

**MATERNAL INFANT AND
EARLY CHILDHOOD HOME
VISITING (MIECHV)
2ND ANNUAL BENCHMARK AND
OUTCOME TECHNICAL REPORT
FY 2014**

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I. Background and Overview

The Center for Prevention Research and Development (CPRD), Institute of Government and Public Affairs, University of Illinois has been contracted as the external evaluator for the Illinois Maternal Infant and Early Childhood Home Visiting (MIECHV) program. This 2nd annual report is submitted subsequent to the end of the third year of a five-year MIECHV implementation plan in Illinois, as required by the federal Affordable Care Act (ACA). The three-year implementation period included in this report spans from October 2011 to September 2014.

MIECHV home visiting programs support pregnant women and the healthy development of families with children prenatally through age 5. Targeted populations include low-income families, pregnant women under age 21, children with developmental delays, military families, and families with histories of child abuse, substance abuse, and low student achievement.

In addition to traditional early childhood home visiting, MIECHV supports a doula expansion program. Doulas are trained, nonmedical personnel who assist women prenatally, during birth, and for a short period post-natally. They provide pregnancy and childbirth education, linkages to health care and social services, and breastfeeding education, and have been associated with better birth outcomes for mothers and children. Participants in this program were tracked separately to evaluate differences that may exist between the women and children who receive home visiting and doula services when compared to families that receive traditional home visiting services alone.

This annual report incorporates both a general evaluation of MIECHV implementation and a specific focus on 33 Performance Benchmarks (PBs), which are related to both processes and outcomes. CPRD has accessed and analyzed data that have been collected and recorded by MIECHV home visitors (HVs) who are engaged in the ongoing provision of services, activities, and referrals for six Illinois target communities. In addition, the CPRD evaluation team is comprised of six Field Data Collectors (FDCs)—one in each of the target communities. FDCs conduct in-home assessments to ascertain early, intermediate, and long-term developmental outcomes that are reflected in several PBs.

This report includes two years of PB data collected and entered by HVs, initially by means of the Effort to Outcomes (ETO) management information system, and currently in Visit Tracker. In addition, the CPRD FDC developmental PB data have been collected at baseline (referred to as Year 1) and one-year follow-up (referred to as Year 2). However, due to the late start-up of the evaluation system, these data lag nearly one year behind data collected by HVs.

CPRD prepares and analyzes PBs and other required data that are then annually submitted to the federal Health Resources and Services Administration (HRSA). Visit Tracker is used to collect and submit administrative, demographic, and federal PB data. In addition, CPRD submits data related to developmental PBs collected by means of in-home surveys, interviews, and digital

video recordings. Most recently, Illinois initially submitted MIECHV Year 3 (FY 2014) PB data in October 2014, and finalized its submission in December 2014.

The ACA requires that MIECHV programs and services be designed to provide an array of evidence-based services to mothers and children at-risk for a range of adverse outcomes. Home visiting service providers are required to document and record data pertaining to the delivery of these services: screenings and assessments, types and number of services provided, and progress made towards established PBs and other goals.

Three strategies comprise Illinois' proposed approach to the implementation of MIECHV:

1. Expanding or enhancing one or more of four evidence-based models of home visiting, as well as doula services
2. Ensuring that the home visiting programs are effectively connected to those community-based organizations and services required to achieve the benchmarks
3. Further developing and strengthening a statewide system of evidence-based and innovative approaches to home visiting, as well as the state and local infrastructure necessary to support effective service delivery

Implementation of these strategies includes the development and testing of a system of universal screening and coordinated intake, and the enhancement of an early childhood collaborative in each target community.

Illinois MIECHV home visiting service providers

MIECHV home visiting service providers are listed in **Table 1** below:

Table 1. Illinois MIECHV Agencies by Community

Community	Agency	Home Visiting Service
Cicero	Children's Center of Cicero-Berwyn	Parents as Teachers
	Family Focus Nuestra Familia	Parents as Teachers
	Family Services and Mental Health	Coordinated Intake and Community Systems Development
Elgin	Elgin School District U-46	Parents as Teachers
	Family Focus DuPage	Healthy Families Illinois
	Kane County Health Department	Nurse-Family Partnership, Coordinated Intake, and Community Systems Development
	Visiting Nurse Assn. Fox Valley	Healthy Families Illinois
Englewood	Children's Home + Aid Society	Coordinated Intake and Community Systems Development
	ChildServ	Parents as Teachers
	Family Focus Englewood	Healthy Families Illinois
	Henry Booth House	Healthy Families Illinois
	Women's Treatment Center	Parents as Teachers
Macon	Decatur Public School District 61 (Pershing)	Parents as Teachers
	Macon County Health Department	Healthy Families Illinois, Coordinated Intake, and Community Systems Development
	Macon Resources	Parents as Teachers
Rockford	City of Rockford Human Services	Early Head Start
	Easter Seals Chicago	Healthy Families Illinois
	La Voz Latina	Healthy Families Illinois
	Rockford Public Schools 205	Parents as Teachers
	Winnebago County Health Dept.	Coordinated Intake and Community Systems Development

Community	Agency	Home Visiting Service
Vermilion	Center for Children's Services/Aunt Martha's	Coordinated Intake and Parents as Teachers
	Danville School District 118	Parents as Teachers
	East Central Illinois Community Action	Community Systems Development and Early Head Start
Doula	Center for Children's Services/Aunt Martha's	Parents as Teachers
	Chicago YMCA	Healthy Families Illinois
	Child Abuse Council	Healthy Families Illinois
	Family Focus Lawndale	Parents as Teachers
	One Hope United	Healthy Families Illinois

Illinois MIECHV has 20 home visiting agencies serving six communities, as well as five doula agencies (see **Table 1** and **Figure 1**). The four evidence-based models used by these agencies are: Parents as Teachers (13 agencies), Healthy Families Illinois (10 agencies), Early Head Start (2 agencies), and the Nurse-Family Partnership (1 agency). **Figure 2** shows the county locations of each MIECHV agency, with the map background showing percent of children aged 3 years or below living in poverty (<200% FPL) in 2012. The map's color gradient corresponds to five levels (quintiles) of child poverty, with darker shades indicating higher levels of poverty. Agency locations indicate that MIECHV serves areas with poorer families and children. It should be noted that in Illinois, concentration of child poverty is often masked by pockets of poverty in affluent counties, which is the level at which these data are presented. For example, home visiting and doula services are located in Waukegan, Cicero, and Elgin, which are poor communities located in the affluent counties respectively of Lake, Kane, and DuPage. Child poverty data was obtained from the [Illinois Early Childhood Asset Map](#) (IECAM) website, maintained by the Early Childhood and Parenting Collaborative at the University of Illinois.

Demographics

The first part of this report describes the characteristics and socio-demographics of MIECHV families served by home visiting programs. This annual snapshot allows readers to understand who participates in MIECHV programs, whether MIECHV is reaching its appropriate target populations, and how these families differ by home visiting services.

Figure 1. Illinois MIECHV Agencies by Community

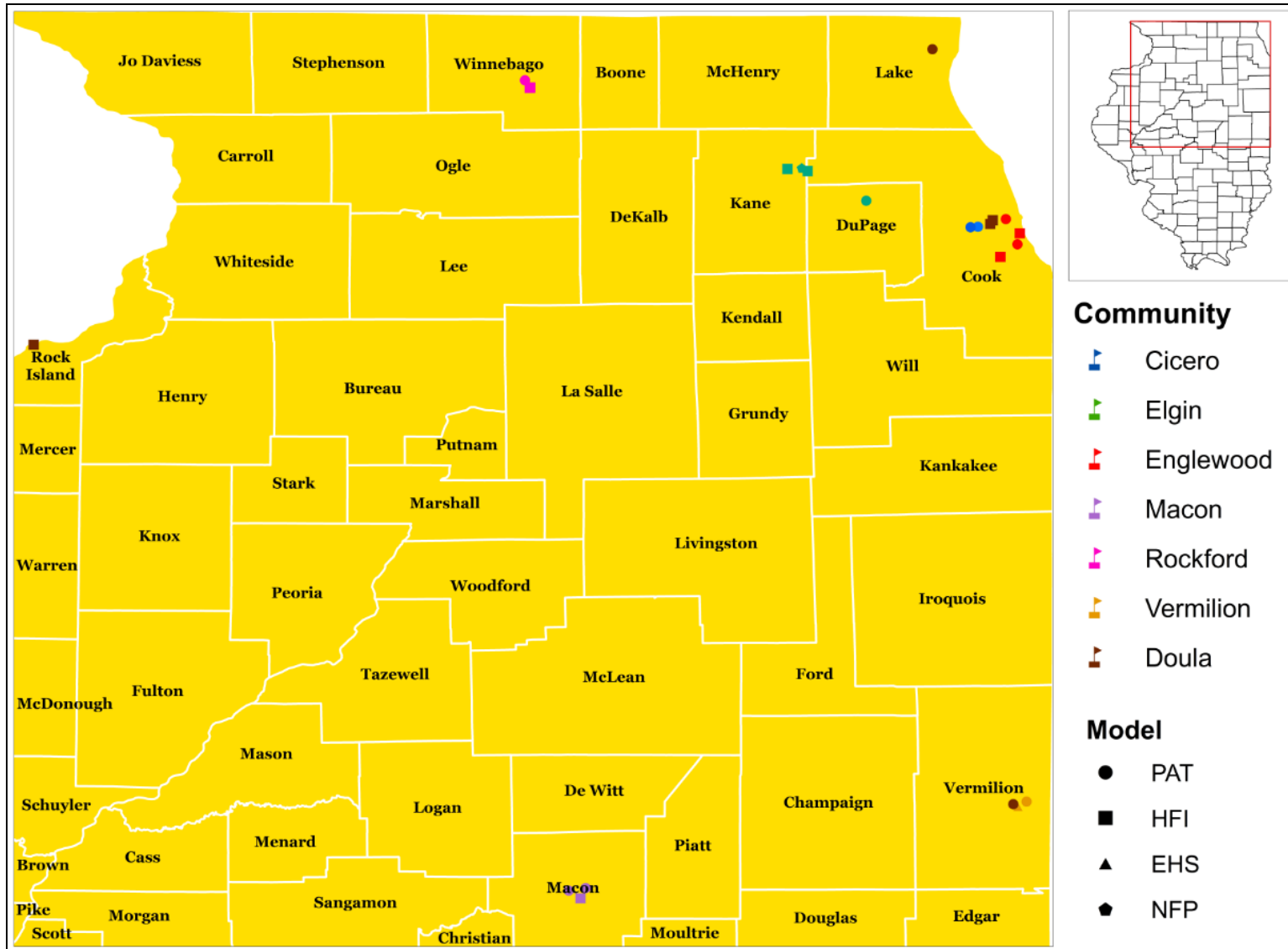


Figure 2. Illinois MIECHV Agency Locations and Child Poverty Rates by County, 2012

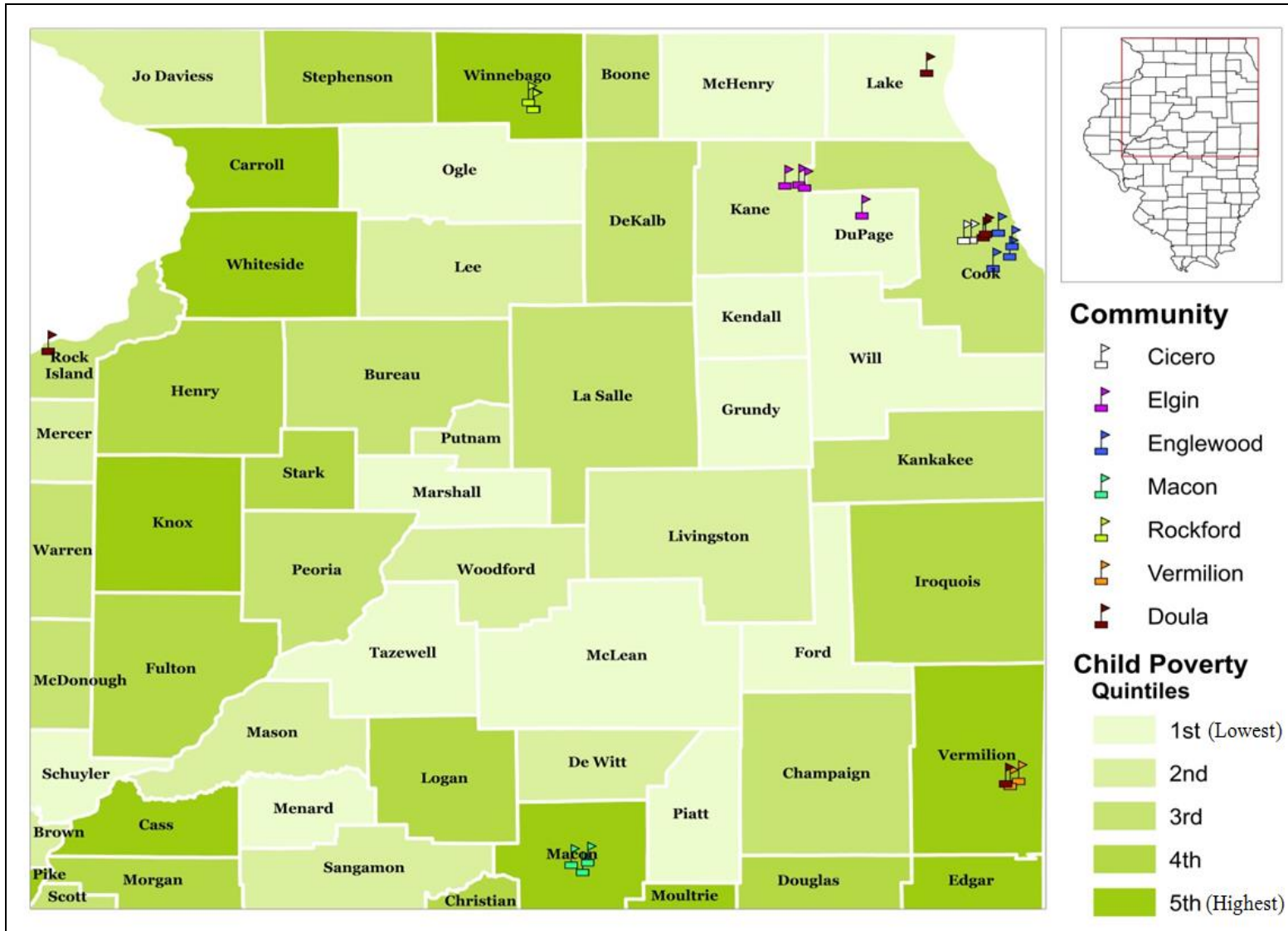
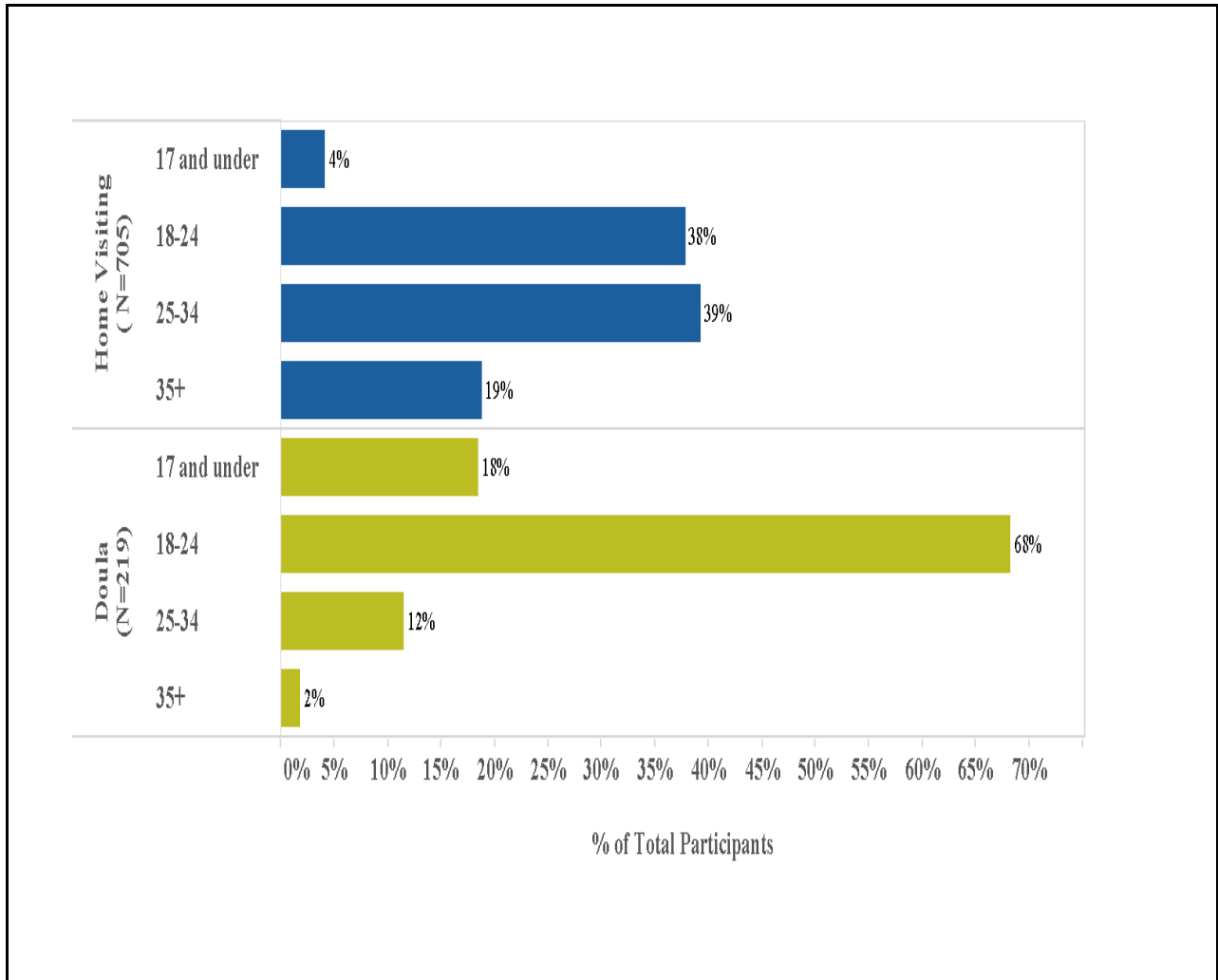
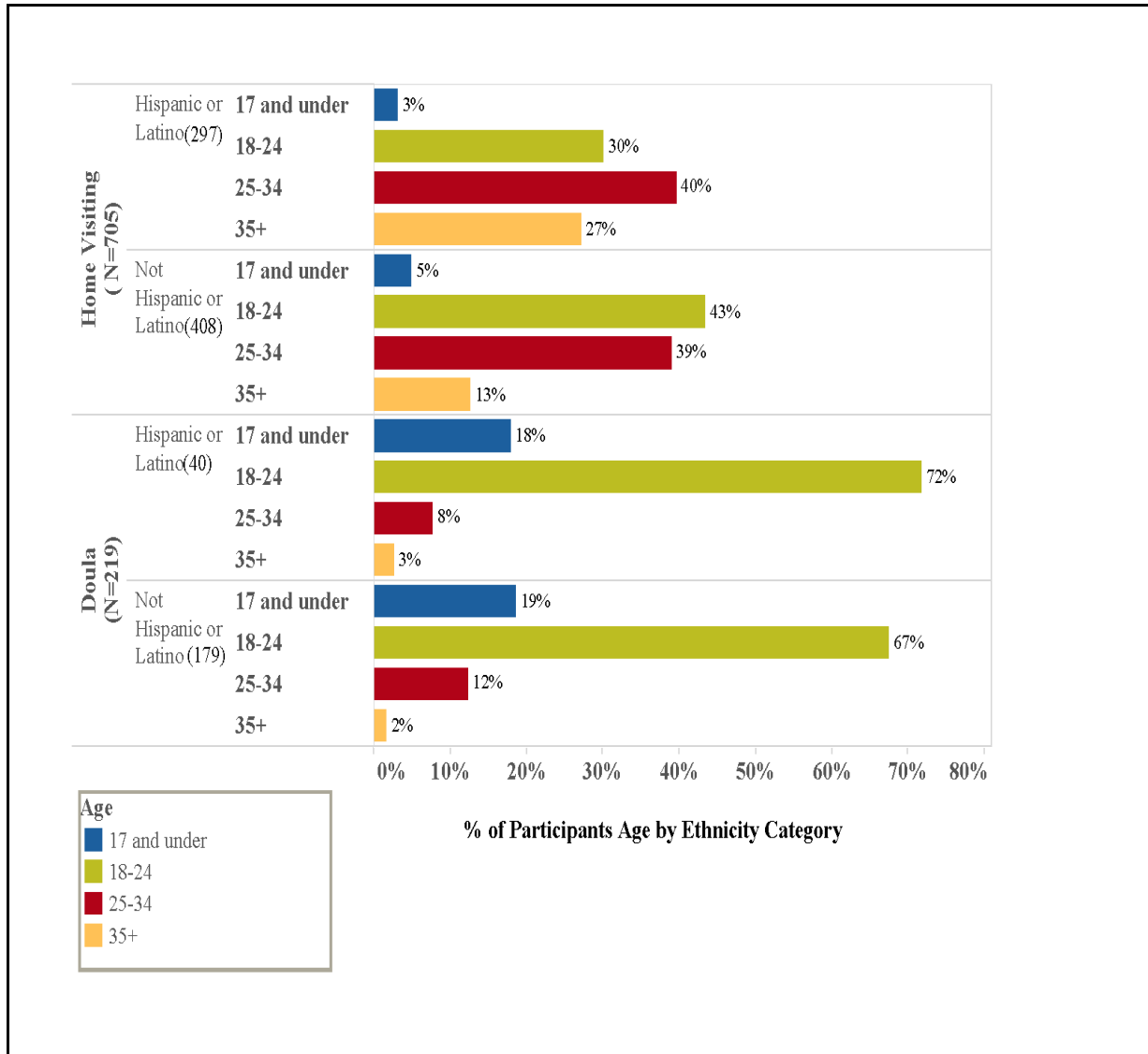


Figure 3. Enrollment by Caregiver Age



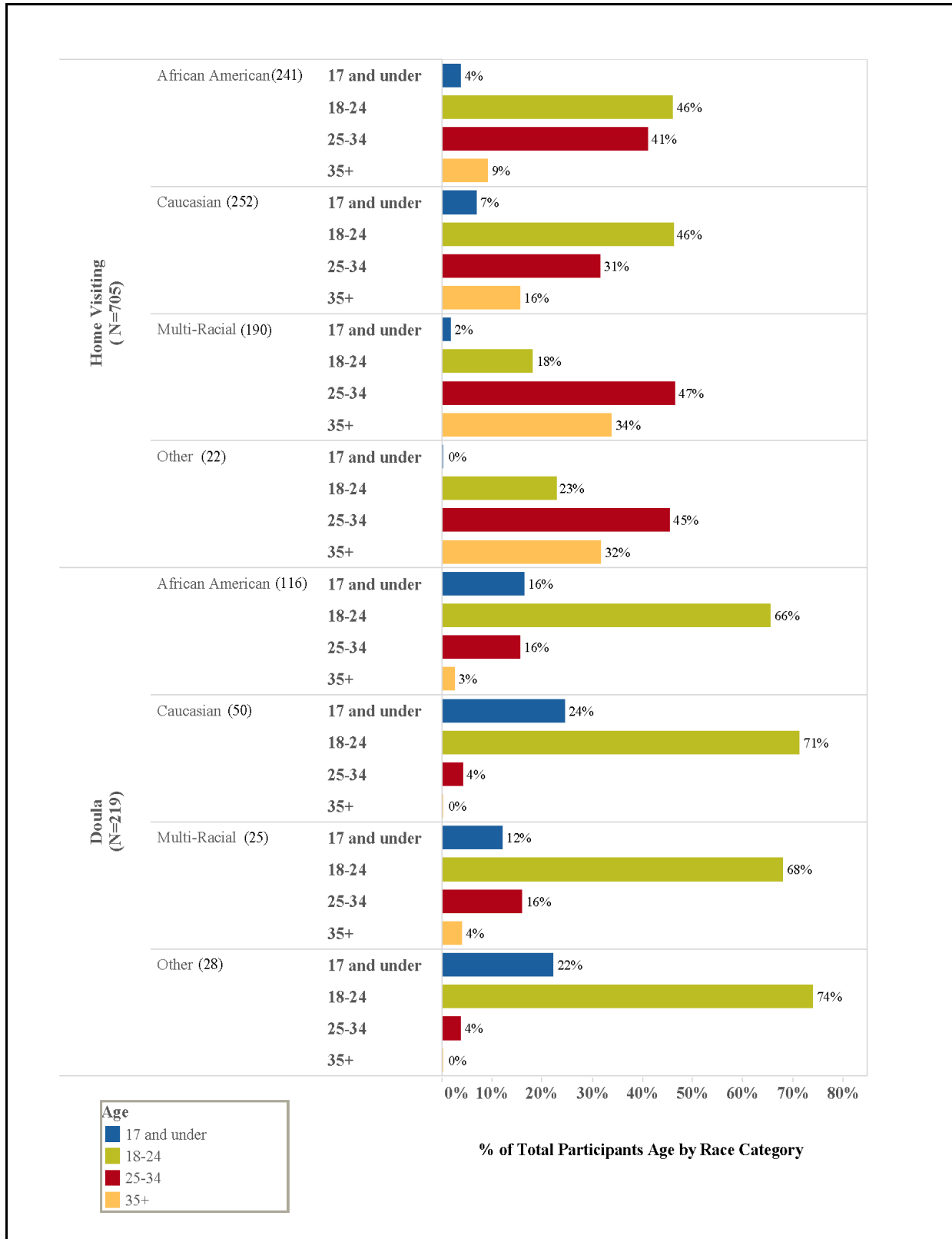
Over 3/4 of home visiting participants are caregivers between 18 and 34 years of age, with relatively few under the age of 18 or above the age of 35. Doula participants are a much younger group, with almost 20% under 18 years of age and over 85% under 25 years old. Doula programs target teen parents and have a much higher percent of teen (under 18) participants than home visiting programs. Not surprisingly, MIEHCV doula program participants are younger when compared to home visiting participants.

