Illinois Maternal Infant and Early Childhood Home Visiting (MIECHV)

4th Annual Benchmark and Outcome Technical Report FY 2016

CPRD
SCHOOL OF SOCIAL WORK
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Performance Task:

The evaluation of the Illinois MIECHV program is funded by the Health Resources and Services Administration to the Illinois Department of Human Services. MIECHV is managed through the Illinois Governor's Office of Early Childhood Development, and the evaluation contracted to the Center for Prevention Research and Development, School of Social Work at the University of Illinois, Urbana.

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I. Background and Overview

Illinois' Maternal Infant and Early Childhood Home Visiting (MIECHV) program recently completed its fourth federal fiscal year providing home visiting and doula services in multiple disadvantaged communities across the state. At this stage of implementation, Illinois MIECHV has completed its onboarding and scaling up processes, and is now going through a refinement and reinvention of various programs, systems and indicators. Most notably, the Health Resources and Services Administration (HRSA) has refined the Performance Benchmarks, reducing the number from 35 to 19, keeping key performance indicators. The Illinois MIECHV reapplication and announcement also increased the number of home visiting Local Implementing Agencies (LIAs) from 24 to 32, adding home visiting (HV) services to Stephenson County, Central Illinois, East St. Louis, Kankakee and several Chicago Community Areas. The MIECHV system has been expanded to addresses special areas of focus including homelessness, child welfare, and caregiver engagement. The 2016 Annual Performance and Evaluation report is produced by the research and evaluation team at the Center for Prevention Research and Development (CPRD), School of Social Work, at the University of Illinois Urbana-Champaign (UIUC). As the external evaluator for the MIECHV initiative, CPRD has completed the fourth full year MIECHV program evaluation, as required by the federal HRSA, reflecting Illinois' submission for the Year 5 (FY2016) Performance Benchmark (PB) data in October 2016, which were approved by HRSA in December 2016.

This year's annual report continues to build on prior years' reports related to program implementation, continuous quality improvement (CQI) and several additional sub-studies and outcome analyses that go beyond the HRSA benchmark reporting requirements. FY2016 was also the final year of the evaluation team's field data collection, which tracked families who remained in home visiting services up to three years. This change was made due to the updating and streamlining of benchmarks and to reduce the cost of the data collection and reporting. Lastly, this was the final year of MIECHV funding for supporting the Community Systems Development positions, which were terminated in the original six MIECHV communities as of March 31, 2016. This system change required home visiting communities to revisit their community systems and Coordinated Intake roles.

As part of the FY 2016 Annual Report, the evaluation team examined new ways to provide feedback on the progress and status of Illinois' MIECHV project. A new metric was created to provide a framework for understanding the elements, complexity, depth and reach of Illinois MIECHV home visiting programs. The Illinois Home Visiting Systems Rubric provides a cumulative and culminating assessment of the MIECHV components based on empirical qualitative and quantitative data from the evaluation results. Each component is scored based on a rubric that must be validated by data.

These ratings were vetted through three rounds of discussion and feedback that included the MIECHV state program staff. These discussions resulted in thinking that the rubric could provide vital information for identifying key dimensions or components of home visiting services, whether those components were important or not, whether we have data to assess each dimension, and how each dimension is rated. A long term goal is to use the rubric for assessing, monitoring and refining home visiting services through prioritization and continuous quality improvement.

HRSA requires that MIECHV programs and services are designed to provide evidence-based services to caregivers and children who are at-risk for a range of adverse outcomes. Four essential strategies comprise Illinois' proposed approach to the implementation of MIECHV:

1. Expanding or enhancing one of three home visiting models, as well as doula services;
2. Ensuring that home visiting programs are effectively connected to the community-based organizations and services that are required to achieve performance benchmarks, including primary care providers;
3. Providing and participating in comprehensive CQI processes and procedures at the LIA, community, and state levels, in order to monitor and improve the quality and effectiveness of home visiting and ancillary services; and
4. 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.

Adoption and implementation of these strategies include 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. A list of the Illinois communities, MIECHV home visiting providers, model types, and ancillary services are provided in **Figures 1** and **2** below:

Community	Agency	Home Visiting Service
Cicero	Children's Center of Cicero-Berwyn	Parents as Teachers
	Family Focus Nuestra Familia	Parents as Teachers and Coordinated Intake
Elgin	Elgin School District U-46	Parents as Teachers
	Family Focus DuPage	Healthy Families Illinois
	Kane County Health Department	Coordinated Intake
	Visiting Nurse Association Fox Valley	Healthy Families Illinois
Englewood/ Southside Cluster	Children's Home + Aid	Coordinated Intake
	ChildServ	Parents as Teachers
	Family Focus Englewood	Healthy Families Illinois
	Henry Booth House	Healthy Families Illinois
	The Women's Treatment Center	Parents as Teachers
Macon County	Decatur Public School District 61 (Pershing)	Parents as Teachers
	Macon County Health Department	Healthy Families Illinois and Coordinated Intake
	Macon Resources	Parents as Teachers
Rockford	City of Rockford Human Services	Early Head Start
	Easter Seals Chicago	Healthy Families Illinois
	YWCA La Voz Latina	Healthy Families Illinois
	Rockford Public School District 205	Parents as Teachers
	Winnebago County Health Department	Coordinated Intake
Vermilion County	Center for Children's Services/Aunt Martha's	Parents as Teachers and Coordinated Intake
	Danville School District 118	Parents as Teachers
	East Central Illinois Community Action	Early Head Start

Figure 1: Illinois MIECHV Home Visiting Agencies by Community FY2016

Community	Agency	Doula Service
Vermilion County	Center for Children's Services/Aunt Martha's	Parents as Teachers
N Lawndale/ E Garfield Park	Chicago YMCA	Healthy Families Illinois
Rock Island	Child Abuse Council	Healthy Families Illinois
N Lawndale/ E Garfield Park	Family Focus Lawndale	Parents as Teachers
Waukegan	One Hope United	Healthy Families Illinois

Figure 2: Illinois MIECHV Doula Agencies FY2016

Illinois MIECHV Communities Expanded

For the past four years, Illinois MIECHV was comprised of 19 home visiting programs serving six disadvantaged communities, as well as five doula programs (see **Figures 1 and 2** above). These original communities were chosen based on the Chapin Hall Needs Assessment conducted in 2010 (Chapin Hall, 2010). After the drop out of the only Nurse Family Partnership (NFP) program last year, three evidence-based models remain that include: Parents as Teachers (12 agencies), Healthy Families Illinois (10 agencies), and Early Head Start (2 agencies).

As part of Illinois' HRSA renewal application in late 2015, Illinois provided a data-driven justification to add eight communities to the MIECHV home visiting programs and services. This expansion was approved by HRSA and beginning in July 2016 MIECHV expanded services – home visiting and doula – based on the federal definitions for community, family and child risk. Criteria include high rates of poverty, child maltreatment, low parent-education levels, high numbers of teen parents, low birth-weight babies, and preterm birth.

The newly selected MIECHV communities include small to moderate size cities, as well as significant rural areas that were previously not well served by Illinois home visiting programs. These new MIECHV communities are located in the Chicago area as well as central and southern Illinois. **Figure 3** below lists the new home visiting sites.

Community	Agency	Home Visiting Service
DeKalb County	Children's Home + Aid Sycamore	Healthy Families Illinois and Coordinated Intake
McLean-Piatt-DeWitt-Woodford	Children's Home + Aid Mid-Central Region	Healthy Families Illinois, Parents as Teachers, and Coordinated Intake
Peoria-Tazewell County	Children's Home Association Peoria	Healthy Families Illinois and Coordinated Intake
Stephenson County	Stephenson County Health Department	Healthy Families Illinois and Coordinated Intake
East St. Louis	Comprehensive Behavioral Health Center	Parents as Teachers and Coordinated Intake
Kankakee County	Aunt Martha's	Healthy Families Illinois, Parents as Teachers, and Coordinated Intake
Austin/ North Lawndale	Primo Center	Parents as Teachers and Coordinated Intake

Figure 3: MIECHV Home Visiting Programs 2017

In July 2016, three additional Competitive Grant (Doula) sites were also added (see **Figure 4** below).

Community	Agency	Doula Service
DeKalb County	Children's Home +Aid Sycamore	Healthy Families Illinois
Aurora	Family Focus Aurora	Healthy Families Illinois
Stephenson County	Stephenson County Health Department	Healthy Families Illinois

Figure 4: Illinois MIECHV Doula Programs 2017

Although Illinois' MIECHV expansion still does not reach all the families and children in need of home visiting, it does engage a number of high needs communities that will now be receiving home visiting services, particularly in downstate Illinois. **Figure 5** below shows the locations of the existing and new home visiting and doula program communities.

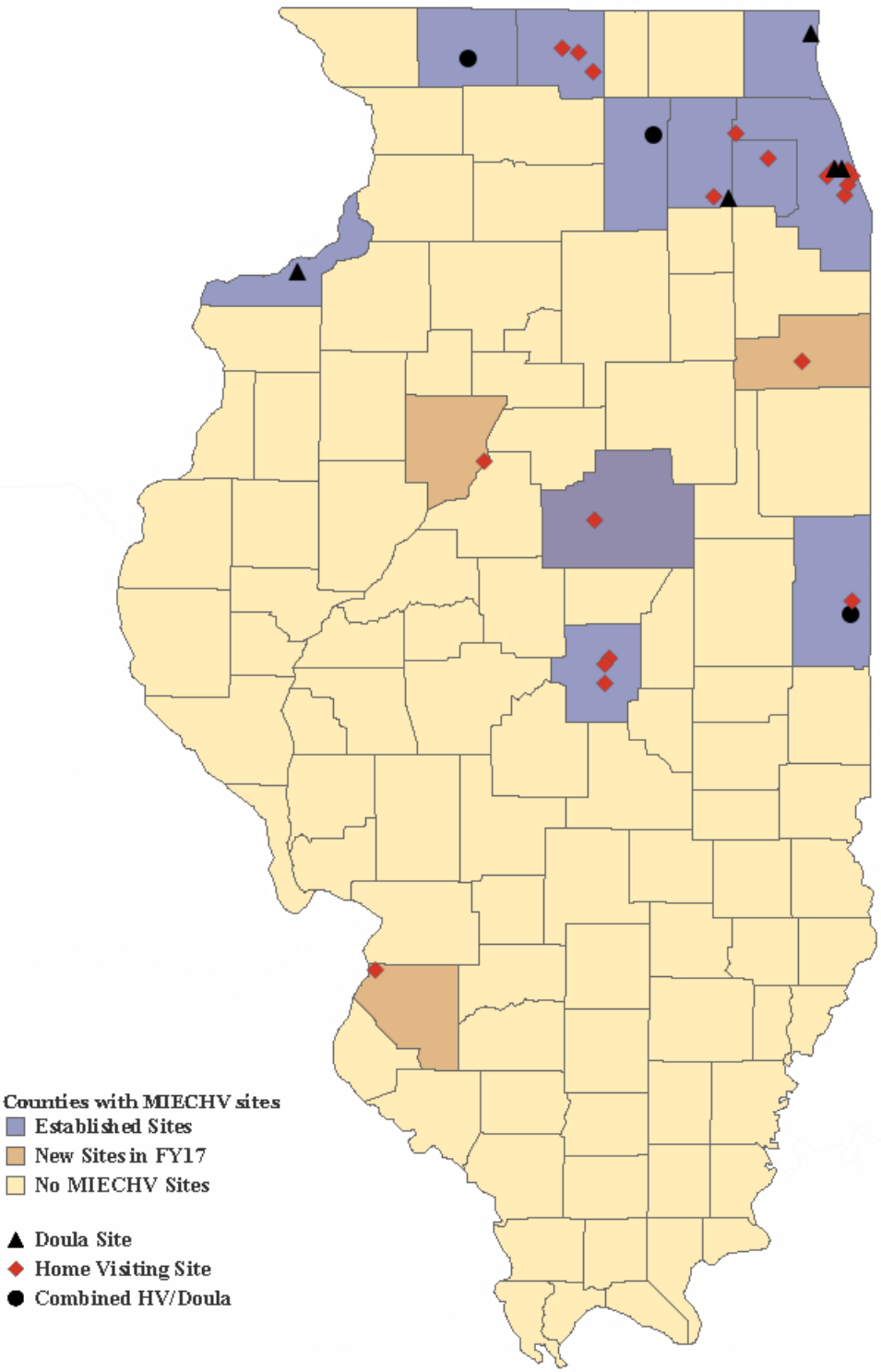


Figure 5: Illinois MIECHV Program Locations by County

II. MIECHV Participant Demographics, 2016

The MIECHV program was originally conceived by the Affordable Care Act of 2010 as an effective way to target high risk or priority populations that are in greatest need of high quality evidence-based maternal and child health services. The overarching goal was to reduce maternal and child health problems at the community or population level. MIECHV's goal was to provide a comprehensive prevention and early identification initiative that could generate the greatest return on investment in terms of health and well-being. Family eligibility to receive MIECHV services was based on eight priority populations that include low income, under 21 and pregnant, families with a history of child abuse or neglect, developmental delays, low student achievement, use of substances, families with tobacco users, and military families.

This section of the report presents the socio-demographic characteristics of MIECHV families that have been served by home visiting and doula programs in FY2016. In a sense, this is an end of year snapshot that allows readers to understand who participates in MIECHV programs, whether MIECHV services are reaching priority populations, and how these demographic factors may influence access to and engagement in MIECHV services. Overall, this snapshot shows that Illinois MIECHV participants clearly meet the HRSA's eligibility standards, and in fact, most families have multiple and complex risk factors.

Caregiver Age

Home visiting participants or caregivers, continue to be mostly between 18 and 34 years of age (78%), with very few under the age of 18 and 20% 35 or older (see **Figure 6** below). This approximates the 2015 data for the ages of participants receiving home visiting services. Doula participants are a much younger group, with 11% under 18 years of age and over 72% between the ages of 18-24 years, representing a majority under 25 years old. As expected, doula programs that target teen parents served 5 times more teens (under age 18) than home visiting programs. This indicates that doulas have good success in reaching younger families; however, it is unclear whether those communities that have both HV and doula programs are competing for the same families. A closer examination of the transfer rate or transition from Doula to HV may be informative.

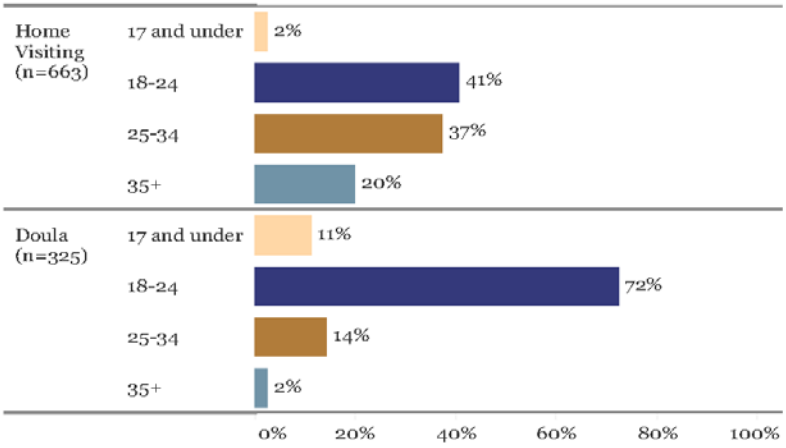


Figure 6: Caregiver Age

Caregiver Age by Ethnicity

As Illinois' largest minority population, MIECHV services continue to serve significant numbers of Hispanic/Latino caregivers (see **Figure 7**). Twenty-three percent of doula caregivers and 42% of HV participants are Hispanic/Latino. Latino HV participants have continued to increase over the past four years of the project (MIECHV Annual Report, 2014, 2015). Older Latino caregivers (women 35 and older) are approximately twice the percent of non-Latino home visiting participants, while teen doula participants are essentially the same for both Latino and Non-Latino. Older caregivers for the Hispanic/Latino population may be related to multiparous mothers or those serving as a caregiver for a grandchild or other relative.

As would be expected doula programs have more teen families (17 and under) than HV programs as doula programs primarily serve pregnant women, require a shorter commitment and may be perceived as a more relevant service to their pregnancy needs.

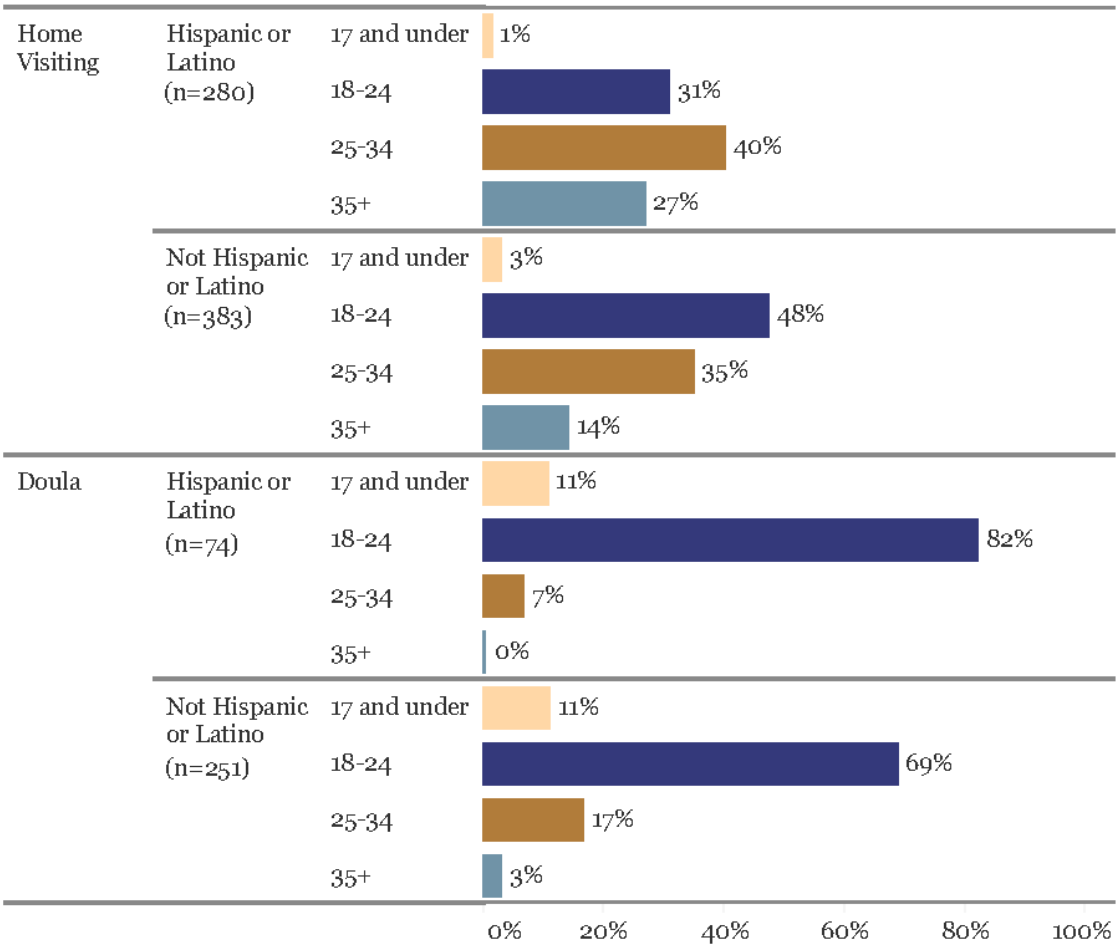


Figure 7: Caregiver Age by Ethnicity

Caregiver Age by Race

The age and race of caregivers receiving HV services reflect higher birth rates among young African Americans (AA) and Caucasians, compared to the Multi-Racial, and a catch all category, Other (includes Native Americans, Hawaiian/Pacific Islanders, and Asians) (see **Figure 8** below). As expected, Caucasians and AA receiving HV services are slightly older compared to participants receiving doula services. Multi-Racial and Other home visiting participants tend to be older, but less so for doula services. Not surprisingly, doula program participants are younger than home visiting participants overall, regardless of race, as doulas' target participants are predominantly under age 25. It is interesting to note that Multi-Racial and Other races have the higher percentages of older (35 +) participants receiving home visiting services – Multi-Racial (34%) and Other races (44%). However, this may also reflect smaller numbers of participants in these categories when combining races that don't fall into the traditional categories.

