to assess the sample size given the nested nature of the data at different points in this process for feasibility.

Several different analytic models will be used to examine retention patterns and predictors of retention. A broad view of the conceptual framework with predictor levels and retention outcomes follows (*Exhibit 3*). We will begin with simple correlations and measures of association to refine the models and reduce the number of variables. First, we will examine variable distributions, descriptive characteristics, and correlations between individual variables within each domain (i.e., participant characteristics, home visitor characteristics, program

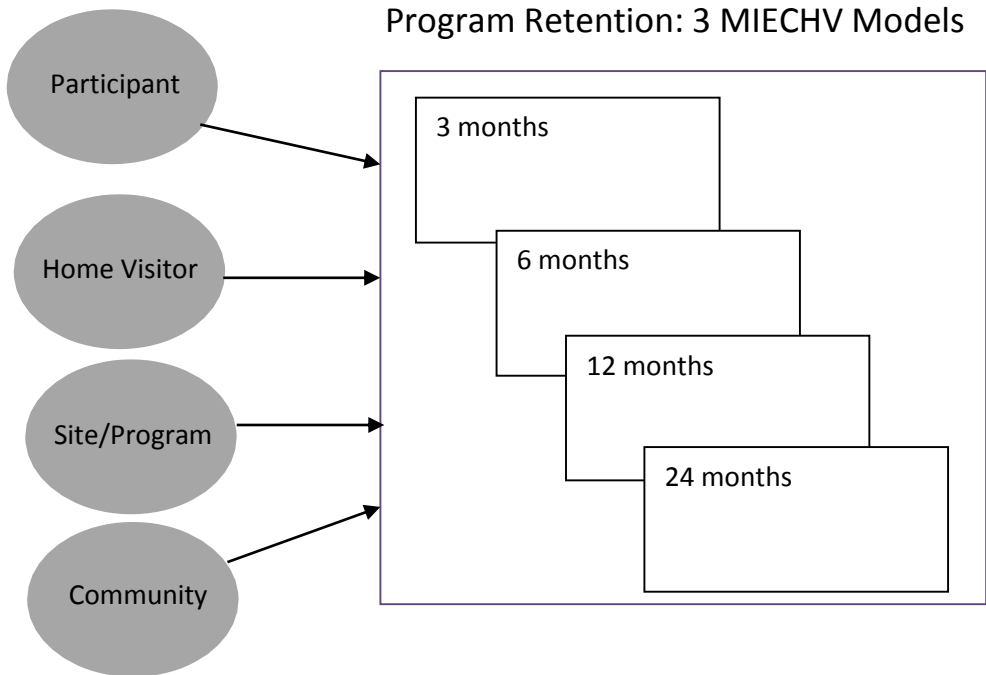
characteristics) and the retention outcomes of interest. Variables that are unrelated to any of the retention outcomes, or which do not show sufficient variability will be dropped or considered as moderators if conceptually appropriate. Logistic regression models predicting retention status at each retention “interval” (3, 6, 12, and 24 months) will then be conducted, first testing the set of participant characteristics to determine which, controlling for others, uniquely contribute to the likelihood of remaining enrolled at that interval. We anticipate having 10 or fewer predictors across the four levels of influence in each of the final retention models.

An analysis to determine the minimum detectable effect size (MDES) at a power level of .80 was conducted using the PowerUP! software (Dong & Maynard, 2013). This software requires specification of an identified grouping variable to which the main effect may be attributable. Among the potential predictor variables, marital status was selected, based on previous literature as a primary predictor of duration of stay in the program. Additionally, 10 covariates were included as an element of the MDSE calculation. Data may be gathered on up to 650 participants, divided among 65 home visitors. Given this sample size and power level of .80, the minimum detectable effect size was calculated to be .215, suggesting that our sample is adequate to sufficiently answer our research questions. With respect to the logistic regression, a sample size of 378 was calculated to detect a small effect (O.R.=1.44) with power of .80. Because the number of home visitors is fixed at approximately 65, we know that we have a potential for lower power in detecting effects at the home visitor level.

Second, because of the nested nature of the data we can apply hierarchical linear modeling (HLM) to distinguish what factors predict family retention in home based services. HLM is a procedure that is designed to investigate the relationship between variables that are measured at different levels in a hierarchical or nested structure (Daro, et al, 2003). This technique will enable the regression of predictor variables at one level (e.g., participant, program) on each other as well as on higher-level variables (e.g., home visitor or community levels). In other words, we will be able “to estimate simultaneously the effect of individual predictors, provider predictors, and program predictors on individual level outcomes” (p 1106, Daro et al, 2003). As noted earlier, sample sizes for higher level factors will be reduced (e.g., sample size for home visitor level variables will be equal to the number of home visitors, $N \sim 65$). These models will also allow us to better understand the extent to which data are clustered at the program or home visitor level (e.g., within a given program do home visitors vary significantly from each other in the extent to which they use motivational interviewing?). The HLM models will use duration of time in the program as the key dependent variable.