Figure 4. Enrollment by Caregiver Age by Ethnicity



By ethnicity, 42% of MIECHV caregivers are Hispanic/Latino and 58% are non-Hispanic/Latino; the percentage of Hispanic/Latino women 35 years and older is more than twice that of non-Latino home visiting participants. Ninety percent of Hispanic/Latino doula participants and 86% of non-Hispanic/Latino doula participants are under 25, compared to 33% and 48% for home visiting programs, respectively. The doula program has roughly equal percentages of Hispanic/Latino and non-Hispanic/Latino teen (17 and under) participants; contrasts between ethnic groups pertaining to other age categories are also minor among doula participants.

Figure 5. Enrollment by Caregiver Age by Race

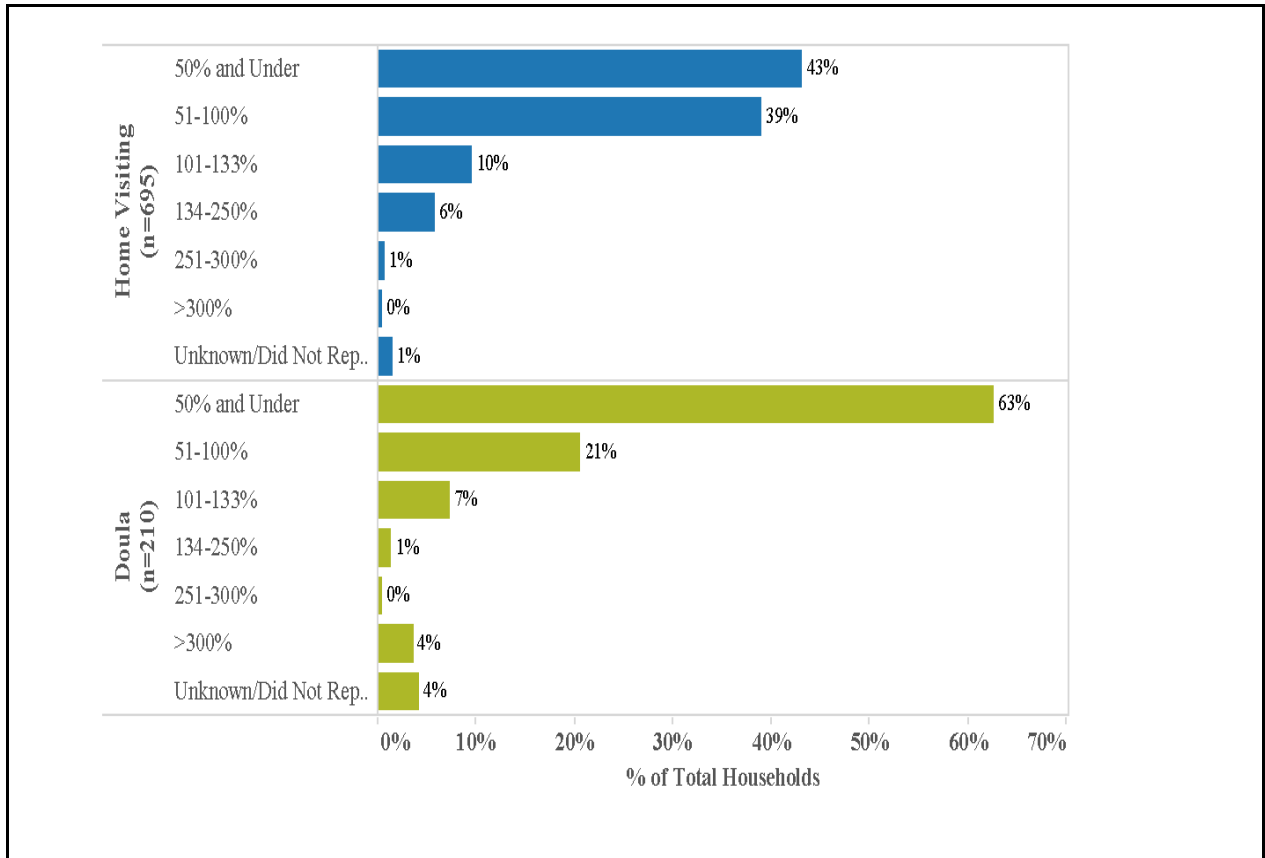


By race, home visiting caregivers are approximately equally divided among African American, Caucasian, and Multi-Racial/Other.

Overall, home visiting programs enroll a relatively low percentage of teens. Regarding racial categories and age, African American and Caucasian participants are younger than participants who identify as multi-racial or “other” (Native American, Hawaiian\Pacific Islander, and Asian). When ethnicity is considered in relation to race, the higher Caucasian percentage age 17 and under is likely accounted for by Hispanic/Latino participants who are identified as Caucasian.

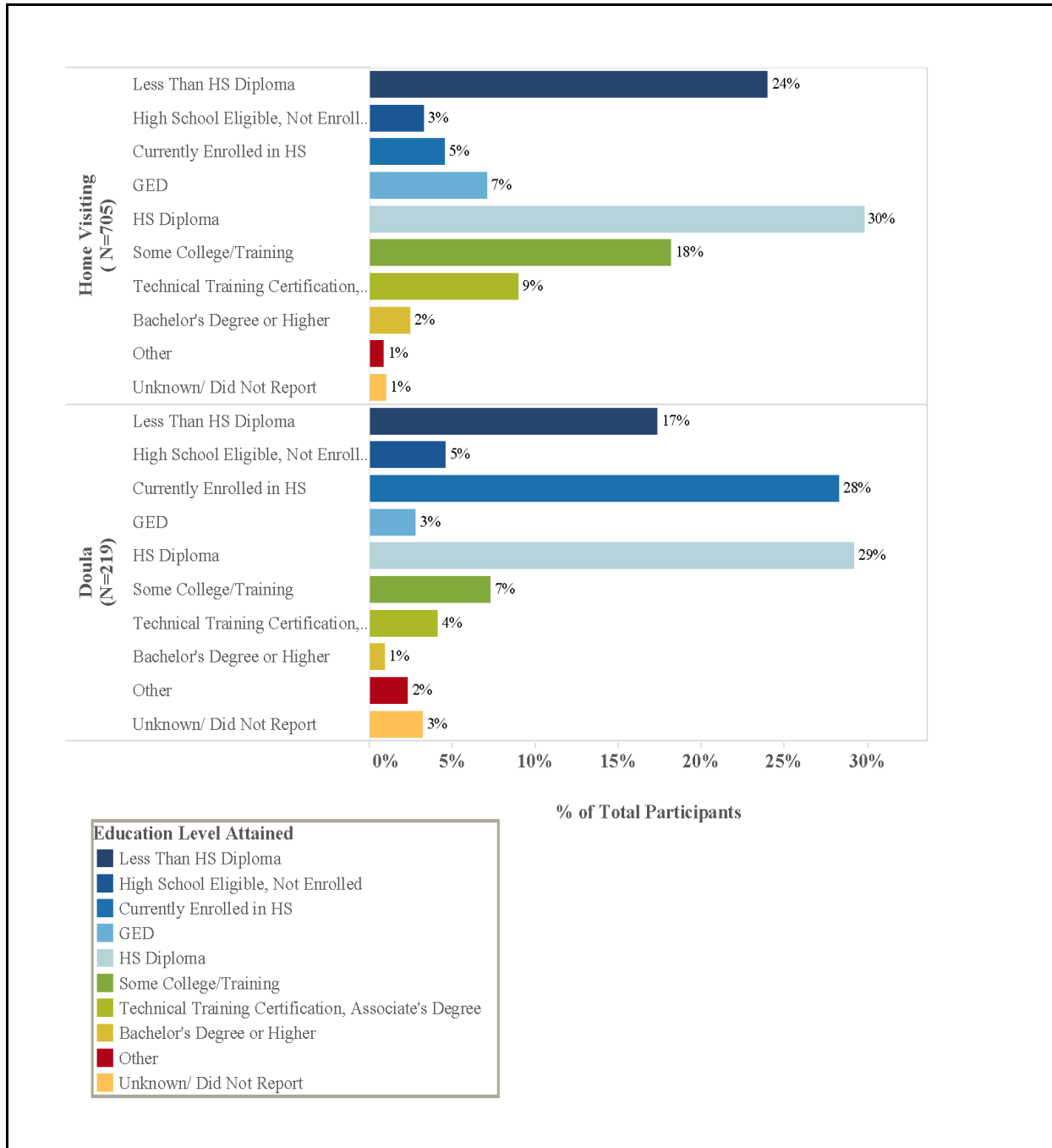
Doula participants are, again, younger than home visiting participants. The vast majority of participants are under 25, from a low of 80% of multi-racial participants to a high of 96% of participants who identify as “other.”

Figure 6. Enrollment by Household Income in Relation to Federal Poverty Guidelines



Poverty is without question the most pervasive factor making MIECHV families eligible for home visiting services, and the most debilitating in terms of family stability. The number of MIECHV families in poverty is based on annual income in relation to federal poverty guidelines. **Figure 6** shows that for 2015, 82% of home visiting participants report income less than 100% of poverty guidelines (i.e., below the income level defined as the upper limit of families of that size living in poverty); 92% report income lower than 133% of those guidelines. Similarly, doula families report 84% below the 100% guideline, and 92% below the 133% guideline. It is likely that doula families report less income than home visiting program participants because there are more doula participants below the age of 21. Poverty levels for 2014 appear to be slightly lower than those reported in FY 2013.

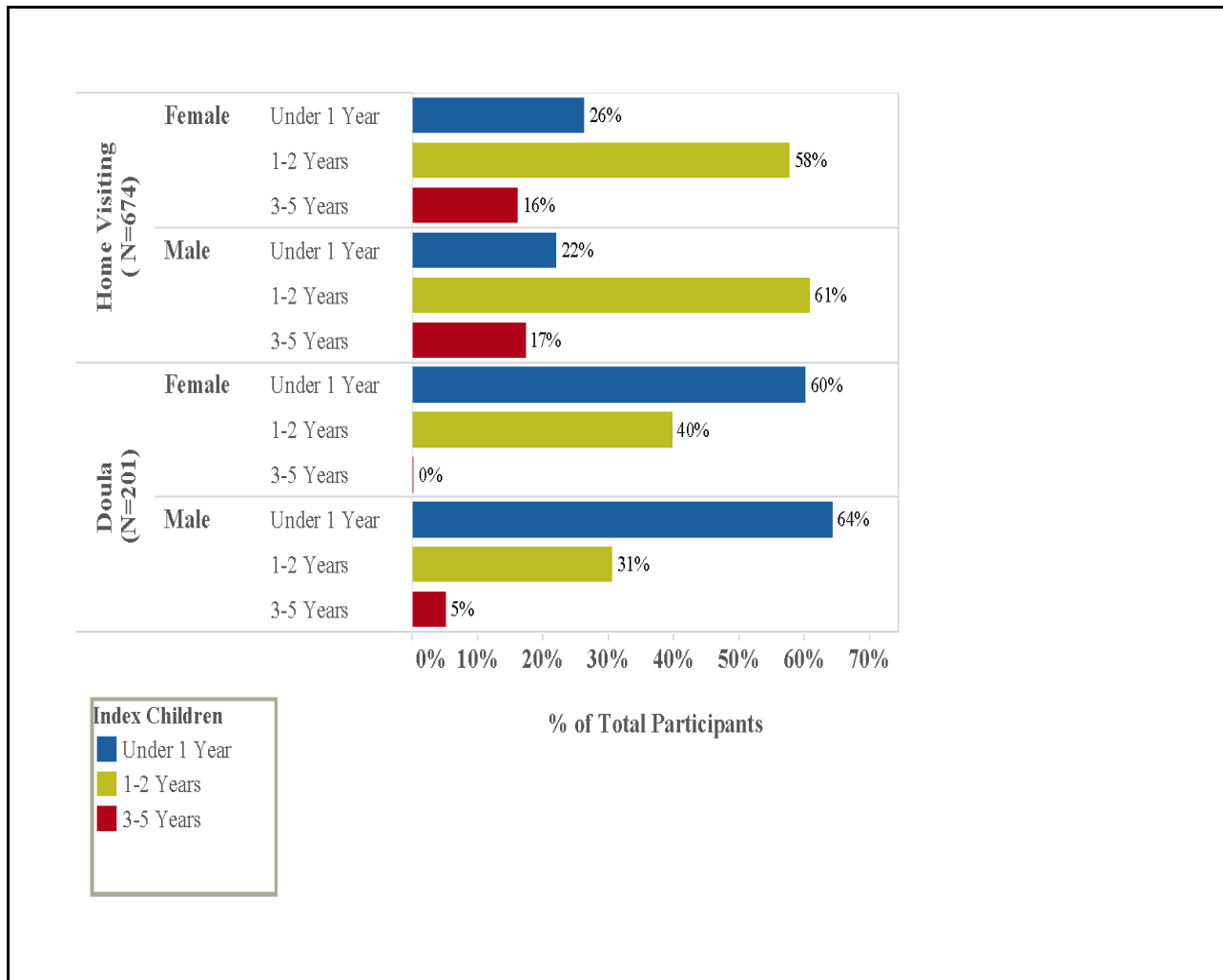
Figure 7. Enrollment by Educational Attainment



Education is a key factor that can help families escape poverty, and a high priority issue for MIECHV. Sixty-nine percent of home visiting participants and 82% of doula participants have an education level of a high school diploma or less. Of these, very few home visiting participants are currently enrolled in high school. Over a quarter of doula participants report current enrollment in high school, which likely reflects their younger age and their ability to manage

school and family up to this point. A key question regarding future outcomes is whether doula mothers graduate from high school/post-high school and become gainfully employed.

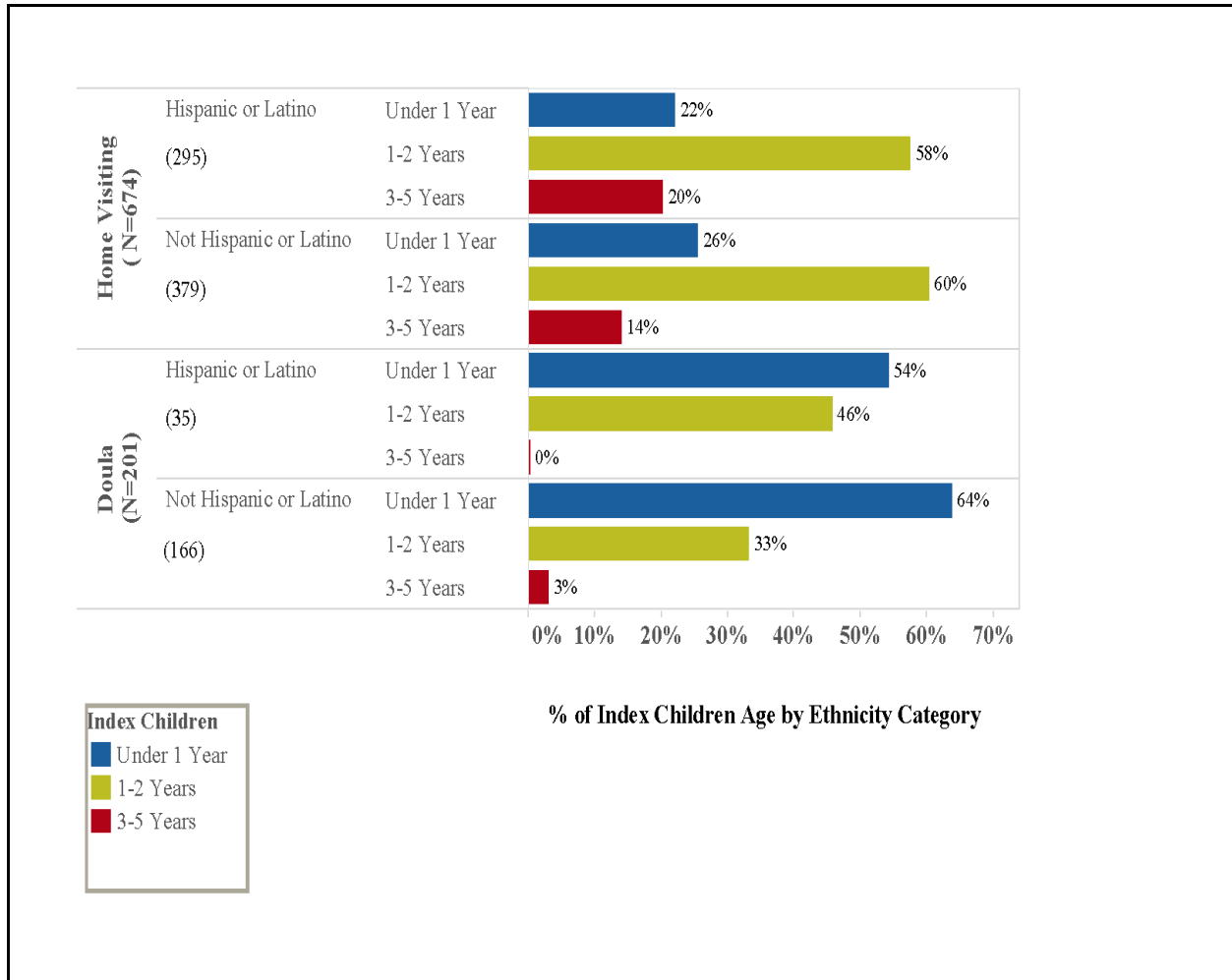
Figure 8. Index Children by Gender by Age



The majority of children enrolled in home visiting programs were between 1 and 2 years of age in FY 2014. This likely reflects the current juncture in MIECHV funding, at which many women who were enrolled during pregnancy or shortly thereafter have continued to take part in programming through their children’s second year. Additionally, not all Illinois MIECHV program models enroll children over 2 years of age. The Nurse-Family Partnership enrolls pregnant women no later than 28 weeks pregnant, who may continue in the program until the child is 2 years old. Early Head Start enrolls pregnant women and families with children from birth to age 3. Healthy Families Illinois enrolls children prenatally through 5 years of age. Parents as Teachers enrolls pregnant women and families with children from birth to age 5.

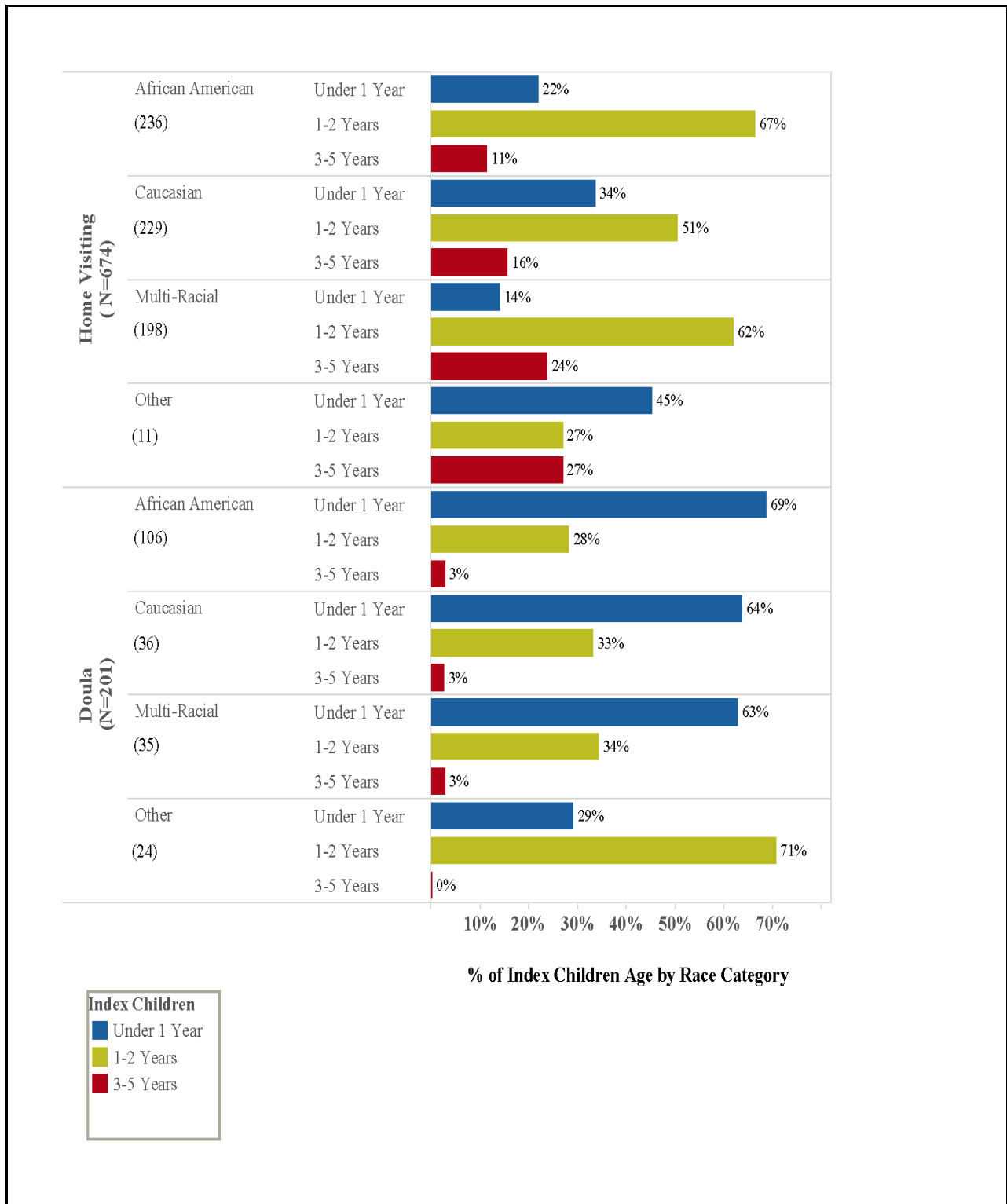
Children enrolled in doula programs are younger than children enrolled in home visiting programs, with most under 1 year of age. This is likely a result of the requirement that doula programs enroll participants during pregnancy.

Figure 9. Index Children by Ethnicity by Age



Nearly 43% of children enrolled in home visiting programs are Hispanic or Latino, in contrast to 17% in doula programs. The age distribution for Hispanic/Latino children served by home visitors is comparable to that of non-Hispanic/Latino children. Hispanic/Latino children in doula programs are slightly older (46% from 1-2 years) than non-Hispanic/Latino children (33% from 1-2 years). As expected, the ethnicity distribution of index children matches the ethnicity of caregivers reported earlier, which serves as a validation check for these data.

Figure 10. Index Children by Race by Age

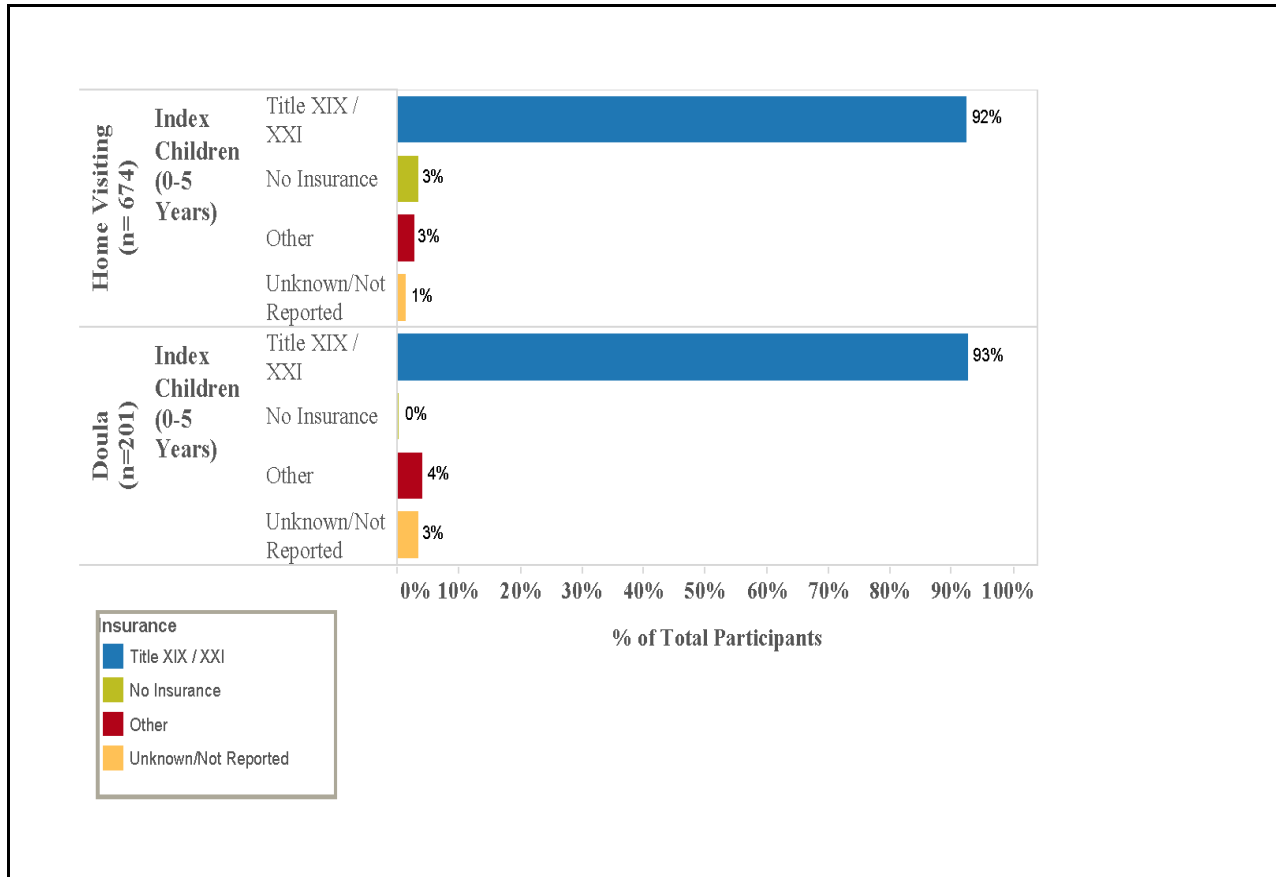


By race, home visiting children are relatively evenly divided among three groups: African American, Caucasian, and either Multi-Racial or Other. Doula children, on the other hand, are 53% African American, 18% Caucasian, 17% Multi-Racial, and 12% Other.