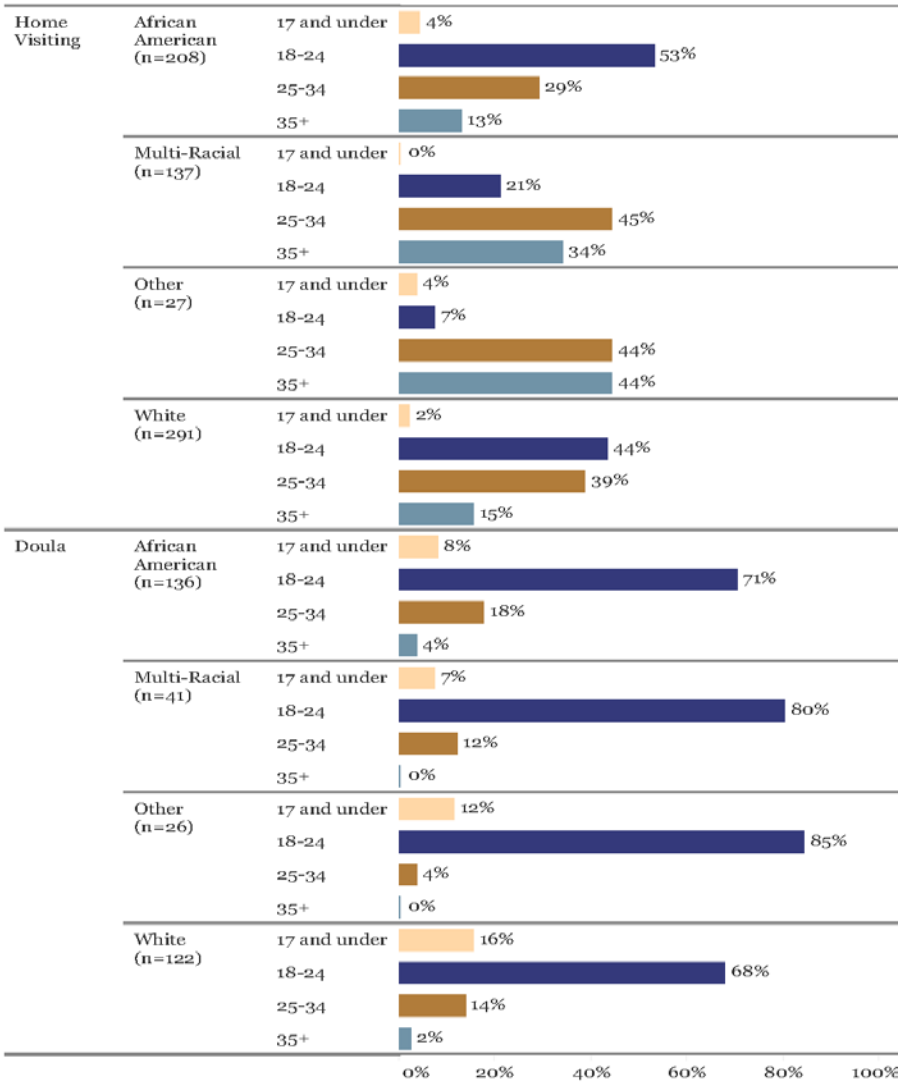


Figure 8: Caregiver Age by Race

Caregiver Marital Status

Almost two thirds of home visiting participants, and 88% of participants receiving doula services are single or never married. Less than 30% of HV and 10% of doula participants are currently married, which decreases the likelihood of providing adequate resources and supports for children and families. Marital status differences between these groups is also partially explained by the younger age, on average, of doula participants compared to HV participants (**Figure 9** below).

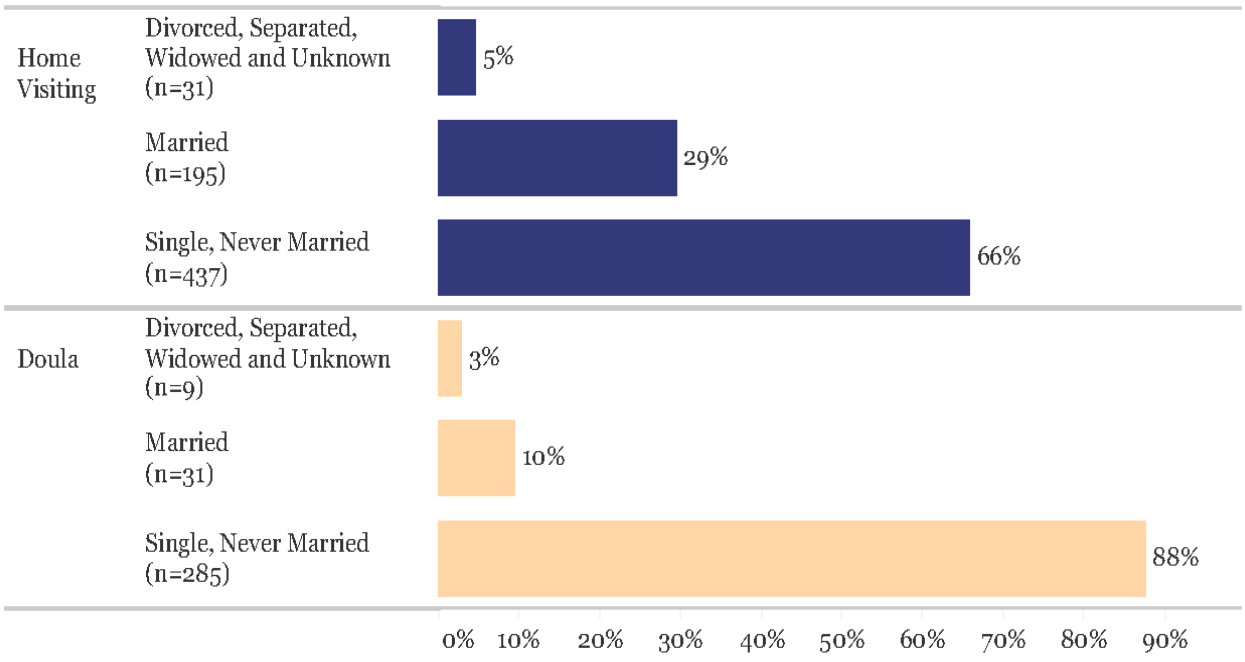


Figure 9: Caregiver Martial Status

Caregiver Household Income by Federal Poverty Guidelines

Most MIECHV families are eligible to receive HV services because their income is below the federal poverty level. Eighty-one percent of HV participants and 87% of doula participants live at or fall below 100% of the 2015 Federal Poverty Level. **Figure 10** (below) shows that for 2016, 41% of home visiting and 62% of doula participants report income at or below 50% of poverty guidelines (i.e. below the income level defined as the upper limit of families of that size living in poverty), and 42% of HV participants and 57% of doula families live at or below the 100% guideline. Doula families report a slightly greater percent (5%) of families at the 100% poverty level compared to HV participants, which is likely attributable to their younger age. Compared to last year's participants, income levels were slightly higher for doula families (84% vs. 87%), but essentially equivalent for HV participants. These trends will need to be monitored over the next few years to determine if changing income levels reflect improving employment status or gaining access to other income sources due to changes in a family situation (marriage, partnership, living with parents).

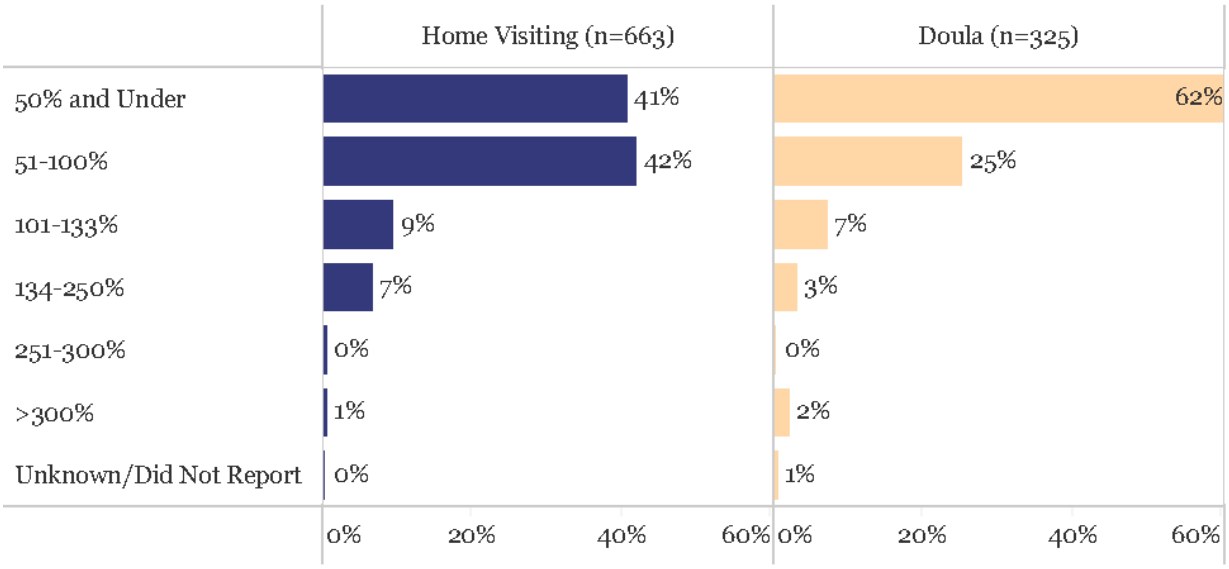


Figure 10: Caregiver Household Income by Federal Poverty Guidelines

Caregiver Educational Attainment

The percentage of caregivers without a high school degree remains relatively high, which is a substantial barrier for individuals who need living wage income to support their families (**Figure 11** below). In fact, 69% of participants receiving HV services and 82% of doula participants have only a high school education or less, which places them at a major disadvantage in the current and future workforce. Compared to last year, HV participants report a 2% increase (37% to 39%) of receiving a GED/High School Diploma. Similarly, 2016 doula participants' data report a slight decrease of those caregivers reporting less than a high school diploma (49% to 46%) and a slight increase in the number of doula participants reporting completing a GED/High School Diploma (33% to 36%) compared to 2015. Again, doula participants would be expected to have lower levels of educational completion because they are younger and many are still in high school. However, many doula caregivers that are currently enrolled in high school are challenged by their new family circumstances. A key goal for MIECHV is to support caregivers to graduate from high school and obtain some post-high school education or training that will better prepare them for gainful employment.

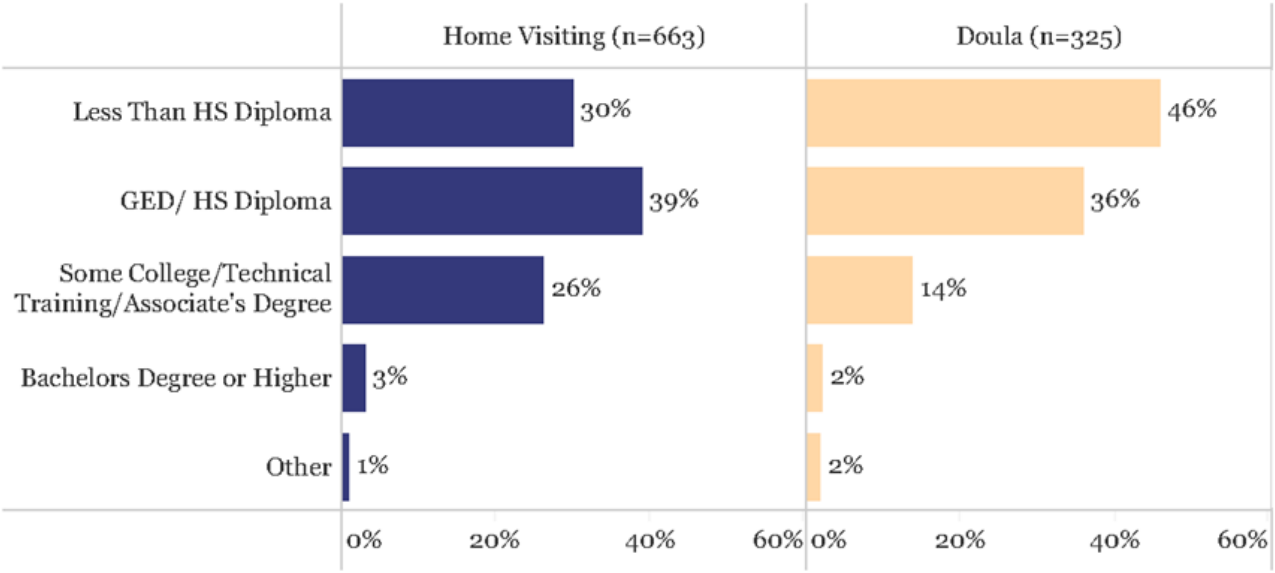


Figure 11: Caregiver Educational Attainment

Insurance Status by Caregiver

Access to health care services and providers is a fundamental need for vulnerable caregivers and young children. The lack of health insurance and subsequent primary care services creates significant risks to the health and well-being of both mothers and children. After four years of MIECHV funding, a majority of home visiting and doula participants continue to have health insurance at program enrollment (**Figure 12**). Most participants are insured through state programs (Medicaid and the Illinois' Children's Health Insurance Program (CHIP), with the exception of 21% of caregivers who report having no insurance. This is actually a 3% increase from 2015 to 2016 (18% to 21%), and indicates that approximately 140 caregivers do not have health insurance. This lack of health insurance for caregivers is likely related to undocumented adults who care for their children or grandchildren, unemployed, employed without insurance or not eligible to receive Medicaid or Medicare. By contrast, almost all pregnant women receiving HV and Doula services are covered by health insurance (95% and 98%) and show a slight decrease from last year 7% to 5%, and 3% to 1% respectively.

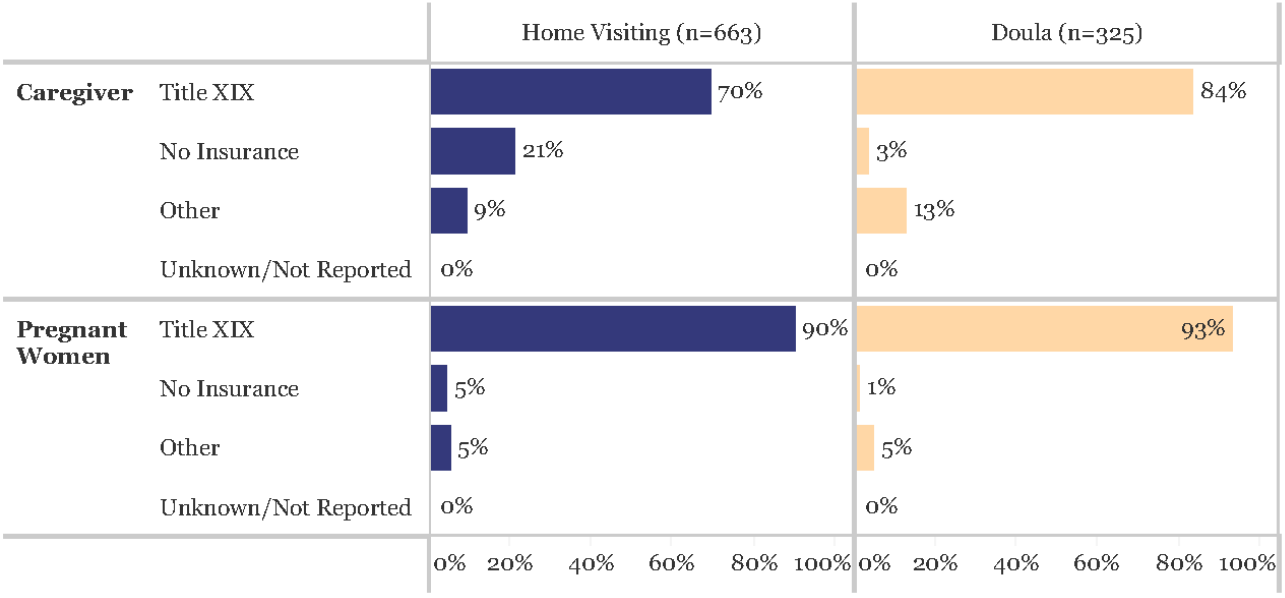


Figure 12: Insurance Status by Caregiver

Insurance Status by Child

Nearly 100% of children enrolled in both HV and doula programs have health insurance (**Figure 13**). The vast majority (90%) are insured through Medicaid (Title XIX) and the State Children's Health Insurance Program (CHIP) at the time of their MIECHV program enrollment. Only 1% of HV children report being uninsured, which was the same as last year. All doula participants, who are enrolled while the mother is pregnant, report having insurance for their children.

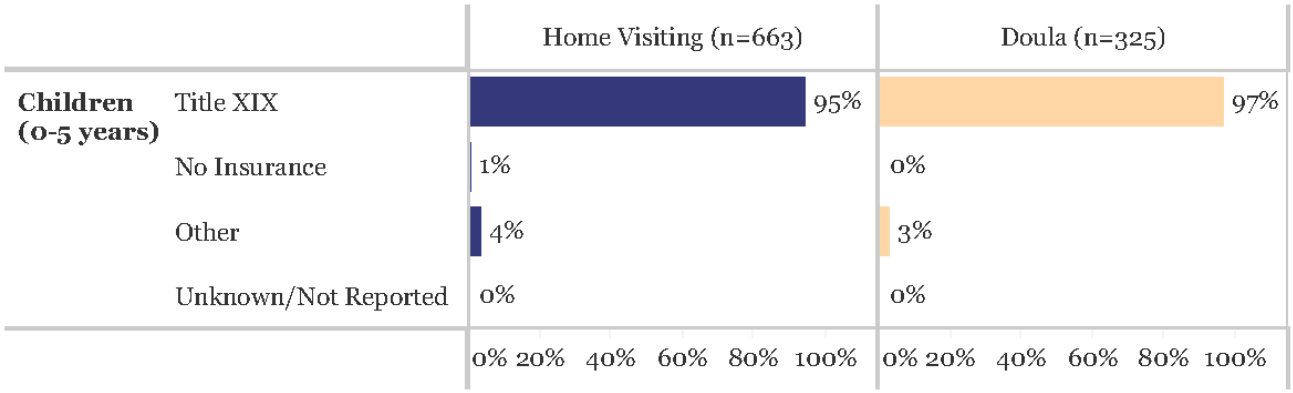


Figure 13: Insurance Status by Child

III. MIECHV Performance Benchmarks, 2016

The primary efforts for assessing, tracking and monitoring the quantity and quality of HV services are linked to the HRSA Performance Benchmarks (PBs). HRSA's benchmarks are comprised of six domains with 33 system, process and outcome indicators designed to ensure and improve the quality of HV services. The MIECHV six superordinate benchmarks are listed below.

- Improve maternal and newborn health;
- Reduce child injuries, neglect, and Emergency Department (ED) visits;
- Increase school readiness and academic achievement;
- Prevent, identify, and treat domestic violence;
- Increase family economic self-sufficiency; and
- Increase completion of referrals to needed services.

Each of these six broad benchmark areas consists of three to eight process or outcome indicators related to the particular construct area. These indicators measure topics ranging from whether a home visiting participant has received information, completed a service or achieved behavior change. Examples include receiving information (injury prevention, birth spacing, and community resources), undergoing screenings (domestic violence, depression, and child development) and accessing recommended health and social services (prenatal care, well-child visits, etc.). These MIECHV PBs measure knowledge and behaviors that have the potential to facilitate improved outcomes over time for MIECHV families. The performance benchmarks calculation is created by identifying the number of families who receive an activity or service (numerator) compared to the number of HV participants who were eligible for receiving that service during that time frame (denominator). Contingent upon the type of service or activity, the benchmark should trend in the direction of improvement whether an increase (more mothers breastfeed) or reduction or decrease in a behavior or practice (fewer child injuries). These benchmarks may represent a timeframe, age, post-event and a variety of other critical indicators. The best way to examine Illinois MIECHV benchmarks over the past four years is to first recognize that not all benchmarks are created equal. That is, attaining one benchmark may be associated with more or less difficulty compared to completing a different benchmark. For example, getting a caregiver to adopt breastfeeding for their newborn is far more challenging than distributing information to a family regarding contraception or safety practices.

As mentioned earlier, the broad performance benchmark areas were outlined and approved by HRSA in the original MIECHV grant application, but states had to identify key measures and indicators that "fit" benchmark criteria. Thresholds or attainment levels for benchmarks are based on best practices, and recommendations from professional health and governmental organizations (CDC, 2013; Bright Futures Steering Committee, AAP). Benchmark data are collected from multiple sources using a variety of methods. Home visitors enter basic participation, demographic and service data into the online Visit Tracker (VT) data system that has been tailored to accommodate Illinois MIECHV's benchmarks. Data related to child abuse and neglect are acquired from the Illinois Department of Children and Family Services (DCFS). Lastly, the evaluation team's field data collectors (FDCs) continued to collect the five key measures: Knowledge of Infant Development Inventory (KIDI), Home Observation for Measurement of the Environment (HOME), Parenting Stress Index (PSI), Parent Satisfaction Survey (PSS), and Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO), to incorporate into several school readiness and academic achievement benchmarks.