Finally, survival analysis will be used so that all participant data related to duration of program enrollment can be included. Survival analysis is appropriate for this type of “right censored” data (in which some families will still be enrolled at the end of the project period and thus their actual duration of services is unknown). Survival analysis using Cox’s Regression will be used to model time to drop out, and key predictors identified in prior analyses will be used to explore whether time to drop out varies for groups of families, approaches to service, or program type. Preliminary power analyses suggests that we will have sufficient power for these tests.

Exhibit 3. Theoretical model* for quantitative study using multi-level factors predicting short and long term program retention outcomes**



*Development of this theoretical model based on ecological [McCurdy & Daro, 2001] and factor [Alonso-Marden et al, 2013] models predicting program retention

**Specific predictors at each level and outcome variables are outlined in Tables 1 -3, and in evaluation document

Qualitative, Semi-Structured Interview Study

“The views of mothers who decide to drop out of home visiting programs are also important to consider. Future research should explore...sensitive points in time during a mother’s participation in home visiting when she may be particularly vulnerable to dropping out.” Radcliffe & Schwarz, 2013, p 60

Evaluation Design

In an effort to capture multiple perspectives of key events related to retention, we will conduct a series of qualitative interviews with triads of mothers, their home visitors and relevant supervisors. Mothers and their home visitors will be interviewed separately at three time points; in cases where mothers remain in services, interviews will occur at program enrollment, approximately 6 months post-enrollment and approximately 12 months post-enrollment. This spacing allows for significant exposure to services and other life changes on the part of participants while not asking them to remember more than 6 months in the past. In cases where mothers exit the program prior to the 6 or 12 month time points, interviews will occur at enrollment, and within one month of leaving services. Relevant supervisors will also be interviewed at either case close or 12 month (*Table 5*).

The first of three interviews with mothers will be done in person. Subsequent interviews will happen in person or over the phone depending on the mother’s preference. Interviews with home visitors and supervisors will happen over the phone. The multiple time-point design will allow us to develop rapport with mothers and home visitors and afford them opportunities to describe key events and decision making and to reflect on those experiences over time. Supervisors will be invited to share their perspectives and may provide important information regarding other contextual factors that might not be visible to mothers or home visitors. Supervisors may also be able to make comparisons with other cases which will further illuminate key issues. Finally, this model will allow for a comparison of mothers’ and home visitors’ experiences of “the same” events. An examination of the similarities and differences between their accounts may yield important insights into experiences that facilitate retention.

Interviews will be semi-structured and begin with open-ended questions designed to elicit respondents’ ideas regarding retention; interviewers will ask relevant follow-up questions. Interviewers will then invite participants to comment on the relevance of various program/home visitor/community factors as appropriate and as time allows. During follow up interviews, respondents will be offered the opportunity to offer comments on ideas shared during previous interviews.

Table 5. Sample Interview Schedule/Timing

Data Collection	Mother	Home Visitor	Supervisor
T1: enrollment/baseline	Y	Y	
T2: 6 months post enrollment	Y	Y	Y (if mother exits)
T3: 12 months post enrollment	Y	Y	Y

Time 2: [if mother leaves program before 6 months, interview within 30 days of exit]

Time 3: [if mother leaves program before 12 months, interview within 30 days of exit]

Research Questions

What factors emerge as being related to parent's decision to stay in services (retention)?

a. Participant, home visitor, program, system, or community factors?

Mothers:

1. What are mothers' experiences of home visiting services and how do these relate to decisions regarding participation and retention?
2. What participant, home visitor, program, and community factors do mothers identify as important to their decisions to remain in or leave services?

Home Visitors:

Questions will focus on services provided specifically to the participating mothers rather than services more generally.

1. What are home visitors' experiences of service provision and how do these relate to decisions regarding participation and retention?
2. What are home visitors' experiences of the role of participant, home visitor, program, and community factors in mothers' decisions to remain in or leave services?
3. What strategies do home visitors employ to try and engage/retain families and what do they observe about their effectiveness?

Supervisors:

We are particularly interested in program or community factors that participants and home visitors might not be aware of.

1. What are supervisors' thoughts regarding the relevance of participant, home visitor, program, and community factors as they relate to participants' decisions regarding participation and retention?