Most African-American, white, and multi-racial children enrolled in home visiting programs are between 1 and 2 years of age, with smaller percentages under 1 year and over 2 years. Again, this likely reflects the current state of MIECHV funding and the retention of families who enrolled in MIECHV in prior years. Children who are identified as “other” tend to be younger than other home visiting children, with almost half under 1 year of age and an equal split between 1-2 years and 3-5 years.

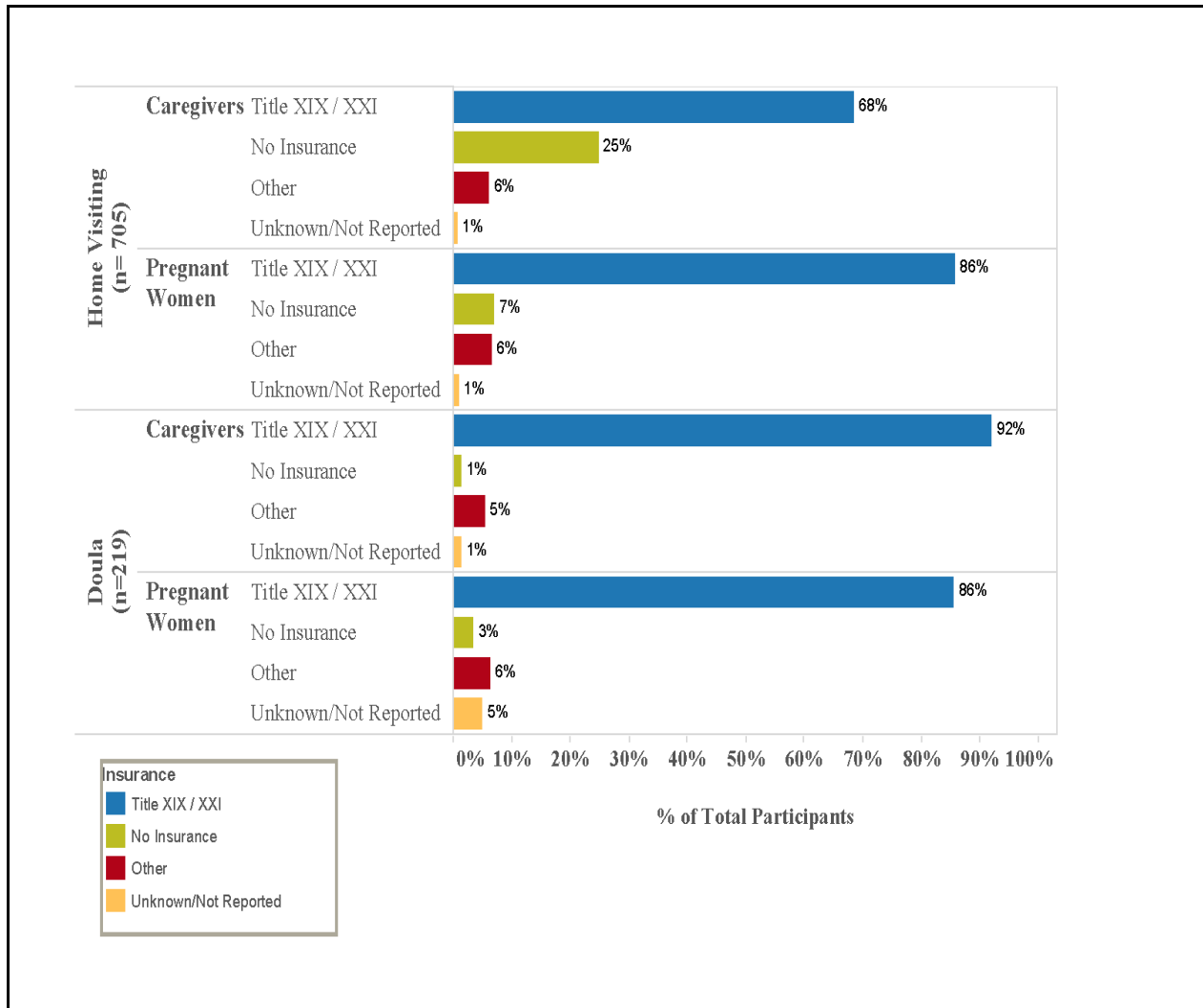
Most African-American, white, and multi-racial children enrolled in doula programs are under 1 year of age. Interestingly, children identified as “other” in doula programs also differ from the rest of the children. In doula services, over 70% of these children are between 1-2 years of age. However, this 70% comprises only 17 children, as only a small number (24) of doula children had their race indicated as “other.”

Figure 11. Insurance Status by Index Children



Over 90% of both home visiting services and doula children are insured through Medicaid (Title XIX) and the State Children’s Health Insurance Program (Title XXI) at the time of their MIECHV program enrollment. No doula children were uninsured at enrollment, and only 3% of home visiting children were uninsured. This slight variance is likely due to differences between the four program models. All doula guardians are enrolled while pregnant; thus program staff are more likely to be able to ensure that children are insured, whereas home visiting programs accept children after birth.

Figure 12. Insurance Status by Caregivers



Most MIECHV home visiting and doula participants also have health insurance at enrollment. The majority are insured through state programs (Medicaid and the State Children’s Health Insurance Program). One quarter of caregivers and 7% of pregnant women were not insured when they enrolled in MIECHV home visiting. Doula programs had smaller percentages of uninsured participants at enrollment—1% of caregivers and 3% of pregnant women. This difference may be due to the younger age of doula participants. They may be more likely to be insured through a parent or to have continued Medicaid/CHIP coverage as dependent minors. Home visitors assess the insurance status of all participants at enrollment, and facilitate connections to Medicaid offices and health insurance navigators.

The socio-demographic characteristics for participating in Illinois MIECHV programs appear to be reaching the intended population. Participants are mostly young and poor women and families who are at risk for an array of health, social, economic and related problem behaviors. However the good news is that these families are receiving services that provide them with an opportunity to improve their lives and the lives of their children.

II. Evaluation Capacity

Data preparation, collection, and management

FY 2014 saw the evaluation team refine and improve data collection procedures, processes, and protocols. CPRD's preparation, collection, and management systems for MIECHV require multiple processes — not only preparing, distributing, and collecting the assessments, but also organizing, tracking, entering, analyzing, and validating this information as it moves from CPRD to the FDCs and is subsequently returned to CPRD. This process begins with preparation of surveys, consent forms, and gift cards, which are linked for both evaluation and audit purposes. Gift card and consent procedures are accountable to UIUC research and administrative polices.

Once the paper and pencil data are collected by the FDCs, they are tracked in an Access Database developed for the FDCs and returned to CPRD's main office, where they are logged, cleaned, scanned using a special TeleForm software system, matched, and prepared for analysis. This requires a series of both administrative and data management tasks that utilize CPRD data processing systems. Every family and survey are linked and tracked after each data collection home visit. All original consents, gift card receipts, and paper surveys are stored on-site in locked file cabinets.

In addition, the ten minute parent-child interaction videos taken for the Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO) assessment are transferred to a secure server, where they are scored by CPRD staff and randomly selected for validation by three FDCs. This scoring procedure can require up to an hour for each video—depending upon the language, video environment (lighting, voice clarity, and background noise), and interruptions. To ensure proficiency in reliably scoring the PICCOLO, CPRD convenes quarterly meetings with four project staff who score the PICCOLO and review and retrain scoring to prevent slippage. This requires ongoing and cross-referencing of inter-rater reliability checks.

At this point, CPRD has scored over 650 PICCOLO videos. The overall inter-reliability for total PICCOLO scores was excellent (ICC: 0.93, 95% CI: 0.74, 0.98). CPRD has also used the Kappa inter-rater reliability measure, but we have found low item-specific kappa values, in spite of a high percent agreement among the four raters. We believe this can be explained by the kappa paradox, whereby binomial responses are more significantly difficult to match (Feinstein & Cicchetti, 1990). After both paper and pencil surveys and PICCOLO scales are scored, they are entered into a database that integrates these data with other performance benchmark data, and are prepared for submission and statistical analyses.

Gift cards

CPRD provides an honorarium to caregivers willing to participate in in-home assessments. This practice is based on well-documented research findings demonstrating that rewarding individuals for participating in research studies results in better participation and continuation (Booker, Harding & Benzeval, 2014). To that end, participants are provided a \$20 Walmart gift card for completing the surveys in the Year 1 (baseline) visit, a \$25 Walmart gift card for the Year 2 follow-up visits, and a \$30 gift card for completion of the Year 3 follow-up surveys.

Pregnant and doula program participants require a different approach to baseline data collection, as only two of the survey tools can be administered prior to the child's birth. With pregnant doula participants the incentive structure is modified, with a \$10 gift card for a first visit, at which the Consumer/Parent Satisfaction Survey (C/PSS) and Knowledge of Infant Development Inventory (KIDI) are administered; and a second \$10 gift card given at the subsequent "1/2 visit" after birth, when the Parenting Stress Index (PSI), Home Observation for Measurement of the Environment (HOME) inventory, and PICCOLO video are completed.

The data collection and incentive procedures were originally submitted and approved by the University of Illinois Institutional Review Board in 2012, and are renewed annually as required by university policy. As part of the consent procedures, participants review the goals, purposes, risks, and benefits of participation, and affirmatively consent to participate before beginning the surveys. After the completion of consent procedures and assessments, mothers are given the appropriate gift card for their participation.

Field data collection challenges

CPRD's six FDCs situated in or near MIECHV communities are entering their third full year of field work, and continue to be challenged by ongoing and emerging issues. Based on discussions at weekly meetings, MIECHV agency site visits, and emerging topics from the field, major challenges include the following:

- Scheduling across sites with multiple home visitors and using a variety of communication modes, including e-mail, shared Google calendars, texting, and personal visits to sites
- Training FDCs to use Visit Tracker to access case lists
- Developing a separate database to track FDC visits and survey completion, since CPRD assessments are not entered into Visit Tracker
- Reluctance of some home visitors to schedule FDC visits
- Persistent need to orient new home visitors to data collection project due to ongoing staff turnover across sites
- Adhering to timelines for Year 1 (baseline) and annual follow-up FDC visits

- Erratic schedules of doulas (attending births, transporting clients to prenatal visits)
- Translation of materials to Spanish and Arabic
- MIHOPE (Mother and Infant Home Visiting Program Evaluation) competing for HV time with participants and confusing participants who did not understand they were asked to participate in two simultaneous evaluation projects

Visit Tracker

Data-based decision making is the cornerstone of the MIECHV project at federal, state, community, and program levels. In 2013, Illinois MIECHV transitioned from ETO to Visit Tracker as its database system. Visit Tracker is a user-friendly Management Information System (MIS) already used by many home visiting programs; therefore it was a logical choice for MIECHV. The IL MIECHV team worked with Visit Tracker developers throughout 2014 to ensure that MIECHV-specific customizations were functional.

Throughout this process, home visiting agencies were challenged by an iterative development process, frequent time-outs, and other issues. However, the resulting tools—Forms 1 and 2—have enabled agencies to increase their data quality, track program progress, and engage in robust CQI activities.

Beginning in 2015, the Visit Tracker development team further extended functionality to the Coordinated Intake (CI) agencies. CPRD’s CQI Specialist will now be working more closely with CI agencies that record referrals to home visiting agencies through Visit Tracker. This will allow for increased transparency and the ability to analyze referrals, completions and program retention rates across MIECHV programs, at both community and state-wide levels.

Field Data Collectors

Unique challenges are presented by efforts to provide support and oversight for six remote field staff located in the six MIECHV target communities across the state. Regular communication via weekly conference calls and regular e-mails keep the FDC team connected and ensures that all aspects of data collection go smoothly. Distributing gift cards, sharing strategies on connecting with home visitors, troubleshooting computer issues, and distributing survey forms are coordinated via e-mail, occasional telephone calls and text messages while in the field.

In addition, the FDC team meets for quarterly training sessions at CPRD in Champaign that provides ongoing professional development regarding survey administration; for example, refining interview and family engagement skills, developing strategies for site engagement, and scheduling data collection visits. Survey data are also submitted at the quarterly trainings, and the CPRD data team randomly verify surveys while FDCs are present in order to ensure both data quality related to survey completion and accurate labeling of each assessment.

Due to the large number of videos requiring scoring, a decision was made to continue training three of the FDC staff on PICCOLO scoring. Ongoing PICCOLO training has included quarterly face-to-face meetings supplemented by monthly conference calls to maintain reliability in video scoring.

During FY 2014, significant training hours were spent introducing and practicing the administration of the Adverse Childhood Experiences (ACE) Survey, including reviewing the consent form and addressing resource needs that might arise. One FDC, who had several years of experience administering the ACE survey in a mental health setting, assisted with the training.

FDC weekly staff meetings

FDCs and the CPRD MIECHV team participate in weekly team conference calls each Tuesday. The calls begin with updates from the field. Each FDC has the opportunity to recount the number of visits scheduled and completed, as well as cancellations and no-shows. FDCs also share news from the field related to home visiting staff turnover, and address specific questions from site home visitors and supervisors. Ongoing support and guidance is provided in response to FDCs' questions, as well as in relation to tracking productivity and addressing challenges in the field.

Weekly meetings give the FDCs and CPRD staff an opportunity to discuss challenging aspects of data collection, compare strategies to increase productivity, address scheduling issues, and generally support the remote staff. These calls also provide a forum for the FDCs to provide support to each other regarding the unique challenges of their work. Each week the FDCs are encouraged to e-mail "difficult questions" for discussion during Tuesday calls regarding problems encountered in the field; for example, interpretations of specific questions on an assessment tool, struggles with engaging particular home visitors, and high visit cancellation rates.

Examples of challenging questions include:

- Can we incorporate the use of electronic books in our assessment questions related to literacy in the home?
- A parent wants to record the PICCOLO video outside... can we do this?
- I had a home visitor today that said she can no longer count my visit as a home visit and must now do an activity. She is using the PAT model. Is this something new?
- How do we find out if kids have special needs or participants have special needs? Will the home visitors tell us? Is it common?

Staff development of FDCs also includes an annual "shadowing" visit which involves a CPRD-based staff member attending a data collection visit with an FDC to observe engagement, informed consent, survey administration, timeliness, professionalism, and rapport with the home visiting site and program participant. Feedback is offered in order to reinforce what was done

well, to strengthen skills as needed, and to address challenges in data collection. General feedback on visit observations are shared with the team during the next training meeting at CPRD, in order to provide additional positive support and an opportunity to discuss challenges in the field.

MIECHV project team meetings with internal CPRD staff are also held weekly in order to coordinate MIECHV evaluation activities, implement Continuous Quality Improvement (CQI), and discuss ongoing tasks, challenges, and solutions. Ms. Lesley Schwartz, who is Manager of Program Evaluation for MIECHV at the Illinois Governor's Office of Early Childhood Development, participates in the weekly calls updating and prioritizing evaluation tasks.

Maintaining positive relationships

The evaluation team recognizes that a key component of in-home data collection is maintaining positive relationships and open communication between CPRD, FDCs, and home visiting staff in the six priority communities. During June and July 2014, CPRD evaluators completed a site visit with one MIECHV program in each community. These face-to-face meetings were conducted in a focus group format which encouraged input and feedback on a variety of topics related to MIEHCV home visiting, our data collection, and CQI.

The six field data collection areas vary in terms of the number of programs, home visitors employed, and participants enrolled. We have done our best to be flexible in the way we introduce and support data collection in order to accommodate the various sites, for example, by going out on "meet and greet" visits with new participants or meeting one-on-one with new home visitors. The evaluation team believes this approach has helped reduce refusal rates for CPRD data collection.

CPRD takes a slightly different approach to data collection at the doula sites with mothers enrolled prenatally, as their data collection includes the use of "split visits" before and after the child is born.

FDCs also maintain regular e-mail communication with the sites and provide brochures to the home visitors to introduce participants to the field data collection project. The CPRD MIECHV Continuing Quality Improvement Specialist connects with sites as part of the CQI process, providing updates on data collection, troubleshooting challenges to scheduling visits, and reviewing the successes of MIECHV. When staff turnover occurs at a site, the FDCs orient the new staff member to MIECHV field data collection. FDCs provide information that includes a sample script to introduce the project to MIECHV program participants, a review of surveys we administer, and a review of the consent process. Also addressed are scheduling procedures, timelines for data collection, and other data collection details.

2014 Site visits

As part of its evaluation plan, CPRD staff has conducted yearly site visits to the six communities to meet with home visiting program site supervisors and home visitors, as well as shadow an FDC's home visit. During June and July 2014, CPRD staff arranged site visits to conduct structured group discussions, and a home visit with each FDC. Our goal has been to assess the successes and challenges that sites encounter during home visiting, CQI, and the field data collection process. Key findings from site visits are described in broad categories below:

Scheduling and data collection:

- Clients find FDCs friendly and helpful
- Home visitors find FDC brochures useful
- Home visitors are satisfied with the use of Google Calendar to schedule FDC visits
- Missed sessions may cause data collection to dominate subsequent visits
- Suggestion for “data collection calendars” to remind staff to complete required assessments in proper timeframes

Families' concerns:

- Parents are receptive to and understand the importance of data collection in relation to funding
- They appreciate gift cards
- They appreciate the educational aspect of data collection
- Mothers may “act different” during assessments and data collection

Home visiting staff:

- Sites find mental health consultation very helpful
- The 4-month wait for PAT training is a frustration for supervisors and new home visiting staff and may contribute to participant turnover
- Stress, heavy workload, and low pay lead to staff turnover
- Staff turnover may increase participant attrition, which also complicates training of new home visitors

Assessments:

- Training video helped with the 4P's Plus screen for substance use in pregnancy
- MIHOPE, the national randomized study for MIECHV, makes it more difficult to maintain full caseloads
- One Spanish translation of the KIDI assessment may be insufficient due to multiple dialects spoken by home visiting participants

- It is challenging to get precise information from participants about WIC and housing benefits

Visit Tracker:

- Home visitors prefer Visit Tracker over ETO
- The MIECHV data collection form has made data collection and entry much easier
- Home visitors are uncertain about which data entry fields to use when there are multiple fields collecting the same data (for instance, breastfeeding)
- Visit Tracker fields don't capture all HFA and PAT standards and requirements
- Home visitors suggested color-coding MIECHV-required VT fields to ease data entry

Client engagement and retention:

- Some home visitors praised their community's Coordinated Intake agencies
- Some Coordinated Intake agencies navigate MIHOPE randomization well
- Caseloads are not consistently full across the state
- Issues related to selectivity and appropriateness of home visiting screening and referrals
- Some dropouts are due to participant relocation
- Staff turnover was down in 2014, but remains a major factor for losing participants

Continuous Quality Improvement:

- CQI plans help sites meet their goals
- Visit Tracker may not reflect actual progress made on performance benchmarks
- Prenatal visit requirements are seen as unrealistic
- Home visitors find it difficult to update household income data quarterly

Home Visitor Suggestions:

- Home visitors proposed an "on-boarding" data workshop with CPRD and families
- They asked for an increased focus on group services and mental health consultation
- Home visitors requested training to address issues related to cultural diversity

III. Performance Benchmarks: FY 2013 and FY 2014

This section provides a description of Performance Benchmarks (PBs) and corresponding reporting requirements for MIECHV that reflect the previously described participants in the socio-demographic section of this report.

The PBs that are part of HRSA's Form 2 Discretionary Grant Information System (DGIS) submission contain both process-oriented indicators and outcome indicators, depending on whether the benchmark reflects accessing or completing a service, or a change in behavior, circumstances, or conditions. For example, ensuring that a mother receives all prenatal and well-child visits is a process indicator for benchmark attainment since it requires that mother and child receive these services. Such services or activities have the potential to facilitate improved outcomes, but do not change a health behavior or health condition. Outcomes—immediate, intermediate, and long term—reflect changes in knowledge, beliefs, behaviors, conditions, and environments such as quitting smoking, increasing positive parent-child interactions, and reducing home accidents.

The six MIECHV benchmarks, which are comprised of 3-8 indicators, are presented by comparing the FY 2013 (October 1, 2012-September 30, 2013) to the FY 2014 (October 1, 2013-September 30, 2014) submissions. Because the DGIS requires separate reporting on the home visiting and doula grants, PBs are divided by home visiting services and doula services. A full, detailed report, 2014 IL [MIECHV Benchmark Glossary](#), is available on the CPRD website.

Benchmark 1: Improving Maternal and Newborn Health

The first set of performance benchmarks measures an array of evidence-based services and activities that home visitors provide to families upon entering home visiting services—with the intention of improving maternal and newborn health.

Figure 13 below (and succeeding figures for benchmarks 2-5) shows change between years 2 and 3 (FY 2013 and FY 2014) for each construct. Since some improvements may actually be reflected by lower numbers, arrows have been added to the bar graphs to signify whether the change was an improvement or not. Up arrows indicate improvement. Down arrows indicate improvement was not made. Side-to-side arrows indicate no change. A circle indicates there was no baseline for comparison.

Between Years 2 and 3 (FY 2013 and FY 2014), the home visiting programs saw increases in women attending American Congress of Obstetricians and Gynecologists (ACOG) recommended prenatal visits, initiating birth control by eight weeks postpartum, and receiving information about the benefits of inter-birth spacing. There was a reduction in prenatal use of alcohol, tobacco, and drugs, and an increase in the percent of children attending recommended well-child visits. Importantly, all women enrolled were screened for depression between their third trimester and two months postpartum.

The two areas of concern which did not see improvement—breastfeeding and insurance status for women and children—may in part be explained by external factors.

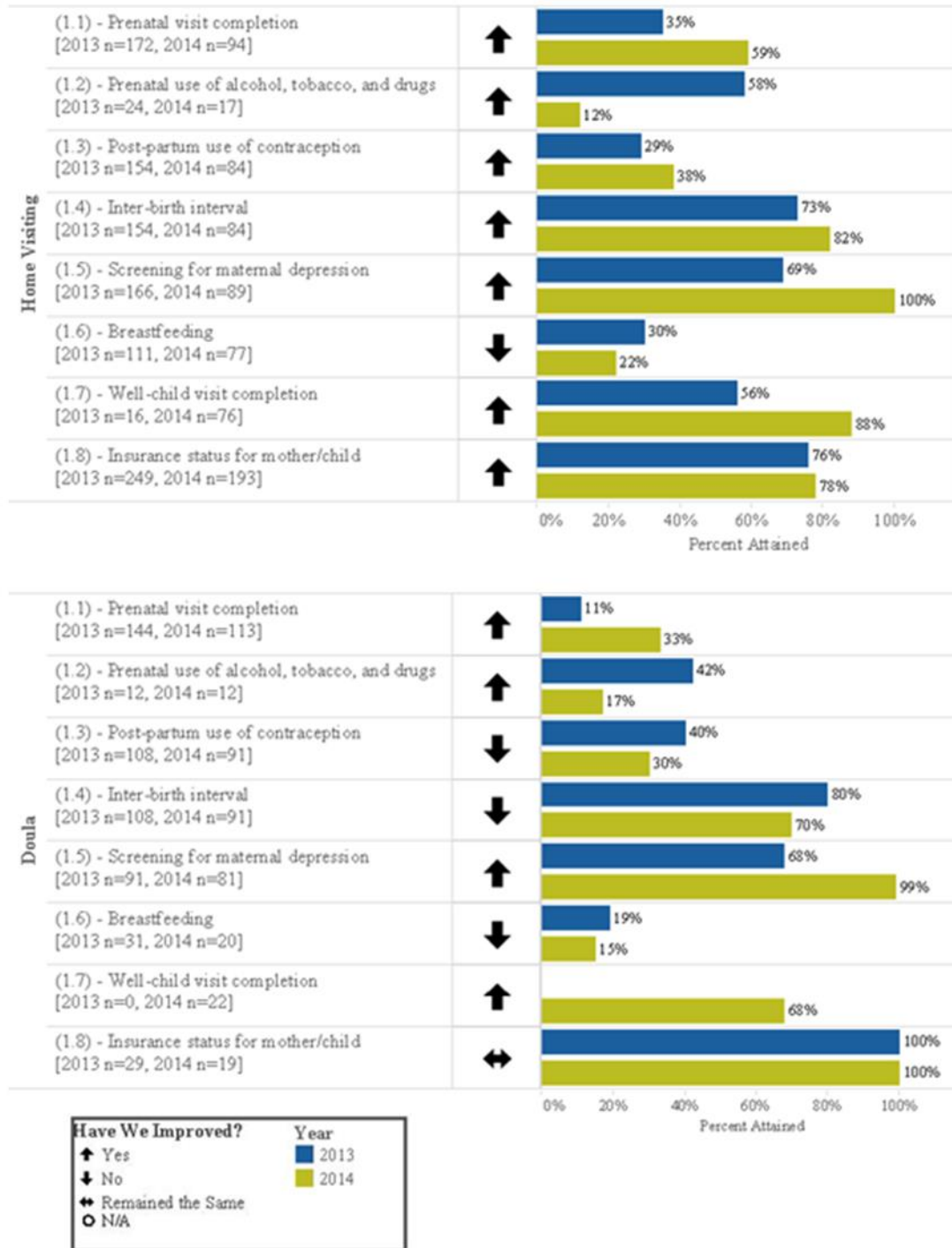
Most (96%) MIECHV children were insured at enrollment. Uninsured rates for mothers, however, vary by MIECHV community, from a low of 1.69% (Macon County) to a high of 48% (Cicero). According to research by the [Illinois Coalition for Immigrant and Refugee Rights](#), Cicero has the second highest number of undocumented immigrants in Illinois. Anecdotally, home visitors in this community report high levels of undocumented participants in their programs. Undocumented immigrants are not eligible for Medicaid or permitted to purchase health insurance through the exchange set up by the Affordable Care Act, which leaves few or no options for individual purchase of affordable health insurance.