The benchmarks that were part of the FDC data collection protocol will no longer continue as most were eliminated or changed due to the reduction in benchmarks for FY2017. This also meant that for 2016, FDCs were primarily focusing data collection on the one-year post-enrollment and two-year follow-up results. In other words, baseline data was no longer collected using the field data collection protocol after October 1, 2015 and the final field data collection was wrapped up on September 30, 2016.

The performance benchmarks for 2016 presented in this report were collected from October 1, 2015 through September 30, 2016. This year's benchmark data analysis builds on the prior three years, and the trend line data are presented where appropriate. HRSA requires states to submit HV benchmarks combining both HV and doula grants in the annual Discretionary Grant Information System (DGIS) report. We have aggregated these and present them in the next section. A FY2016 Benchmark Glossary for both home visiting and doula programs provides more information about the MIECHV benchmarks. Finally, it should be recognized that Illinois' MIECHV program has been able to meet or exceed HRSA's annual benchmark requirements for the past four years.

Benchmark 1: Improving Maternal and Newborn Health

The health of the mother and child during pregnancy, delivery and postnatally are critical for getting a healthy start in life for both parent and child. The first category or broad construct of performance benchmarks is related to maternal and newborn health, targeting six evidence-based family-completed activities and services that home visitors provide to families during home visits. **Figure 14** shows benchmark reports for the past four years through FY2016.

Overall, both home visiting and doula programs show considerable improvements in these important areas, which continued through 2016 for most indicators. Illinois MIECHV staff have been increasingly successful in supporting families receiving pre-natal and well-child visits, and providing postpartum contraception information, inter-birth interval education, and depression screens, as well as maximizing insurance coverage for mother and child. One construct, insurance coverage (**Figure 14 - 1.8**), appears to be limited by undocumented families who cannot receive federal and state health insurance.

Several benchmarks continue to be stubbornly difficult to move in the intended direction. For example, the breastfeeding construct remains in the mid to upper 20% range, which if below the intended goal for MIECHV. Getting women to adopt and continue breastfeeding for at least six months requires addressing a complex array of personal, cultural, situational and environmental factors. Many factors that impede or support the adoption and use of breastfeeding are based on the settings in which families live and work. Breastfeeding continues to be a challenging benchmark that is part of many CQI plans and efforts.

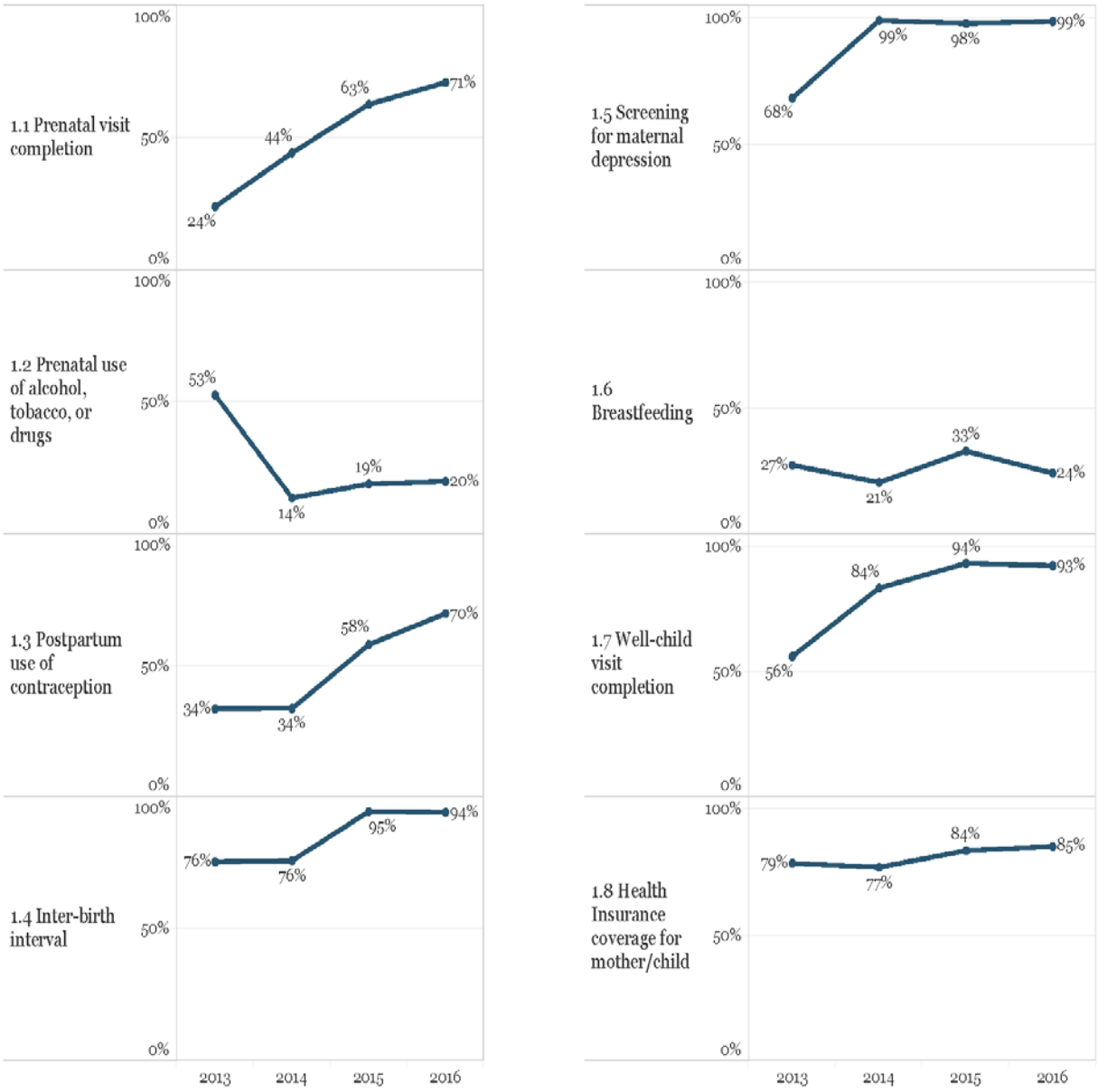


Figure 14: Benchmark 1: Improving Maternal and Newborn Health

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

The health and safety of children and families is often affected by the exposure to hazardous settings, child neglect and abuse. Research has demonstrated that home visiting programs can impact these outcomes through health and safety education about safe home settings, safe practices and addressing parent-child stressors (Olds, Kitzman, Knudtson, Anson, Smith, & Cole, 2014; Peacock, Konrad, Watson, Nickel & Muhajarine, 2013).

This overarching benchmark (**Figure 15** below) identified safety education, parental behaviors (abuse and neglect) and manifestations of safety failures through family use of medical services, with a focus on the emergency department (ED) utilization, which typically reflects far more serious injuries or illness and a significantly more expensive way to use the health care system as compared to seeing a pediatrician or primary care provider.

HV dissemination of safety information to families within the first three months of program enrollment was a benchmark that reached 96% of the caregivers. This information focuses on practices to prevent child injuries, and keep children and households safe. This benchmark attainment has remained in the high 90% range over the past two years.

The second series of indicators focuses on child injuries and illnesses that require medical treatment, and use of the ED by mothers and children. Children's injuries requiring medical treatment remain at the lowest level in four years at 2%, while mothers' use of the ED increased to 12%, the highest in four years. The most disconcerting benchmark was a modest increase in using the ED for all causes to 21% in 2016. Although this was only a modest increase of 3% from 2015, it does suggest that 1 in 5 MIECHV children still end up in the ED, and the ED is used as a major source of health care services. This issue has been identified in past years and may need to continue to be understood, to enable home visitors to provide education or help guide parents in the health care decision making process.

The final list of indicators relate to reports of child neglect and maltreatment to the Illinois Department of Children and Family Services (DCFS) – first reports, suspected and substantiated. Despite some variability, these indicators have also remained low over time. These numbers continue to remain in the low single digits (5% or less), with the exception of first report, which ranges from 6-11%, with 2016 reported at 10% or 1 in 10 MIECHV children. As with the Emergency Department visits, because the number of DCFS reports is small, these results must be interpreted with caution.

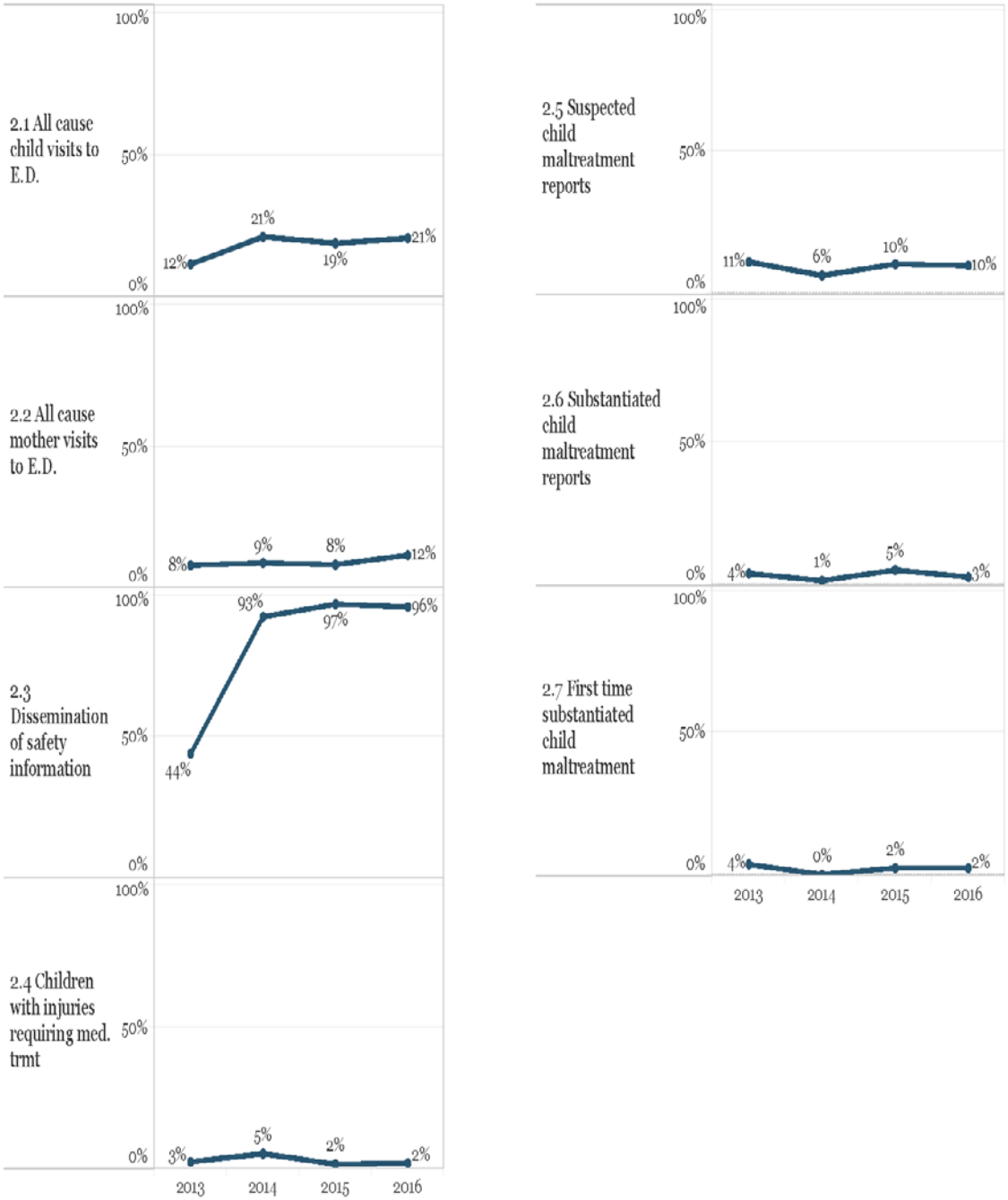


Figure 15: Benchmark 2: Reduction in Child Injuries, Neglect, and ED Visits

Benchmark 3: Increasing School Readiness and Academic Achievement

Research has continued to demonstrate that child development is significantly influenced in utero, infancy and early childhood by parent behaviors and practices. Neuroscience has been able to capture and describe the role that parent-child interactions and safe environments play in promoting brain development that results in improved outcomes for learning and social-emotional functioning. This benchmark focuses on the parental role, parent-child interactions and the environment that a child experiences in the first five years of life, and how a child progresses through various developmental milestones. The first three benchmark constructs (3.1, 3.2, and 3.3) capture support for child learning, parent knowledge of child development, and parent-child interactions. Construct 3.1 shows a steady increase over the past four years of Illinois MIECHV, while the parent knowledge of child development (3.2) has steadily increased, but remains at 36% with correct responses. The KIDI scale, used to measure this construct, is challenging both because it requires a high reading level, and it includes cognitively complex concepts. This makes the KIDI an excellent discrimination measure (good test), but is difficult to read and understand for many people. Constructs 3.5-3.7 report the percent of children who received the Ages and Stages developmental assessment between 10 and 14 months of age. Children identified with developmental delays through these screenings are either monitored for delays and re-assessed, or referred for a more intensive assessment that may ultimately result in receiving early intervention services.

Construct 3.4 under this benchmark is an assessment of caregiver stress using the Parenting Stress Index (PSI), which was a required measure for all MIECHV participants. Shown in **Figure 16** (3.4) below, 100% of MIECHV participants receiving the PSI assessment reported below the high stress threshold for 2016, which is the same as the previous years' report.

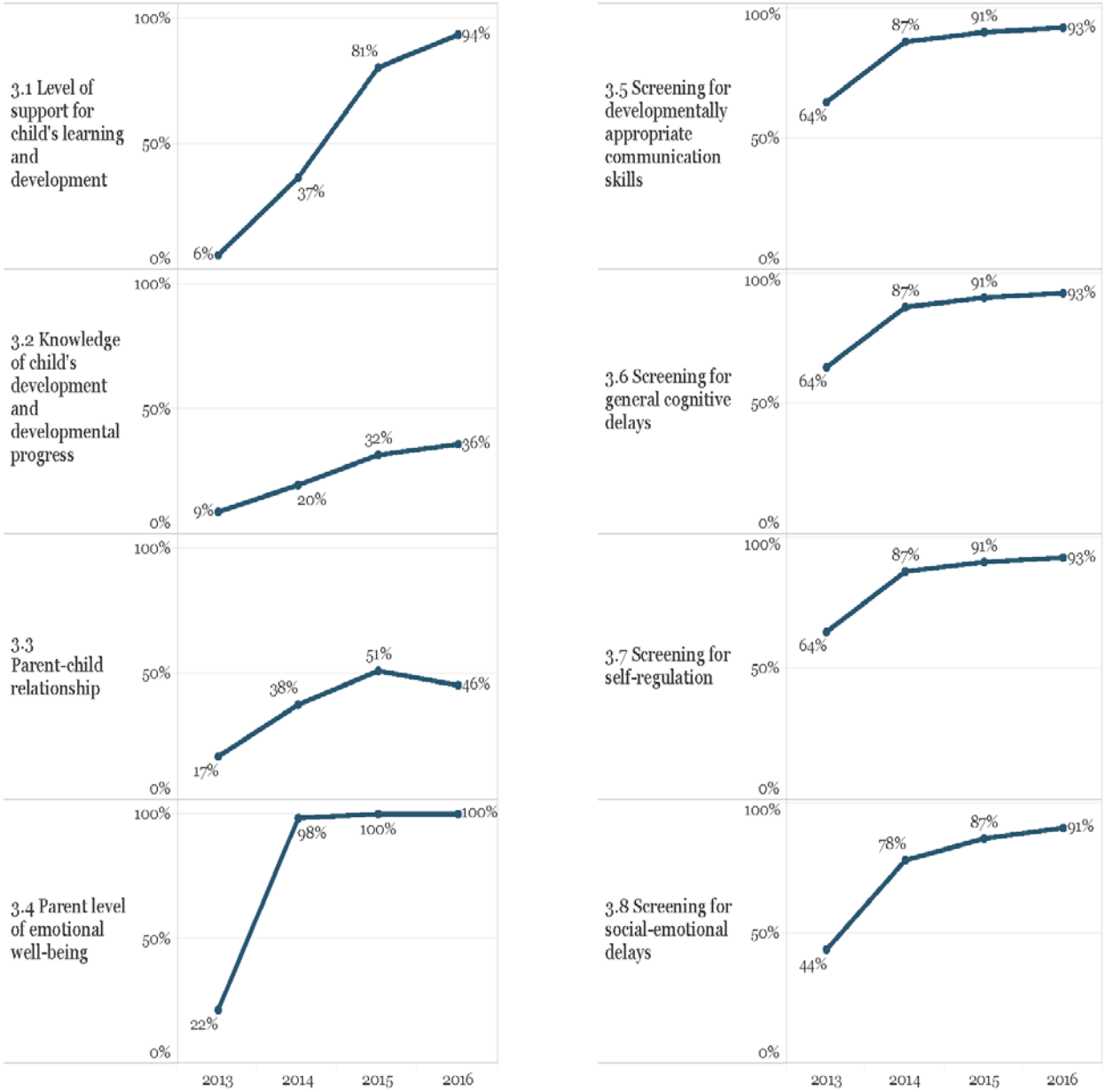


Figure 16: Benchmark 3: Increasing School Readiness and Academic Achievement

Benchmark 4: Preventing, Identifying, and Treating Domestic Violence

One of the most toxic and damaging effects on young families is a household permeating with hostility, dysfunction and violence (Holt, Buckley, & Whelan, 2008). Specifically, intimate partner violence (IPV) is a noxious and destructive behavior that also contributes to negative consequences for children (Abajobir, Kisely, Williams, Clavarino, & Najman, 2017).

The fourth PB (**Figure 17**) consists of three constructs related to preventing, identifying, and treating domestic violence. Screening for IPV, using the Futures Without Violence (FWV) assessment, reached 100% for 2016, which means that all MIECHV participants were screened. Ninety percent of families with positive screens on the Futures assessment received referrals to appropriate community resources. This was a 10% decrease from the prior years. Even more surprising was the substantial drop in safety plan development with IPV identified families, from 100% to 56% between 2015 and 2016. While this measure includes small numbers (N=9), this precipitous decrease requires a more in-depth understanding of how and why this occurred last year.

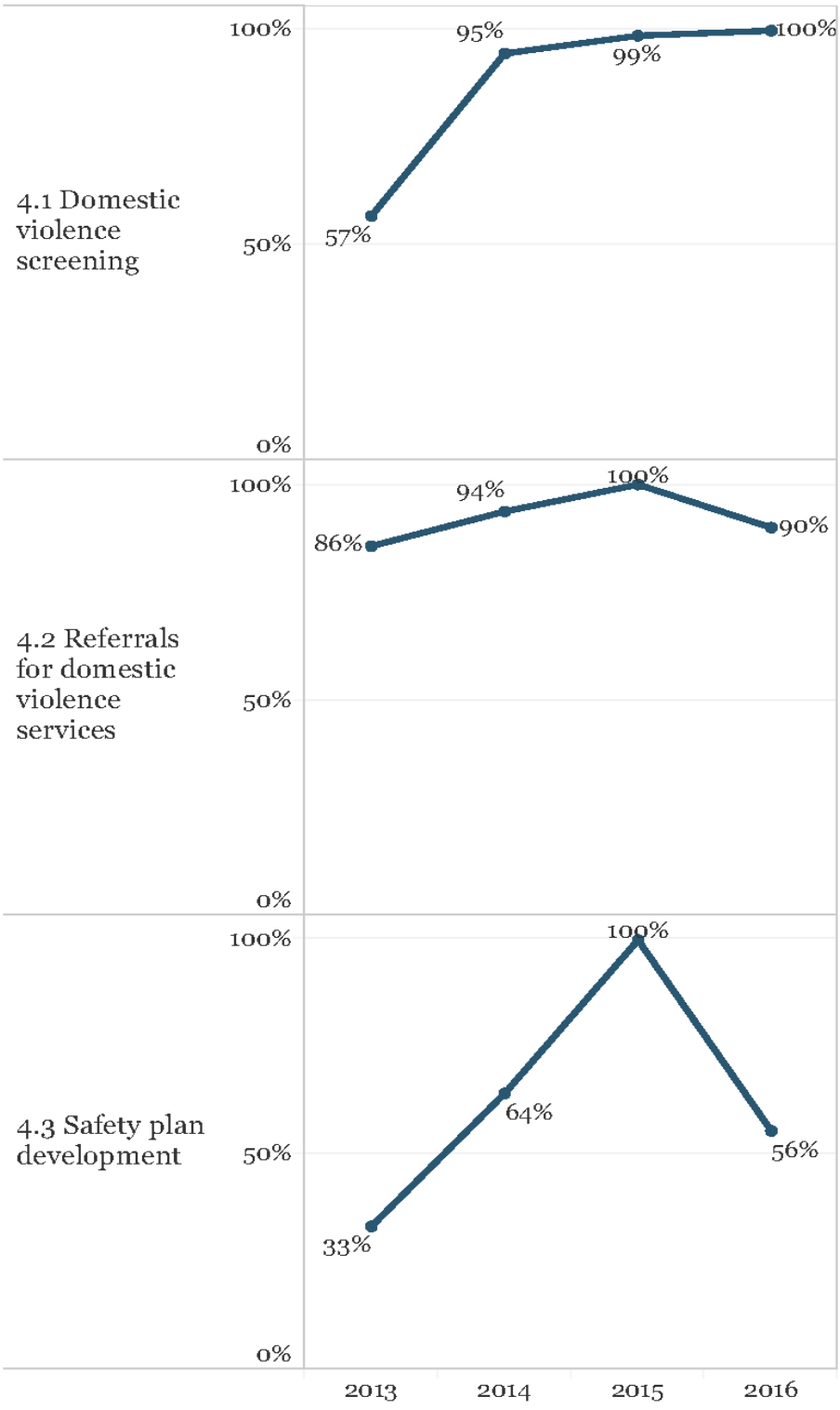


Figure 17: Preventing, Identifying, and Treating Domestic Violence

Benchmark 5: Family Economic Self-Sufficiency

The fifth group of benchmarks (see **Figure 18**) is related to measures and conditions of family and economic self-sufficiency. HV programs have demonstrated the potential to increase employability, employment and income (Minkovitz, O'Neill & Duggan, 2016).