Study Population/Sampling

We will enroll approximately 30 mothers from the pool of participants who begin MIECHV funded services after October 1, 2015. Home visitors of participating mothers will number approximately 25 given overlap among home visitors. The supervisors of the home visitor will be invited to participate as well and will number approximately 15 given overlap among supervisors. Mothers will be either pregnant or the parent of a child aged birth to 12 months at the time of study enrollment. Study participants will be limited to women whose first language is either English or Spanish. All mothers will be 16 years of age or older.

We will attempt to recruit a sample that includes mothers from rural, frontier and urban communities as well as a range of cultural groups by utilizing purposive sampling. This will be accomplished by on-going monitoring of the characteristics of our participant pool during recruitment and communication with the field regarding these parameters. Achieving a sample that is quantitatively "representative" of MIECHV participants in terms of geography or race/ethnicity is neither feasible nor appropriate, however, in that our aim is to lay the ground work for analytical rather than statistical generalizations.

Recruitment, Data Collection, & Consent Procedures

MIECHV model consultants will communicate the overview of the study and timing to the field prior to any direct contact from the evaluation team. PSU/RRI will provide a study overview and conduct a recruitment webinar for all home visitors and supervisors. Recruitment packets including flyers and enrollment forms will be provided to home visitors for distribution to potential participants during home visits. Home visitors will give the flyer to the mothers and briefly describe the study; they will then invite mothers to connect with PSU/RRI by mailing the enrollment form or connecting via email or text. PSU will follow-up with mothers by describing the study, answering questions and reviewing the informed consent. Interviews will be scheduled with mothers who decide to participate. Informed consents will be collected at the time of the first interview. If a mother decides to participate in the study, the home visitor and supervisor will be contacted and interviews will be scheduled. These contact and consent procedures have been successful in prior evaluation work with the PSU/RRI and the home visiting community.

The goal will be to complete the first round of interviews within 45 days of mothers enrolling in home visiting services. Timely communication procedures will be developed with the ‘triad’ home visitor to maximize the ability to interview mothers who leave the program early within 30 days of program exit. We will work with each of the three MIECHV funded home visiting models to understand and articulate definitions of ‘drop’ or ‘exit’ as needed, and note in our summary when these parameters may differ. Interviews will be conducted by staff with experience working with similar client and provider populations. Interviews will be recorded (with permission) and transcribed.

More details on the interviews including protocols and instruments are included in *Exhibit 4*.

Analysis Plan

A sample size of 30 triads will allow us to explore the meaning of a variety of factors such as rural versus urban settings, social support, program factors, and race/culture in more detail using a comparative approach than would be possible with a smaller sample. We may also be able to begin to identify patterns or clusters of issues that are related to retention.

Analysis will be a multi-step process.

- We will begin by looking for common themes and important factors *within each respondent category*. For example, what factors are cited most frequently by mothers as contributing to retention? What do home visitors see as “deal breakers” even if for only a small portion of mothers?
- Next, we will look within triads for similarities and differences in interpretation of or the relative import of particular events, situations or conditions. We will also investigate whether/which discrepancies are patterns that exist across triads.
- Additionally, we will look for themes or patterns *within other respondent groupings/sub-groupings* (i.e. younger mothers, rural vs urban, cultural groups).

We will conduct two types of analysis. The first will focus on identifying the features or characteristics of participants, home visitors, programs or communities depicted as contributing to decisions regarding retention and will utilize a content analysis approach. A second type of exploration of the data will focus on respondents’ understanding of and feelings about home

visiting services and retention; examples might include what mothers describe as their motivation for participation or what participation symbolizes in terms of their role/competence as caregivers. This work will focus on participants' narratives, in this perspective, participants' stories "explain actions and practices by reference to (their) beliefs and desires" (Bevir, 2006, p. 285) and will utilize a narrative analysis (Cresswell, 2007).

Both inductive and deductive methods will be used in analyzing the data. The categories referred to above will provide a foundation for the deductive analyses. However, researchers will actively look for new insights and ideas as they appear in the interviews. The first 5-6 interviews will be open-coded and form the basis of the initial coding schema. That coding schema will then be added to and refined on a regular basis as described below.