The breastfeeding PB measures six months of breastfeeding, which can be challenging for many women. Of MIECHV participants who gave birth during FY 2014, 65% initiated breastfeeding; however, far fewer were able to reach six months duration. At the same time that breastfeeding rates saw a slight decline between Years 2 and 3, enrolled families saw increases in household income and benefits, as well as in setting of educational attainment goals. It may be that women found it difficult to continue breastfeeding for six months given increased opportunities and demands outside the home.

Participants in the doula programs saw slightly less improvement on these benchmarks. Higher percentages of women attended recommended prenatal visits and were screened for maternal

depression, as well as decreased prenatal drug use. All enrolled women were insured. However, these women saw slight declines in postpartum contraception use, breastfeeding, and receipt of information about inter-birth spacing. These findings may reflect a need for better transitioning participants from doula to traditional home visiting services, and may also be the result of the typically younger population served by doula programs. Younger participants may face additional barriers regarding breastfeeding and contraception. Research also shows that young mothers are at the highest risk of a subsequent pregnancy, which creates an enormous burden for young families (Aslam et al., 2015)

Figure 13. Benchmark 1: Improving Maternal and Newborn Health



Benchmark 2: Reduction in Child Injuries, Neglect, and ED Visits

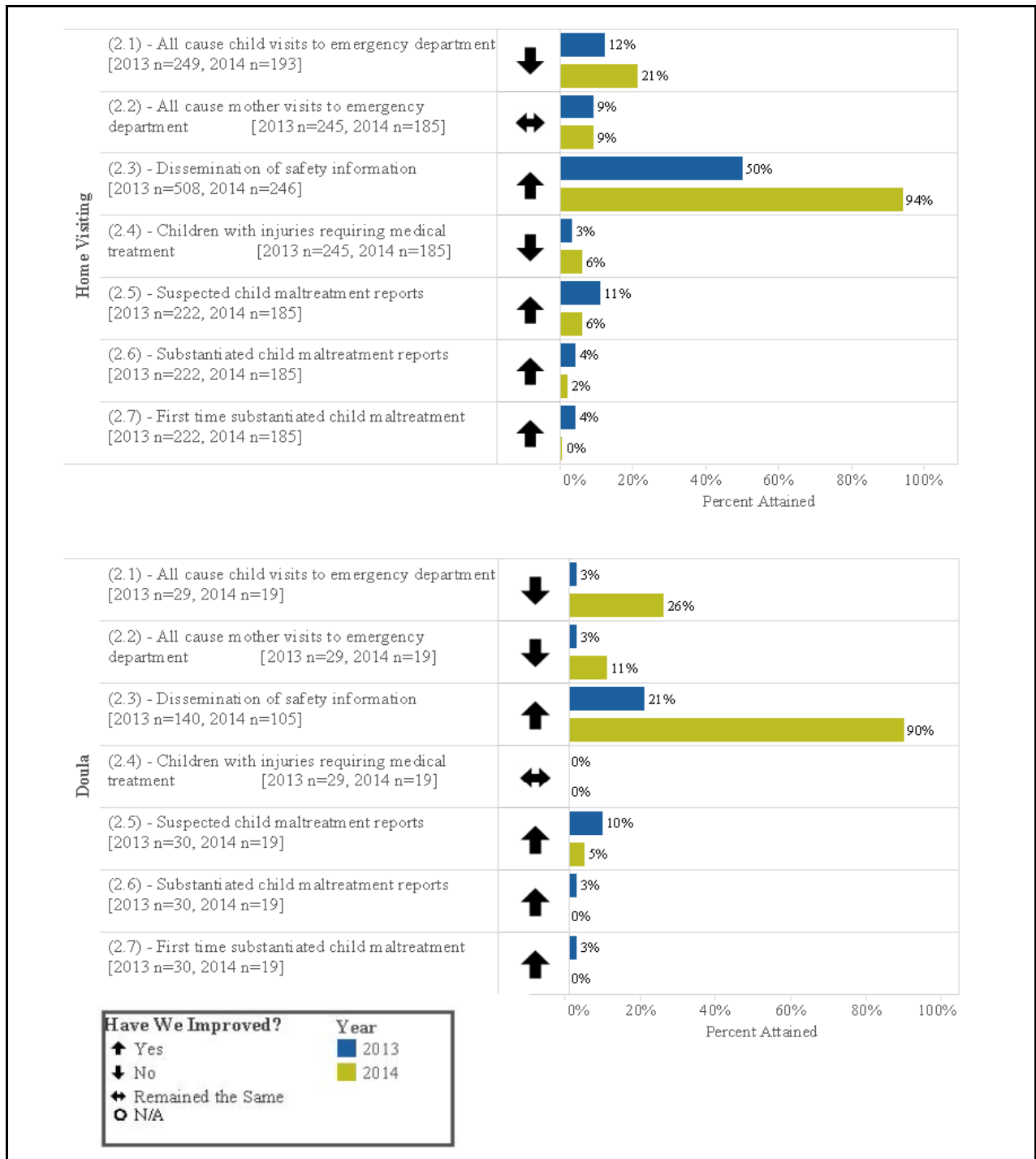
The second performance benchmark (**Figure 14** below) measures process and outcome measures related to child safety and emergency department utilization.

In project Year 3 (FY 2014), a higher percent of home visiting participants received information about how to prevent child injuries compared to Year 2 (FY 2013). Year 3 also saw fewer reports of child maltreatment to the Department of Children and Family Services (DCFS)—both suspected and substantiated. The number of reported cases from DCFS is small; thus results must be interpreted with caution.

However, children utilized the emergency department more frequently and experienced more injuries requiring medical treatment than last year. These apparent increases likely reflect improvements in data collection and entry by home visiting programs, rather than real increases in needed care.

Doula participants also saw a large increase in dissemination of safety information and reductions in both suspected and substantiated reports to DCFS. As with home visiting participants, doula children and mothers visited the emergency department more frequently than in Year 2. Again, this is likely due to improved capture of these visits as opposed to an actual increase in visits, or the small number of children who are reported to have needed emergency department services. The prevalence of small numbers for comparison purposes creates unstable and overstated changes in either direction.

Figure 14. Benchmark 2: Reduction in Child Injuries, Neglect, and ED Visits



Benchmark 3: Increasing School Readiness and Academic Achievement

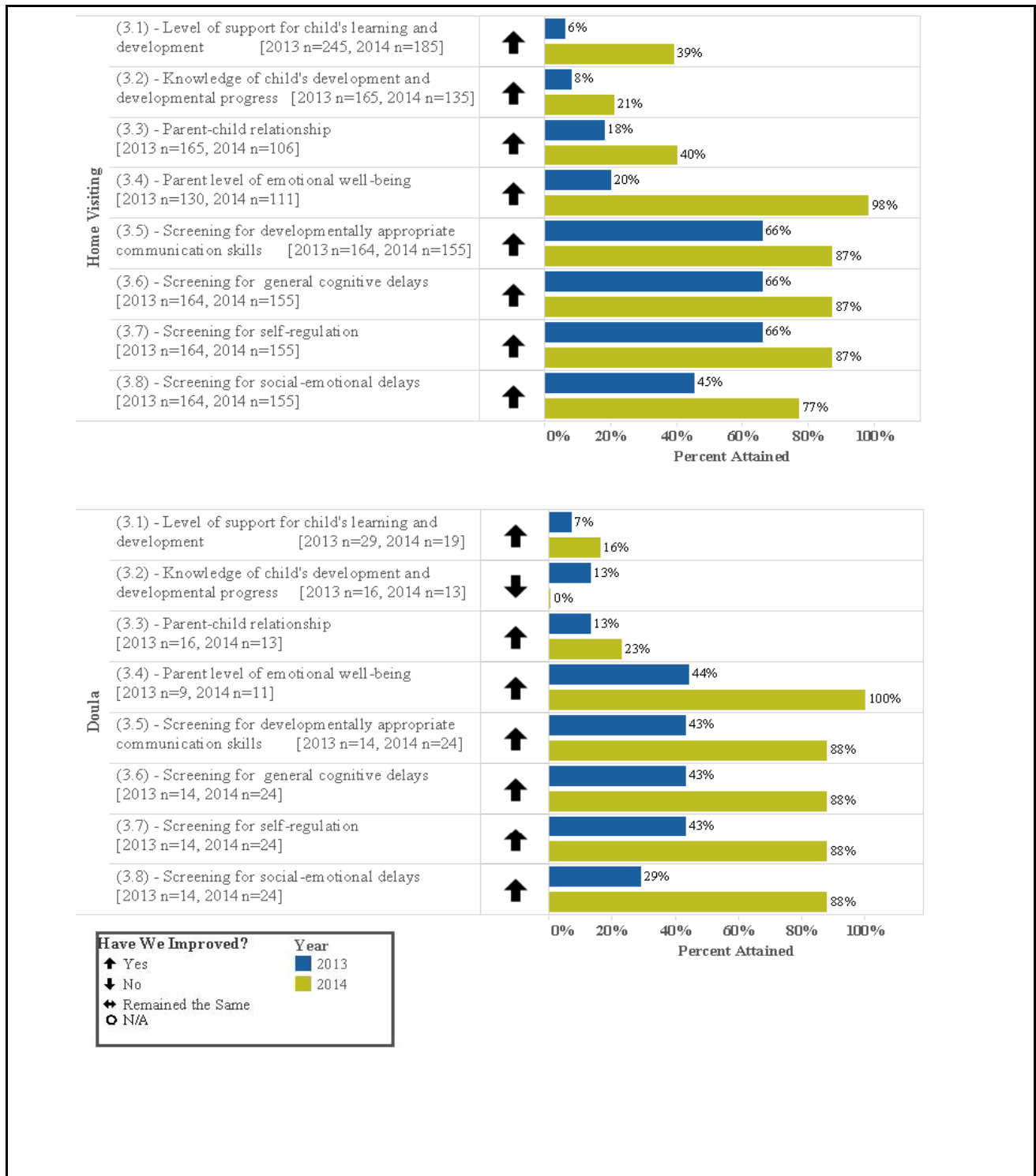
Benchmark 3 (**Figure 15** below) includes both process and outcome measures related to school readiness, social-emotional well-being, and academic achievement.

A greater percentage of children enrolled in home visiting were assessed for developmental delays with the Ages and Stages Questionnaires (ASQ-3 and ASQ-SE) in Year 3 (FY 2014) than in Year 2 (FY 2013). Constructs 3.5-3.8 measure whether the assessment was given between 10 and 14 months of age, rather than the total score on each assessment.

Between Years 2 and 3, home visiting participants increased their overall scores on the four assessments used as part of the outcome evaluation—the Home Observation for Measurement of the Environment (HOME), Knowledge of Infant Development Inventory (KIDI), Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO), and Parenting Stress Index (PSI). These assessments will be discussed in greater detail later in this report.

In Year 3, a greater percent of children also were assessed by the ASQs in the doula program. Participants in this group increased their scores in three of the four outcome evaluation assessments—the HOME, PICCOLO, and PSI. This group saw a decline in scores on the KIDI assessment, which measures parental knowledge of infant development. The mean (average) age of doula participants is 20.2, compared to 25.5 for home visiting participants. This again may be the participant age factor for the KIDI assessment.

Figure 15. Benchmark 3: Increasing School Readiness and Academic Achievement



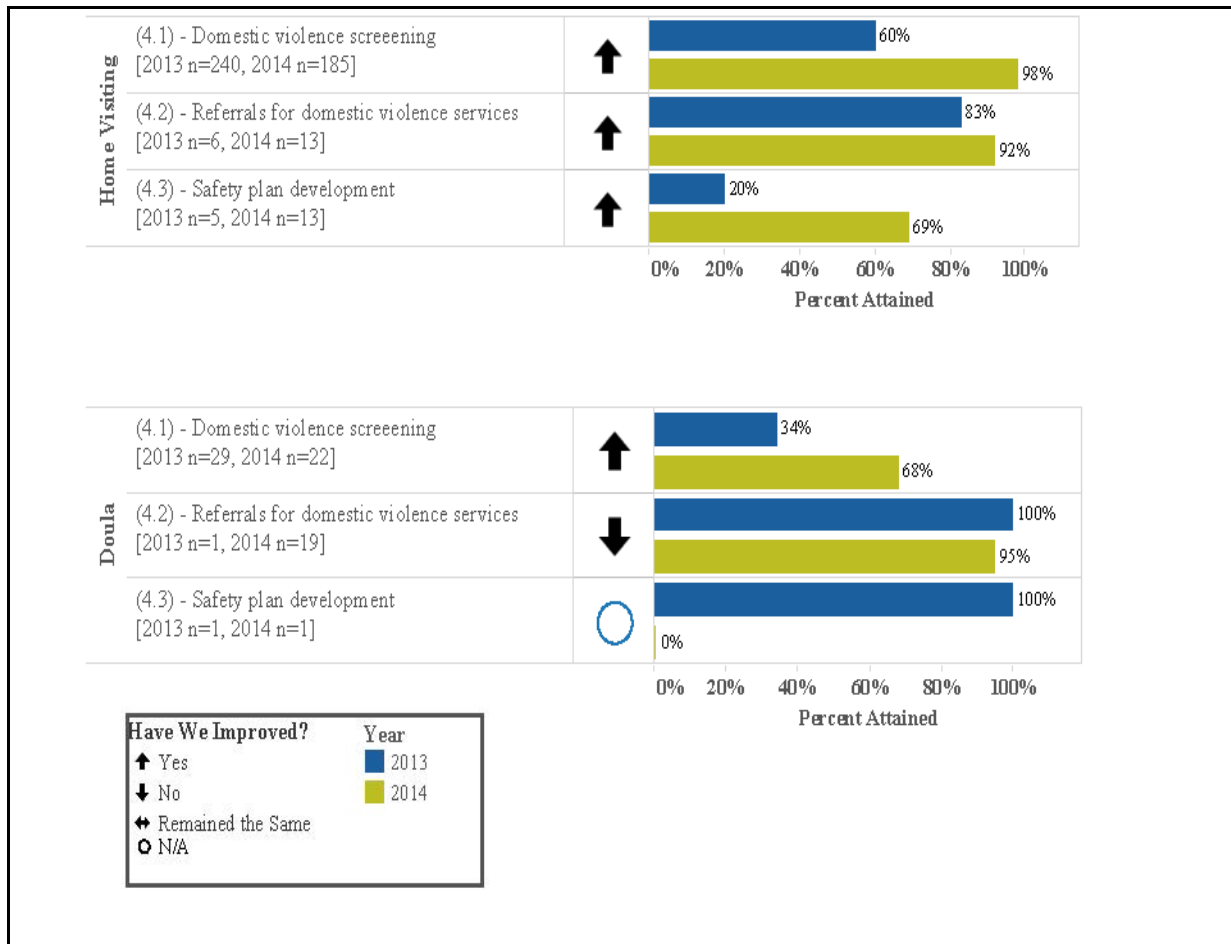
Benchmark 4: Preventing, Identifying, and Treating Domestic Violence

The fourth performance benchmark (Figure 16 below) consists of three constructs related to preventing, identifying, and treating domestic violence.

Between Years 2 and 3 (FY 2103 and FY 2014), MIECHV home visiting participants saw increases in domestic violence screening, referrals for positive screens, and the creation of safety plans intended to increase the safety of women living in situations of domestic violence.

Doula programs saw a similar increase in screening for domestic violence. All women experiencing domestic violence created a safety plan. Referrals for domestic violence, however, decreased from 100% to 95% between Years 2 and 3. While real, this decrease is likely based on a small number of cases, and therefore should not be a major cause of concern. Although referrals for domestic violence services remain high for both home visiting (92%) and doula programs (95%); factors that interfere with referrals may be worth further examination (Fugate et al., 2005).

Figure 16. Benchmark 4: Preventing, Identifying, and Treating Domestic Violence



Benchmark 5: Family Economic Self-Sufficiency

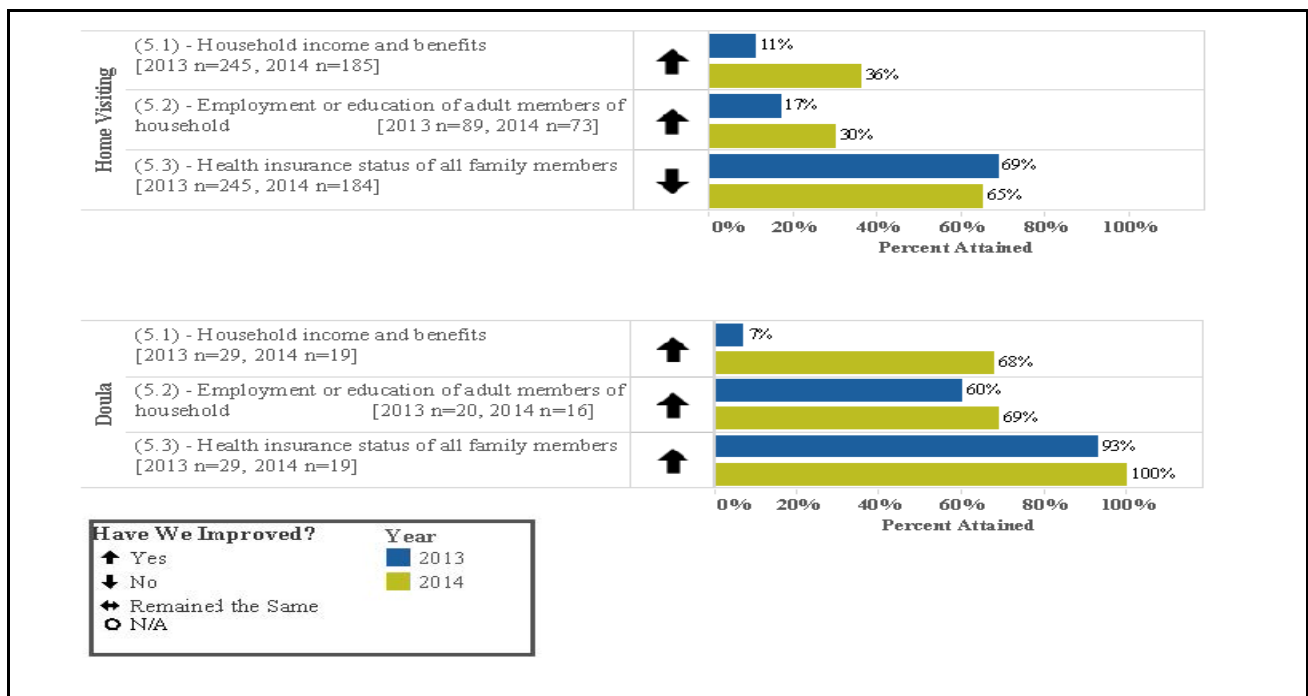
The fifth performance benchmark (**Figure 17** below) measures conditions related to family economic self-sufficiency.

Between Year 2 and Year 3 (FY 2013 and FY 2014), home visiting participants saw increases in household income and benefits and set more goals related to educational attainment.

There was a slight reduction in the percent of families who report insurance coverage for all family members. This construct measures whether the primary guardian and all children are insured. It also counts the insurance status of an additional guardian when that guardian resides in the home. As discussed earlier, it can be very challenging for undocumented immigrants in particular to obtain affordable private insurance. Several MIECHV communities have significant numbers of Latino families that do not have access to health insurance due to their immigration status. Other families with two guardians living in the home may not qualify for Medicaid, but may not be able to afford private insurance. Given the increases in household income seen during this period, this may be a factor for some families.

Doula participants saw increases in all three family economic self-sufficiency constructs between Years 2 and 3 (FY 2013 and FY 2014). A substantial number of participants experienced increases in household income and benefits. All doula families were covered by health insurance. Note that low-income women, regardless of immigration status, qualify for coverage while pregnant.

Figure 17. Benchmark 5: Family Economic Self-Sufficiency



Benchmark 6: Increasing Completion of Referrals to Needed Services

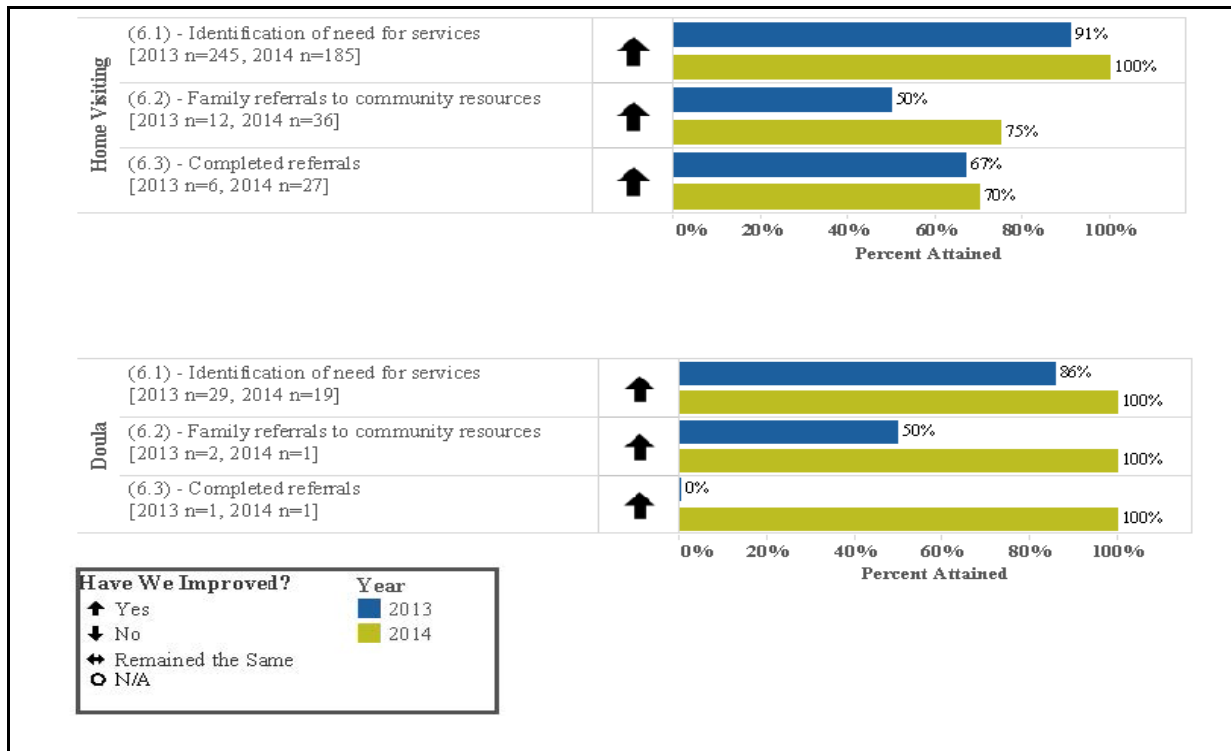
This benchmark (**Figure 18** below) measures to what extent families are assessed for needed services, are referred to services, and complete those referrals.

Four different screening tools are included in this benchmark. The Ages and Stages Questionnaires (ASQ-3 and ASQ-SE) are used in MIECHV services to identify developmental delays in children at six months and one year of age. The Edinburgh Postnatal Depression Scale is given to women at least once between their third trimester of pregnancy and 2 months postpartum, in order to identify depression. The Futures Without Violence assessment tool screens for domestic violence and is given to all enrolled women.

All home visiting participants were assessed for service need in Year 3 (FY 2014), up from 91% in Year 2 (FY 2013). Families identified as needing services saw an increase in referrals made, and completed those referrals at a higher rate.

Doula participants also experienced increases on all three of these constructs, but the numbers are too small to provide useful information.