Construct 5.1 measures whether income and benefits increase during a family's first year in home visiting. This is a particularly challenging construct to achieve, given that many women enrolled in home visiting programs are not currently in the workforce or in school. For 2016, family income slightly declined for caregivers receiving HV services. Over 50% of caregiver households report an increased income, but this was down 4% from 2015.

Despite this small decrease, the percent of household members who achieved an education-related goal (construct 5.2) increased by 17% from the prior year, which may reflect both greater initiative and broader opportunities in Illinois communities.

Health insurance is a critical resource for all families, particularly those in disadvantaged settings. Health insurance provides access to health care, which assures families and children the opportunity to acquire health promotion, preventative, and critical health services when needed.

Construct 5.3 measures whether the primary guardian, all children, and any additional guardian residing in the home have insurance coverage. Family insurance coverage for HV participants was essentially the same as last year at 78%.

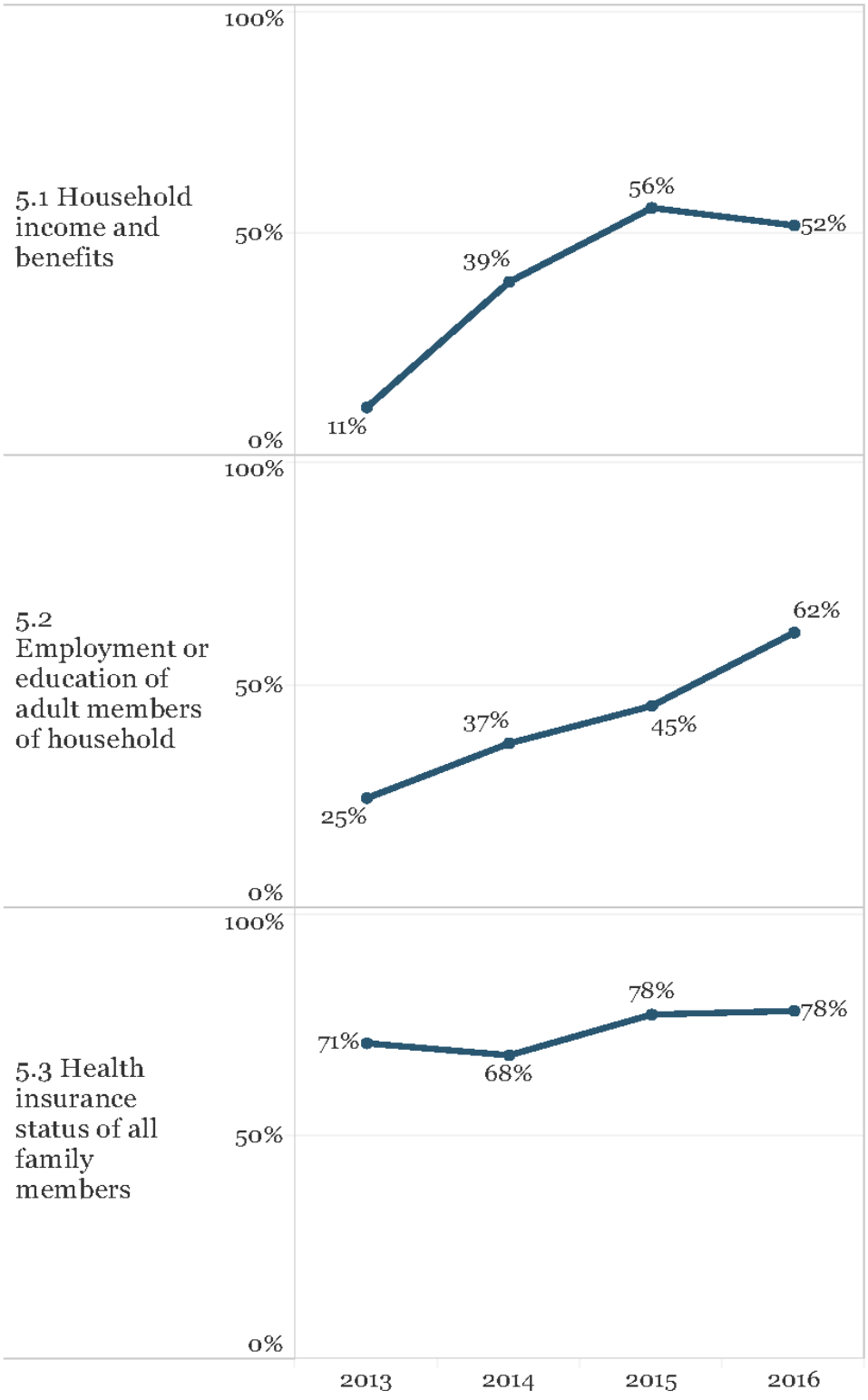


Figure 18: Family Economic Self-Sufficiency

Benchmark 6: Increasing Completion of Referrals to Needed Services

A major challenge for HV programs is ensuring a match between the service needs of the participants with the service availability and acceptability in their community. HV programs conduct a number of assessments that may result in the identification of service needs beyond what a home visitor can provide. As mentioned above, these include screenings for IPV, alcohol and drug use, symptoms of depression, and child developmental delays, as well as assessing basic family resources such as housing, food, or social services. Benchmark 6 (**Figure 19**) reflects the result of an assessment that was conducted by the HV and whether the caregiver was identified with a need, referred to a needed service, and whether the referral was followed-up on and services were received.

Four different assessments are included in this benchmark. The ASQ-3 and ASQ-SE for developmental delays, Edinburgh Postnatal Depression Scale (EPDS) to assess women for depression at least once between their third trimester of pregnancy and two months postpartum, and the FWV screening for domestic violence, conducted in the first year of program enrollment.

The first construct (6.1) reports on whether caregivers and families have been screened with the appropriate assessments during their first year of enrollment. Each screening tool has a targeted timeframe for administration. Results show that these screenings were completed for 100% of the participants for the third year in a row.

The next construct (6.2) focuses on whether caregivers or families with positive screens – indicating need for additional services – receive referrals to appropriate community resources from their home visitors. For 2016, Illinois MIECHV was able to increase the percent of participants receiving referrals to services by 7% from 86% to 93%. Making referrals to critical services and medical specialists is often challenging because of availability, cultural appropriateness, transportation and stigma.

The final and most critical construct for this benchmark is whether families who received referrals to community resources actually receive and complete services. That ability to complete services has been somewhat erratic with significant fluctuation over the past four years, with a 42% increase to 92% in 2016. This significant gain may reflect greater knowledge of resources in the communities, stronger partnerships across agencies and organizations or more serious needs that require services.

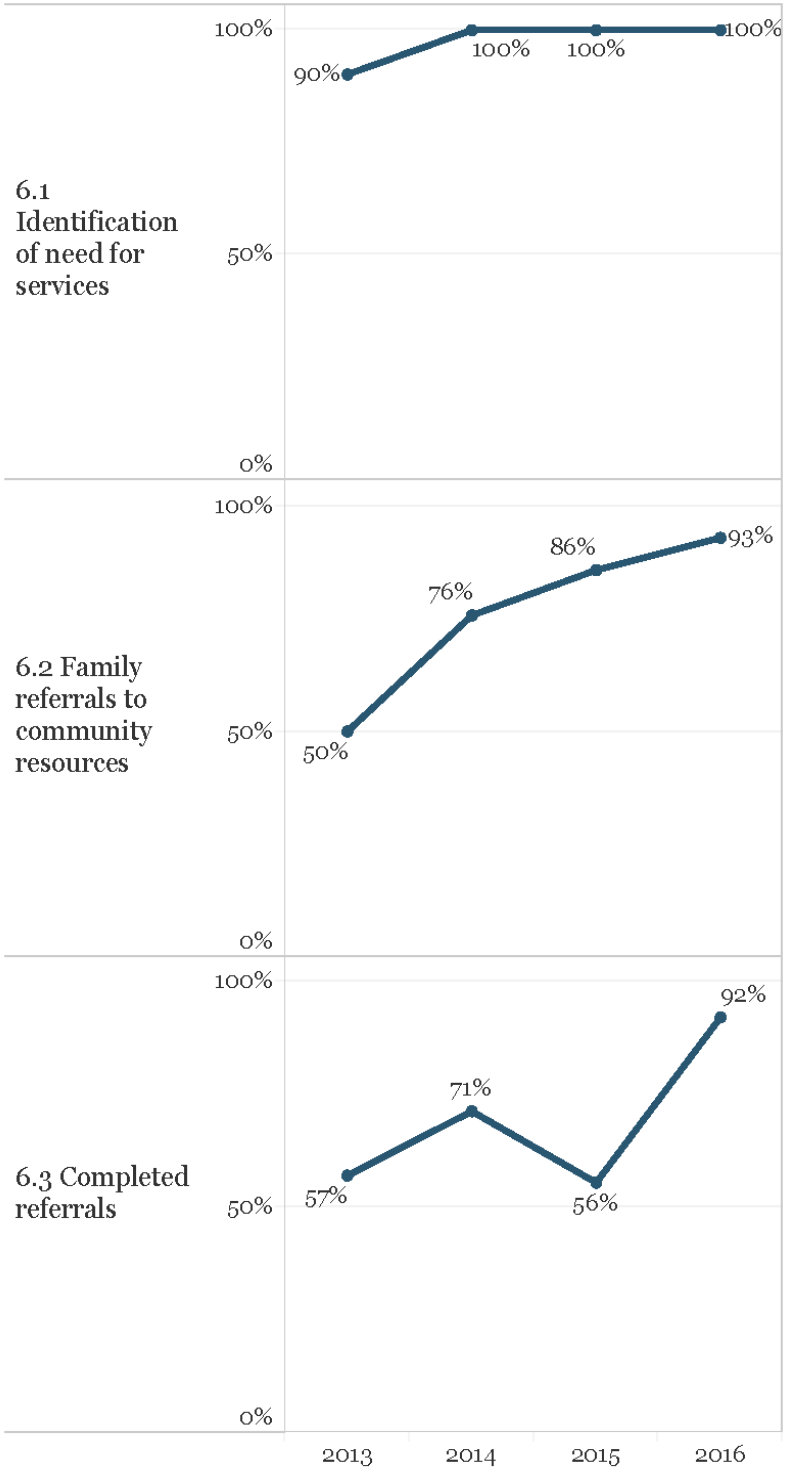


Figure 19: Increasing Completion of Referrals to Needed Services

IV. MIECHV Immediate and Intermediate Outcomes: One year follow-up

Background

In addition to collecting benchmark data for the required HRSA performance benchmarks described above, the Illinois MIECHV program evaluation has completed a deeper analysis of data collected from in-home assessments that captured various aspects of the parent-child relationship and home environment. The assessments were conducted by the evaluation teams' field data collectors (FDCs) who received extensive training and continuing education for conducting these assessments. Although only a small percent of the caregivers remained in the program for two full years, a large number remained for one full year. Similar to performance benchmarks, this data was used to conduct overall analysis of the HV programs, and identify key challenges that could be addressed as part of the CQI process.

The major evaluation goals for MIECHV are guided by research questions that seek to assess the impact of high-quality home visiting programs on short- and long-term outcomes for families and children.

1. What impact does HV have on these immediate and intermediate outcomes?
2. What factors facilitate or inhibit the effects of HV programs on these outcomes?

Although the long-term effects of MIECHV programs are beyond the scope of the current evaluation, and this evaluation plan lacks a control group, MIECHV programs are geared toward targeting immediate and intermediate age-appropriate, developmental outcomes or milestones that have previously demonstrated the effectiveness of these model programs. Moreover, these short-term outcomes show that when families and children are on track to attain antecedent outcomes, this increases the likelihood that they will attain longer term impacts. This section reports the MIECHV immediate and intermediate outcomes over one and two years of participation. The data collection methodology and procedures are delineated in prior versions of this MIECHV Annual Report (2013A).

Data Collection Measures and Methods

HRSA required states to use standardized, validated measurement tools for assessing benchmarks. As part of Illinois' MIECHV grant submission, five widely used and highly regarded measures were adopted and utilized over four years of the project. The five measures used in the field data collection included: Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO), Home Observation

for Measurement of the Environment (HOME), Knowledge of Infant Development Inventory (KIDI), and Parenting Stress Index (PSI); and FDCs also administered a Parent Satisfaction Survey (PSS). Again, each standardized measure assessed one or more of the required HRSA benchmarks. The evaluation team's field data collectors (FDCs) administered the measures to caregivers at baseline entry into the HV program, and at 1 and 2 year follow-ups.

Psychometric Properties for Illinois MIECHV Measures

A critical part of ensuring high quality measurement tools is conducting a series of psychometric analyses to ensure these measures remain reliable and valid with the Illinois MIECHV population. The raw and standardized Cronbach alphas for the total measurement score and the subscale scores are provided below in **Table 1**. Overall, the total alphas range from a high of .93 for the Parenting Stress Index to a low of .79 for the KIDI, both of which are in acceptable ranges.

Table 1: *Reliabilities (Cronbach's Alpha) for MIECHV Baseline Assessments*

	Cronbach's alpha	
Survey	Raw	Standardized
HOME (n=822)	0.82	0.82
a) Responsivity	0.67	0.70
b) Acceptance	0.82	0.86
c) Organization	0.29	0.30
d) Learning Materials	0.69	0.70
e) Involvement	0.64	0.61
f) Variety	0.48	0.46
KIDI (n=1036)	0.79	0.79
PICCOLO (n=707)	0.90	0.90
a) Affection	0.69	0.70
b) Responsiveness	0.68	0.68
c) Encouragement	0.78	0.77
d) Teaching	0.79	0.80
PSI (n=871)	0.93	0.93
a) Difficult Child	0.86	0.86
b) Parental Distress	0.87	0.88
c) Parent-Child Dysfunction	0.84	0.86

Knowledge of Infant Development Inventory (KIDI)

The KIDI assesses parent knowledge and beliefs related to infant and child development that have demonstrated positive relationships with supportive parenting practices and child outcomes (MacPhee, 1981; Benasich, & Brooks-Gunn, 1996). Caregivers respond to a series of fifty-eight questions asking whether they agree or disagree with each statement. High KIDI scores have been associated with improved parenting skills and child outcomes, including child IQ (Benasich & Brooks-Gunn 1996). The results of the KIDI show statistically significant improvements for five of the six MIECHV communities and doula programs (see **Figure 20**). It is interesting to note that Elgin is the only community that did not show improvement on the KIDI, and in fact, it decreased slightly over the one-year time period. The evaluation team believes this modest decrease may be related to the large number of Elgin families who are Hispanic/Latino, and where English is a second language, as well as low literacy levels. The KIDI assessment was translated into Spanish, however many child development concepts may have been more challenging to understand or culturally obscure for Spanish-speaking caregivers.

Region	N	Mean Score Y1	Mean Score Y2	P-Value
Illinois MIECHV	461	35.1	37.5	<.001
Cicero	102	35.1	37.5	<.001
Elgin	65	35	34.7	0.654
Englewood	66	33.4	35.3	0.009
Macon	72	36.9	40.8	<.001
Rockford	82	34.2	37.5	<.001
Vermilion	46	36.6	38.8	0.020
Doula	28	35.5	38.1	0.017

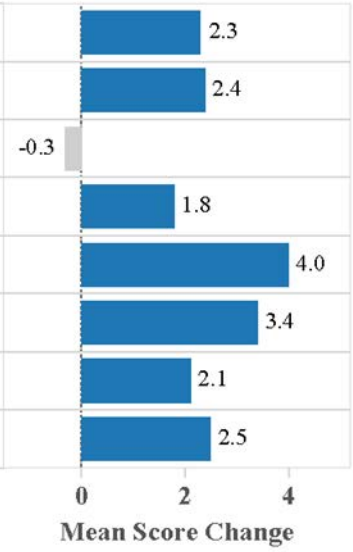


Figure 20: KIDI Score by Community by 1 year follow-up

KIDI Item Level Changes

To help stakeholders understand the degree to which caregivers improve on the KIDI measures, we also provide item or question level responses over a 1 and 2 year period. This granular level of reporting can and has been used by the HVs and CQI teams to better understand the specific concepts caregivers may not know or that need additional education and/or clarification. Whether a caretaker correctly answers or misses one specific item alone may not be that important, but it's the totality of a KIDI score that has shown positive outcomes for parents and children (MacPhee, 1981; Winter, Morawska, & Sanders, 2012; September, Rich, & Roman, 2015). However, the KIDI authors note that "knowledge of (child) development is most likely to change as a result of fairly intensive education on norms and principles, not as a result of more general parent education that focuses on child-rearing practices" (MacPhee, 1981, p. 23). **Table 2** shows the KIDI assessment with the 58 single items covering a wide variety of knowledge and child development topics.

Results are presented for three years of matched KIDI data, and are color coded with green and red. Green shows a 5% or more increase from year to year, and the red show less than a 5% increase or even a small decrease. We have highlighted them to provide some sense of directionality. We have also identified a number of items that for some reason have not changed much or remained difficult for caregivers to answer correctly, or that we would like to see almost everyone get correct.