Individual transcripts will be coded by dyads that include the interviewer and another member of the research team. Each person will code the interview individually; the dyad will then meet to reach alignment on coding. Any issues that were not resolved, along with any new codes that emerged, will be presented for review to the full research team. This process will be on-going, alerting reviewers to new and emergent concepts in a timely fashion. Team meetings will also serve as a process for critiquing and refining the codes themselves. Team members will be encouraged to ask questions and offer insights and alternative interpretations. This method of analysis draws on the in-depth knowledge the interviewer has with the case while bringing the perspectives of other researchers, thereby expanding the range of perspectives "listening to" and "seeing" the data. This investigator triangulation (Patton, 2002) facilitates a more complete view of the respondents' experiences and, coupled with the comparison across cases, decreased the possibility of interpretive bias (Strauss & Corbin, 1998).

Reliability will be achieved using a number of techniques. The shared process of analysis will result in consensual results. Disagreements will be resolved by allowing time for reflection and considered discussion. In addition, the Principal Investigator will conduct a final review of each interview. Early results will be shared with the field (either in the form of Advisory Board meetings or member checks) and their assessment of the accuracy and significance of the findings will serve as an important check.

Incentives and Minimizing Attrition

Monthly follow-up calls to the study participants will be made by the evaluator to confirm and/or update contact information which will help insure that the evaluation team is able to locate respondents at the time of subsequent interviews. We will provide mothers with both a \$40 stipend for each interview, as well as incentives such as toys for their children, diaper vouchers or picture frames. We were encouraged to offer these types of "incentives" by the Home Visitors. We believe offering both the stipends and the incentives will increase participation as well as assist us in building rapport with the mothers and thereby increase the quality of the information. The incentives and monthly calls will minimize attrition from the study. Using the same procedures, the MIECHV TOPS evaluation has retained close to 95% of mothers at 7 months post enrollment.

Exhibit 4: DRAFT Mother Interview Guide

Overview of Interview Procedures

- Overview of the project and interview topic/format
- Review and sign consent form
- Answer questions
- Give incentive
- Turn on digital recorder (with permission)
- Conduct Interview
- Thank you
- Record/write any notes

Introduction and Interviews

Beginning the interview:

“We’re really interested in hearing about your experiences, including any specific stories you can share. Hearing real situations instead of generalizations helps us understand what is really going on for people and how people make decisions“. *Restate that you’re interested in really understanding her story, experience, decisions regarding home visiting.*

Mothers Enrolled in Services

First Interview- Decision to enroll in services, how they found out about HV, what they were told, how services were described by HV, what needs they had (especially in regards to parenting) that they thought might be met, what has happened thus far and how they feel about it, changes in parenting that have resulted and how they feel about it, surprises (good and bad), what they would do if they wanted HV services to be different.

Second Interview - Highlights of services thus far, what needs have been met, what’s different/better/worse because of services, changes in parenting and how they feel about it, how services compare to expectations, how significant others participate in/feel about services, what they would do if they wanted HV services to be different, intentions regarding continuing participation and why.

Third Interview - Highlights of services thus far, what needs have been met, what’s different/better/worse because of services, changes in parenting and how they feel about it, how services compare to expectations, how significant others participate in/feel about services, what they would do if they wanted HV services to be different, intentions regarding continuing participation and why.

Mother Has Exited Services

Interview – Looking back, what were highlights and disappointments, what’s different/better/worse because of services, changes in parenting and how they feel about it, describe the process of deciding to end services, conversations with the H V, significant other, friends, etc.

Overview of Interview Guiding Processes/Principles

Ask about decisions related to participating in home visiting:

- Describe the decision including the timing and context
- Connect decisions to what was happening in terms of parenting/ needs for support
- Connect decisions to specifics of home visiting services (program content, structure, expectations vs reality, relationship with home visitor)
- Identify specific contributing factors (age of child, time of year, employment, other family stressors, significant others, etc.)
- If relevant, talk about how/why things changed over time

Flow should look like:

- Invite mothers to tell a story
- Explore key phrases and descriptions
- Probe: “what was going on in your head when...”, not “why did you”?

Potential prompts:

- *I want to make sure I understand. Can you say more about what “annoyed” felt like?*
- *Tell me more about...*
- *I think I know what I would mean if I said xxxxx, but can you tell me more about what that was like for you?*
- *I don’t want this to get too general, so can you think of a specific time when you felt that way?*
- *Let’s go back to your story. Can you put yourself back in that moment and describe what was going on for you then?*

Avoid “why” questions as they get too general and reflective. Try “what was going on for you when...” instead.

Exhibit 4 continued: DRAFT Home Visitor Interview Guide

Overview of Interview Procedures

- Overview of the project and interview topic/format
- Review and sign consent form
- Answer questions
- Turn on digital recorder (with permission)
- Conduct Interview
- Thank you
- Record/write any notes

Introduction and Interviews

Beginning the interview:

“We’re really interested in hearing about your experience, including any specific stories you can share. Hearing real situations instead of generalizations helps us have a better idea what actually happens during visits”. Restate that you’re interested in really understanding her perspective regarding working with this particular mother.