Figure 18. Benchmark 6: Increasing Completion of Referrals to Needed Services



IV. Longitudinal Matched Participants—One Year Follow-up

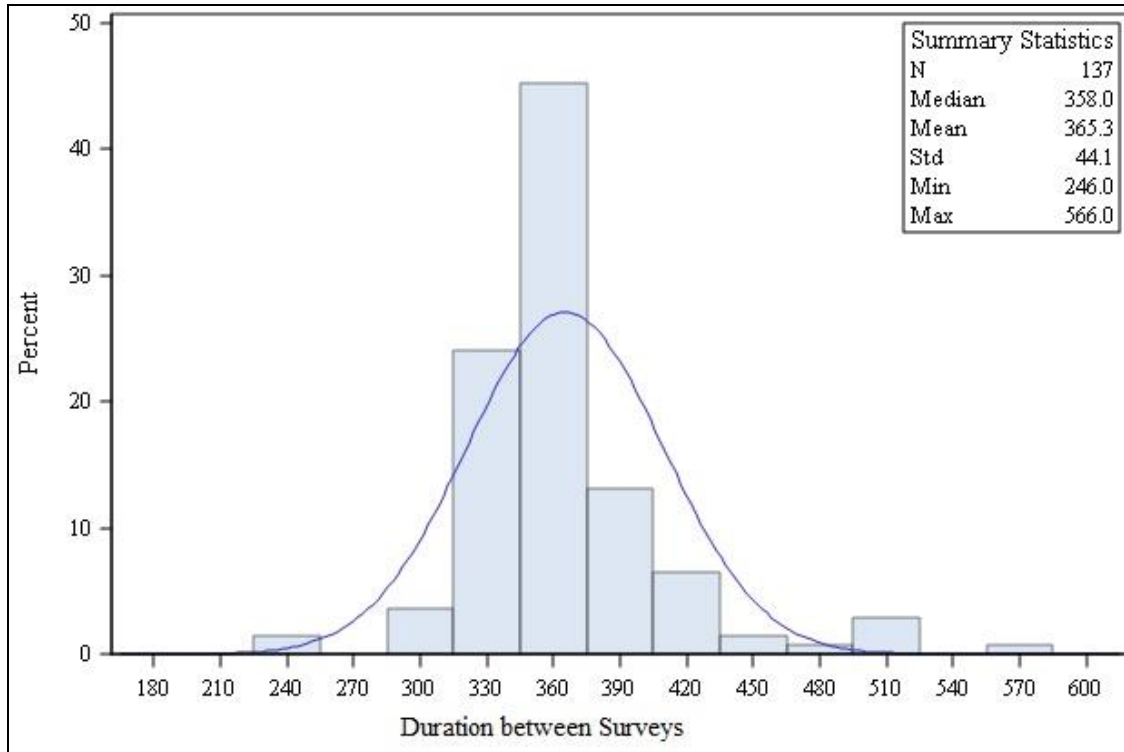
The federal reporting of MIECHV benchmarks to HRSA described earlier in this report provides multi-year data (baseline and two follow-up years) for each of the performance benchmarks that are reported cross-sectionally and by yearly cohort. To gain a better understanding of the potential impact that home visiting services have on immediate, intermediate, and long term outcomes, the evaluation team is using a longitudinal design with a baseline (Year 1), and Year 2 and 3 follow-ups. Because this evaluation design does not include a control or a comparison group, multi-year tracking of families provides the evaluation team with an understanding of the strengths and limitations of the data and how MIECHV families score on these measures change over the one year of MIECHV program services.

The procedures and protocols for data collection and the measures that were used have been previously described. This section of the annual report provides an analysis of individual family change over time at approximately one year after entering Illinois MIECHV programs. The key measures and constructs for FY 2014 (KIDI, HOME, PICCOLO, PSI and C/PSS assessments) allowed the evaluation team to determine individual change at one year follow-up (Year 2) to determine impacts or changes during that time period. The limitation of this approach is that it does not allow us to assess causality (e.g., home visiting service caused improvement of parent-child interaction scores); but it does provide information regarding change over time and in comparison to themselves and other samples. This information is particularly important for continuous quality improvement.

Overview of results

We begin by providing data that show the approximate duration between administration of the baselines (Year 1) and the Year 2 follow-up. The mean duration between the first and second year surveys was 365 days and the median was 358 days (see **Figure 19**). It also shows the mean (average) and median (middle) number of days that Year 2 follow-ups were conducted from the time the baseline survey was conducted. A few outliers exist that are likely attributable to participants who became involved in the data collection procedures after being transferred from non-MIECHV programs. As we are committed to following up with all families before they leave or age out of the programs, in a few instances the duration between surveys was slightly less than a year.

Figure 19. Number of Days between Year 1 (Baseline) and Year 2 Data Collection



A second important aspect of the data presented here is the number of families that enrolled in a MIECHV program and the number that remained in the program up to the twelve-month time period, and thus had the opportunity to participate in the Year 2 follow-up assessment. This, again, is critical for understanding both the attrition rates of the Illinois MIECHV program and the number of families that were lost from baseline to follow-up. The selection bias for participants remaining in the program potentially skews the impact on the total eligible MIECHV families in a community, as the families who remain in the program are likely to be different than those who drop out (Damashek, et al., 2011).

The sample sizes vary from measure to measure based on the number of participants, number of refusals, and the quality and completion of the measures and videos. As mentioned earlier, doula and home visiting mothers who are pregnant do not participate in the PICCOLO, PSI, or HOME measures during their baseline assessments, since these assessments require a child to be present for parent-child interactions and observations. However, doula participants receive these assessments at a post-natal visit conducted at approximately 2-4 months postpartum. This type of analysis provides comparisons among programs and communities, as well as overall averages that show home visitors both their areas of strength and those needing additional attention. These data are being incorporated by project staff into MIECHV’s CQI processes in order to develop

and improve the quality of home visiting service delivery. The current analysis for each measure is reported below.

The results show that while enrollments increased considerably in FY 2013, a significant number of caregivers dropped out prior to the twelve-month follow-up. Moreover, the number of cases for each in-home assessment is significantly lower than the number of cases that enrolled and left the program. These data show the number of dropouts from MIECHV programs by total and by community, participant refusals, and incomplete data. As shown below, follow-up survey completion was lowest for the PICCOLO digital video recording. Further, it shows the number of families assessed at baseline (January/February 2013) and their Year 2 follow-up. In addition, the follow-up survey was administered only for MIECHV home visiting programs, since doula program participation only lasts until 2-4 months postpartum.

Table 2. Illinois MIECHV Participants Baseline and Year 2 Follow-up Assessments, 2013-2014

Community	Enrollments	Program Duration ≥12m	HOME		KIDI		PICCOLO		PSI	
			n	%	n	%	n	%	n	%
Illinois MIECHV	1204	412	148	35.92%	152	36.89%	128	31.07%	141	34.22%
Cicero	247	119	36	30.25%	39	32.77%	27	22.69%	37	31.09%
Elgin	165	59	30	50.85%	28	47.46%	25	42.37%	26	44.07%
Englewood	246	77	22	28.57%	24	31.17%	19	24.68%	22	28.57%
Macon	183	37	16	43.24%	15	40.54%	14	37.84%	14	37.84%
Rockford	191	61	18	29.51%	19	31.15%	15	24.59%	17	27.87%
Vermilion	172	59	26	44.07%	27	45.76%	28	47.46%	25	42.37%

The final methodological issue that is fundamental to understanding the quality of the longitudinal study is the psychometric properties—reliability and validity—for the instruments used for the MIECHV evaluation. The outcome measures used by Illinois MIECHV were proposed in the original MIECHV grant submission as part of the performance benchmarks provided to HRSA. These well-known measures have been widely used and have been validated with multiple populations and settings. The Cronbach’s alpha measures the consistency and internal reliability that indicates the positive interrelations between the items and the scale. The reliability for the scales used for the MIECHV measures are shown in **Table 3**. The total reliability scores for KIDI, PSI, PICCOLO, and HOME have overall acceptable reliabilities > .80, but several of the subscales have less than acceptable reliabilities, particularly on the HOME subscales organization and variety, and the PICCOLO responsiveness subscale. As mentioned earlier, the inter-rater reliability for PICCOLO videos was excellent (ICC 0.93).

Table 3. Cronbach's Alpha Reliabilities for MIECHV Baseline Assessments

Survey	Cronbach's alpha	
	Raw	Standardized
I. KIDI (n=686)	0.80	0.80
II. PSI (n=565)	0.93	0.93
a) Difficult Child	0.86	0.87
b) Parental Distress	0.87	0.88
c) Parent-Child Dysfunction	0.84	0.86
III. PICCOLO (n=459)	0.84	0.84
a) Affection	0.64	0.64
b) Responsiveness	0.58	0.59
c) Encouragement	0.73	0.73
d) Teaching	0.64	0.62
IV. HOME (n=531)	0.82	0.82
a) Responsiveness	0.68	0.70
b) Acceptance	0.82	0.85
c) Organization	0.26	0.27
d) Learning Materials	0.70	0.71
e) Involvement	0.63	0.60
f) Variety	0.50	0.48

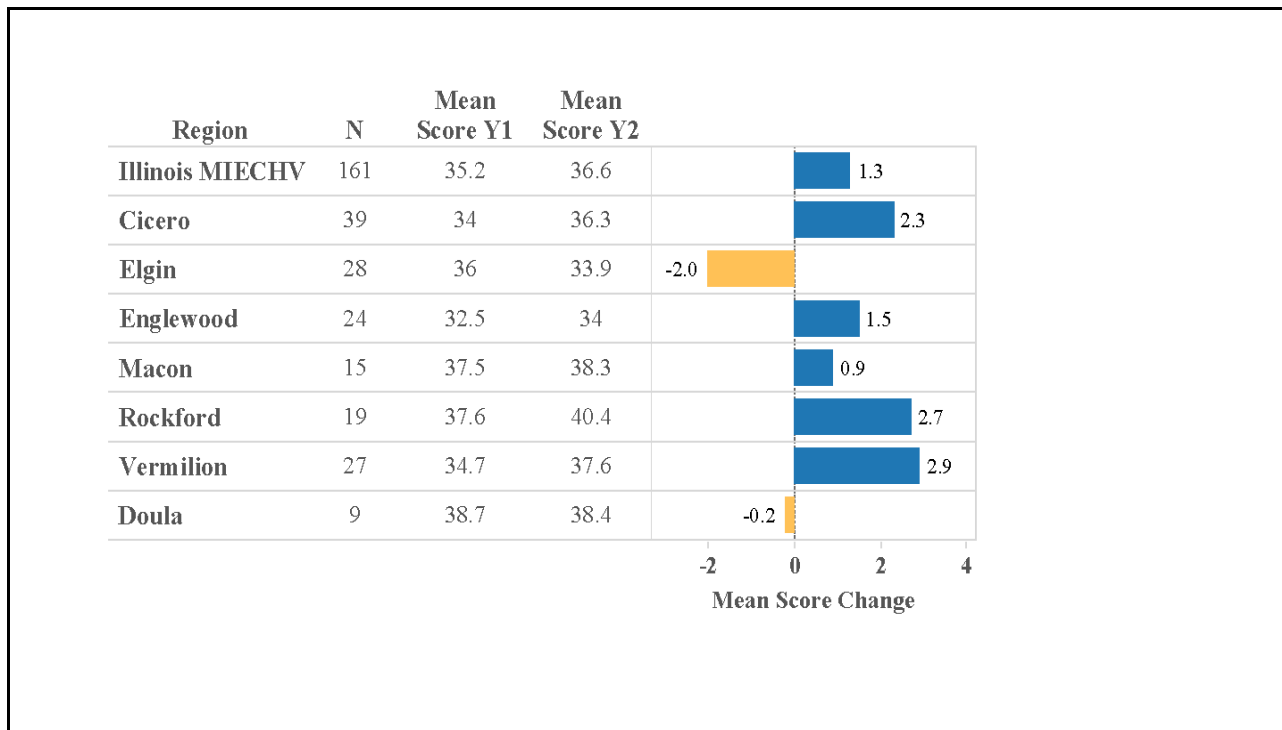
Results by outcome measurement instrument

1. Knowledge of Infant Development Inventory (KIDI)

The KIDI is a unidimensional measure that assesses parent knowledge and beliefs related to infant and child development. It has demonstrated improved relationships with positive parenting practices and child outcomes (MacPhee, 1981). Caregivers respond to a series of 58 items—some true, some false—asking them to agree or disagree with child development knowledge. Items 40 and beyond ask the parent if they agree with a statement as is; if they disagree, they are asked to choose whether the statement describes the behavior of a younger or older child. Evaluators use an answer key that determines the number of assessment items answered correctly, and calculate the percent correct for each caregiver.

Fifty-three percent of Year 2 households showed improvements in attaining a score in the normal range for the KIDI. **Figure 20** below shows that modest gains were made for five of the six communities, with a minor decrease for the doulas. At the aggregate level, KIDI scores increased significantly by 4.0% from Year 1 to Year 2 ($p = .004$). While this small increase is not likely to be practically significant, change in the intended direction is encouraging. The changes by community show the largest gains in Vermilion (7%), and a decrease of almost 6% in Elgin.

Figure 20. KIDI Score by Community (n=161)



In order to gain a better understanding of how caregivers are responding to KIDI questions and concepts that may require additional attention, KIDI survey results are reported below at the item

level for Year 1 and Year 2. For example, we have identified the questions that had an absolute increase by 10% or more: (10) understanding language; (20) bedwetting; (37) recognizing stories/music; (41) recognizing adult moods, and (49) age for toilet training. These relative increases range from 12% to 21%. Overall, most KIDI matched items (baseline to Year 1) showed small increases and decreases with a greater number of items increasing suggesting some gains of parent knowledge, at least on several key topics. On average, the total increase was modest but statistically significant. However, substantial opportunities exist to continue to support and educate MIECHV families so that they can improve their infant and child development knowledge.

Table 4. Statewide KIDI Assessment by Items: Year 1, Year 2, % Change

Statewide KIDI (Knowledge of Infant Development Inventory): Correct Response % by Question (n=161)		Year 1	Year 2	Change
1.	When toddlers are strongly attached (bonded) to their parents, they are more clingy and tend to stick close to mom or dad.	12.8%	19.6%	6.8%
2.	A 2-year-old who is 2 or 3 months behind other 2-year-olds is retarded.	85.4%	90.9%	5.5%
3.	Children often will keep using the wrong word for a while, even when they are told the right way to say it (like “feet not footses”).	72.0%	73.2%	1.2%
4.	Babies should not be held when they cry because this will make them want to be held all the time.	70.7%	71.4%	0.7%
5.	If a baby (less than a year) wants a snack, give it nuts, popcorn, or raisins.	90.2%	90.9%	0.6%
6.	Babies do some things just to make trouble for their parents, like crying a long time or pooping in their diapers.	86.6%	93.9%	7.3%
7.	If you punish children for doing something naughty, it’s okay to give them a piece of candy to stop the crying.	85.9%	91.5%	5.6%
8.	You must stay in the bathroom when your infant is in the tub.	95.7%	97.5%	1.8%
9.	Babies cannot see and hear at birth.	72.4%	74.8%	2.5%
10.	Infants understand only words they can say.	69.1%	83.3%	14.2%
11.	If children are shy or fussy in new situations, it means they have an emotional problem.	82.2%	82.0%	-0.2%
12.	Talking to a child about things he (she) is doing helps its mental development.	90.9%	95.0%	4.2%
13.	A two-year-old who says “NO!” to everything and bosses you around is trying to get you upset.	80.5%	87.2%	6.7%
14.	The way a child is brought up has little effect on how smart he (she) will be.	57.9%	58.3%	0.4%

Statewide KIDI (Knowledge of Infant Development Inventory):		Year 1	Year 2	Change
Correct Response % by Question (n=161)				
15.	Babies may cry for 20-30 minutes at a time, no matter how much you try to comfort them.	48.2%	48.5%	0.3%
16.	Once kids turn 3 or so, they become less defiant and negativistic—“No, I don’t want to!”	35.4%	41.4%	6.0%
17.	A toddler who’s energetic—always on the go—needs a low-sugar diet or Ritalin.	56.4%	56.4%	0.0%
18.	Babies have little effect on how parents care for them, at least until they get older.	66.5%	59.4%	-7.1%
19.	When putting babies in the crib for sleep, place them on their back, not stomach.	91.5%	93.8%	2.4%
20.	A 3-1/2-year-old boy who wets the bed has a problem that should be seen by a doctor.	54.0%	65.4%	11.4%
21.	A brother or sister may start wetting the bed or thumb sucking when a new baby arrives in the family.	36.0%	42.2%	6.3%
22.	New foods should be given to the infant one at a time, with 4-5 days between each one.	73.5%	74.7%	1.2%
23.	The 2-year-old’s sense of time is different from an adult’s.	73.8%	72.6%	-1.2%
24.	Most premature babies end up being abused, neglected, or mentally retarded.	78.7%	82.9%	4.3%
25.	If babies are fed cow’s milk, they need extra vitamins and iron.	24.8%	27.6%	2.8%
26.	Some healthy babies spit out almost every new food until they get used to it.	63.0%	64.8%	1.8%
27.	The baby’s personality or temperament is set by 6 months of age; it doesn’t change much after that.	57.1%	59.5%	2.4%
28.	Some parents do not bond until their baby starts to smile and look at them.	19.0%	16.6%	-2.5%
29.	The way the parent treats a baby in the first months of life determines whether the child will grow up to be well-adjusted or a moody misfit.	39.6%	41.7%	2.1%
30.	Children learn all of their language by copying what they have heard adults say.	4.3%	5.5%	1.3%
31.	When a baby less than 12 months gets diarrhea, you should give it flat ginger ale or Pedialyte.	56.7%	58.6%	1.9%
32.	Infants may stop paying attention to what is going on around them if there is too much noise or too many things to look at.	72.6%	76.8%	4.3%
33.	Some normal kids do not enjoy being cuddled.	29.9%	28.8%	-1.0%
34.	If a baby has trouble pooping, give it warm milk.	35.6%	37.3%	1.7%
35.	The more you soothe a crying baby by holding and talking to it, the more you spoil them.	69.1%	75.6%	6.5%

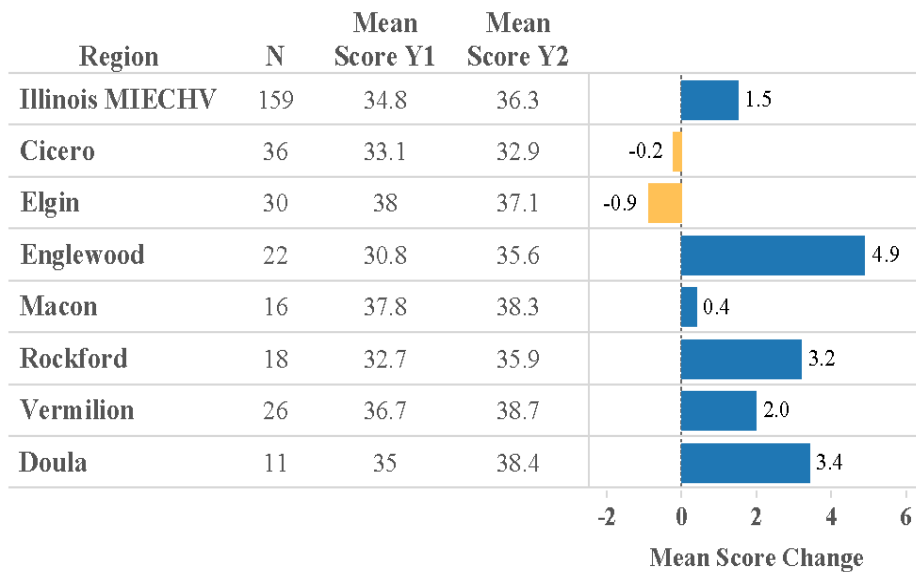
Statewide KIDI (Knowledge of Infant Development Inventory):		Year 1	Year 2	Change
Correct Response % by Question (n=161)				
36.	A common cause of accidents for toddlers is pulling something like a frying pan, a tablecloth, or a lamp down on top of them.	72.0%	80.5%	8.5%
37.	Newborn babies recognize stories and music they heard before they were born.	78.0%	87.7%	9.7%
38.	A good way to teach your child not to bite is to bite back.	85.9%	86.5%	0.6%
39.	Some days you need to discipline your child; other days you can ignore the same thing. It all depends on the mood you're in that day.	76.8%	79.4%	2.5%
40.	Most babies can sit on the floor without falling over by 7 months.	75.0%	79.3%	4.3%
41.	Six-month-olds will respond to someone differently if the person is happy or upset.	51.9%	61.3%	9.5%
42.	Most 2-year-olds know the difference between make-believe and true stories on TV.	69.3%	69.8%	0.4%
43.	Infants usually are walking by about 12 months of age.	81.5%	84.0%	2.6%
44.	Eight-month-olds act differently with familiar people than with someone not seen before.	83.4%	84.0%	0.6%
45.	Babies are about 7 months old before they can reach for and grab things.	39.9%	32.3%	-7.6%
46.	Two-year-olds are able to reason logically, much like an adult would.	64.4%	62.6%	-1.8%
47.	One-year-olds know right from wrong.	66.5%	68.5%	2.1%
48.	Three-month-olds often will smile when they see an adult's face.	84.7%	79.9%	-4.8%
49.	Most children are ready to be toilet trained by one year of age.	58.3%	68.7%	10.4%
50.	Infants begin to respond to their name at 10 months.	37.8%	28.0%	-9.8%
51.	Babies begin to laugh at things around 4 months.	70.4%	75.9%	5.6%
52.	Six-month-olds know what "No" means.	60.2%	65.8%	5.6%
53.	Four-month-olds lying on their stomach start to lift their heads.	14.8%	11.7%	-3.2%
54.	Babbling ("a-bah-bah" or "bup-bup") begins around 5 months.	58.0%	65.9%	7.8%
55.	Eighteen-month-olds often cooperate and share when they play together.	23.6%	26.4%	2.8%
56.	Infants of 12 months can remember toys they have watched being hidden.	66.5%	64.4%	-2.0%
57.	Babies usually say their first real word at 6 months.	46.0%	45.4%	-0.6%
58.	Infants will avoid high places, like stairs, by 6 months of age.	50.9%	50.0%	-0.9%

2. Home Observation for Measurement of the Environment (HOME)

As described earlier, the HOME measure is designed to evaluate the home milieu of a child’s living environment, educational resources, parent interactions, and stimulation, in order to assess and improve home visiting services. The HOME measure consists of six subscales: 1) Parental Responsivity; 2) Acceptance of Child; 3) Organization of the Environment; 4) Learning Materials; 5) Parental Involvement; and 6) Variety in Experience. Each subscale, and the total HOME scale score, reflect constructs that have demonstrated improved relationships and outcomes between families, children, and their environment (Bradley & Caldwell, 1984).

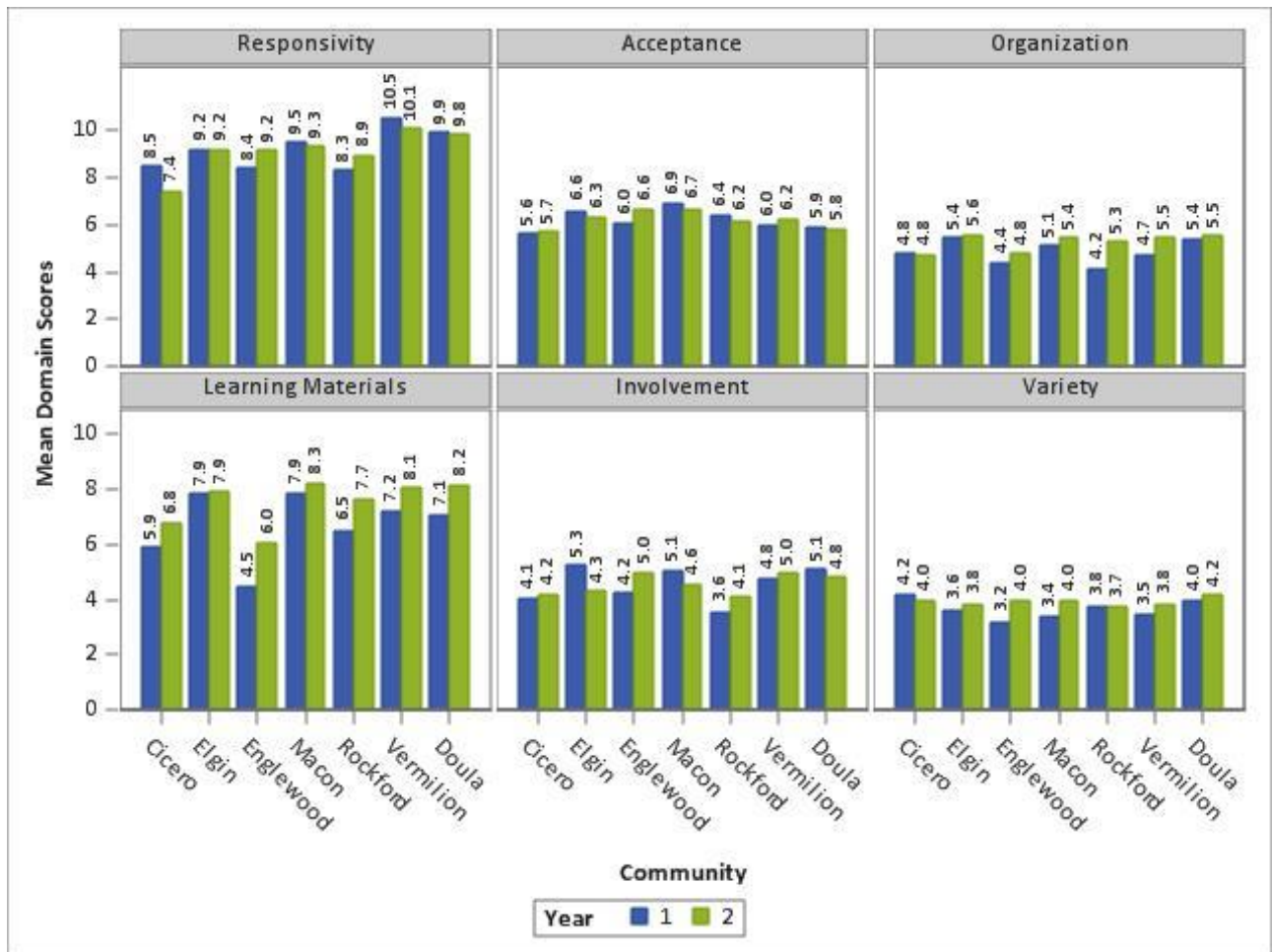
Figure 21 displays Illinois MIECHV HOME total scores from Year 1 baseline to Year 2 follow-up. Results show an overall increase of 34.4 to 35.1, or barely 2.0%, on the HOME scores for the six MIECHV communities and doula programs. The largest gains were attained by Englewood (15%), Rockford (10%), and the doula programs (10%). These data also show a small decrease for Elgin and Cicero. The small decreases in the Elgin and Cicero communities may be related to cultural differences around childrearing practices, and should be explored in more detail.