Table 2: *Statewide KIDI Assessment by Items: % Change in Correct Response, Baseline to 1 and 2 Year Follow-up (n=461; n=156)*

Item	Y1	Y2	Change	Y1	Y2	Y3
1. When toddlers are strongly attached (bonded) to their parents, they are more clingy and tend to stick close to mom or dad.	15.2%	18.0%	2.9%	13.5%	12.9%	5.1%
2. A 2-year-old who is 2 or 3 months behind other 2-year-olds is retarded.	87.1%	93.9%	6.8%	82.6%	93.0%	93.6%
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").	73.0%	74.6%	1.6%	75.5%	71.8%	77.4%
4. Babies should not be held when they cry because this will make them want to be held all the time.	72.8%	72.1%	-0.8%	66.7%	69.2%	69.2%
5. If a baby (less than a year) wants a snack, give it nuts, popcorn, or raisins.	90.7%	94.1%	3.5%	92.3%	94.9%	91.0%
6. Babies do some things just to make trouble for their parents, like crying a long time or pooping in their diapers.	90.7%	93.9%	3.3%	87.7%	92.3%	93.0%
7. If you punish children for doing something naughty, it's okay to give them a piece of candy to stop the crying.	87.6%	92.6%	5.0%	85.8%	91.7%	93.6%
8. You must stay in the bathroom when your infant is in the tub.	96.5%	98.9%	2.4%	95.5%	98.7%	98.1%
9. Babies cannot see and hear at birth.	76.9%	79.3%	2.3%	75.0%	75.5%	84.6%
10. Infants understand only words they can say.	74.8%	84.1%	9.2%	65.2%	84.5%	83.3%
11. If children are shy or fussy in new situations, it means they have an emotional problem.	80.0%	84.9%	5.0%	76.3%	83.9%	87.1%
12. Talking to a child about things he (she) is doing helps its mental development.	92.0%	94.1%	2.1%	93.6%	92.9%	94.9%
13. A two-year-old who says "NO!" to everything and bosses you around is trying to get you upset.	80.5%	84.8%	4.3%	73.1%	84.0%	84.6%
14. The way a child is brought up has little effect on how smart he (she) will be.	56.0%	57.4%	1.4%	54.5%	53.6%	53.2%
15. Babies may cry for 20-30 minutes at a time, no matter how much you try to comfort them.	45.9%	48.3%	2.4%	51.6%	46.5%	50.6%
16. Once kids turn 3 or so, they become less defiant and negativistic— "No, I don't want to!"	38.3%	36.7%	-1.6%	31.0%	40.0%	35.5%
17. A toddler who's energetic—always on the go—needs a low-sugar diet or Ritalin.	55.3%	59.5%	4.1%	55.5%	56.1%	58.3%
18. Babies have little effect on how parents care for them, at least until they get older.	62.1%	61.3%	-0.7%	61.9%	52.3%	60.9%

Item	Y1	Y2	Change	Y1	Y2	Y3
19. When putting babies in the crib for sleep, place them on their back, not stomach.	90.0%	92.6%	2.6%	91.7%	93.6%	91.6%
20. A 3-1/2-year-old boy who wets the bed has a problem that should be seen by a doctor.	58.1%	67.8%	9.8%	56.1%	64.7%	71.2%
21. A brother or sister may start wetting the bed or thumb sucking when a new baby arrives in the family.	34.6%	42.8%	8.2%	32.3%	40.0%	49.4%
22. New foods should be given to the infant one at a time, with 4-5 days between each one.	66.5%	79.5%	13.0%	62.8%	77.3%	80.8%
23. The 2-year-old's sense of time is different from an adult's.	76.4%	73.3%	-3.1%	68.6%	69.9%	81.3%
24. Most premature babies end up being abused, neglected, or mentally retarded.	85.0%	85.0%	0.1%	82.5%	82.7%	84.0%
25. If babies are fed cow's milk, they need extra vitamins and iron.	24.8%	30.1%	5.2%	26.5%	22.4%	28.9%
26. Some healthy babies spit out almost every new food until they get used to it.	60.1%	66.5%	6.4%	62.8%	61.4%	71.8%
27. The baby's personality or temperament is set by 6 months of age; it doesn't change much after that.	57.3%	61.9%	4.6%	57.4%	57.7%	68.6%
28. Some parents do not bond until their baby starts to smile and look at them.	14.8%	16.5%	1.7%	16.0%	17.3%	15.4%
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.	42.2%	46.7%	4.6%	37.8%	46.5%	56.1%
30. Children learn all of their language by copying what they have heard adults say.	7.4%	6.5%	-0.9%	5.2%	5.8%	9.6%
31. When a baby less than 12 months gets diarrhea, you should give it flat ginger ale or Pedialyte.	45.0%	53.5%	8.5%	43.0%	50.3%	51.9%
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.	69.8%	78.5%	8.7%	68.6%	75.0%	80.1%
33. Some normal kids do not enjoy being cuddled.	29.0%	34.1%	5.2%	25.8%	30.8%	37.4%
34. If a baby has trouble pooping, give it warm milk.	33.2%	43.6%	10.4%	27.7%	37.2%	35.5%
35. The more you soothe a crying baby by holding and talking to it, the more you spoil them.	74.9%	75.5%	0.6%	72.7%	76.9%	71.2%
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.	69.2%	78.3%	9.1%	68.8%	77.4%	74.4%
37. Newborn babies recognize stories and music they heard before they were born.	78.3%	85.6%	7.3%	79.5%	86.5%	85.9%
38. A good way to teach your child not to bite is to bite back.	86.9%	86.9%	0.0%	85.9%	85.8%	84.5%

Item	Y1	Y2	Change	Y1	Y2	Y3
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.	80.9%	82.5%	1.6%	79.5%	81.9%	82.7%
40. Most babies can sit on the floor without falling over by 7 months.	66.1%	77.6%	11.5%	65.4%	78.1%	75.6%
41. Six-month-olds will respond to someone differently if the person is happy or upset.	49.1%	59.0%	9.9%	50.6%	54.8%	49.4%
42. Most 2-year-olds know the difference between make-believe and true stories on TV.	71.2%	76.9%	5.8%	71.8%	76.0%	78.2%
43. Infants usually are walking by about 12 months of age.	79.7%	82.4%	2.7%	75.5%	78.1%	77.6%
44. Eight-month-olds act differently with familiar people than with someone not seen before.	84.1%	82.1%	-2.0%	79.5%	79.5%	79.5%
45. Babies are about 7 months old before they can reach for and grab things.	40.1%	38.6%	-1.5%	42.3%	36.4%	37.2%
46. Two-year-olds are able to reason logically, much like an adult would.	64.2%	69.2%	5.0%	63.5%	63.2%	73.6%
47. One-year-olds know right from wrong.	67.1%	69.9%	2.8%	64.9%	67.1%	76.1%
48. Three-month-olds often will smile when they see an adult's face.	80.4%	78.3%	-2.1%	83.3%	78.7%	74.4%
49. Most children are ready to be toilet trained by one year of age.	56.1%	68.2%	12.1%	52.0%	68.0%	69.0%
50. Infants begin to respond to their name at 10 months.	38.0%	37.6%	-0.3%	41.7%	27.9%	28.4%
51. Babies begin to laugh at things around 4 months.	66.1%	69.1%	3.0%	64.1%	70.3%	74.0%
52. Six-month-olds know what "No" means.	58.6%	66.9%	8.3%	56.2%	66.2%	70.3%
53. Four-month-olds lying on their stomach start to lift their heads.	16.2%	14.2%	-2.0%	16.8%	10.3%	10.4%
54. Babbling ("a-bah-bah" or ""bup-bup") begins around 5 months.	55.9%	65.4%	9.5%	55.8%	64.7%	68.8%
55. Eighteen-month-olds often cooperate and share when they play together.	24.9%	26.0%	1.2%	23.4%	27.7%	29.0%
56. Infants of 12 months can remember toys they have watched being hidden.	57.6%	65.0%	7.4%	61.5%	64.1%	65.8%
57. Babies usually say their first real word at 6 months.	45.5%	49.9%	4.4%	46.8%	52.6%	49.7%
58. Infants will avoid high places, like stairs, by 6 months of age.	47.7%	53.3%	5.6%	49.0%	47.7%	56.1%

Despite the positive overall and item level improvements of 5% or more on 24 of 58 items on the one year follow-up KIDI scores, we also recognize that several key knowledge indicators or concepts may require special attention to avoid any misunderstanding or even danger to the child and family. Many or most participants have correctly answered the questions and many have improved over time, but several key concepts or questions appear to be either not understood by the caregiver or reflect a lack of knowledge. We have identified item level questions we believe are critically important to a caregiver knowledge base and should result in correct scores on that item. We have also identified item level questions where the KIDI score is low or is not improving and should be reviewed for readability, understanding or ways to improve the concept, if it's important to parent knowledge. We have identified a number of KIDI items (below) that may require special attention at the basic knowledge level and should be addressed and reinforced by HVs for everyone or the low-scoring caregivers.

1. When toddlers are strongly attached (bonded) to their parents, they are more clingy and tend to stick close to mom or dad.
   Concept: Bonding does not mean clingy.
14. The way a child is brought up has little effect on how smart he (she) will be.
   Concept: Parenting plays a major role in a child's learning and brain development.
15. Babies may cry for 20-30 minutes at a time, no matter how much you try to comfort them.
   Concept: There is a range of behaviors that can be considered "typical."
16. Once kids turn 3 or so, they become less defiant and negativistic— "No, I don't want to!"
   Concept: It is common for 3-year-olds to be defiant and say "no" as part of typical development.
21. A brother or sister may start wetting the bed or thumb sucking when a new baby arrives in the family.
   Concept: Certain behaviors are "typical" reactions to stressful events.
25. If babies are fed cow's milk, they need extra vitamins and iron.
   Concept: Babies nutritional needs cannot be met with cow's milk alone (unlike formula).
28. Some parents do not bond until their baby starts to smile and look at them.
   Concept: Bonding and attachment do not begin automatically at birth
33. Some normal kids do not enjoy being cuddled.
   Concept: Children can have differing levels of need for comfort with physical touch.
41. Six-month-olds will respond to someone differently if the person is happy or upset.
   Concept: Young children recognize facial expressions, and can distinguish between happy and angry body language at six months.
53. Four-month-olds lying on their stomach start to lift their heads.
   Concept: Certain physical developmental milestones are typically achieved at specific ages.
58. Infants will avoid high places, like stairs, by 6 months of age.
   Concept: Young children need supervision and may not recognize danger.

Home Observation for Measurement of the Environment (HOME)

The HOME survey is a widely used, validated measure for assessing parent-child interactions and environments for children. The MIECHV project uses the Infant-Toddler version of the HOME (IT-HOME). The IT-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. The total HOME scale score has demonstrated strong psychometric properties and is associated with positive parent and child cognitive and social outcomes (Bradley & Caldwell, 1984; Caldwell & Bradley, 2003).

Figure 21 shows the Illinois MIECHV baseline (Y1) and one-year follow-up (Y2) by the total participants and the six targeted communities. First, it should be noted that baseline differences exist (30.5-38.6) that likely represent differences of participant populations and community demographics. For example, the doula families scored highest at baseline and one-year follow-up, but these increases were not statistically significant; this may be due to having less room to improve, also known as the "ceiling effect." However, each of the other MIECHV communities demonstrates statistically significant outcomes, including the state total HOME score. Unfortunately, no national norms are available for comparison. However, a number of studies of high-risk populations have used the HOME with the Infant-Toddler Scale, and have reported an average of 30.9 (Bradley & Caldwell, 2003). This suggests that significant gains have been made over the one-year time period, while some of the variation may be attributable to the age and normal development of the child.

Region	N	Mean Score Y1	Mean Score Y2	P-Value
Illinois MIECHV	371	35	37.7	<.001
Cicero	81	34.2	36.3	<.001
Elgin	61	36.2	38.9	<.001
Englewood	28	30.8	36	<.001
Macon	60	35.6	38.8	<.001
Rockford	71	33.3	36.7	<.001
Vermilion	43	36.9	38.5	0.020
Doula	27	38.4	39.1	0.452

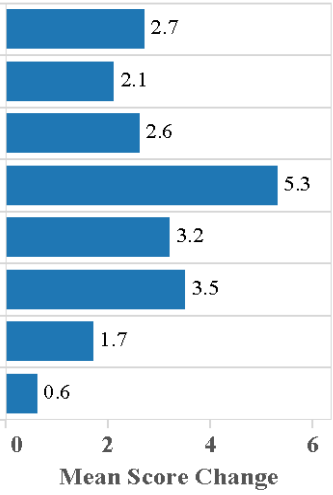


Figure 21: HOME Score by Community by 1 year follow-up

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 the FDCs, who video record a ten-minute casual, unscripted parent-child interaction activity. Videos are returned to the University of Illinois for review, scoring, and analysis. A quarterly tested-retest reliability analysis was conducted by a subset of trained scorers. The four domains that comprise the PICCOLO include:

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); and
4. Teaching (shared conversation and play, cognitive stimulation, explanations, and questions).

The PICCOLO scale has also been well validated, linking scale scores conducted in the first three years of life with positive improvements in both cognitive-language and social outcomes assessed at pre-kindergarten. These associations have been stable across multiple cultures, including Latino and African American (Roggman, Cook, & Innocenti, 2013; Norman, & Christiansen, 2013).

Results for the PICCOLO assessments are presented for the one year follow-up. The statewide aggregate comparison at 1 years show significant increases at the state level with some variation at the community level. All communities report significant increases (see **Figure 22** below). It is interesting to note that Macon County appears to have a substantially higher baseline PICCOLO score compared the other MIECHV communities, but the Macon County increase at one year follow-up was much smaller than the increase for the other communities. This may be related to a "ceiling effect," as the other five communities and doulas had much lower baseline scores, or a possibility of a systematic bias on the scoring rubric. Data also show that the lowest scoring communities at baseline reported the greatest gains at one year follow-up (Rockford, Elgin and Englewood), which suggest substantive gains in positive parenting behaviors as a result of remaining in the program. Unfortunately, without a control group causality cannot be determined.

Region	N	Mean Score Y1	Mean Score Y2	P-Value	Mean Score Change
Illinois MIECHV	341	31.8	41.1	<.001	9.3
Cicero	60	30.8	41.4	<.001	10.5
Elgin	58	27.7	38.3	<.001	10.6
Englewood	31	28.1	39.8	<.001	11.7
Macon	55	38.9	43.5	0.023	4.6
Rockford	65	30.7	40.7	<.001	10.0
Vermilion	47	33.1	42.3	<.001	9.2
Doula	25	32.7	41.9	0.005	9.2

0 5 10

Mean Score Change

Figure 22: PICCOLO Score by Community by 1 year follow-up

Parenting Stress Index- Short Form

A common and important factor that HV participants, particularly pregnant teens, often confront is the amount of changes, new demands and responsibilities that parenting brings to their lives. A widely used measure to capture these challenges is the Parenting Stress Index (PSI) that asks parents how they experience the effects of motherhood in the early stages of parenting. The goal of the PSI assessment provides a measure to help understand levels of parenting stress that can be addressed by supporting and educating young families to cope with and manage their parenting experiences. The PSI-SF assesses the types, frequency, and magnitude of maternal stress related to parent-child relationships and interactions (Abidin, 1995). The PSI-SF can be scored with three subscales and a total score. The three dimensions include:

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

It should be noted the intended direction of the PSI is downward or a negative direction. **Figure 23** shows highly mixed reponses to PSI assessment with both descreasing and increasing stress levels at the one year follow-up. The state level PSI scores show no overall decrease in the stress scores at one year follow-up, as might be expected. Four of the six MIECHV communities and doulas report minor increases or no change in parenting stress, and only one community—Cicero—reported a statistically significant decrease. The increase of just over four points in the Englewood community is not really surprising, since we know their home visiting agencies serve very high-risk families; in fact, one of the MIECHV programs is located in an alcohol and drug treatment center.

Overall, the PSI scale has not demonstrated meaningful decreases in the last three years of the MIECHV project. That may be related to the measure or to the population served. On average, it does appear the Illinois MIECHV participants have significantly low PSI scores relative to reported norms, which may suggest a lower baseline threshold for the Illinois MIECHV families. It may also indicate that those participants remaining in their home visiting program up to two years may be systematically different than those who do not remain in a MIECHV program for that long. This construct requires further exploration to determine whether the Illinois sample significantly differs from other test samples, and if the PSI measure is sensitive to change in order to capture changing parenting stress levels by child's age or in the total MIECHV population.

Region	N	Mean Score Y1	Mean Score Y2	P-Value
Illinois MIECHV	417	62.5	62.4	0.939
Cicero	97	63.5	59.1	0.020
Elgin	61	56.5	57.2	0.721
Englewood	50	66.7	70.9	0.155
Macon	65	64.4	63.7	0.750
Rockford	72	62.7	63.6	0.691
Vermilion	44	61.4	62.8	0.568
Doula	28	60.9	63.4	0.407

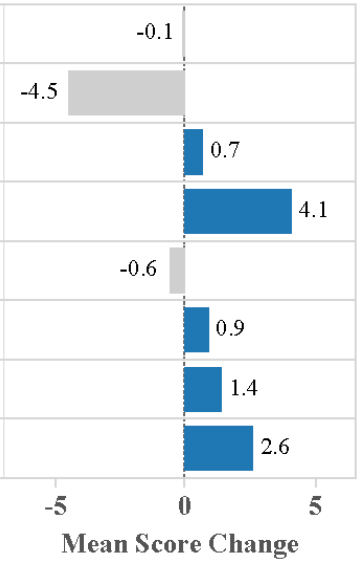


Figure 23: PSI Score by Community by 1 year follow-up

MIECHV Immediate and Intermediate Outcomes: Two year follow-up

Without question, one of the most compelling sets of findings from the MIECHV evaluation to date, is the result of tracking immediate and intermediate outcomes of caregivers who remained in HV programs for one or two years. As described earlier, the evaluation team's field data collection staff conducted a baseline, one and two year follow up with families as long as participants remained in the program. Unfortunately, the number of families who dropped out, transferred, intentionally left or closed out of HV services by the 2nd year follow up assessment was as high as 60% of those participants who completed the one year follow-up. These smaller numbers at two year follow-ups made it difficult to calculate the multi-year comparisons at the community level. In other words, the evaluation team was not comfortable calculating statistical comparisons at the community level due to the smaller number of participants that would push the boundaries of statistical robustness. To that end, we provide a statewide comparison for each of the outcomes at the two year follow-up. **Figure 24** below shows three years of longitudinal outcome data for KIDI, HOME, PICCOLO and PSI assessments. Over the two years, scores significantly improved as analyzed using growth curve analysis, with the exception of the PSI. Over the past three years, the Parenting Stress Index appears to have been unable to detect high levels of parental or child stress; and very few PSI score changes appeared to be influenced by the HV programs or services, compared to the other assessments. However, these outcomes may be attributable to both HV programs and/or normal developmental changes of the child. But all two-year changes, with the exception of the PSI, are moving in the expected direction of improved program effectiveness.

Survey	N	Mean Score Y1	Mean Score Y2	Mean Score Y3	P-Value
HOME	128	34.8	37.5	38.8	<.001
KIDI	156	34.4	36.3	37.6	<.001
PICCOLO	123	30.1	39.7	43.9	<.001
PSI	152	63	62.2	62.9	0.863

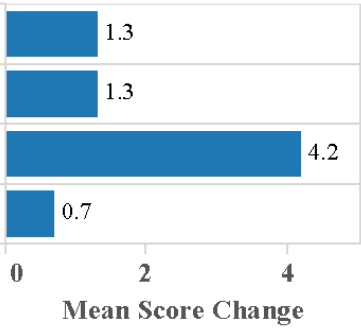


Figure 24: MIECHV State level immediate and intermediate outcomes- 2 year follow-up

The Childhood Experiences Assessment

The Childhood Experiences Survey (CES), an adapted version of the original Adverse Childhood Experiences (ACE) Questionnaire, was part of survey administration through the end of the 2016 federal fiscal year (Mersky, Topitzes, & Reynolds, 2014). The FDCs continued to collect CES on all caregivers who completed their first or second year of participation in MIECHV programs, and who willingly consented to participate. A description of the background, rationale and data collection methodology is available in a prior document (MIECHV Annual Report 2016).

The role of adverse childhood experiences and the devastating influence they can have on health and related outcomes has been well documented in adult and child research literature (Flaherty, Thompson, Dubowitz, Harvey, English et al., 2013; Flaherty, Thompson, Litrownik, Zolotor, Dubowitz, Runyan, & Everson, 2009). MIECHV began administering the Childhood Experiences Survey (CES) to caregivers at their one-year follow-up visit because of an Institutional Review Board (IRB) requirement to re-consent participants and limit administration to those participants who could self-consent (18 years old and older). Waiting until the one year follow-up visit to administer this survey also increased the likelihood that the participants responding would have an established relationship with their home visitor and would feel more comfortable discussing sensitive issues and concerns related to the survey, should they arise. The goal of administering the CES trauma survey was to better understand the prevalence of adverse childhood experiences in Illinois' MIECHV population compared to state and national estimates, analyze whether these experiences vary by socio-demographics, and determine any relationships or changes related to MIECHV outcomes.

For FY2016, the descriptive information regarding Illinois' MIECHV ACE sample shows variations in the prevalence of different adverse childhood experiences. The highest reported adverse childhood experiences are poverty, parent divorce and separation, substance abuse, and peer victimization. The percentage of each ACE score

was in line with last year's 1-year follow-up sample (FY15, n = 163 vs. FY16, n=289), but most showed slightly higher prevalence compared to the five state sample. This can likely be attributed to the larger number of MIECHV respondents that would result in a better representation of the MIECHV participants' actual prevalence, which is likely significantly higher than a statewide telephone sample. Again, this also reinforces the fact that the HV population faces multiple risk factors associated with growing up poor, experiencing substance use, and having inadequate parent resources and supports.