Mothers Enrolled in Services

First Interview- Describe the first few contacts with the mothers, how services were described including what mothers can do if things don’t go well, what specific services/activities this mother expressed interest in, any needs the mother said she had, how excited the mother seemed, how the mother talked about parenting- particular successes or challenges, other influences on mother’s decision to participate in services, what’s going well so far, any bumps in the road.

Second Interview - Summary/highlights/challenges of services thus far, specific requests from mother and your response, any departures from “services as usual”, role of significant others in services, specific successes and challenges in parenting/life facing this mother, additional programming supports that have been/would be useful to HV, concerns, prediction regarding participation/retention and why.

Third Interview- Summary/highlights/challenges of services thus far, specific requests from mother and your response, any departures from “services as usual”, role of significant others in services, specific successes and challenges in parenting/life facing this mother, additional programming supports that have been/would be useful to HV, concerns, prediction regarding participation/retention and why.

Mother Has Exited Services

Tell the story of the mother’s exit from services including HVs response and any attempts to retain mother, your understanding of her decision as well as your interpretation, what happened in the visits leading up to her departure, describe major accomplishments as well as additional information and activities you would have liked mother to receive, lessons learned.

Overview of Interview Guiding Processes/Principles

Ask about decisions related to participating in Home Visiting:

- Describe the decision including the timing and context
- Connect decisions to what was happening in terms of parenting/ needs for support
- Connect decisions to specifics of home visiting services (program content, structure, expectations vs

reality, relationship with home visitor)

- Identify specific contributing factors (age of child, time of year, employment, other family stressors, significant others, etc.)
- If relevant, talk about how/why things changed over time

Flow should look like:

- Invite home visitors to tell a story
- Explore key phrases and descriptions
- Probe: “what was going on in your head when..”, not “why did you”?

Potential prompts:

- *I want to make sure I understand. Can you say more about what “annoyed” felt like?*
- *Tell me more about....*
- *I think I know what I would mean if I said xxxxx, but can you tell me more about what that was like for you?*
- *I don’t want this to get too general, so can you think of a specific time when you felt that way?*
- *Let’s go back to your story. Can you put yourself back in that moment and describe what was going on for you then?*

Avoid “why” questions as they get too general and reflective. Try “what was going on for you when...” instead.

Exhibit 4 continued: DRAFT Supervisor Interview Guide

Overview of Interview Procedures

- Overview of the project and interview topic/format
- Review and sign consent form
- Answer questions
- Turn on digital recorder (with permission)
- Conduct Interview
- Thank you
- Record/write any notes

Introduction and Interviews

Beginning the interview:

“We’re interested in hearing any thoughts you have about this particular Home Visitor/Mother dyad’s experience of home visiting. We are particularly interested in your ideas about how the organizational context or features of the system impacted engagement and retention. Specific examples or stories that illustrate your points would be helpful.”

Mothers Enrolled in Services

Describe the supervision of the home visitor around this particular mother/HV dyad. What kinds of activities/discussions were around engagement and retention. Summary/highlights/challenges of services, specific requests from mother and/or home visitor and your response, any departures from “services as usual”, role of significant others in services, specific successes and challenges in parenting/life facing this mother, additional programming supports that have been/would be useful to the HV. Prediction regarding future participation/retention and why.

Mother Has Exited Services

Describe the supervision of the home visitor around this particular mother/HV dyad. What kinds of activities/discussions were around engagement and retention. Summary/highlights/challenges of services, specific requests from mother and/or home visitor and your response, any departures from “services as usual”, role of significant others in services, specific successes and challenges in parenting/life facing this mother, additional programming supports that have been useful to the HV.

Tell the story of the mother’s exit from services including HVs response and any attempts to retain mother, your understanding of her decision as well as your interpretation, what happened in the visits leading up to her departure, describe major accomplishments as well as additional information and activities you would have liked mother to receive, lessons learned.

Overview of Interview Guiding Processes/Principles

Ask about the Home Visitor/parent dyad:

- Describe the processes/actions
- Include the timing
- Identify specific contributing contextual factors at the participant, home visitor, program, and community levels
- If relevant, talk about how/why things changed over time

Flow should look like:

- Explore key phrases and descriptions
- Probe: “what was going on in your head when..”, not “why did you”?