Figure 21. HOME Scores by Community (n=159)



A second way that we looked at the HOME results was by subscale scores for the six domains, by Year 1 baseline and Year 2 follow-up (**Figure 22**). Results show mixed outcomes by domain, with most communities increasing overall; however, several communities show moderate decreases. For example, by looking at the domain level changes, the majority of scores increased or remained approximately the same. The largest gains were for learning materials, organization and variety. While a few communities showed decreases for responsiveness and acceptance, no statistically significant differences were found.

Figure 22. Baseline Comparisons for HOME Subscales by Community (n=159)



3. Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO)

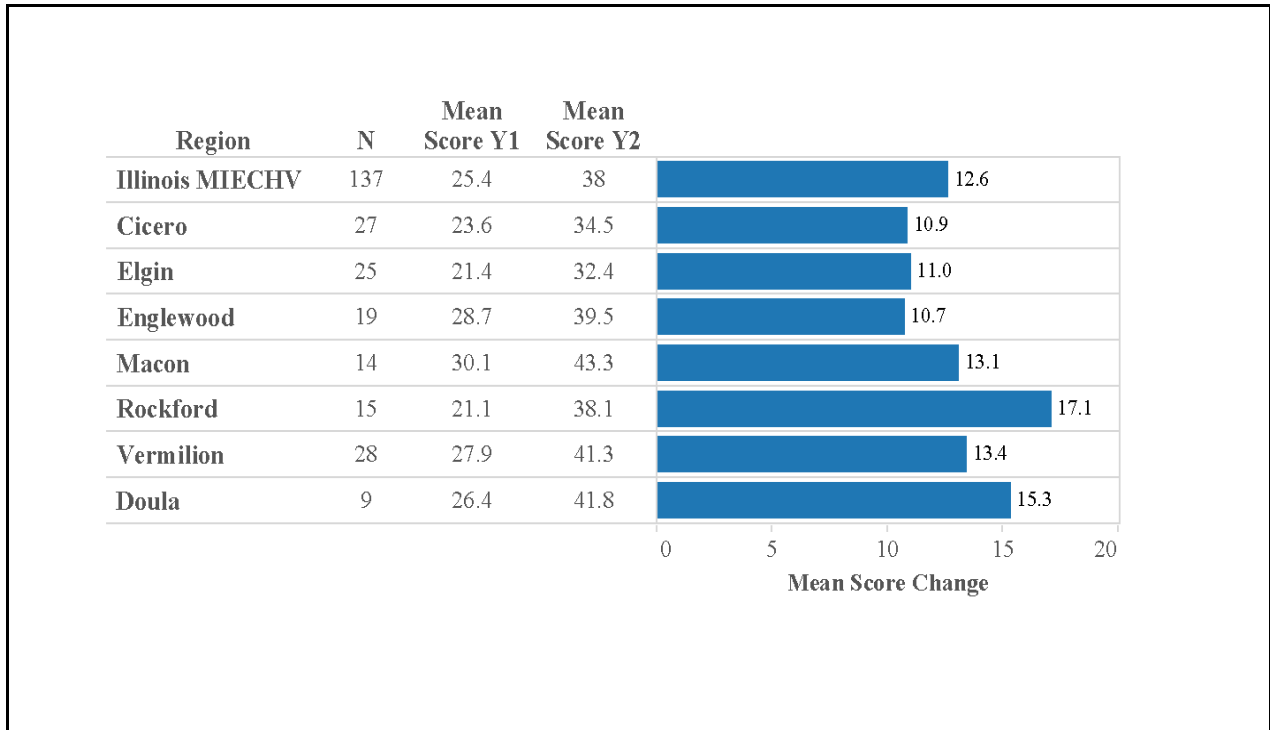
The Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO) is an observational tool designed to measure positive parenting behaviors as parents interact with their infants, toddlers, and young children (Innocenti & Roggman, 2007). This assessment is conducted by CPRD's FDCs who digitally record a ten-minute casual, unscripted parent-child interaction activity. Videos are returned to CPRD for review, scoring, and analysis.

The four domains of the PICCOLO are:

1. Affection (warmth, physical closeness, and positive expressions towards the child)
2. Responsiveness (responding to child's cues, emotions, words, interests, and behaviors)
3. Encouragement (active support of child's exploration, effort, skills, initiative, curiosity, creativity, and play)
4. Teaching (shared conversation and play, cognitive stimulation, explanations, and questions)

The PICCOLO measures have been used for the past two years as part of the MIECHV benchmarks and program evaluation. In 2014, the evaluation team from CPRD conducted 137 Year 2 follow-up PICCOLO assessments with Illinois MIECHV families. **Figure 23** below shows the total comparisons, as well as comparisons by MIECHV community. Results show relative increases at the statewide level (50%), and at community levels: from an 80% increase for Rockford to a 38% increase for Englewood. Since the MIECHV program does not have a control group, these large gains cannot be differentiated from those changes that may occur due to normal development as the child ages or confounding factors. Nonetheless, the large gains indicate positive changes in parent-child interactions that can guide and promote program improvement, and lead to positive outcomes for MIECHV target children.

Figure 23. PICCOLO Scores by Community (n=137)



To further understand the meaning of these increases, our analysis drilled down to examine the total scores, subscale scores, and child’s age as a confounding factor. **Figure 24** below shows a graphic of PICCOLO scores between the baseline assessment and Year 2 follow-up, by child’s age. PICCOLO scores were disaggregated by three age categories: less than 12 months old, 1-2 years, and 2-3 years old, thus following the analysis of the scale developers (Roggman et al., 2013). Results show PICCOLO scores increase for each of the three age groups, with the youngest age group (< age 1) showing the greatest gains—nearly 14 points or 60%—with the other two age groups at 41% and 36% respectively.

To understand how we might compare the Illinois PICCOLO results to external benchmarks or national norms, the evaluation team contacted the Dr. Lori Roggman and her team, who informed us that that no national norms exist at this time (L. Roggman, personal communication, January 29, 2015). Dr. Roggman suggested that we review the PICCOLO manual that provides reference scores relative to their Early Head Start (EHS) sample (n=3001) that was used to validate the measure. To provide a point of reference for understanding how Illinois MIECHV scores compare to an Early Head Start sample, the evaluation team identified the Roggman’s reference score and the Illinois MIECHV reference score that is used for benchmark reporting.

Figure 24 below also displays MIECHV Year 1 (baseline) and Year 2 follow-up, and the Roggman EHS sample, which is the third vertical bar. The Roggman data are cross-sectional PICCOLO scores at respective age groups, but not necessarily a post-test score based on an intervention.

Figure 24. PICCOLO Mean Scores between Baseline and Year 2 Follow-up (n=137)

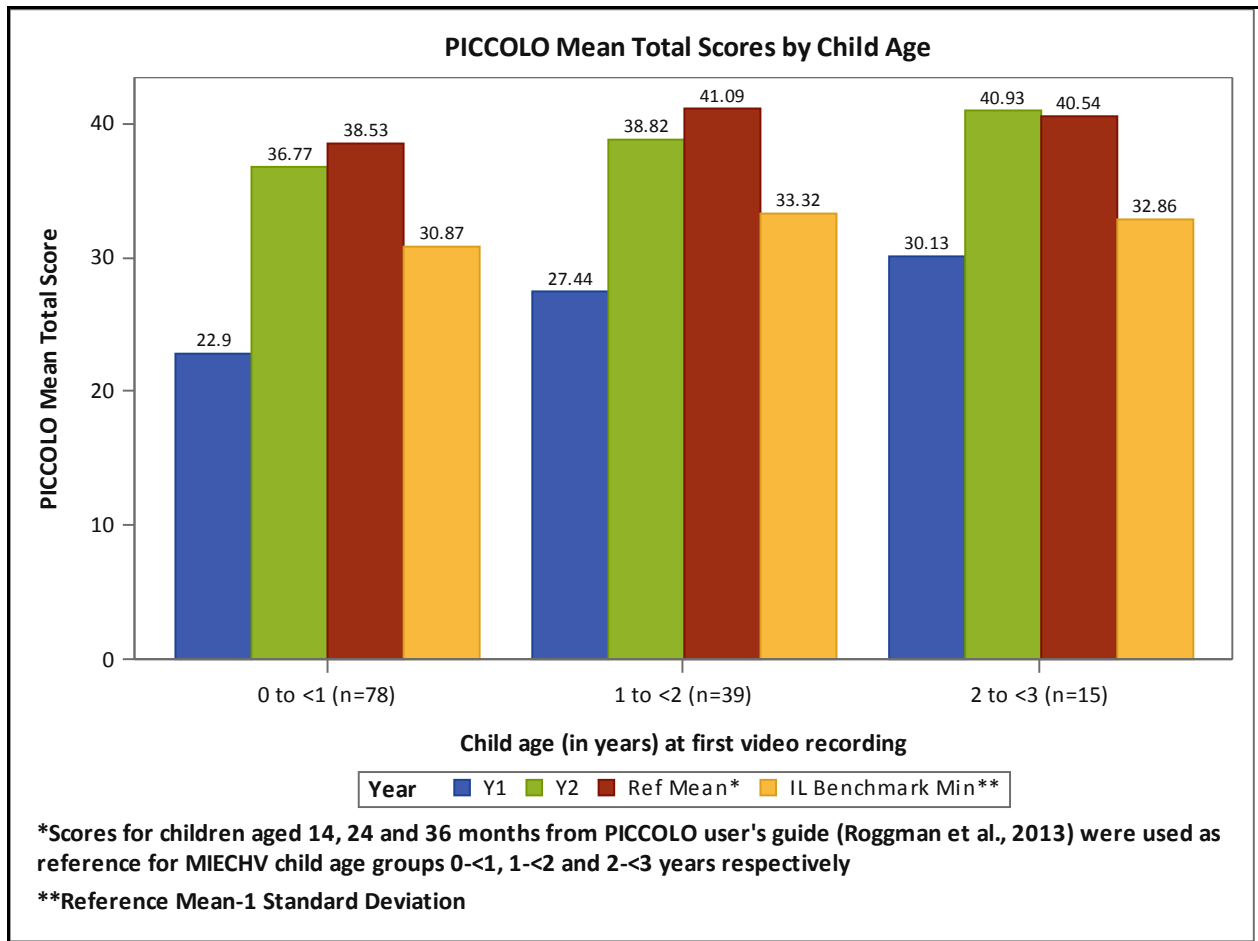


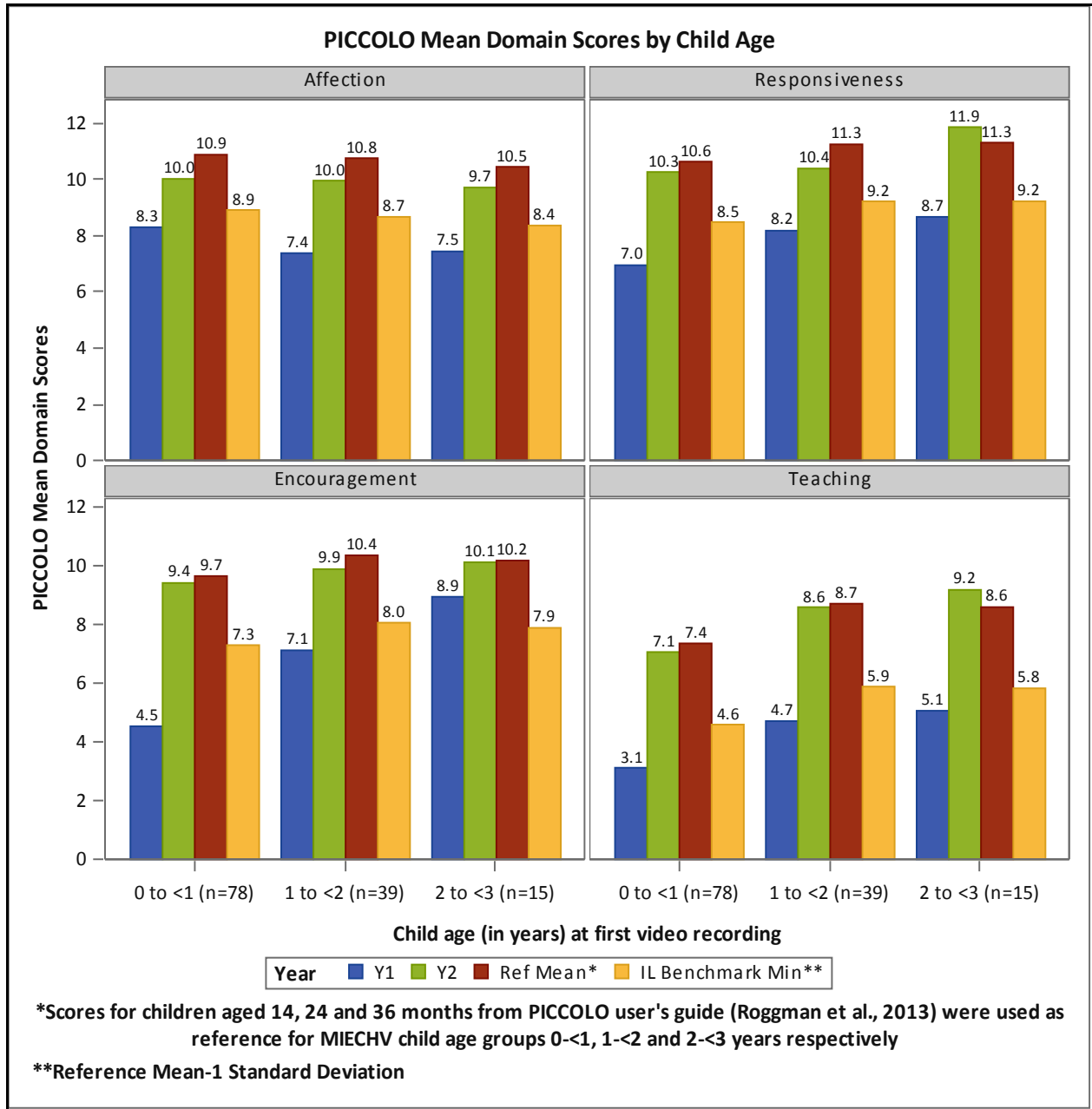
Figure 24 shows that Illinois MIECHV mean scores were lower at baseline for each of the three age groups, and did not exceed the EHS average even at the 1 year follow-up, with the exception of children in the 2-3 year age category. This difference suggests that Illinois MIECHV families’ have considerably lower parent-child interactions scores at baseline, which suggests that IL MIECHV serves a different, potentially higher risk population of families in comparison to Roggman’s EHS sample.

The second reference score (IL. Benchmark Min.) is the benchmark threshold that Illinois uses to report outcomes as part of the annual performance data submission to HRSA. This reference benchmark represents one standard deviation below Roggman’s EHS mean, indicating that approximately 16% of the sample fell below this score. The Illinois results suggest that this is a reasonable benchmark for Illinois, as the majority of MIECHV families fell below the reference point at baseline, but now exceeds this benchmark at Year 2 follow-up.

Figure 25 below shows the age group disaggregated PICCOLO scores by the four subscales—affection, responsiveness, encouragement, and teaching—from the baseline measure to the Year 2 follow-up. Results of the subscale changes show that teaching interactions with the child had the lowest scores overall, but also showed greatest gains for all three age groups. The Illinois MIECHV evaluation of PICCOLO scores showed sizeable gains from Year 1 to Year 2 follow-up across three age groups and the four parent-child interaction domains. Similar to the total scores, Illinois PICCOLO sub-scores are markedly lower than the EHS reference group at baseline, but approximated the Roggman scores at Year 2 follow-up.

The age group differences were—not surprisingly—lowest for children less than 1 year old, but are comparable for the other two age groups. Overall, Illinois PICCOLO scores were lower at baseline than Roggman scores at similar age groups, suggesting that the Illinois sample is likely to be at higher risk than the EHS sample. Since the evaluation methodology does not have a control group, it is impossible to attribute causality to home visiting services per se. However, these results clearly demonstrate improvements in parent-child interactions across age and domain, which may be attributable to child development factors or home visiting services or some combination of both. Regardless, intentional home visiting services should continue to address and enhance parent-child interactions like those measured by the PICCOLO since these practices have demonstrated positive cognitive, social, and emotional outcomes at age 3 and pre-kindergarten (Roggman et al., 2013).

Figure 25. PICCOLO Scores by Subscale between Baseline and Year 2 Follow-up (n=137)



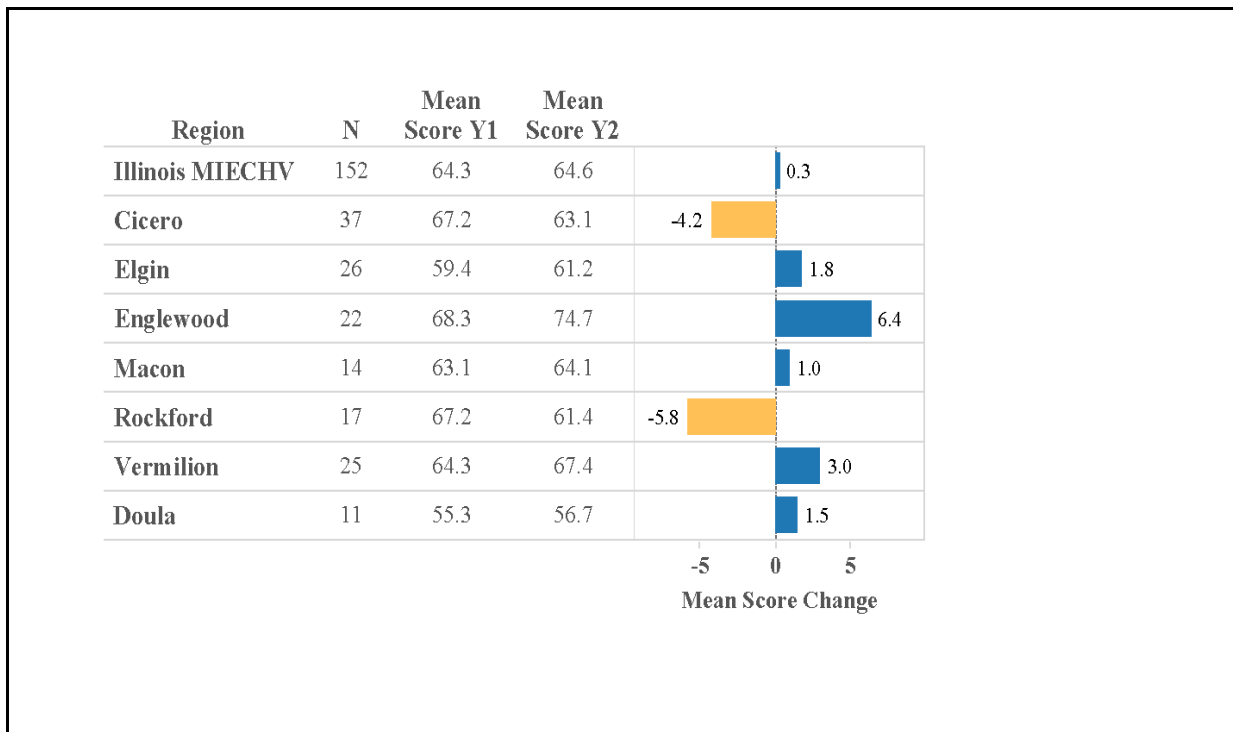
4. Parenting Stress Index-Short Form (PSI-SF)

A number of factors can influence how parents—particularly new parents—interact with and respond to their children. The MIECHV team selected the Parenting Stress Index-Short Form to use as a measure of parent and child stress in order to understand how stress might mediate benchmark and caregiver outcomes. The PSI-SF assesses the types, frequency, and magnitude of maternal stress related to parent-child relationships and interactions (Abidin, 1995). The three dimensions include:

1. Parental distress (emotional distress in the parenting role)
2. Parent-child dysfunctional interaction (problematic parent-child interactions)
3. Difficult child (problematic child behavior or demands)

These individual items are rated on a 5-point scale from strongly agree to strongly disagree. Illinois MIECHV statewide results show relatively normal or below normal scores compared to the reference group provided by the authors. The PSI normal range scores fall between the 16th to 84th percentiles; very few cases of Illinois MIECHV caregivers report above the 85% or “high parent stress” level. **Figure 26** below shows that all of the Illinois MIECHV scores remain below the threshold considered problematic (Abidin, 2012). It should be noted that with the PSI-SF the goal is to decrease scores, thus indicating caregivers report less stress in their lives.

Figure 26. PSI Scores by Community (n=152)



The PSI-SF baseline to Year 2 follow-up showed no overall statistical differences for the total score, and no differences with any of the three subscales. Two communities reported reductions in PSI scores: Rockford (-8.6%) and Cicero (-6.5%); Vermilion increased its PSI-SF score by 4.8%, and Englewood had the largest increase at 9.4%. It is somewhat concerning that the Englewood community, which already had the highest baseline score, *increased* its PSI-SF score. This increase in PSI-SF score coincides with the reality of the well-known socio-ecological factors including poverty, homelessness, violence, and substance abuse in this community (Englewood is the only community with a MIECHV HV agency that specifically targets substance abusers).

5. Consumer/Parent Satisfaction Survey (C/PSS)

The Illinois MIECHV Consumer/Parent Satisfaction Survey (C/PSS) was adapted from the Healthy Families Illinois parent satisfaction survey. The C/PSS was designed to help program and home visiting staff understand and report MIECHV participants' satisfaction with their home visitor and home visiting services. This multi-dimensional measure assesses service quality, willingness to recommend home visiting services, perceptions of good treatment, and time spent on various child development topics. We report on the major categories that allow comparative analysis.

Satisfaction has been shown to be a positive predictor of remaining in and completing home visiting programs, along with other factors such as cultural competence, frequency and duration of visits, skills and experience of the home visitor, and positive rapport with the family (Barak, Spielberger, & Gitlow, 2014; Holland, et al., 2014; Damashek et al., 2011). We recognize that the C/PSS results from the Illinois MIECHV 2013 data were “over the top” positive ratings of home visitors and home visiting services. We also know that caregivers who remain in the program rate home visiting services higher than those who drop out (see Consumer/Parent Satisfaction Survey of MIECHV home visiting dropouts, on **p. 68** of this report).

The C/PSS satisfaction survey for Illinois home visiting services at Year 1 baseline and Year 2 follow-up are shown in **Figure 27 (p. 53 below)**. Overall, each of the Illinois MIECHV communities with two years of data shows increases in overall satisfaction as rated by service quality, perceived helpfulness, and willingness to recommend home visiting services to other families in need.

Rating the quality of services

The overall rating of the quality of home visiting services from 2013 to 2014 either increased or remained the same on the satisfaction rating scale, as shown in **Figure 27** below. Almost all follow-up participants rated their services as excellent, and only three individuals reported that they received poor services. In fact, these numbers actually show an increase over last year's rating of 3.9 on a 4 point scale. These ratings are extraordinarily high and reflect the excellence of MIECHV programs and agencies for participants who remained in the program for at least one year.

Perceived help from receiving services

A second consumer satisfaction question asks participants whether they believe that home visiting services helped them. Again, the total rating and ratings by community show essentially the highest rating for the help that home visiting services has provided to families. **Figure 27** below shows that the participants reached a “ceiling effect,” which means that the C/PSS scores are already high at baseline and remained high at follow-up.