A comparison of Illinois' MIECHV CES study to the Centers for Disease Control and Prevention (CDC) five state Behavioral Risk Factor Surveillance System (BRFSS) allows for national and Illinois MIECHV comparisons (Bynum et al., 2010). Illinois' MIECHV ACEs (CES) survey had additional questions on different types of ACEs compared to the CDC's five state sample (8 items). Therefore, the CDC to MIECHV comparison could only be made on the types of ACEs that could be exactly matched on both surveys. The comparison shows that prevalence of most ACE types in Illinois' MIECHV participant sample closely match those of the BRFSS sample, with the exception of incarceration (Illinois, 19% vs. BRFSS, 7%) and psychological abuse (Illinois 34% vs. BRFSS, 27%). The difference for 2015 was only incarceration, but the 2016 sample showed a 7% increase in reports of psychological abuse, and again likely represents the larger MIECHV sample in 2016. The prevalence of MIECHV CES scores are compared in **Table 3** below.

Table 3: *BRFSS and Illinois MIECHV Comparisons of ACEs (n=289)*

		Poverty	Psychological Abuse	Physical Abuse	Sexual Abuse	Peer Victimization	Domestic Violence	Mental Illness	Substance Abuse	Incarcerated	Parental Divorce, Separation, or Absence	Death of Parent, Caregiver, or Sibling	Victim of Violent Crime
	N	%	%	%	%	%	%	%	%	%	%	%	%
BRFSS	16,755		27%	15%	17%		17%	22%	31%	7%			
Illinois MIECHV	289	64%	34%	18%	20%	44%	20%	21%	34%	19%	56%	20%	13%
Maternal Age at Enrollment													
18-21	68	62%	25%	13%	14%	37%	16%	21%	31%	22%	50%	21%	7%
22-25	75	59%	36%	9%	14%	49%	12%	31%	28%	19%	56%	16%	11%
26-31	74	68%	30%	19%	24%	41%	24%	20%	39%	18%	73%	31%	19%
>=32	72	68%	43%	32%	27%	50%	29%	12%	39%	16%	44%	11%	13%
Race													
Caucasian	129	68%	33%	18%	18%	50%	21%	29%	40%	20%	64%	16%	10%
African American	68	59%	36%	16%	17%	41%	23%	12%	27%	26%	56%	28%	20%
Other	92	62%	33%	21%	24%	38%	17%	17%	32%	11%	46%	20%	11%
Ethnicity													
Non-Hispanic	154	68%	39%	20%	24%	53%	26%	29%	41%	28%	63%	26%	19%
Hispanic	135	59%	27%	16%	15%	35%	14%	13%	27%	8%	49%	13%	6%
Education													
<HS Diploma	111	64%	32%	19%	20%	39%	25%	18%	35%	18%	49%	22%	11%
>=HS Diploma	178	64%	35%	18%	20%	48%	17%	23%	34%	19%	60%	19%	14%
Relationship Status													
Other	197	64%	36%	20%	19%	46%	23%	25%	36%	21%	60%	22%	16%
Married	92	63%	29%	15%	21%	41%	15%	13%	30%	13%	48%	15%	6%

Illinois' Cumulative ACE Scores by Socio-demographic Characteristics

The ACEs research literature has continuously reported that ACE scores have a dose-response relationship with the accumulation of stress and trauma compounding over time resulting in poor health habits, behavioral health problems, and ultimately, morbidity and premature mortality (Felitti, Anda, Nordenber, Willison, Spitz & Edwards, 1998; Hillis, Anda, Dube, Felitti, Marchbanks, & Marks, 2004). That is, the cumulative influence of ACEs has been associated with an array of negative health behaviors, chronic diseases and death (Bellis, Lowey, Leckenby, Hughes, & Harrison, 2014). Emerging research has also been accumulating evidence not only for the relationship between ACEs and chronic health conditions, but also on how trauma/ACEs can negatively influence children and youth in their academics, behaviors, and psychological distress (Wade, Shea, Rubin, & Wood, 2014; Kerker, Zhang, Nadeem, Stein, Hurlburt, Heneghan... Horwitz, 2015). Because Illinois MIECHV used an ACEs measure that had five additional childhood trauma constructs, and a one-to-one in-person survey approach, the Illinois sample is likely different from the five state study (Bynum et al., 2010). **Table 4** below shows not only the number and aggregation of ACEs, but how these ACEs are distributed by socio-demographics. When examining the number of ACEs by respondent demographics, the following differences were revealed:

1. The Illinois MIECHV sample has almost 4 times fewer respondents that report no ACEs (10.4%) compared to the CDC sample (39.2%), and 34.6% report having 5 or more ACEs. These differences, which would be expected, again reaffirm the higher risk levels of young mothers compared to a state probability sample.

2. Younger mothers participating in Illinois MIECHV report fewer ACE scores than the older age groups.

3. Similar to prior years, no major differences appear to exist by race or reported levels of education.

4. Non-Hispanics reported higher numbers of ACE scores compared to Hispanics, particularly those reporting 5 or more (23.7% vs. 44.2%).

5. Married mothers reported fewer ACEs than non-married MIECHV participants.

Table 4: *Comparison of Prevalence of Adverse Childhood Experiences (ACEs) Between Illinois MIECHV by Selected Demographics (n=289)*

		Number of ACEs					
		0	**1**	**2**	**3**	**4**	**>=5**
	N	**%**	**%**	**%**	**%**	**%**	**%**
BRFSS	16,755	39.2	21.6	12.8	9.7	6.4	10.3
Illinois MIECHV	289	10.4	16.6	14.9	11.8	11.8	34.6
Maternal Age at Enrollment							
18-21	68	13.2	17.6	13.2	11.8	19.1	25
22-25	75	9.3	20	14.7	13.3	9.3	33.3
26-31	74	6.8	13.5	18.9	13.5	6.8	40.5
>=32	72	12.5	15.3	12.5	8.3	12.5	38.9
Race							
Caucasian	129	8.5	14	16.3	13.2	10.1	38
African American	68	8.8	25	11.8	5.9	14.7	33.8
Other	92	14.1	14.1	15.2	14.1	12	30.4
Ethnicity							
Non-Hispanic	154	7.1	16.2	9.1	9.7	13.6	44.2
Hispanic	135	14.1	17	21.5	14.1	9.6	23.7
Education							
<HS Diploma	111	13.5	15.3	14.4	10.8	12.6	33.3
>=HS Diploma	178	8.4	17.4	15.2	12.4	11.2	35.4
Relationship Status							
Other	197	9.1	17.3	12.7	9.1	13.2	38.6
Married	92	13	15.2	19.6	17.4	8.7	26.1

Impact of Socio-Demographic Factors and ACE Scores on Immediate and Intermediate MIECHV Outcomes

A final way that we analyzed the MIECHV ACEs data was to examine the relationships between types of ACEs and immediate and intermediate parent-child outcomes – scores on the HOME, PSI, KIDI and PICCOLO surveys. Since these outcomes are related to parent functioning and parent-child interactions, our goal is to understand if these factors are influenced by different types of ACEs. It could be postulated that participants with adverse childhood experiences would have lower intermediate outcomes compared to participants without ACEs. Multivariate regression models were used to study the relationships between MIECHV outcomes, and various CES types, while adjusting for socio-demographic factors. Results are presented in **Table 5**.

Based on socio-demographic factors, it appears that Hispanics, African Americans and "Other Race" caregivers had lower KIDI scores compared to Whites, while the "Other Race" caregivers had a higher HOME score. These KIDI score differences may be related to the cognitive complexity of the KIDI measure that may influence understanding of many of the KIDI concepts, and the potential language barriers for the Hispanic population. Although the KIDI assessment was translated into Spanish, many child development concepts may have been more cross-culturally challenging to understand and interpret for caregivers with English as a Second Language.

With respect to CES results related to immediate and intermediate outcomes, and controlling for socio-demographic variables, the regression model finds that caregivers who report psychological abuse had lower HOME scores and individuals who report having an incarcerated family member have lower PICCOLO scores. It is interesting to note that caregivers who report higher levels of household substance abuse have higher parenting stress scores, and oddly, those who report more domestic violence actually report lower levels of parenting stress.

Table 5 shows that the variance in MIECHV outcomes explained by these adjusted regression models (Coefficient of determination or R^2) range from 18% (for the PICCOLO) to 47% (for the KIDI) indicating that models fit better for some outcomes than for others. Therefore, types of CES adverse experiences seem to explain only small to modest variation in MIECHV outcomes. These results suggest that the relationship between ACEs and MIECHV immediate and intermediate outcomes is more complex than these simplified measurement models show. Therefore, the evaluation team is currently developing additional models to further explore the relationships described above.

Table 5: *Multivariate Regression Analyses for 2016 MIECHV Outcomes*

	HOME			KIDI			PICCOLO			PSI		
	B	SE	P-value	B	SE	P-value	B	SE	P-value	B	SE	P-value
Intercept	27.55	2.08	<0.001	22.47	2.22	<0.001	20.12	3.82	<0.001	32.46	6.77	<0.001
Maternal Age	0.03	0.04	0.350	-0.03	0.05	0.531	0.28	0.11	0.008	-0.11	0.15	0.459
African American	-0.70	0.88	0.425	-4.33	1.15	<0.001	2.58	2.30	0.264	-2.49	3.61	0.490
Other Race	1.52	0.62	0.016	-1.76	0.81	0.031	1.48	1.66	0.374	-0.35	2.61	0.894
Hispanic	-0.30	0.63	0.629	-3.84	0.85	<0.001	1.87	1.65	0.260	-1.43	2.66	0.591
>=HS Diploma	0.77	0.50	0.130	0.29	0.65	0.652	-1.70	1.34	0.208	1.70	2.03	0.403
Married	0.50	0.54	0.356	-0.83	0.71	0.244	1.11	1.40	0.431	-3.04	2.21	0.171
Baseline Score	0.27	0.05	<0.001	0.54	0.05	<0.001	0.27	0.05	<0.001	0.50	0.06	<0.001
Poverty	-0.16	0.52	0.765	-0.30	0.68	0.664	0.39	1.38	0.776	1.63	2.11	0.442
Psychological Abuse	-1.20	0.61	0.049	-0.07	0.78	0.933	-0.77	1.58	0.629	1.22	2.38	0.610
Peer Victimization	0.08	0.56	0.892	0.35	0.69	0.611	0.62	1.41	0.661	0.66	2.17	0.762
Physical Abuse	0.31	0.71	0.661	0.62	0.95	0.513	0.67	1.89	0.723	4.18	2.98	0.162
Domestic Violence	-0.12	0.73	0.872	0.30	0.97	0.761	2.76	1.96	0.161	-9.70	3.02	0.002
Sexual Abuse	-0.38	0.69	0.580	0.38	0.93	0.681	-0.57	1.84	0.759	1.09	2.80	0.697
Household Mental Illness	0.35	0.67	0.599	-0.77	0.87	0.381	2.56	1.72	0.138	-2.83	2.73	0.302
Household Substance Abuse	1.03	0.58	0.077	1.04	0.77	0.178	1.20	1.54	0.438	4.70	2.36	0.047
Incarcerated Household Member	-0.42	0.70	0.553	-0.27	0.92	0.771	-3.67	1.80	0.043	1.26	2.85	0.659
Parental Divorce, Separation, or Absence	-0.44	0.49	0.372	0.71	0.63	0.256	1.88	1.28	0.143	-0.70	1.98	0.723
Death of Parent, Caregiver, or Sibling	-0.68	0.60	0.258	-0.04	0.77	0.959	0.70	1.54	0.648	4.37	2.49	0.081
Victim of Violent Crime	-0.70	0.86	0.414	0.83	1.03	0.421	0.11	2.14	0.960	-2.88	3.22	0.373
R^2	0.29			0.51			0.26			0.33		
Adjusted R^2	0.22			0.47			0.18			0.28		

Parent Satisfaction Survey

Although not always the most powerful outcome in terms of evaluating the impact of HV programs and services, the degree to which caregivers report feedback on multiple questions related to caregiver experiences, attitudes and beliefs provides important information for assessing factors related to engaging, retaining and satisfying participants, and understanding their satisfaction and experiences with MIECHV services. In other words, high levels of parent satisfaction are necessary to ensure engaging and participating in HV, but may not be sufficient to assure program outcomes considering the voluntary nature of participation and complexity of family needs. The Illinois MIECHV Parent Satisfaction Survey (PSS) was adapted from the Healthy Families Illinois parent satisfaction survey. The PSS was designed to help program and home visiting staff understand and report MIECHV participant input on a multi-dimensional measure that assesses service quality, willingness to recommend home visiting services, perceptions of good treatment, and time spent on various child development topics.

Satisfaction has been shown to be a positive predictor of remaining in and completing home visiting programs, along with other factors such as the frequency and duration of visits, cultural competence, skills and experience of the home visitor, and positive rapport with the family (Barak, Spielberger, & Gitlow, 2014; Holland, Christensen, Shone, Kearney, & Kitzeman, 2014); Damashek, Doughty, Ware & Silovsky, 2011).

The PSS results for all Illinois MIECHV sites, administered by FDCs to active program participants in 2016 at one- and two-year post enrollment visits, are shown in **Figure 25** below. Statewide results of 318 participants surveyed show high overall satisfaction with home visiting services as rated by service quality, perceived helpfulness, and willingness to recommend home visiting services to other families in need.
When asked how they would rate the quality of services received from their home visitors, MIECHV participants overwhelmingly rated the services as excellent (89%) or good (10%). All felt the services they received helped them, with 96% responding that the services helped “a great deal.” Ninety-six percent would “definitely” recommend home visiting services to others, and all participants reported they had been treated with respect and consideration. Participants reported that overall, they were satisfied with the help received from their home visitor, and with the information received on child development and parenting skills. Visit content, as would be expected, included the home visitor talking about child health, development, and parenting. These positive PSS scores show that those who remained in the home visiting programs truly liked and benefited from them. Remaining in a HV program is likely due to home visitors establishing positive, supportive, and productive relationships with caregivers and their families.

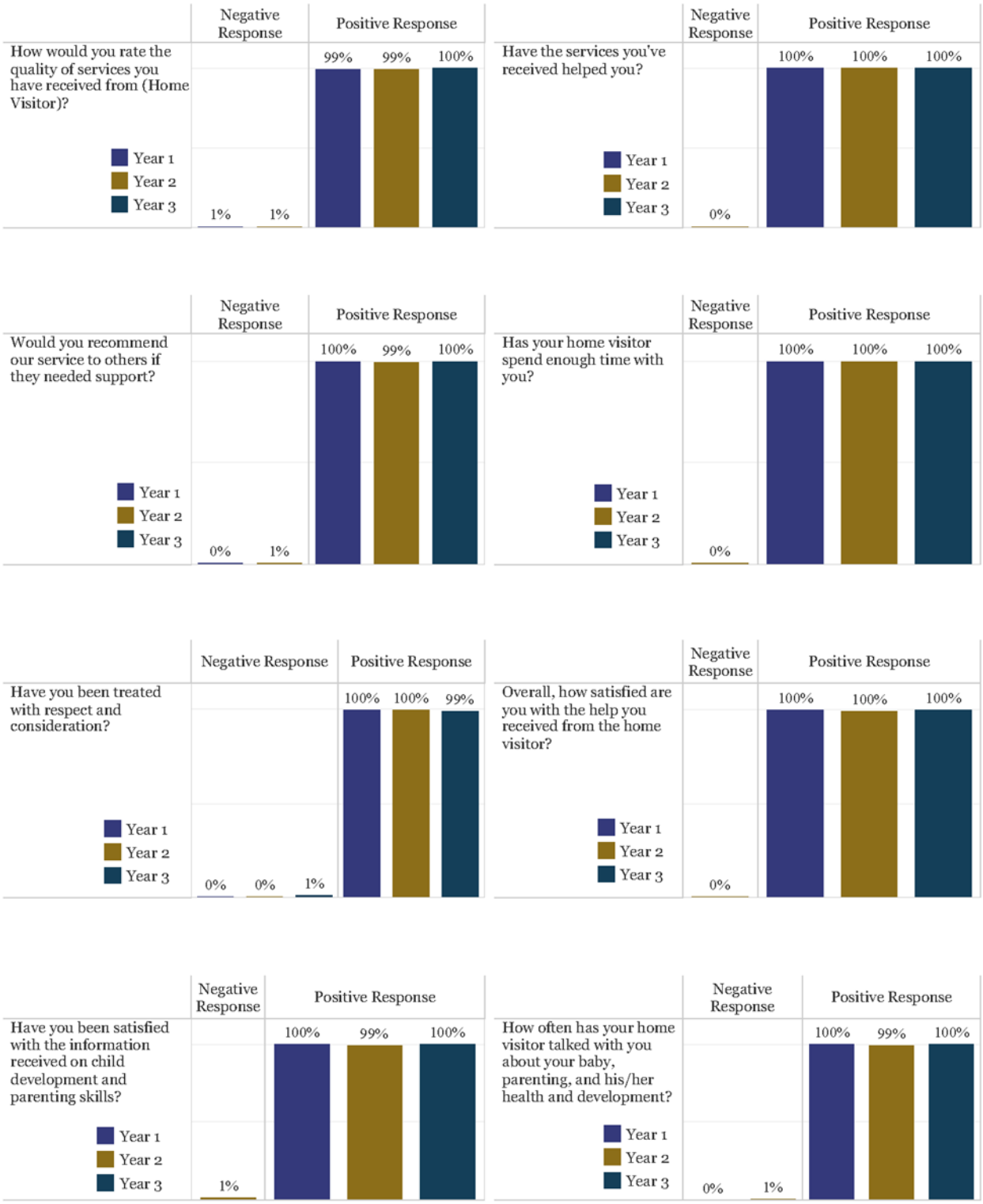


Figure 25: Parent Satisfaction Survey of Matched Participants with a first and a last year response (n=318)

The next comparisons for PSS were reports by HV participants who have been in the programs for two full years. This small (n=33) but important group of participants clearly demonstrate that their participation is highly related to the benefits and enjoyments they derive from the program. Nearly all participants report 100% satisfaction with the HV services after two full years of participation (see **Figure 26** below).

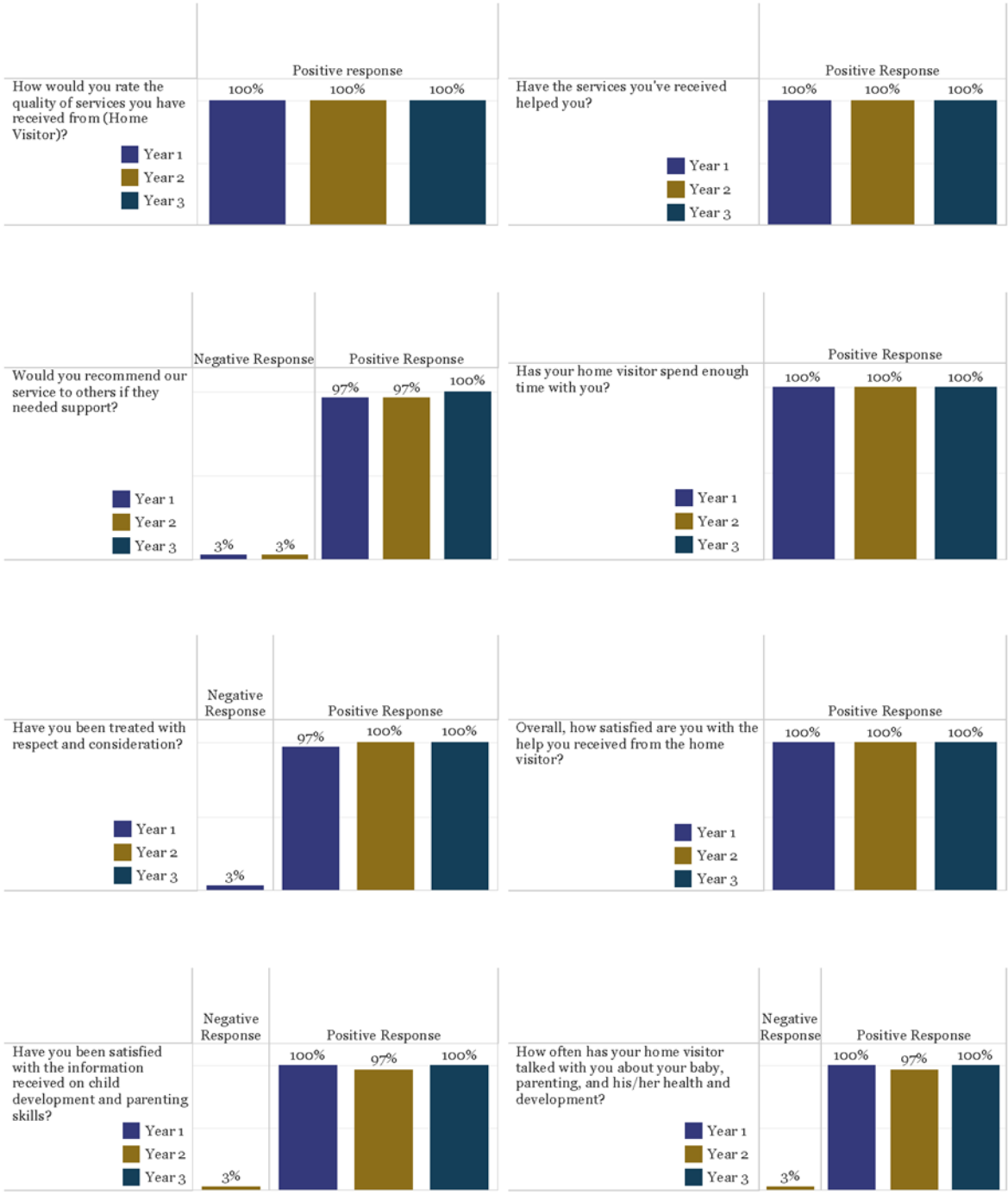


Figure 26: Parent Satisfaction Survey of Matched Participants across 3 Years (n=33)

Parent Satisfaction Survey- Dropout Analysis- 2016

The evaluation team conducted a brief study to track caregivers and families who did not complete the MIECHV program, as a way to understand the key factors that may be contributing to dropouts. This was a follow-up to a study that was initially conducted in 2014. The MIECHV Dropout Study was designed to contact and interview home visiting participants who left or dropped out of Illinois MIECHV home visiting services before they completed, graduated or aged out of the program. The evaluation team adapted the Parent Satisfaction Survey (PSS) that was currently being used as part of the in-home assessment into a telephone survey. The protocol for conducting the 10-15 minute telephone interview was submitted and approved as an amendment to the current MIECHV IRB. The research team identified approximately 188 participants who dropped out of home visiting programs in the six communities, and attempted to contact those families over a 6-week time period. The FDC staff made at least 5 attempts to contact the families with the telephone number that was last recorded in the participant's file. As expected, many mobile phones were no longer in operation or there were no responses to those calls. The FDC staff were able to reach 43 MIECHV participants who dropped out (23% contact rate). Thirty-four participants provided consent to participate in the phone survey and 9 participants refused (79% interview completion rate). A summary of the key satisfaction factors is provided below and a more extensive report can be found on the CPRD website (MIECHV Dropout Study, 2016).