Potential prompts:

- *I want to make sure I understand. Can you say more about what “annoyed” felt like?*
- *Tell me more about...*
- *I think I know what I would mean if I said xxxxx, but can you tell me more about what that was like for you?*
- *I don’t want this to get too general, so can you think of a specific time when you felt that way?*

Avoid “why” questions as they get too general and reflective. Try “what was going on for you when...” instead.

VI. ADDITIONAL STUDY ITEMS

IRB and procedures to protect confidentiality

The study will be submitted to the Oregon Health Authority, Public Health Division (PHD) Institutional Review Board (IRB) to help assure that the rights of persons participating in the research are protected. The PHD IRB has a monthly schedule of receiving applications and meeting to discuss whether the applications should be approved. PSU, with consultation from MIECHV evaluation staff, will complete IRB's initial questionnaire, write a complete description of the project, and design all consent forms, survey instruments, interview guides, and any other documents needed.

PSU has provided assurances of data security wherever it is stored and during transmission. These assurances are outlined as follows: During the consent process, participants are made aware that all collected data will be kept confidential. The electronic data will be stored in the project's secure database and will not be shared with others. Procedures have been developed and are in place to ensure that violations of confidentiality will be prevented. These procedures include assigning a coded identification number that is used on all data collection instruments and storing documents containing identifying information such as names, addresses, email addresses and telephone numbers in a locked file cabinet. Electronic identifying information will be stored in the participant database and will be accessible only to the principal investigators, project manager and data manager. Access to the project's database and computer network is restricted to those staff members who require access to perform their job. All staff are trained on HIPPA regulations and are trained to close or lock applications that are password protected when they are away from their workstation. Prior to data analysis, all identifying information will be removed from the data except the participant and/or home visitor identification number.

We plan to use Qualtrics as the platform for our web-based survey. Qualtrics data is very secure and the efforts in place to maintain that security are illustrated in their security statement which reads "servers are protected by high-end firewall systems, and vulnerability scans are performed regularly. Complete penetration tests are performed yearly. All services have quick failover points and redundant hardware, and complete backups are performed nightly. Qualtrics uses Transport Layer Security (TLS) encryption (also known as HTTPS) for all transmitted data. We also protect surveys with passwords and HTTP referrer checking. Our data is hosted by third party data centers that are SSAE-16 SOC II certified. All data at rest are encrypted, and data on deprecated hard drives are destroyed by U.S. DOD methods and delivered to a third-party data destruction service. Qualtrics deploys the general requirements set forth by many Federal Acts including the FISMA Act of 2002. [They] meet or exceed the minimum requirements as outlined in FIPS Publication 200 (www.qualtrics.com/security-statement/). Online survey completion is more secure than paper completion in several ways (e.g. potential for others living in the home to see responses is limited, the risk of losing the survey in the mail is eliminated).

Persons Responsible for Evaluation

Oregon Health Authority

At the state office, the persons responsible will be drawn from the state MIECHV team, the Maternal and Child Health Assessment & Evaluation Unit (A&E) and the informatics staff within Oregon Health Authority's Public Health Division. MCH has 4 research analysts, 2 epidemiologists and 4 informaticists. The MIECHV CQI Coordinator and two of the current research analysts have extensive evaluation experience, including work on Oregon's other MIECHV grant projects, and two of these staff members have doctoral degrees in related fields. While this grant will support a dedicated position responsible for continuous quality improvement (CQI) and a position to oversee of the evaluation for the MIECHV expansion as well as benchmark data collection and analysis, the combined resources of the A&E Unit and the informatics team will be available, as needed, to support these efforts.

MIECHV Oregon Retention Study (MORE): Organizational Capabilities and Staffing Plan

[please see separate CV files]

The Regional Research Institute

The Regional Research Institute (RRI) at Portland State University has a long history of meeting the needs of a range of government agencies, non-profits and other community based organizations through evaluation services; this work is always driven by partnership and collaboration. RRI faculty and staff work with partners on program design and logic models, develop procedures to monitor fidelity, identify appropriate data collection and analytic strategies, and implement a wide range of quantitative and qualitative methodologies. RRI has a growing portfolio of Randomized Control Trials (RCTs) funded by the National Institutes for Health (NIH), the Institute for Education Studies (IES), and other federal sources. Research faculty at RRI are partnering on these studies with colleagues at PSU and other institutions around the country, utilizing interdisciplinary strengths and state-of-the-art methods. In addition to RCTs, effectiveness research at RRI tests evidence-based practices (EBPs) in community settings, brings EBPs to scale in public systems, and adapts and tests culturally specific models.