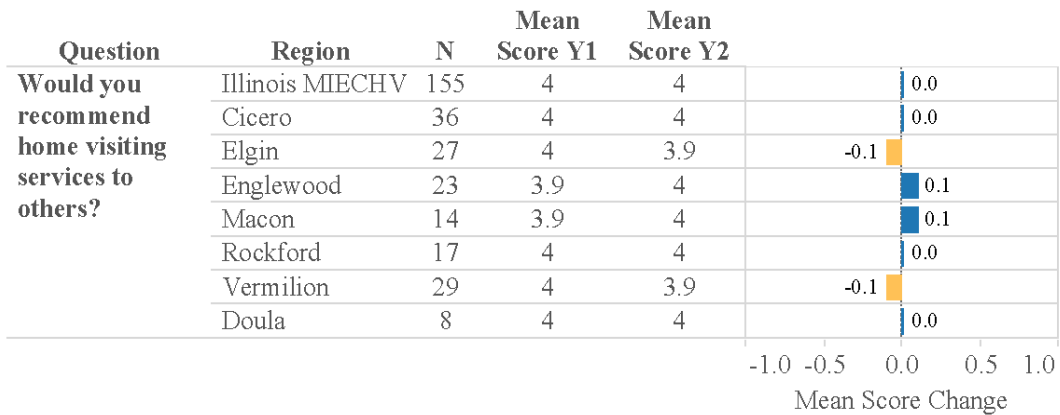
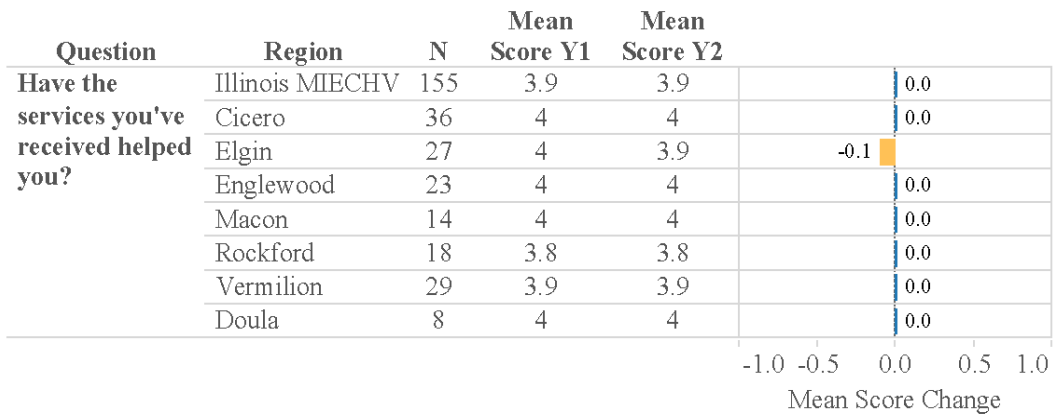
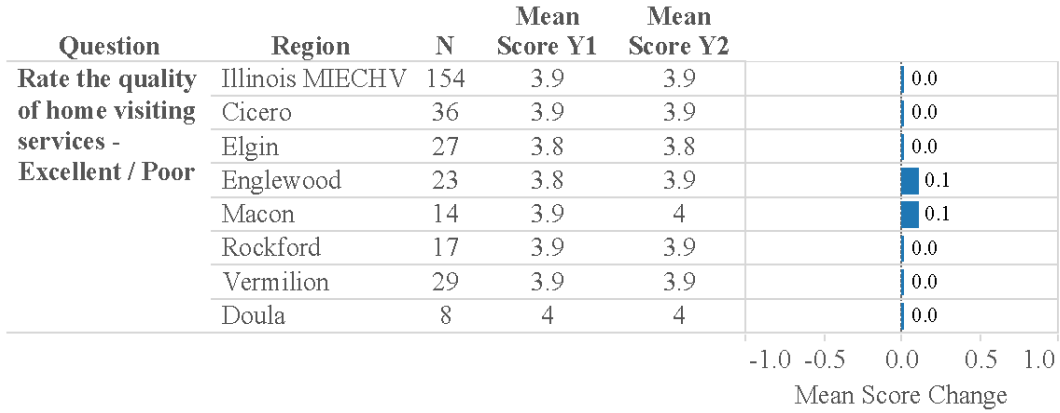
Recommend home visit services to others

A third key question that provides strong evidence regarding the quality and satisfaction of Illinois MIECHV home visiting services asks whether the participant would recommend the services to other family members and friends. Again, the willingness to recommend home visiting services is at or near the top of the rating scale, with some movement up and down for several of the communities. However, these minor decreases are not likely to be significant as we are referring to only about one-tenth of a point on a 5-point scale.

The C/PSS continued to show support and satisfaction with MIECHV home visiting services for those who remained in the program and received a Year 2 follow-up assessment. It should be noted that the fact that the C/PSS scores are so positive for each of these three questions reveals that those who remained in the program truly liked it, benefited from it, and would be willing to recommend services to others. This is likely the result of home visitors establishing positive and productive relationships with caregivers, children, and other family members.

However, it should also be noted that the evaluation team conducted an attrition study and reported a nearly 50% dropout rate for participants. That result triggered us to question whether the participants who dropped out were less satisfied with home visiting services. CPRD's survey of dropout families (p. 67 of this report) showed positive results, but we also found slightly less satisfaction when compared to those participants who remained in the program.

Figure 27. Consumer/Parent Satisfaction Survey



6. The Adverse Childhood Experiences Survey

Illinois MIECHV families confront a significant number of complex and enduring challenges related to poverty, high crime neighborhoods, poor housing, discrimination, health disparities, and numerous other interrelated issues. Although most MIECHV families confront challenging life circumstances, most also have a strong desire to improve their lives and the lives of their children. One risk factor that has drawn increased attention is that of complex trauma in relation to prolonged abuse, neglect, and exposure to dysfunction. As a result of this emerging literature, the evaluation team discussed the potential for obtaining a better understanding of complex trauma by including the Adverse Childhood Experiences (ACE) survey as part of in-home assessment conducted by CPRD's field data collection. The State of Illinois Office of Early Childhood Development staff agreed to allow the administration of the ACE survey.

The Adverse Childhood Experiences Study, completed in the 1990's by the Centers for Disease Control and Prevention (CDC) and Kaiser Permanente, is one of the largest investigations ever conducted to assess associations between childhood abuse, neglect, and family dysfunction, and later-life health and well-being. Traumatic childhood events are common. In the ACE study, 63% of the people who participated had experienced at least one category of childhood trauma, and over 20% had experienced three or more. We know that adverse childhood events have an impact on later health, and that the more types of trauma experienced in childhood, the greater the likelihood of experiencing negative health-related outcomes such as drug and alcohol abuse, depression, heart disease, tobacco use, and obesity in adulthood (Felitti et al., 1998).

By gathering information on the nature and frequency of negative childhood events, we hope to better understand health risk levels of the MIECHV participants, to improve services for participants at risk for poor health outcomes, and to prevent children's exposure to adverse events. We also hope to gain a better understanding of how health and social problems result from adverse childhood experiences. Thus the following research questions are posed:

1. What is the prevalence of ACEs for Illinois MIECHV participants, and how do the scores vary by socio-demographic factors?
2. How are ACE scores related to participation in Illinois MIECHV programs?
3. How are ACE scores associated with MIECHV participants' child and caregiver long and short term outcomes?
4. How can ACE scores information be used to address issues related to home visiting programs and services?

CPRD received final Institutional Review Board approval in January 2015, and began administering an ACE survey in February 2015. The survey asks about a variety of adverse or hurtful childhood experiences related to abuse and neglect, domestic violence, household crime, mental illness, substance abuse, and divorce. The Childhood Experiences Survey is a 19-question adaptation of the ACE survey approved by the University of Wisconsin-Madison (Mersky et al.,

2013). It includes the 10 original ACE survey questions, and additional questions related to poverty, death of a parent or sibling, prolonged absence of a parent, bullying, and violent crime victimization.

CPRD Field Data Collectors have begun administering the *Childhood Experiences Survey* to 2nd and 3rd year MIECHV participants age 18 and older. These adult participants have an established relationship with their home visitor and are thus more likely to feel comfortable responding to the sensitive survey items. As part of the consent process, participants are encouraged to talk with their home visitor about any questionnaire item that raises an issue that bothers them, so that the home visitor can provide support and resources. In the event that a participant requires a referral, CPRD has developed an informational brochure about the survey containing a list of relevant resources and a 24-hour crisis line. The brochure has been customized for each MIECHV community and is available in English and Spanish.

As with all MIECHV data collection surveys, participation is voluntary, and participants may skip any questions or stop answering questions at any time. In order to save time and limit the number of surveys we ask the participants to complete, the Childhood Experiences Survey replaces the Consumer/Parent Satisfaction Survey during the home visit at which it is administered. It is a paper and pencil assessment.

While voluntary for participants, we have encouraged our home visiting sites to view this as a mandatory component of our MIECHV data collection. Our goal is to give all established MIECHV participants the opportunity to respond to the survey. As prescribed in the IRB protocol, participants will receive a Walmart gift card as an incentive during the data collection visit, whether they complete the ACE measure or not.

Before survey administration began, Field Data Collectors received multiple trainings on ACEs and how to administer the Childhood Experiences Survey. Staff practiced reviewing the consent form, administering the survey, and responding to potential challenging questions and situations that might arise.

Site supervisors and home visitors received information regarding the survey during a MIECHV Providers conference call in early February 2015, and an informational brochure was shared with all MIECHV sites.

FDCs inform participants that their survey information will be kept confidential and not be shared in any way that could specifically identify them. FDCs do not share the survey responses with the home visitor unless specifically asked to by the participant. Since we are not asking the participants to share this information for discussion, we do not expect the survey to reveal any disclosures of harsh events that participants are not comfortable discussing with their home visitors.

The final question on the survey asks participants: “Overall, how uncomfortable did you feel answering the questions on this survey.” Somewhat surprisingly, our early data collection shows that “not at all” is the most common response for this item.

Examples of some of the questions on the survey:

1. As a child, how often did your family experience serious financial problems?
2. How often were you hungry because your family could not afford food?
3. How often were you homeless when you were growing up?
4. Did you live with anyone who was a problem drinker or alcoholic?
5. Before the age of 18, did you experience the death of a parent, caregiver or sibling?

V. Continuous Quality Improvement

Continuous quality improvement (CQI) is a vital component of Illinois' MIECHV initiative, providing a mechanism to generate meaningful commitments from all levels of the program. For the purposes of programs in Illinois, CQI is the complete process of identifying, describing, and analyzing strengths and problems, and subsequently testing, implementing, and learning from and/or revising solutions. CQI is also the cornerstone for determining whether the program models are implemented in the way that they were designed and whether there is positive change in benchmark performance. The CQI component may be the most critical aspect of MIECHV as it identifies, tracks, and creates improvements and midcourse corrections for ensuring the best possible services are provided to Illinois children and families.

CPRD's full time Continuing Quality Improvement Specialist began in earnest in mid-FY 2013, and has been fully implementing CQI processes across all LIAs and at the state level through FY 2014.

Local Implementing Agency (LIA) CQI activities

The CQI Specialist conducts monthly technical assistance calls with each home visiting agency to determine progress, challenges, and problems, and to provide support in planning and implementing CQI activities. Each agency develops a CQI action plan several times a year. These plans are developed based on prior performance on the MIECHV benchmarks and aim to improve benchmark performance and overall program quality.

The CQI Specialist builds upon monthly TA calls with webinars, benchmark-specific training calls, and other community-level supports on an as-needed basis. In November 2013, the CQI team hosted a webinar for all agency-level CQI team members that provided an orientation to the IL MIECHV CQI process and tools. In July 2014, site level meetings were created to bring together agencies working on the same benchmarks (prenatal visits, well-child visits, injury prevention) to share best practices and lessons learned.

During this year, home visiting agencies initiated an average of three CQI action plans, working on the following benchmarks, listed in **Table 5**:

Table 5. Targeted Constructs for CQI Plans: Year 2 to Year 3 Changes

Benchmark 1: Maternal and Newborn Health				
Construct	# of Agencies	Year 2	Year 3	Change
1.1 Prenatal visit completion	4	24%	44%	+ 20%
1.3 Postpartum contraception use	9	34%	34%	-
1.4 Interpartum birth interval	1	76%	76%	-
1.6 Breastfeeding	6	27%	21%	- 6%
1.7 Well-child visit completion	7	56%	84%	+ 28%
Benchmark 2: Child Abuse, Neglect, and Maltreatment; and Reductions of ED Visits				
Construct	# of Agencies	Year 2	Year 3	Change
2.3 Dissemination of safety information	12	44%	93%	+ 49%
Benchmark 3: Improvement in School Readiness and Achievement				
Construct	# of Agencies	Year 2	Year 3	Change
3.5-3.7 Developmental screenings	4	64%	87%	+ 23%
Benchmark 5: Family Economic Self-Sufficiency				
Construct	# of Agencies	Year 2	Year 3	Change
5.1 Household income and benefits	6	11%	39%	+ 28%
5.2 Educational goal attainment	8	25%	39%	+14%

Most, but not all, of the areas targeted in CQI plans saw significant improvement from Year 2 (FY 2013) to Year 3 (FY 2014). While these improvements cannot be specifically tied to CQI work, agencies report that the CQI process helped them improve their data quality and program practices.

Integrating CI and CSD functions into CQI activities

This year, the CQI team initiated technical assistance calls and other supports with each region’s Central Intake (CI) and Community Systems Development (CSD) teams.

During this year, most CIs and CSDs submitted three action plans, focusing on the following benchmarks:

- Increasing the number of signed Memoranda of Understanding
- Increasing the number of agencies with single points of contact
- Increasing referrals from MIECHV priority populations, including teens, pregnant women, low income families, and families with a history of interactions with the child welfare system

Because the CIs and CSDs were not previously using Visit Tracker or any single shared MIS system, data collection and analysis for these functions has been limited. This has been a major challenge for CQI work and is being addressed in the current fiscal year.

The 2014 Home Visiting and Continuous Quality Improvement Survey Summary

In June 2013, the CPRD team conducted a CQI readiness and capacity survey to assess the status of CQI at each site, determine staff experience with CQI, and identify perceived challenges to implementing a CQI process at their agency. Respondents expressed an understanding of the importance of CQI to program success, but reported having little knowledge of or experience with CQI. CPRD repeated a Year 2 follow-up survey of MIECHV providers in June 2014 to determine how the CQI staff and agency-based teams integrated and improved their CQI processes. A summary of the findings are provided below. The full report is available on the [CPRD website](#).

Home visitor experience with CQI

Overall results from the home visitor survey show twelve questions for which responses demonstrate moderate to large improvements from 2013 to 2014. CQI team members report agreeing or strongly agreeing that they/I...

- Know the difference between CQI and QA (increased from 69% to 82%)
- See fewer quality problems than in the past (increased from 44% to 66%)
- Agree with their commitment to CQI (increased from 61% to 79%)
- Have developed a detailed CQI plan (increased from 30% to 72%)
- Have integrated CQI into their home visiting programs (increased from 38% to 83%)
- Have adequate time to conduct CQI processes (increased from 35% to 51%)
- Have high quality data to conduct CQI (increased from 43% to 63%)
- Are provided with opportunities to gain new knowledge and skills (increased from 48% to 69%)
- Have had adequate training and TA to implement CQI (increased from 30% to 69%)
- Are already seeing the benefits of our CQI process (increased from 38% to 67%)
- Have a strong CQI team (increased from 46% to 65%)
- Have a CQI team leader who is well organized (increased from 49% to 69%)

From FY 2013 to FY 2014, there were minimal or modest changes in the following eight beliefs by home visitors, providing continued opportunities for improvement in these areas. Respondents report agreeing or strongly agreeing that they/I...

- Feel that CQI does not take away from the quality of our home visiting work (increased from 7% to 16%)
- Remain eager to implement our CQI program (increased from 64% to 67%)
- Have a CQI champion within our organization (increased from 43% to 46%)
- Have a team that analyzes the “root causes” of problems before implementing any

changes (increased from 69% to 73%)

- Have improved my home visiting skills (increased from 35% to 45%)
- Are part of a home visiting program that has strong partnership in the community (increased from 82% to 84%)
- Have received positive feedback for providing quality home visiting services (increased from 77% to 78%)
- Have strong support for CQI recommendations from supervisors (increased from 77% to 81%)

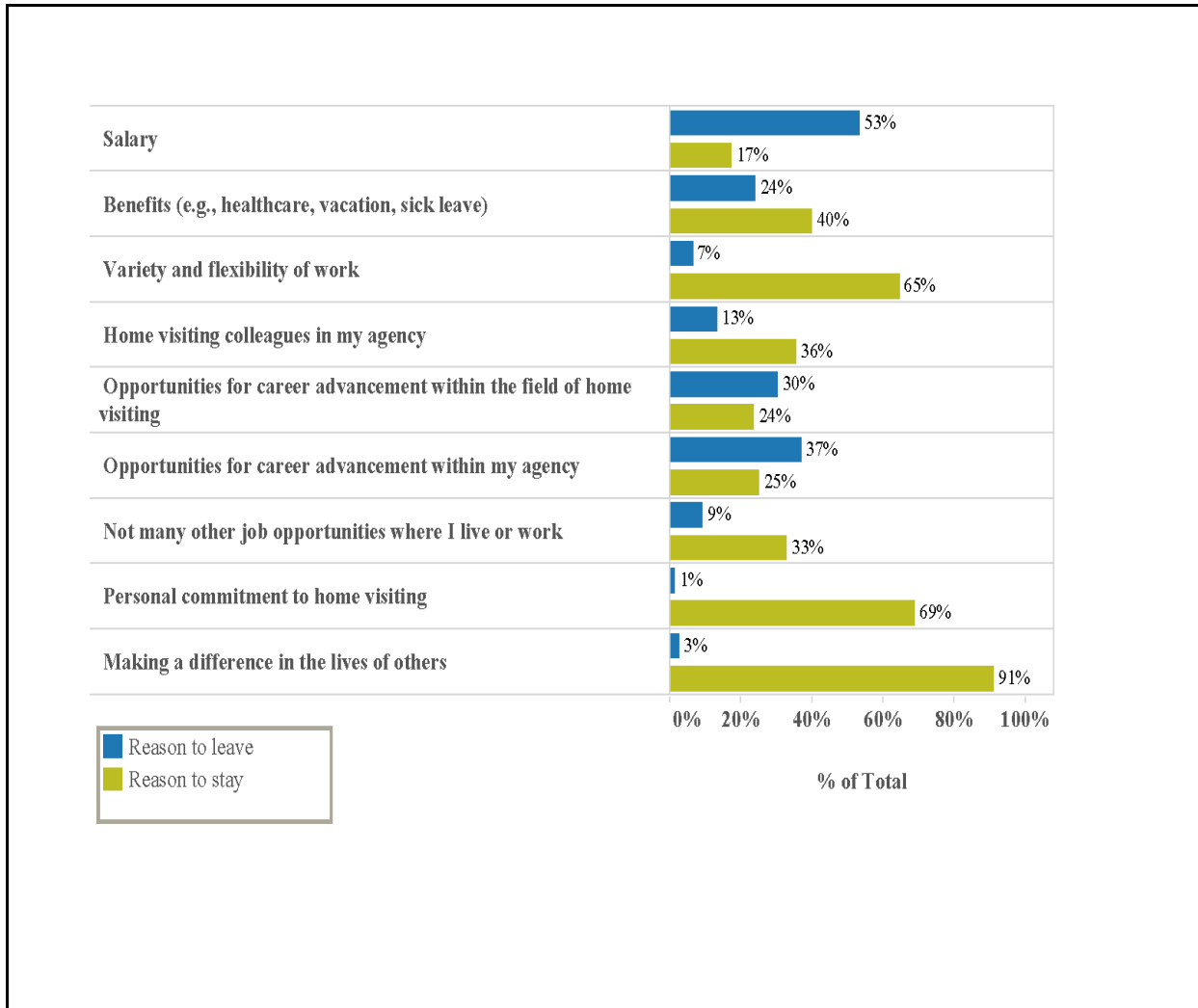
These home visitor responses provide a comparative report of staff knowledge, attitudes, beliefs, and experiences with respect to CQI and a roadmap for continued work over the next year.

Benefits and challenges of home visiting

As a result of ongoing concern about turnover of home visiting staff, CPRD developed a new series of questions that addressed the benefits and challenges of home visiting positions, shown in **Figure 28**. These survey questions asked home visiting staff about motivations for staying or leaving their current positions. Salary and benefit levels were the most significant reasons for considering leaving a current position, followed by the lack of opportunities for career advancement within the agency and the home visiting program. By contrast, making a difference in the lives of others and personal commitment to home visiting programs were significant reasons for staying in a position. Other positively rated reasons for remaining included variety and flexibility of work (64.6%), fringe benefits (39%), and their colleagues (25%).

The final question on the home visitor survey asked them about their annual salary. Answers ranged from \$20,000 to \$70,000 for a full-time employee. This issue has become a common concern in Illinois and at the national level because of its impact on staff turnover and professional career ladders. As a result, home visitor salaries are also a key issue that is being addressed by Illinois State CQI team.

Figure 28. Reasons for Considering Staying/Leaving Position (n=78)



State level CQI activities

State level CQI activities were also initiated in FY 2014. The MIECHV state CQI team is composed of representatives of Illinois’ MIECHV and home visiting key stakeholders. Team members include the Office of Early Childhood Development team, the independent evaluation team from CPRD, as well as representatives from Chicago Public Schools, Illinois Head Start Association, Illinois State Board of Education, Illinois Department of Human Services, and the Ounce of Prevention Fund. The goal of the state team is to identify strengths and challenges in the MIECHV systems and advocate for policy-level change.

The MIECHV State CQI team met five times last year: February, May, August and November of 2014, and in February 2015. Over the course of these meetings, the group identified several important topics to address at the policy level.

- Development of a process and policy for improving salaries and benefits
- Professionalization of home visiting through credentialing/Medicaid certificate and Infant Mental Health credential
- Management training for home visiting supervisors
- Infant mental health consultation
- Healthy Moms, Happy Babies trainings
- Reducing case loads
- Weekly visits for first 8 weeks
- Reflective supervision training
- Benchmark alignment
- Early Learning Guidelines trainings

As a result of these meetings, a number of broad policy and programmatic issues were identified by the State CQI team that will ultimately improve the quality Illinois home visiting services. Several issues are beginning to be addressed by the State CQI team, while other issues are being vetted by other state agencies or home visiting groups. Key issues raised and discussed by the CQI State team include:

- Salary Levels: In its annual survey of home visiting staff, CPRD asked questions about salary, benefits, and retention. With support from survey findings, home visitors in Macon County, the MIECHV community with the most significant salary level issue, received a salary adjustment.
- Medicaid Certificate: The State of Illinois is in the process of creating a Medicaid certificate program open to all home visitors with at least an Associate's degree.
- Infant Mental Health Credential: The State of Illinois is partnering with the Illinois Partnership for Infant Mental Health to develop a BA level infant mental health credential open to home visitors, as well as other interested participants.
- Supervisor Training: The Ounce of Prevention Fund is rolling out a 2-day Train the Trainers training focused on domestic violence screening.
- Weekly Visits: In November 2014, The Office of Early Childhood Development began requiring all MIECHV home visiting programs to provide weekly visits for the first 8 weeks of service, regardless of program model.
- Caseload Reduction: The Office of Early Childhood Development adjusted caseloads for MIECHV agencies to reflect additional program requirements associated with the grant.
- Benchmark Alignment: The Office of Early Childhood Development is collecting shared data collection points across state home visiting providers (ISBE, CPS, EHS, Ounce, DHS).

In most recent meetings, the group used a ranking process to prioritize the top issues across state agencies. The group identified the following as priority issues to target for further action at the state level over the next year:

- Infant mental health consultation

Benchmark alignment

Next steps for CQI work

The CQI team intends to build upon its early successes by incorporating the following actions into its work:

- **Increase opportunities for agencies to share their CQI experiences with each other.** This will be especially important to maintaining commitment at the agency level as CQI plans move from big, quick wins to more gradual and harder to achieve improvements. This approach can also benefit CI/CSDs as they transition to the use of Visit Tracker.
- **Focus on policy level issues that impede improvement on the benchmarks.** Many of the benchmarks that saw the least improvement over the past year relate to issues that require policy-level actions, like increasing access to healthcare providers, increasing supports for breastfeeding and working mothers, and increasing affordable health insurance options for undocumented families.

VI. Brief MIECHV Studies

A key part of the MIECHV evaluation is not only producing federal reports, conducting CQI activities, and disseminating information to key stakeholders, but also further exploring and examining the MIECHV data through a series of brief studies prompted by serendipity, confusing or contradictory data, existing research literature or emerging research questions. These questions may materialize from the participants, home visitors, policy stakeholders, state, and evaluation staff. In 2014, the evaluation team conducted a series of brief studies that included a home visiting attrition study, MIECHV dropout study, CQI staff study, and several smaller analyses addressing special requests. A synopsis of these studies is presented below and full access is available on [CPRD's website](#).

1. Participant Engagement and Attrition Summary

One of most challenging issues confronted by many home visiting programs is to maintain levels of full participation to ensure that families receive the full complement of services and resources that have been demonstrated in efficacy and effectiveness trials. Research shows that home visiting agencies that fully implement their programs are likely to have better outcomes and impacts. If participants drop out prior to completing the recommended “dosage,” or just drop out after only a few weeks or months, they are unlikely to derive the purported benefits reported in validated home visiting programs, and significant resources may be wasted.

Considering the importance and well documented results of premature loss of home visiting program participants, the evaluation team explored multiple characteristics related to retention and dosage factors. The evaluation team, using the Visit Tracker (VT) Management Information System data, analyzed the dropout rates at the program, agency, and community levels. This analysis was conducted to identify potential characteristics of dropouts and length of participation (duration) in the program. This was calculated by identifying the enrollment date of the family and the date they exited the program (prior to program completion).