A comparison of participants who remained in the program for at least 1 year compared to those that were contacted as part of the dropout sample is shown in **Figure 27** below. The darker colors show more favorable responses, which are higher for those who remained in the program compared to those who did not complete the program. The average score for each question is also provided so that a numerical comparison can be made. Similar to the 2014 study, all of the 1-year follow-up sample reported higher averages than the dropout sample, but overall the variation is modest. It also shows that these differences are likely attributable to a small number of dropout respondents reporting negative ratings for all of the items. This is best illustrated by the bar graphs that show no brown shades (negative responses) of those that remained in the programs for at least 1-year compared to earlier dropouts. This would be an expected response, but also note that most dropouts rated services quite favorably, suggesting that other factors played a role in dropping out or not completing the program. The open-ended responses regarding dropping out were mostly related to changes in the circumstance of the caregiver such as becoming employed, aging out or moving to special needs services, homelessness or self-professed belief of not needing HV anymore. However, several negative comments were made regarding their HV or program that need to be addressed such as not liking or redundant materials, communication problems (accent), "cut me off," did not like HV, did not include siblings or was often late for visits. These factors should continue to be explored to

minimize controllable issues through professional development, supervision and feedback.

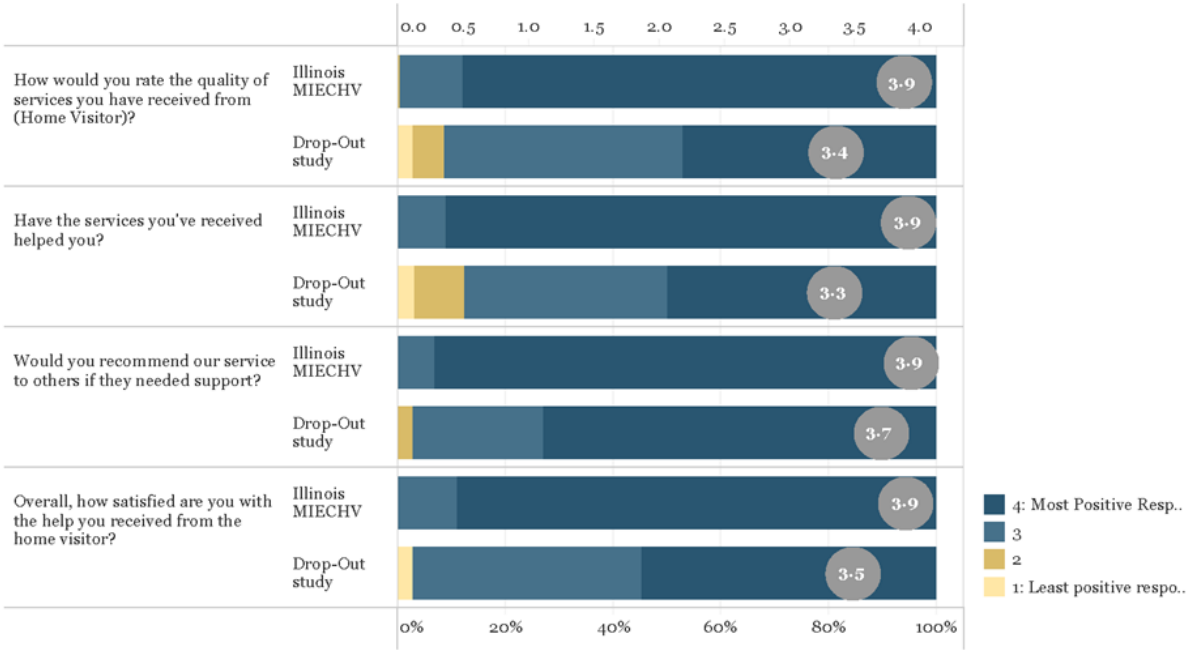


Figure 27: Illinois MIECHV PSS vs Dropout Study

2016 MIECHV Site Visit Focus Groups - Qualitative Analysis

The evaluation team conducted six focus groups, one in each MIECHV community, to gain a deeper, contextual understanding of HV services, data collection and CQI. A standardized set of questions was asked to each focus group that included supervisors, home visitors, a field data collector and evaluation staff members. Prior to initiation of the focus groups, the lead evaluator read a statement regarding the voluntary nature of participation, acquired assent, and assured anonymity of HV responses. Staff were told that they did not have to answer any question, and that all responses would be confidential. All participants agreed to participate in the focus group, and the focus group discussion was digitally recorded.

The digital recording was transcribed by an external vendor and qualitative data analysis was done by a PhD level scientist who had little knowledge and experience with the MIECHV project to minimize staff biases. Qualitative analysis was done using an inductive process of reviewing each question by site, cross-referencing by responses and themes, and sorting and separating responses across a conceptual framework. The summary results are provided below.

Data collection and multitude of assessments. Overall, there were few major problems with the number of assessments, and most sites understood the need for them, but the number and frequency of assessments may hinder relationship building. "This is my opinion but some of the data collection pieces get in the way of building the relationship. When it starts becoming intrusive to families, then we're ending up not serving them as well as we need to."

Some sites stressed the redundancy of doing assessments again and again. "*You're bringing out a relationship survey, and families are like, "What, this again?" "Why does she keep asking if I'm depressed?*"

Confidentiality was stressed as an issue at another site with caregivers fearful that the information may be used against them. "*Who's gonna give out the information? Who's gonna read it? Is somebody gonna use this against me? Like is DCFS gonna come and like take my [child]?*"

Field Data Collectors. Having the Field Data Collectors assisting with data collection during the home visits was generally successful with few problems. "*I haven't had any negative feedback at all. They've all been very open to having her come.*"

Having the gift card as an incentive may have been a potential motivator, but it may not have been critical.

Visit Tracker: benefits and challenges of use. Most of the comments about Visit Tracker, Illinois MIECHV's data system, were critical and suggested several ways it could be improved. One site reported it to be easy to use, or "*user friendly*." But this was directly contradicted by another site "*I don't really care for Visit Tracker; it's just not friendly. I prefer our other system and would love it if we would've been able to use that system*."

Complaints included that it was repetitive and created for duplicative data entry with conflicting requirements for different systems. "*We've got different requirements for different programs, and if we could get some kind of a system where we were only having to do one or follow one set of requirements, it would ease the burden tremendously on staff.*"

Suggestions for changes also included improved report writing capability. "*I wish that we could add to it so that we could just print it off and it could be our case note. I think that would help though because we could just take our case notes out.*"

Caseload capacity: 85% requirement. Sites were generally not concerned about maintaining the 85% caseload capacity, and whatever challenges they had with this arise from hiring and maintaining home visiting staff. "*Caseload capacity probably*

right now is our biggest concern, mostly due to staff retention. The two of us, our caseloads are full, but we're still only at two-thirds capacity because we have an open home visiting position, so that seems to be the biggest issue."

Community Systems Development (CSD) loss and Coordinated Intake (CI). No concerns were expressed about losing the CSD person. Comments about Coordinated Intake yielded mixed responses, with few being very enthusiastic about the process. At best comments were neutral, but most registered different kinds of rather mild complaints. With several sites simply doing their "*own type of recruitment*" or one site calling CI "*irrelevant*" and that they recruit through a local "*parent ambassador*" program for home visiting clients, and sidestepping or ignoring the Coordinated Intake process, which most saw as not especially helpful for a variety of reasons.

Another site reported that their Coordinated Intake was generating "*zero referrals.*"

Meeting weekly for first 8 weeks. For many sites, the weekly visit requirement was not perceived as a problem since that was their current practice. "*I've been able to maintain my caseload of my weekly visits. I haven't had an issue with that.*"

However, sites also identified several issues with this requirement. Many issues had to do with the fact that clients themselves either do not want, don't need or cannot do weekly visits. "*Meeting weekly is not important to building relationships. For some of them, yes, they say, "Yes, every week, okay." The majority of them choose two visits a month because that's what works for them. So weekly sometimes is difficult.*"

Scheduling visits and cancellations were a problem at several sites. "*If you schedule 'em weekly you're maybe three or two and I mean that's just real. So I schedule weekly just in order to get two-three visits in a month. I don't know– maybe one-third. I don't even know if it's that high if people do I actually see weekly for eight whole weeks.*"

Relationship building and client engagement. Sites related several important tips for relationship building. The most common was going with the flow, letting the client drive the process, and meeting the client where they are at – even if this meant setting aside some of the goals and requirements of the home visiting programs. And one HV stressed the importance of trust: "*they have to trust you. That's the most important thing, you know?*"

Another helpful tip is clarifying rules and expectations regarding parents participating with the home visit (this is not "babysitting time"), rules about cell phone use, showing up on time and following through with promises.

In contrast to some of the more critical comments about assessments, one site reported that assessments "*give a chance for the parent and the participant to talk on that subject, and then there can be some dialogue back and forth, so that's been helpful.*"

Drawbacks that hinder relationship building. While some sites reported few barriers to relationship building, other sites identified some clear challenges. In addition to the multitude of assessments, which was identified as a barrier previously, several sites reported that, despite encouraging clients to work, having clients who have jobs can be one of the bigger challenges to home visiting and building relationships. "*Our families don't have careers. They have jobs, so when their boss tells 'em to go to work, they have to go to work and so that can also make it hard to just even have a weekly time to see them.*"

Benchmark performance issues: alcohol use. No sites offered any insights as to why alcohol use during pregnancy may have increased. Most reported not having any known issues with alcohol use during pregnancy.

Benchmark performance issues: referrals for services. The most common issue identified as creating difficulties with meeting benchmarks with regard to follow-through on referrals for services was a lack of services to refer clients to. "*Our community, as many communities, does a miserable job of taking care of individuals with mental health needs.*"

Clients lacking transportation available to get to the referred services and clients lacking insurance were also identified as barriers. In some cases, clients simply choose not to follow through due to a stigma attached to mental health services. "*I mean mental health has a stigma and "I'm fine" is the typical response." Or "that this is just the way it is, this is your lot in life, get over it."*

Pay for performance. Few concerns were identified with meeting new pay for performance standards. Many people were familiar with it from other programs they operate. Maintaining caseload capacity, given variations in staffing, was a potential problem and another site offered that families may be closed who may have been kept on otherwise.

Impact of state budget. For the most part, there were few direct impacts noted related to the state budget impasse. One site – a health department – suggested that it has impacted "*our ability to replace any people; to get people hired.*" One site reported a threat of a staff furlough which was described as "a scare," but it did not materialize. That same county also reported that the state budget has affected cash flow and spending, saying: "*We've been joking all year, saying that we're playing with*

Monopoly money because it's what it feels like. Here's a giant stack of money you have, it's in this box. The money exists. You can look at it but you cannot have it."

Staff turnover has not been a general issue and what there has been has not been due to the state budget.

Safety concerns. Overall, home visitors reported feeling generally safe in home visits. None had any direct involvement with unsafe experiences, but most sites report carefully documenting staff time to track staff whereabouts. One commented on how safety concerns can hinder the work of home visiting: "*I don't know why I'm not ever afraid, but I'm not. Now they just changed it to where we can't do visits after 5 for our safety which we never felt unsafe. So that's just more of a restriction on us if our clients work or go to school*"

Despite feeling generally safe, many sites do take precautions and are very aware of potential risks. These included "*always sit facing the door– not with your back to the door - to make sure like you can see exits and everything,*" putting personal items in the trunk before leaving the office and one person reported that she will "*do things like leave my door unlocked so if I have to get back to my car I can get in it and pull out*."

CQI. The CQI process was very favorably received by all sites with no negative comments. Positive comments included "*You have been really a good—a big help for us, any questions that I have, you all would always answer*" and "*It's been wonderful having you. I think that you've been super helpful. You were always very approachable and helped guide us through the process*."

Mental health consultants. Opinions varied widely on the Mental Health Consultant. The difference appears to be based on the personality of the person. One site reported: "*She's just helped me so much, and she's awesome, I just feel like she's my person now that's really helping me.*"

On the other hand, another site reported "*I don't find it helpful or supportive. I don't find that any of the staff is connected to her. I don't feel like sometimes she has a lot of empathy with us*."

MIECHV Program Completers and Dropouts

Over the past few years, the evaluation team has analyzed and explored the number of participants who enroll in HV, how long they participate in home visiting services, and the reasons they depart. Overall, we have seen that most participants stay in a HV program an average of 165 days, but length of enrollment varied according to demographic and other factors such as age of the caregiver, special needs of the family,

level of education, and ethnicity, which appeared to influence the dropout (Annual Report 2015). Prior years' data was not collected in a way that provided a clear understanding as to why participants dropped out of programs, but the data system was upgraded last year to provide a better understanding of factors that contribute to caregivers not completing HV programs.

For this FY16 report, the evaluation team examined HV participation data by examining the number of families who enrolled in program year 2015 (10/1/2015-9/30/2016) by their enrollment status at the end of the 2016 year (9/30/2016). This provided a standardized sample of the one-year cohort who enrolled, departed, and/or continued in the program past FY2016.

Based on the results in **Table 6** below, 44.5% of participants completed HV services, and a list of other factors are provided by HVs as to why caregivers left a HV program.

We also categorized the listed factors by their locus of control. Locus of control provides a way to interpret whether a dropout or departure factor was related to something a HV program has control over, compared to factors over which HVs may not have control (Brincks, Feaster, Burns & Mitrani, 2010). Factors that LIAs may have control over would include dropping out/quitting, dissatisfaction and possibly Other/Unknown categories. Factors that HV programs are likely to have little or no control over would be employment, moving, transferred, and medical crises. This leaves the "Other/Unknown" category that is undetermined and cannot be classified one way or another. Over that one-year time period, we know that 45% of the caregivers completed the programs, 7.3% left the program for reasons the HV program may have some control over, 32.2% departed for reasons that the HV program likely could not control, and 15.5% are undetermined. Although these results suggest that approximately 55% of caregivers did not complete the HV program after one or more years in HV programs, data show a more complex and nuanced result that might be better understood with improved data reporting for the "Other" category. This Other/Unknown category comprises 16% (65 families) of the factors provided as to why they left the program, and leaves us without a clear understanding of how to interpret these responses. At face value, unknown is simply undetermined, but may be comprised of other factors – controllable or uncontrollable. Of the 55% of participants who did not complete a HV program, only 7.3% (those dissatisfied or quit) may be actionable in terms of within a program's controls. Further investigation into what or who fall into the "unknown" category would be helpful to identify other possible contributing factors for not completing HV programs. People moving out of the catchment area, becoming employed, and transferring to other programs are certainly factors that MIECHV has little or no control over. This unique perspective may provide a more precise way of understanding why caregivers leave HV programs, and the factors that can be addressed.

Table 6: *HV reports of reasons why caregivers left HV programs*

HV Status Factors	N	%	Locus of Control
Completed	184	44.5	NA
Dropped out/Quit	30	7.1	Controllable
Dissatisfied with programs	1	0.2	Controllable
Moved Out	102	24.6	Uncontrollable
Transferred	22	5.2	Uncontrollable
Medical Crises	1	0.2	Uncontrollable
Employment	10	2.4	Uncontrollable
Other/Unknown	64	15.5	Undetermined

V. MIECHV Continuous Quality Improvement

Continuous quality improvement (CQI) remains a vital component of Illinois' MIECHV initiative providing a mechanism to generate meaningful understanding, opportunities for improvement and success at all levels of the MIECHV initiative. 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.

Local Implementing Agency CQI Activities

The CQI Specialist continues to conduct 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. Additional webinars, benchmark-specific training calls, and other community-level supports are provided on an as-needed basis.

The mainstay of CQI activities is the development, implementation and evaluation of CQI Action Plans. Each agency develops plans several times a year. Plans are developed based on prior performance on the MIECHV benchmarks and aim to improve benchmark performance and overall program quality.

CQI Benchmarks – FY2016

In federal fiscal year 2016, after several years of addressing improvement opportunities related to the existing MIECHV benchmarks and with increased skill in the use of CQI methods and tools, most home visiting agencies chose to expand their CQI projects beyond the benchmarks to more systemic issues such as increasing visit and group attendance and increasing family engagement and retention. A handful of LIAs also began initial work on the new set of MIECHV benchmarks that will be implemented in the upcoming fiscal year.

In FY16, LIAs completed 24 CQI plans. The topics included:

- Increasing group attendance (4 agencies)
- Improving referrals to families for needed services (4 agencies)
- Increasing referrals into home visiting (3 agencies)

- Improving prenatal visit attendance (2 agencies)
- Increasing postpartum initiation of birth control (2 agencies)
- Improving data collection and entry (2 agencies)
- Reducing child emergency department (ED) visits (1 agency)
- Increasing home visit attendance (1 agency)
- Increasing safe sleep practices (1 agency)
- Increasing family engagement (1 agency)
- Increasing educational goal setting (1 agency)
- Increasing household income (1 agency)
- Improving model fidelity through implementation of a new curriculum (1 agency)

LIAs also began increasing the complexity of their plans and attempting to make more ambitious improvements. Of the 24 CQI plans completed this year:

- 7 agencies surpassed their goals
- 3 agencies met their goals
- 9 agencies made improvements but did not meet their goals
- 1 agency did not meet its goal
- 4 agencies that focus on referrals were not able to meet their goals due to insufficient numbers

This decentralized approach, allowing LIAs to choose their own topics for CQI plans and implement plans outside of the MIECHV benchmarks, differs from Illinois MIECHV's initial approach to CQI, when the majority of agencies worked on the same or only a handful of benchmark indicators. We have seen that LIAs have maintained improvements in the vast majority of these areas however (see **Table 7** below), as demonstrated by the improvements made across years on these particular constructs. The areas that have not seen consistent improvement across years have either been unstable due to small numbers (safety planning and child ED visits) or because of the unique challenges MIECHV families face (breastfeeding). These more complex benchmarks require additional time and attention to address with more of an in-depth understanding of the underlying causal factors. Overall, Illinois MIECHV benchmarks continue to incrementally improve and we recognize that more complex benchmarks will need additional resources and supports.