RRI Project Team:

Anna Rockhill, MPP, MA will serve as the **Principal Investigator**. She has 18 years of experience as Principal Investigator on a wide range of child welfare and related projects including Oregon's Title IV-E Waiver. Ms. Rockhill is currently working on a Home Visiting intervention with adolescent parents and is a co-investigator on The Oregon Parenting Study (TOPS), the Maternal, Infant and Early Childhood Home Visiting (MIECHV) expansion grant evaluation. The Principal Investigator also has experience overseeing multi-site projects with complex data collection and management needs. For example, TOPS entails coordinating data collection from home visitors implementing three different evidence-based programs in 13 Oregon counties. Home Visitors with TOPS mothers on their case load are required to submit weekly Home Visit Logs to report the content of their home visits with caregivers. The project has a well-developed system for submission, tracking, data entry, data management and analysis and over 1200 logs have been

collected since project start-up in December, 2014. In addition, in her role as PI, she typically oversees between 3-5 research projects at a time.

Peggy Nygren, PhD will be a **Co-Investigator**. Peggy has worked in the field of early childhood development and program evaluation for over two decades. Her work at the Yale Child Study Center provided her with research experience in social and emotional development and program implementation in early childhood and school-aged youth. She managed several Federal grants at OHSU's Evidence-based Practice Center to apply systematic review methodology to primary prevention topics such as screening for family violence (child and intimate partner) and the efficacy of early home visitation programs. Peggy was awarded a dissertation research fellowship from the Quality Improvement Center for Early Childhood (QIC-EC), Center for the Study of Social Policy (CSSP), for her work on understanding the role of multi-level risk and protective factors related to parenting and child well-being in families receiving Healthy Families - Oregon (HF-O) home visitation program services in Oregon. Her work at Portland State University has focused on better understanding the impacts of Early Head Start and Healthy Families home visitation program models on child welfare involvement, child health, and parenting practices. She served as a consultant on TOPS collaborating on the overall evaluation plan and developing measures protocols for both the parents and home visitors.

Beth Green, PhD will also be a **Co-Investigator**. Dr. Green is Director of Early Childhood & Family Support Research at the Center for the Improvement of Child & Family Services, Portland State University Regional Research Institute. Dr. Green has been partnering with community-based programs for 20 years to design useful and rigorous evaluation and research studies to help improve services for young children and their families. Her areas of expertise include child maltreatment prevention, home visiting, early childhood care and education, and the relationship of program intervention processes to outcomes. Dr. Green has been involved since 1996 in the National Early Head Start Research and Evaluation Project, a national randomized clinical trial of Early Head Start (EHS) services that has tracked EHS outcomes for children from birth to grade 5. Her work has had a long-standing focus on understanding intervention processes and mechanisms, and in particular in understanding how early childhood programs can be most effectively provided to maximize effectiveness. Dr. Green earned a Ph.D. in Social Psychology from Arizona State University, with an emphasis on applied research methods, and spent 3 years at the University of Pittsburgh's Office of Child Development doing her postdoctoral studies in applied early childhood research and program evaluation. Dr. Green also served as a consultant on TOPS.

Katie Winters, MA will serve as the **Project Coordinator**. Ms. Winters has been working as an evaluator for over 10 years with a number of evaluation firms in both Oregon and California and has considerable experience managing multi-site, complex projects- often more than one at a time. Her projects have employed mixed-method and quasi-experimental designs and she has developed and implemented successful participant recruitment and retention strategies for national and state-wide evaluations. She has had significant responsibility for maintaining client contact and facilitating stakeholder participation. In her role as Project Coordinator for TOPS Ms. Winters has developed relationships with Home Visitors and Home Visitor Supervisors across the state of Oregon. Her responsibilities have also included supervising other research staff and building evaluation capacity within community-based organizations. Ms. Winter's master's degree includes a special emphasis on Program Evaluation and Organizational Behavior. She is a member of the American Evaluation Association and serves as Financial Officer for the Oregon Program Evaluators Network.

Camilla Pettle, BA will provide **administrative support** to the project. Ms. Pettle has worked at Portland State University's Regional Research Institute for three years supporting projects with diverse populations at the federal, state, and local levels including TOPS. She has provided administrative support to many evaluations and is familiar with both PSU's protocol as well as the requirements of the funder. Her years of experience as a detail-oriented professional make her an integral part of this project. Specifically, Ms. Pettle will be responsible for managing communication and scheduling related to the advisory board as well as travel reimbursements and other related payments; developing and implementing systems for participant stipends; manage mailings; assist with data entry; assist with report editing and production and other administrative tasks as needed.