Table 6. Illinois MIECHV Participant Attrition and Program Duration (n=823)

	Enrollments	Dropouts		Number of days in the program		
		n	%	Median	Mean	Std.
Illinois MIECHV	823	397	48.24	165.00	197.08	141.65
Cicero	187	69	36.90	218.00	230.59	131.00
Elgin	109	50	45.87	170.00	233.28	166.26
Englewood	162	60	37.04	189.00	210.13	117.97
Macon	112	78	69.64	97.00	145.51	140.15
Rockford	121	64	52.89	199.50	231.36	145.36
Vermilion	132	76	57.58	132.50	156.58	126.46

This analysis found that the overall attrition rate of Illinois MIECHV participants is around 48% over this study period. This attrition is at the upper range of dropouts considering that previous studies report attrition rates between 6% and 60% for different home visiting models (Grant, 2000). Participants appeared to be at especially highest risk of dropping out in the initial months (2-4 months) after enrollment. Programs should pay special attention to retention of participants during this high risk period, during which participants evaluate the pros and cons of staying in the program.

Descriptive statistics by participant demographics show some variation. Among the communities, Cicero had the highest median program duration of 218 days and Macon had the lowest median program duration of 97 days. In general, participants most likely to remain in a home visiting program were older (age 30 or above), non-White, Hispanics, less than a high school education, married, uninsured, participate in WIC, report low achievement by the parent or child, serve a disabled child or sibling, and participants without a history of abuse.

After adjusting for other variables in the model, the risk of dropping out seems to decrease by about 3% with every year increase in age (HR: 0.97, 95% CI: 0.95, 0.99). While race was not found to be significant, non-Hispanic ethnicity was found to be associated with about 78% higher risk of dropping out (HR: 1.78, 95% CI: 1.16, 2.74). Illinois MIECHV participants having less than high school education appear to have 36% higher risk of dropping out (HR: 1.36, 95% CI: 1.08, 1.71). This relationship was only marginally significant in the unadjusted model, but became highly significant in the adjusted model. WIC participants (HR: 0.60, 95% CI: 0.47, 0.77) and those with history of abuse (HR: 0.60, 95% CI: 0.38, 0.95) had about 40% lower risk of dropping out when compared to their respective reference groups. Participants with low achievement (HR: 0.67, 95% CI: 0.47, 0.95) had about 33% lower hazard of dropping out. Participants with disabled child (HR: 0.68, 95% CI: 0.44, 1.05) seem to have a lower hazard of

dropping out. While this relationship was statistically significant in the unadjusted model, it was only marginally significant in the adjusted model (p value=0.08).

This study could not examine differential attrition by program model because of the low number of participants with only two Early Head Start programs and one Nurse-Family Partnership. Considering that significant amounts of variation in the attrition exist between programs, future studies should identify factors operating at community, agency, and home visitor levels, especially those that are modifiable, so that program administrators can address these issues. For example, home visiting staff turnover has been a problem in some programs and this issue likely impacts participant retention. Previous studies have shown that special training of home visitors and identification of specific needs of the participants and tailoring the programs to address these needs and concerns help with retention (Ingoldsby et al, 2013; Ammerman, 2009; Daro et al., 2003). As mentioned in these studies, attrition should not be considered in isolation and one of the goals should be to train the home visitors to improve their family engagement and retention skills.

This study's findings of higher risk of attrition in the younger participants is not surprising as the home visiting participants in this age group have many additional challenges related to family, education, employment and life issues in general. Higher retention for Latino families is an interesting finding and actually confirms results from previous studies on home visiting programs. Communities such as Cicero, where the majority of participants are Latino, have considerably lower attrition levels. Participants with less than high school education may not have stable jobs or housing, which may also contribute to high attrition in this subgroup. The full report can be found on the [CPRD website](#).

2. Consumer/Parent Satisfaction Survey of MIECHV Home Visiting Dropouts

Parent/consumer satisfaction is a widely used measure to evaluate the quality of home visiting and related health and social services. Satisfaction has been shown to be a positive predictor of remaining in and completing home visiting programs along with other factors such as cultural competence, frequency and duration of visits, skills and experience of the home visitor, and positive rapport with the family (Barak, Spielberger, & Gitlow, 2014; Holland, et al., 2014; Damashek, et al., 2011).

A major challenge of parent/consumer satisfaction ratings is positive bias, participant selection bias, and interpretation of the results. However, consumer input, feedback, and satisfaction provide one important dimension for rating the quality of home visiting services. To that end, the evaluation team proposed a [brief study of MIECHV families](#) who dropped out or stopped home visiting services to explore differences between the full sample from 2013 and the dropouts in 2013.

The evaluation team developed the following research questions to be addressed by this study:

1. How did families who dropped out of home visiting report their home visiting experiences?
2. What were the major reasons for dropping out of the Illinois MIECHV home visiting programs?

Dropout respondent demographics and service delivery characteristics

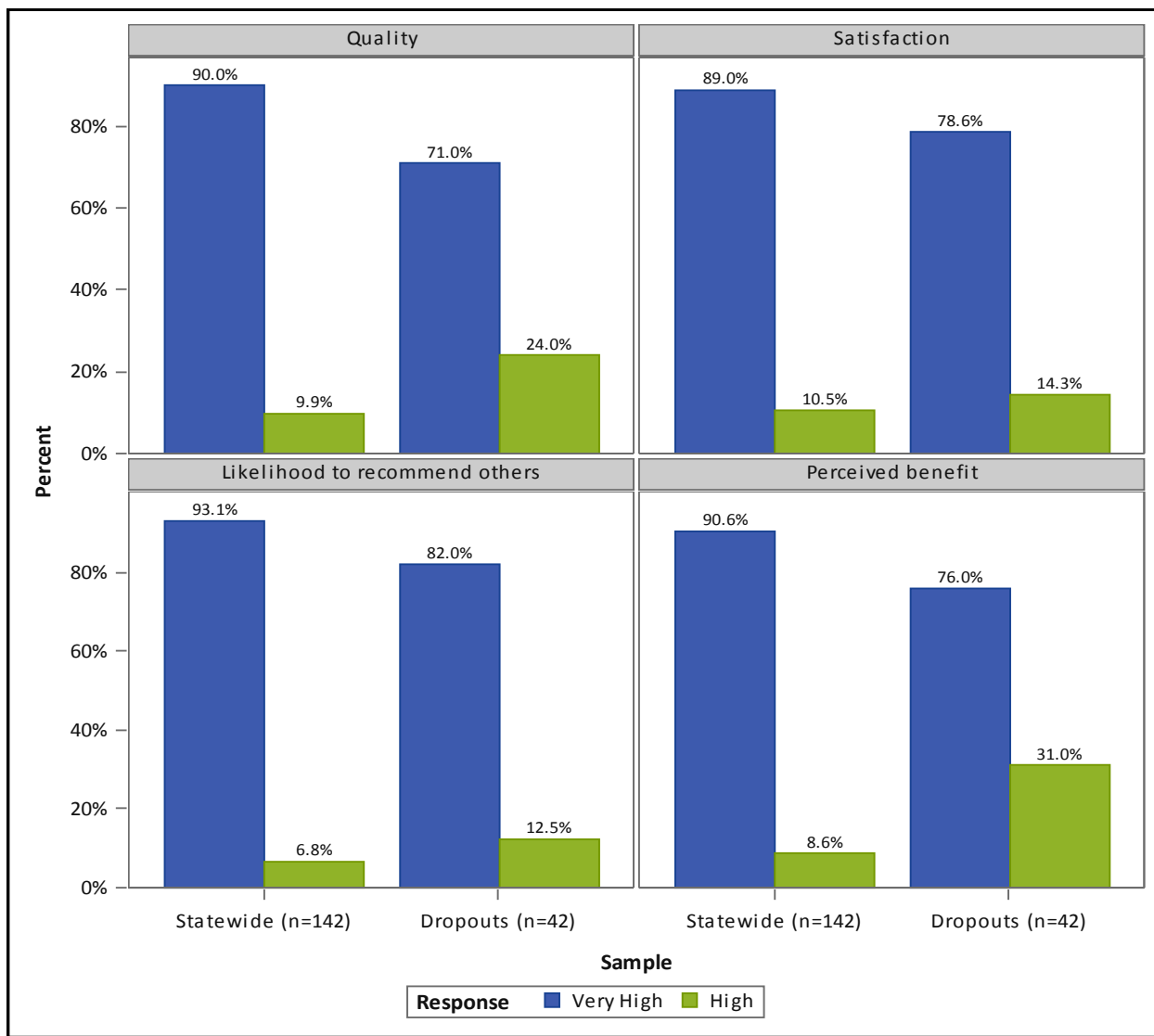
Of the 42 respondents, their average age was 29 years old with a range from 19 to 38 years old. When asked about how much time home visitors spent with them at each visit, the average visit lasted approximately 68 minutes with a range of 40 to 80 minutes. When asked about how frequently dropout respondents saw their home visitors, 44% reported weekly visits, 46% reported every other week and 5% reported monthly visits.

State sample compared to dropout sample

A final way that we examined parent/consumer satisfaction results was to compare the large sample from 2014 who participated in home visiting and had not dropped out yet, to those who we contacted via telephone. Several caveats must be recognized for this type of comparison. The two surveys were done with different methodology; one in person and one over the telephone. Second, the telephone survey was successful in contacting 42 dropouts, which was only 28% of the targeted sample.

Figure 29 below shows four key dimensions to consumer satisfaction that include participant reports of quality rating, satisfaction with services, perceived benefit, and likelihood of recommending services to others. As presented in last year's (FY 2013) annual report, the consumer satisfaction surveys were so positive (97-99% positive) that we believe that it would be almost impossible to improve due to the ceiling effect. With those caveats, **Figure 29** shows that the dropout sample rated home visiting high, but not quite as high as the full annual sample. These differences range from approximately 10-19% in the dropout sample, which is not surprising since the full sample had more cases and the families were still enrolled in home visiting services.

Figure 29. Consumer Satisfaction Comparison between Statewide and Drop out Sample (n=42).



Major factors for leaving program

Overall, parents who completed the dropout survey reported high ratings for home visiting services on each of the four dimensions. The next research question asks: “What were the factors that contributed to their dropping out of the home visiting programs?” This question was asked in an open-ended way, so the analysis required a grouping and sorting of responses. Of the 42 telephone respondents, 24 reasons were provided for leaving the program and those could be categorized into four broad categories. A fifth “other” category was created based on a number of idiosyncratic categories that had only 1-2 responses in each. The broader categories and examples of participants’ responses are listed below in order of frequency.

1. Lost contact with home visitor—e.g., I got a new telephone number, she never called back, she stopped contacting me, I cancelled too many times and was kicked out (5)
2. Child aged out or moved to another program—Sent my child to Head Start, completed program, child was going to preschool, child required autism services (5)
3. Became employed—Got a full-time job and did not have time, too busy (5)
4. Did not like my home visitor—She was not helpful, did not bring creative toys/activities, did not like my home visitor and did not what to try someone new (4)
5. Other—Child left foster care, went back to parents (5)

The dropout sample also reported positive home visiting service experiences, but was slightly less positive than the full 2014 sample (of actively enrolled participants). The majority of respondents rated home visiting services very positively both in the objective “highly satisfied,” related to quality, perceived benefits, and willingness to recommend to others. The open-ended questions also found overwhelming support for the services they received. The major factors dropout respondents mentioned included losing contact, poor communication and scheduling issues with their home visitor, becoming employed or too busy, moving, and having a child age out or complete the program. A small number of respondents criticized home visiting services in terms of activities and information that were too basic, programs that did not meet their needs or interests (e.g., pregnancy materials), loss of home visitor, not wanting to start over, and one participant mentioned that she did not like her home visitor. These also are commonly reported factors in the research literature as to why participants drop out of home visiting programs (Holland, et al., 2014). Although these concerns were raised by only a small number of participants, they provide key areas for continued attention, monitoring and improvement.

Lessons learned

Taking into account the results of this brief study in the context of what is already known in the research literature and how those issues are evident in Illinois MIECHV programs, the following lessons learned and considerations are provided:

- Participants report substantial support and satisfaction from Illinois MIECHV home visiting services, as reported in both the larger sample of MIECHV home visiting participants and the dropout sample. For families remaining in the program, satisfaction scores are even higher, which reflects the positive relationship families have with their home visitor.
- The communication process between the home visitor and participants is often complicated by demands of busy lives and schedules.
- It is unclear why several of the dropout sample report they “completed” or “aged out of” the program, when they were categorized as dropouts in Visit Tracker. This suggests a need for closer examination of how home visiting participants’ reason for program exit are recorded in Visit Tracker.
- Respondents reported needing assistance in transitioning to other programs or preschool.
- The essential ingredients for providing high quality home visiting programs are home visitors who can build positive, healthy, and product relationships, and provide information and education materials that are meaningful and useful to participants.

VII. Conclusions and Recommendations

This Illinois MIECHV second annual evaluation report describes the results of the performance benchmarks, a longitudinal study of a subset of continuing families, and several study briefs that were conducted in 2014. Illinois MIECHV programs, services, and systems were fully implemented, building on the foundation that was established in 2012-2013. Specifically, Illinois MIECHV has expanded and developed training and technical systems, benchmark reporting, field data collection, brief studies, continuous quality improvement, and expanded the growth of coordinated intake and community systems.

These improvements are the result of technology upgrades with Visit Tracker, program monitoring, and increased knowledge, skills and capacity of program, state, and evaluation staff and services. Improvements and efficiencies were captured with both qualitative and quantitative data: better performance benchmark reporting, reduced turnover rates of home visiting staff, participant reports of high program satisfaction, lower parent stress, increased parent-child interaction skills, and expanded development and use of CQI processes at the local and state level.

Continued challenges remain with respect to reducing participant dropouts, improving coordinated community services and referral protocols, monitoring program activities to address staffing, caseload maintenance, and integrating program content across four program models and in line with the PBs. Although the turnover rate for MIECHV home visiting decreased from 2013 to 2014 (56.8% to 32.1%), staff turnover remains a challenge for LIAs. Loss of a home visitor sets off a cascading series of factors that often result in participant attrition, and furthermore places a substantial burden on the management and other home visiting staff at the LIA.

The staff turnover issue is further complicated by the initial mandatory trainings that home visitors are required to attend before assuming a caseload, as it can often take several months to orient and train a new home visitor on the model curriculum, as well as on the various screening tools and assessments. This recovery period may be particularly problematic for small home visiting programs (1-2 home visitors) that lack the capacity to quickly replace or cover staff loss. Staff turnover is a common workplace issue, but its impact on home visiting services is exacerbated by the importance of the trusting relationship that develops between the home visitor and family during this critical time in life. As mentioned earlier, we have heard multiple participants say they do not want to start over with a new home visitor.

The build out of Visit Tracker in 2014 provided home visiting programs with accurate, real-time data that can be used to check the status and report process measures. The aggregation of information provides “snapshots” of how a home visitor, program, and community are performing, and provides measurable goals for improvement and completion. Agencies can

now identify and address data problems, track progress, and measure improvement relative to benchmarks and model standards.

The CQI work with the LIAs continues to show substantial progress and improvements, with 41 CQI plans resulting in improvement out of a total of 57 plans submitted. The action plans that did not show progress during the CQI process were likely the result of the complex nature of the issues impacting some benchmarks, such as breastfeeding and contraception use. It is clear that to improve health behaviors and the attendant performance benchmarks will require additional strategies and resources that can overcome individual, family, cultural, and possibly institutional barriers.

The state CQI team, comprised of representatives of home visiting funders and providers, met quarterly in 2014 to review and address common concerns, and consider ways to address these issues at the state level. The team prioritized key issues such as: staff turnover, professionalization and credentialing of home visitors, improvement of pre-service and professional development and training programs, and data alignment across all of Illinois home visiting programs. Based on the most recent state CQI meeting in February 2015, the highest priorities were to examine the needs and resources for mental health consultation, and align data benchmarks across Illinois home visiting programs.

Building on the annual reports from both FY 2013 and FY 2014, significant progress has been made for Illinois MIECHV's infrastructure development (e.g., data systems, workforce development, reduced staff turnover, and positive gains in early and intermediate outcomes). These system and service improvements resulted in demonstrating progress on performance benchmarks, and positive outcomes for families' at the Year 2 follow-up. This second year report shows the great strides that have been made for Illinois MIECHV since 2012, and clarifies issues that still need to be addressed in the upcoming and subsequent years. To that end, the evaluation team has identified the following recommendations that need to be considered in the upcoming year.

- Ensure that LIAs continue to receive and respond to monthly real time feedback on their data to ensure accuracy, quality, and utility. Field assessment data results should be made available to LIAs on a quarterly basis.
- Continue to explore and understand the barriers to adopting breastfeeding, contraception use, and educating families on the proper use of the health care system.
- Develop a system or policy framework for replacing and onboarding new home visitors in a timely manner.
- Increase opportunities for mental health consultation to support agency staff in addressing complex issues such as domestic violence, developmental delays, poverty, and child abuse, and cultural competency.

- Continue to offer and expand trauma-informed service support for home visiting programs and participants.
- Develop community level guidelines for helping exiting families transition to preschool or other early childhood programs.
- Continue to develop and expand the coordinated intake and systems development to maximize reach and program enrollment of high risk families and appropriate entry into home visiting program models.
- Continue to encourage and support intensive weekly services for the first eight weeks to increase participant engagement and improve program retention.
- Continue to develop and upgrade Visit Tracker systems to capture home visiting services in a standardized way (e.g., length of visit, activities and educational topics, etc.) to improve our understanding of fidelity to the program model.
- Explore opportunities for linking MIECHV home visiting data with other Illinois database systems – Cornerstone, Medicaid, ISBE Student Information System/Student Identifier, Early Intervention, etc.) to provide a more comprehensive understanding of the impacts of home visiting services.

References

- Abidin, R.R. (1995) *Parenting Stress Index*. Odessa, FL: Psychological Assessment Resources, Inc.
- Aslam, R.W. Hendry, M., Carter, B., Noyes, J. et al., (2015). Interventions for preventing unintended pregnancies among adolescents (protocol) *The Cochrane Collaboration Library*, Issue 1.
- Ammerman, R. T., Putnam, F. W., Margolis, P. A., & Van Ginkel, J. B. (2009). Quality improvement in child abuse prevention programs. *Preventing Child Maltreatment: Community Approaches*, 63-86.
- Barak, A., Spielberger, J., & Gitlow, E. (2014). The challenge of relationships and fidelity: Home visitors' perspectives. *Children and Youth Services Review*, 42, 50-68.
- Booker, C.L., Harding, S., & Benzeval, M. (2011). *A systematic review of the effect of retention methods in a population-based cohort study. BMC Public Health*, 11, 249, 1-12.
- Bradley, R., & Caldwell, B. (1984). 174 children: A study of the relationship between home environment and early cognitive development in the first five years. In A. Gottfried (Ed.), *The home environment and early cognitive development* (pp. 5-56). Orlando, FL: Academic Press.
- Center for Prevention Research and Development (2015). MIECHV Consumer/Parent Satisfaction Study. Champaign, IL: Center for Prevention Research and Development.
- Damashek, A., Doughty, D., Ware, L., & Silovsky, J. (2011). Predictors of client engagement and attrition in home-based child maltreatment prevention services. *Child Maltreatment*, 16(1), 9-20.
- Daro, D., McCurdy, K., Falconnier, L., & Stojanovic, D. (2003). Sustaining new parents in home visitation services: Key participant and program factors. *Child Abuse & Neglect*, 27(10), 1101-1125.
- Feinstein, A. R., & Cicchetti, D. V. (1990). High agreement but low Kappa: I. the problems of two paradoxes. *Journal of Clinical Epidemiology*, 43(6), 543-549.
- Felitti, F., Vincent, J., Anda, M., Robert, F., Nordenberg D., Williamson, P., David, F., Spitz, M., Alison, M., Edwards, V., et al. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study. *American Journal of Preventive Medicine*, 14(4), 245-258.
- Fugate, M., Landis, L., Riordian, K, Naureckas, S., & Engel, B. (2005). Barrier to domestic violence help seeking: Implications for interventions. *Violence Against Women*, 11, 3 290-310,
- Green, B. L., Ayoub, C., Bartlett, J. D., Von, E. A., Furrer, C., Chazan-Cohen, R., Vallotton, C., & Klevens, J. (2014). The effect of Early Head Start on child welfare system

- involvement: A first look at longitudinal child maltreatment outcomes. *Children and Youth Services Review* 42, 127-135.
- Holland, M.L., Christensen, J.J., Shone, L.P., Kearney, M.H. & Kitzeman, H.J. (2014) Women's Reasons for Attrition from a Nurse Home Visiting Program, *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 43, 61-70.
- MacPhee, D. (1981). *Manual for the Knowledge of Infant Development Inventory*. Unpublished manuscript, University of North Carolina.
- Ingoldsby, E.M., Baca, P., McClatchey, M.W. Luckey, D.W., Ramsey, M. O., Loch, J.M. ... Olds, D.L. (2013). Quasi-experimental pilot study of intervention to increase participant retention and completed home visits in the nurse-family partnerships. *Prevention Science*, 14, 525-534.
- Innocenti, M. & Roggman, L. (2007). PICCOLO: A valid and reliable parenting interaction measure. Division of Early Childhood, Niagara Falls, Ontario. Retrieved from http://works.bepress.com/lori_roggman/382/
- Mersky, J. P., Topitzes, J., & Reynolds, A. J. (2013). Impacts of adverse childhood experiences on health, mental health, and substance use in early adulthood: A cohort study of an urban, minority sample in the U.S. *Child Abuse & Neglect*, 37(11), 917-925.
- Roggman, L. A., Cook, G. A., Innocenti, M. S., Jump Norman, V., & Christiansen, K. (2013). Parenting interactions with children: Checklist of observations linked to outcomes (PICCOLO) in diverse ethnic groups. *Infant Mental Health Journal*, 34(4), 290-306.
- U.S Department of Health and Human Services. Home visiting. Office of the Administration for Children and Families, Early Childhood Development. Retrieved February 20, 2015. <http://www.acf.hhs.gov/programs/e cd/programs/home-visiting>

Appendix 1: MIECHV 2014-2015 Timeline

March 2014

- CPRD submits annual report to Governor's office
- Sites submit 3rd CQI packet
- FDC quarterly meeting and training held in Champaign

April 2014

- Peter Mulhall presents Annual Report results to HV Task Force
- Mary Anne Wilson presents Digging into Data webinar to home visiting staff

May 2014

- CPRD leads second statewide CQI meeting, and presents annual report results
- Peter Mulhall presents "Working Towards Outcomes" at Early Head Start meeting

June 2014

- FDC quarterly meeting and training held in Champaign
- CQI team develops annual CQI summary report
- CQI team presents CQI Effectiveness Report to Home Visiting Task Force
- CQI team re-administers the CQI capacity survey, analyzes, and summarizes results
- CPRD conducts annual site visits in six MIECHV communities
- CPRD project staff conduct in-home observations of FDC in the six MIECHV communities

July 2014

- MIECHV sites submit CQI quarterly plan for review and feedback
- Final site visit completed at ChildServ in Englewood
- PICCOLO scoring team training held
- Olga Poes, Research Assistant resigns from CPRD evaluation team
- CQI HV survey completed—80 of 107 returned
 - Amazon gift card incentives given—2 per community
- Dropout phone surveys data collection is closed
- Deborah Kemmerer moves to Boston

August 2014

- Study Brief on Participant Engagement and Attrition completed
- Summary Brief on HV Attrition Rates completed
- Literature review on HV retention/attrition rates completed for state CQI team meeting
- State CQI meeting held
 - Draft of state CQI plan completed

September 2014

- Drop out telephone surveys completed
- Field data collection surveys submitted for data entry and scanning
- Mary Anne Wilson recorded benchmark webinar for new MIECHV staff
- Regions IV/V MIECHV & ECCS Grantee Meeting in Chicago attended by Peter Mulhall and Mary Anne Wilson
- FDC quarterly meeting and training held in Champaign

October 2014

- Deborah Kemmerer resigns from CQI position
- FY 2014 DGIS data submitted to HRSA

November 2014

- Stacey McKeever starts CQI position
- State CQI meeting held
- PICCOLO scoring team quarterly meeting held

December 2014

- Peter Mulhall and Mary Anne Wilson present an overview of MIECHV benchmarks to Illinois Department of Human Services Nurses in Bloomington
- Final Year 3 DGIS report submitted
- FDC quarterly meeting and training held in Champaign
- Amendment for ACE protocol submitted to UIUC IRB

January 2015

- IRB approves Adverse Childhood Experiences survey and protocols
- Peter Mulhall presents to Home Visiting Task Force Exec. Committee

February 2015

- FDCs begin administering Adverse Childhood Experiences survey
- Look Through Their Eyes Webinar held
- National MIECHV Webinar—Beyond Reporting: Making the Most of Your Data—Peter Mulhall presented on Illinois State CQI activities

Appendix 2: Illinois MIECHV Products

The products listed below can be linked to at the [CPRD website](#):

- a. [2014 IL MIECHV Fact Sheet](#)
- b. [2014 IL MIECHV Benchmark Glossary](#)
- c. [Study Brief: Report on Participant Engagement and Attrition 2012-2013](#)
- d. [2014 IL MIECHV ACE Brochure](#)
- e. [2014 CQI HV Survey Report](#)
- f. [2014 Consumer/Parent Dropout Survey Analysis](#)