Eleanor Gil-Kashiwabara, PsyD will be the **Project Consultant**. Dr. Gil-Kashiwabara is a Licensed Psychologist and Research Associate Professor at Portland State University, Regional Research Institute for Human Services. She is the immediate Past-President of Oregon Psychological Association. Dr. Gil-Kashiwabara is the Principal Investigator on numerous projects addressing American Indian/Alaska Native (AI/AN) children's health and mental health, including two ACF-funded Tribal MIECHV Programs and is Principal Investigator on TOPS. She has also conducted research addressing transition planning for Latinas with disabilities. Her clinical interests include child/family psychotherapy and psychological evaluations with Spanish-speaking children, most of whom are in protective custody. Dr. Gil-Kashiwabara is especially interested in issues related to the intersection of gender-culture-disability, children in foster care, and has done some work addressing acculturation issues in Latina youth and women. She has published several articles, book chapters, and briefs related to transition planning with underserved youth and culturally competent research.

Timeline of Study Activities by Month/Year

Activity	2015									
	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	
OHA submits Evaluation Plan to OPRE for conditional approval	X									
OHA contracts with Evaluator (PSU)		X								
Finalize evaluation plan		X	X							
Key Informant Discussions			X	X						
Submit revised Evaluation Plan to OPRE for final approval			X	X						
Prepare and submit IRB application to OHA IRB and revise as necessary until approval is received					X	X	X			
HV model developer approval process				X	X	X				
PSU IRB approval process						X	X			
Ongoing Advisory Board and stakeholder feedback/convening as appropriate				X	X	X	X	X	X	
Gather program information from Model Consultants and supervisors					X	X	X			
Administer field survey to Home Visitors online								X	X	
Clean/analyze field survey and program data gathered from Model Consultants and supervisors and create variables for merge with MIECHV client database										X
Clean MIECHV client data set and merge with program and home visitor variables										
Analyze quantitative data										
Introduce evaluation and train home visitors to recruit mothers for qualitative interview study							X			
Recruit/interview mothers and Home Visitors (supervisors as appropriate)							X	X	X	
Ongoing text/email/phone monthly contacts								X	X	
Ongoing qualitative data analysis/synthesis								X	X	
Write evaluation report										

	2016											
Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
OHA submits Evaluation Plan to OPRE for conditional approval												
OHA contracts with Evaluator (PSU)												
Finalize evaluation plan												
Key Informant Discussions												
Submit revised Evaluation Plan to OPRE for final approval												
Prepare and submit IRB application to OHA IRB and revise as necessary until approval is received												
HV model developer approval process												
PSU IRB approval process												
Ongoing Advisory Board and stakeholder feedback/convening as appropriate	X	X	X	X	X	X	X	X	X	X	X	X
Gather program information from Model Consultants and supervisors												
Administer field survey to Home Visitors online	X											
Clean/analyze field survey and program data gathered from Model Consultants and supervisors and create variables for merge with MIECHV client database												
Clean MIECHV client data set and merge with program and home visitor variables	X	X	X	X	X	X	X					
Analyze quantitative data								X	X	X	X	X
Introduce evaluation and train home visitors to recruit mothers for qualitative interview study												
Recruit/interview mothers and Home Visitors	X	X	X	X	X	X	X	X	X	X	X	X
Ongoing text/email/phone monthly contacts	X	X	X	X	X	X	X	X	X	X	X	X
Ongoing qualitative data analysis/synthesis	X	X	X	X	X	X	X	X	X	X	X	X
Write evaluation report												

	2017									
Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	
OHA submits Evaluation Plan to OPRE for conditional approval										
OHA contracts with Evaluator (PSU)										
Finalize evaluation plan										
Key Informant Discussions										
Submit revised Evaluation Plan to OPRE for final approval										
Prepare and submit IRB application to OHA IRB and revise as necessary until approval is received										
HV model developer approval process										
PSU IRB approval process										
Ongoing Advisory Board and stakeholder feedback/convening as appropriate	X	X	X	X	X	X	X	X	X	X
Gather program information from Model Consultants and supervisors										
Administer field survey to Home Visitors online										
Clean/analyze field survey and program data gathered from Model Consultants and supervisors and create variables for merge with MIECHV client database										
Clean MIECHV client data set and merge with program and home visitor variables										
Analyze quantitative data	X	X	X	X	X	X	X			
Introduce evaluation and train home visitors to recruit mothers for qualitative interview study										
Recruit/interview mothers and Home Visitors	X									
Ongoing text/email/phone monthly contacts										
Ongoing qualitative data analysis/synthesis	X	X	X	X	X	X	X			
Write evaluation report				X	X	X	X	X	X	X

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