Table 7: *Targeted Constructs for CQI Plans: Year 3 to Year 4 Changes*

Construct	# of Agencies	FY14	FY15	FY16	FY14-FY16 Change	Improvement
Breastfeeding	7	22%	29%	22%	-	No
Contraception	6	38%	61%	76%	+38%	Yes
ASQs	5	87%	91%	93%	+6%	Yes
Education	5	30%	46%	64%	+34%	Yes
Child ED visits	4	21%	19%	22%	+1%	No
Injury prevention	3	94%	96%	98%	+4%	Yes
Well-child visits	2	88%	91%	92%	+4%	Yes
Income & benefits	2	36%	54%	50%	+14%	Yes
ASQ-SE	2	77%	87%	91%	+14%	Yes
Prenatal care	1	59%	73%	73%	+14%	Yes
Referral completion	1	70%	62%	92%	+22%	Yes
Safety planning	1	69%	100%	56%	-13%	No

The 2016 Home Visiting and Continuous Quality Improvement Survey (HV/CQI Survey)

The evaluation team conducted the fourth HV/CQI survey to assess the status of HV professional training needs, experiences with CQI, perceptions of HV employment, HV safety policies, and for FY16, a series of new questions focusing on the HV and caregiver relationship.

Home visiting staff attitudes and beliefs regarding CQI practices

As CQI activities continue in the fourth year of implementation as part of MIECHV, evidence continues to suggest greater comfort, competence and success with the CQI process results in improved benchmark outcomes as reported above. **Table 8** shows that three of fourteen statements received higher endorsement from 2015 and the two prior years indicating high levels of knowledge and experiences and that supervisors are likely to support recommendations from the CQI team. Each statement's endorsement strongly indicates that CQI is well integrated into home visiting programs. The majority of other items on the survey did not increase as highly for FY16 - commitment to CQI, root causes, fewer quality problems, quality of data sources, TA support and perceived benefits – but they were all positively endorsed in excess of 70% agreement. These results and the number of CQI plans described above demonstrate that Illinois MIECHV's CQI program is highly formalized and well implemented across programs.

Table 8: *HV Survey Responses (agree/strongly agree) by Survey Item, FY2013—FY2016*

	2013		2014		2015		2016	
	n	%	n	%	n	%	n	%
1) Implementing CQI processes takes away from the quality of our program.	6	7%	12	16%	9	12%	3	4.9%
2) Our team is committed to the CQI process.	51	62%	59	79%	66	90%	56	91.6%
3) Our organization has a champion for the CQI process.	36	43%	38	48%	43	59%	33	55%
4) We have integrated CQI into our program.	30	38%	65	83%	66	89%	58	95.1%
5) We, as a team, analyze the root causes of problems before implementing any changes.	59	69%	58	73%	60	81%	51	83.7%
6) In our program, I see fewer quality problems today than in the past.	36	44%	43	56%	50	68%	41	67.2%
7) Our team has adequate time to conduct CQI procedures.	29	35%	40	51%	39	53%	42	68.5%
8) Our team has high quality information (data) to conduct CQI process.	35	43%	50	64%	57	77%	47	78.3%
9) We have had adequate training and technical assistance to implement the CQI process.	25	30%	54	69%	48	66%	42	70%
10) We can see the benefits from our CQI process.	31	38%	53	67%	57	78%	48	80%

Home Visitor Perceptions of Safety

The 2015 HV/CQI survey asked multiple questions regarding safety, perceived danger and safety policies in MIECHV agencies and communities. For FY2016, we asked a series of questions related to safety policies and practices that agencies have implemented. These policies were identified in last year's study and analysis of safety procedures and policies and provide, at minimum, what most LIAs should be doing for their HVs. **Table 9** shows that essentially all LIAs allow HV staff to cancel or leave visits if they believe they are in danger. This is a critically important understanding as some human service workers believe they are not doing their job unless they are working in high risk settings (Lyter & Abbot, 2007). The majority of HVs report receiving safety information during their orientation and that LIAs have a safety manual and/or policy. These responses indicate that most HVs understand they can leave a dangerous setting, and have been provided with training and guidance through a policy manual. Two less widely reported safety recommendations were having a safety committee and providing staff with mobile phones. Less than half of the HV respondents report their LIA provides a mobile phone for staff. It might be interesting to examine what barriers prevent or limit LIAs, other than cost of course, to provide mobile phones to their HVs.

Table 9: *HV Reports of Statewide Safety Policies and Procedures*

Which safety policies and practices have been implemented in your agencies?	Yes		No		Not Sure	
	n	%	n	%	n	%
1. Provides information about safety during initial orientation/onboarding	52	85.2%	5	8.2%	4	6.6%
2. Provides annual safety trainings to all home visitors/CI staff	42	70.0%	10	16.7%	8	13.3%
3. Has a written safety policy or manual	51	83.6%	8	13.1%	2	3.3%
4. Has a standing safety committee	29	49.2%	18	30.5%	12	20.3%
5. Allows home visitors/CI staff to cancel/leave a home visit for safety reasons	59	98.3%	0	0.0%	1	1.7%
6. Provides cell phones to home visitors/CI staff	28	46.7%	31	51.7%	1	1.7%

Home Visitors Professional Development Needs and Preferences

A key component of the CQI Home Visitor Survey is to ascertain professional development needs of the home visiting staff. HVs participate in an intensive array of trainings when hired by the LIAs relative to the model programs they are implementing and a wide array of other knowledge and skills necessary to be a successful home visitor. In addition to the program models they are trained to implement, HVs must also develop content background in special health and education topics, community referrals and resources and special populations. Over the past four years, the evaluation team has asked home visitors to identify training and professional development needs to assist the project staff in planning, organizing and supporting home visiting knowledge and skills in various geographical, cultural and organizational settings. Building on past years' questions, the FY16 survey asked survey respondents the degree to which they are interested in additional professional development and training. **Table 10** below shows that 65%-87% of HVs reported being interested in almost all of the topics. The highly rated topics primarily focus on behavioral related issues that include mental health conditions - depression, ACES, children with special needs, and infant mental health services. These priorities are not really surprising since they address more complex family issues that require in-depth knowledge and skills. It would also be interesting to know not only whether HVs want to learn more about the topical knowledge described above but whether they want to understand their role in identify and managing these issues with community resources.

Table 10: *Home Visitors Report of Training and Technical Assistance Needs*

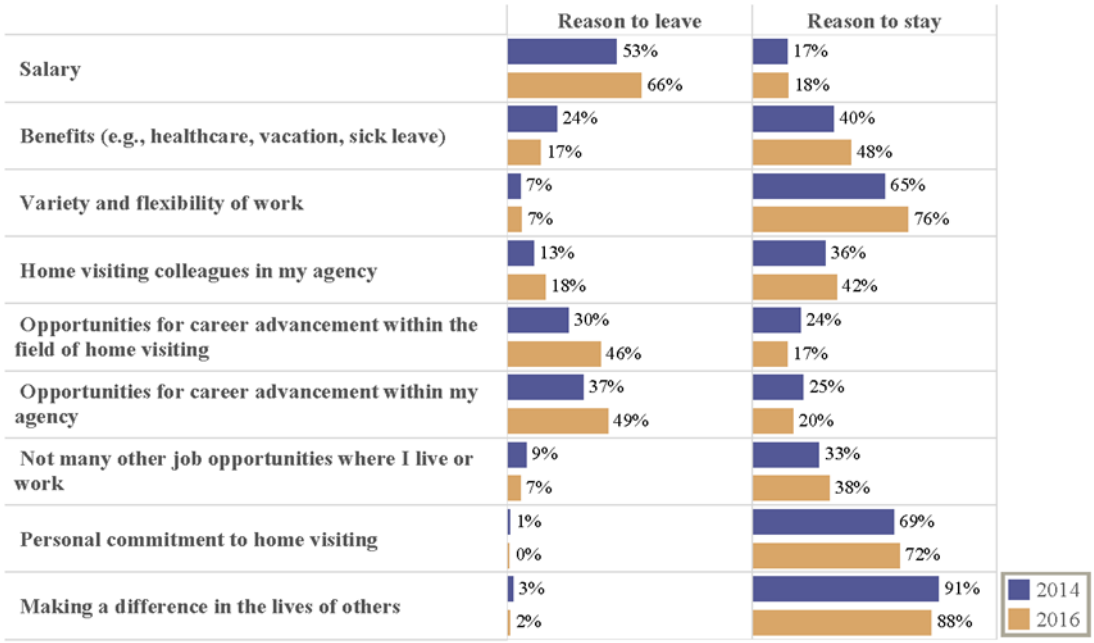
	Not at all interested 1		Somewhat interested 2		Interested 3		Very interested 4		Sum Columns 3 & 4	N/A 5	
	n	%	n	%	n	%	n	%		n	%
1. Breastfeeding	6	9.8%	10	16.4%	23	37.7%	17	27.9%	65.6	5	8.2%
2. Depression/mental health	1	1.6%	4	6.6%	25	41.0%	28	45.9%	86.9	3	4.9%
3. Adults with developmental delays or learning disabilities	0	0.0%	9	14.8%	25	41.0%	23	37.7%	78.7	4	6.6%
4. Family planning	3	5.1%	8	13.6%	23	39.0%	21	35.6%	74.6	4	6.8%
5. ACES and childhood trauma	2	3.3%	6	9.8%	17	27.9%	31	50.8%	78.7	5	8.2%
6. Infant mental health services	2	3.3%	7	11.7%	22	36.7%	24	40.0%	76.7	5	8.3%
7. Domestic violence safety planning	4	6.7%	13	21.7%	21	35.0%	17	28.3%	63.3	5	8.3%
8. Children with special needs	0	0.0%	5	8.2%	26	42.6%	26	42.6%	85.2	4	6.6%
9. Working with male caregivers	2	3.3%	9	15.0%	23	38.3%	22	36.7%	75.0	4	6.7%

Factors Contributing HV Retention and Departure

As previously noted, the Illinois MIECHV project was launched in 2010-2011 from the ground up, adding 35 HV LIAs and support services to Illinois' existing HV system. One early challenge of building such a large system was hiring a significant number of inexperienced staff, which resulted in a relatively high turnover rate during the first year of onboarding staff. Again, the HV turnover rate was quite high, at 31% in 2016. Staff turnover continues to remain a concern, and the financial stability of the state has exacerbated that problem with layoffs, furloughs and closures. Staff turnover is a well-documented problem that ultimately impacts the cost, quality and quantity of HV services provided.

The HV/CQI survey included a series of questions related to why HVs remained in their current positions or reasons why they might leave. Eight questions were subsequently asked in 2016 to determine what major factors may have changed or remained the same. **Figure 28** shows that low salaries significantly increased, as a reason for leaving, from 53% in 2014 to 66%, as did lack of opportunities for career advancement in the field of home visiting and at the home visiting agencies. By contrast, the factors that contributed to the reasons HVs remain in their current positions were similar in 2014, indicating a personal commitment to HV and making a difference in the lives of

others. Other emerging factors for remaining in their current HV position related to the variety and flexibility of the work (increased by 11.2%), and fringe benefits (^ 8.4%). Home Visiting is first and foremost a job of passion and commitment to help others, which is probably the best reason or reasons for doing any type of work. It should also be noted that changes over the two years are also related to HVs indicating that a topic is "neither a reason to leave or stay." For example, salary as factor to leave increased from 53% to 66%, while salary as a reason to remain remained the same – 2014, 17% and 2016, 18%. Although this is a cross-section of HVs each year, it does indicate that salary has become a bigger issue. On the positive side, fringe benefits, variety and flexibility in their work, home visiting colleagues, and lack of local job opportunities were viewed as reasons to remain a home visitor. Personal commitment and making a difference in the lives of their families remain the most compelling factors to continuing their HV positions. Based on our surveys, home visiting has generally been an entry level position with accompanying marginal salary levels. The home visitor position is challenged by low wages, but these low salaries appear to be offset by home visitors viewing their work as important and meaningful.



Note: Totals do not equal 100% because one response choice was "Neither a reason to leave or to stay."

Figure 28: Reasons to Leave or Stay

Self-Report Salary of HVs by Demographics and Community

Home visitors were again asked on the HV/CQI survey to provide their annual salary for analytical and comparative purposes. HVs' salaries are presented in **Table 11** for 2016. A HV's median annual salary in 2016 was $32,500 with a range from $23,100 to $60,000. MIECHV communities with the highest median salaries were in Englewood and Macon County; and, not surprising, HVs with Bachelor's degrees and more years of experience were paid significantly more than those with less education and experience (see **Table 11**). We also compared salary averages from the 2014 survey. Results show that the median salary appears to have increased by $2,284 or approximately 7.5% over the two year period. This suggests that HV staff are getting raises and first year salaries have improved from prior years, which has been a goal of the state MIECHV staff.

Table 11: *Home Visiting Salaries by Community, Education, and Experience*

	N	Median	Mean	Std	Min	Max
Illinois MIECHV	46	$32,500	$34,604	$7,813	$23,100	$60,000
Community						
Elgin	9	$33,000	$33,552	$6,376	$23,100	$44,000
Englewood	12	$34,000	$34,500	$6,385	$26,000	$46,000
Macon	11	$34,300	$36,048	$9,013	$27,328	$60,000
Rockford	9	$31,000	$35,876	$11,036	$26,000	$55,000
Vermilion	5	$30,000	$31,279	$4,569	$27,900	$39,000
Education*						
<Bachelor's degree	9	$27,000	$29,096	$3,830	$26,000	$36,868
Bachelor's degree	24	$32,000	$34,258	$7,297	$23,100	$60,000
>Bachelor's degree	13	$38,000	$39,056	$8,521	$27,328	$55,000
Experience						
<=1 year	10	$32,500	$33,198	$8,670	$23,100	$55,000
2-5 years	25	$32,000	$33,112	$5,045	$26,000	$46,000
>=6 years	11	$40,000	$39,273	$10,697	$26,000	$60,000

**P value <.05*

Assessing HV relationships with caregiver/guardian

The HV-Caregiver (HV-C) relationship is the cornerstone for providing high quality home visiting services. The depth and strength of the relationship between the HV and caregiver is built on trust and confidence that allows participants to share and self-disclose personal challenges, and to support learning and parenting practices that maximize the potential for improving maternal and child outcomes. The HV-C relationship is often complicated by an array of personal, family and child issues facing the participant, which can range from domestic violence to child developmental delays. Most HV program "models" do not have a curriculum solution for complex family needs. The HV-C journey begins with engaging families and addressing their needs – from simple to complex. The unique HV-C bond cannot be easily identified on the first visit as a relationship unfolds based on trust and responsiveness to unique family needs.

In an attempt to further explore the HV-C relationship, the HV/CQI survey asked a series of questions on the various factors that HVs believed influenced their relationship with the caregiver. **Table 12** shows the highest rated statements endorsed by the HVs related to their relationship were the caregivers' willingness to open up to the HV regarding personal struggles, general trust, and levels of respect for the HV. The lowest rated factor (least influence on the relationship) characterizing the HV-C relationship was the racial and ethnic match between the HV and caregiver. There was a lot of variance across the four responses, and only the question regarding racial/cultural matching indicated minimal influence on the HV-C relationship.

Table 12: *HV perceptions of factors influencing their relationship with caregivers*

	No influence on the relationship		A small influence on the relationship		A moderate influence on the relationship		A major influence on the relationship	
	n	%	n	%	n	%	n	%
1) The willingness of the guardian to open up to me about personal struggles in her life	0	0.0%	2	5.7%	12	34.3%	21	60.0%
2) The guardian's lack of trust or comfort with people outside her/his family and friends (including the home visitor)	0	0.0%	3	8.6%	12	34.3%	20	57.1%
3) The guardian's lack of interest or motivation in wanting to be a successful parent	0	0.0%	1	2.9%	14	41.2%	19	55.9%
4) The guardian's personal commitment to our home visiting program	0	0.0%	2	5.7%	14	40.0%	19	54.3%
5) The support the guardian receives from family and friends	1	2.9%	8	22.9%	16	45.7%	10	28.6%
6) The interruptions or interference of other family members or friends during home visits	3	8.6%	11	31.4%	11	31.4%	10	28.6%
7) The level of control that the guardian believes she/he has in her/his life	0	0.0%	7	20.0%	20	57.1%	8	22.9%
8) The way the home visitor and guardian seem to "click" or "connect" in the relationship	0	0.0%	3	8.8%	16	47.1%	15	44.1%
9) Having the home visitor match the race and ethnicity of the guardian	12	34.3%	9	25.7%	9	25.7%	5	14.3%
10) The difficulty the home visitor has in scheduling home visits with the guardian	0	0.0%	7	20.0%	17	48.6%	11	31.4%
11) The level of respect the guardian has for the home visitor	0	0.0%	3	8.8%	13	38.2%	18	52.9%
12) The degree to which the guardian relies on the home visitor for basic service needs (housing, food, clothing)	3	8.6%	5	14.3%	18	51.4%	9	25.7%

A final question that was part of the relationship building items asked HVs to characterize or classify the distribution of their participants into four categories ranging from "invested and eager" through "disinterested and defensive" (see **Table 13**). Responses ranged from 15% percent who reported caregivers as "disinterested and defensive" to 64.6% who reported caregivers as both "trusting and warm" and "invested and eager." HVs classified 28% of caregivers as "guarded and polite." These responses suggest that HVs detect a small but significant number of HV participants (15%) may be challenging to engage and sustain in their respective programs. HVs report at the median percentile (50th percentile) as "trusting and warm, (30%)" while "guarded and polite" has the same percentile (25%) as "invested and eager" to learn. Of course, the importance of this information is to make HVs and staff aware of variation among participants to identify and strategize ways to improve the depth and quality of the HV-C relationship.

Table 13: *Classification of HV Participants by Four Relationship Categories*

	Mean	SD	Min	25th Percentile	50th Percentile (Median)	75th Percentile	Max
Disinterested and defensive	15.0	11.0	0	10	10	20	50
Guarded and polite	28.4	19.7	1	10	25	40	80
Trusting and warm	31.4	16.7	5	20	30	45	75
Invested and eager to meet	33.2	20.6	5	20	25	50	70

CQI/HV Survey Open Ended Questions

As part of the HV/CQI survey, a final open-ended question asked participants to provide feedback to improve or change the HV/CQI process for their agency/organization. This question provided an opportunity for HVs to respond in their own words regarding issues related to MIECHV and the CQI successes and challenges. Thirty-one survey respondents provided one or more comments. As a way to provide a meaningful analysis and summary of participant responses, we report them in five broad categories.

Successes with CQI. A number of respondents described making significant progress in addressing their benchmarks. In fact, one respondent indicated that "our data look good, so it seems like we are searching for minor problems." Illinois MIECHV has demonstrated this progress most notably by benchmark improvements at the state and community level in each of the last four years. Several respondents acknowledged progress and improvement over the past few years, which created a "can do" attitude for their CQI efforts.

Technical Assistance and Support. A frequent theme of the open-ended responses was the support they were receiving from CQI staff. Five specific quotes were written regarding the assistance and support provided by CQI staff ranging from; "she does a great job keeping us up on the data needed for Visit Tracker," "assists with meeting our goals," "has been fantastic, great support and feedback" and "I love [our CQI staff member] and feel like she has worked wonders for our program." "I feel like she is always helping us change/improve our program and CQI so nothing to add at this time." These positive and powerful comments demonstrate the absolute necessity for ongoing high quality training, technical assistance and support to LIAs to guide their CQI efforts. The CQI Specialist serves as an intermediary among the challenges of day to day HV work, data collection and benchmark reporting and developing new knowledge and skills to improve the quality of HV services. And, notwithstanding the high praise for the CQI Specialist, it is also evident that many programs have a long way to go to improve many of the key program outcomes and benchmarks. This was suggested by one respondent who suggested the tremendous need for CQI with the Coordinated Intake staff and services. This has already begun with the FY17 expansion of Illinois MIECHV and the recent assignment of a second CQI staff member who will work closely with the CI staff and communities.

Call for Assistance. A common thread of open-ended responses from HVs, recorded by over a third of the respondents, was asking for additional help and guidance with referrals and/or caseloads. A number of respondents were clear that they were having a hard time meeting the caseload requirements. Survey respondents directly stated that they were interested in "lowering the caseload requirements" and that the state

does not understand the "challenges in working with teens." One respondent suggested that by reducing caseloads, they would have "more time to work with the clients." The other side of this call for help surfaced with the recognition by respondents of the need to "increase referrals" in their communities. Numerous communities acknowledged their "need for assistance related to working with other agencies to increase referrals," "help referring families" and/or to have someone "monitor all referrals that are given to each home visiting agency." One person referring to their CI system commented that having "a system point of entry bottle necks referrals."

Several suggestions surfaced from the respondents who proposed "expanding CI with CQI" and to provide a "community wide CQI process for addressing referrals." The number of HVs requesting help for increasing caseloads and improving the referral process illustrate that referrals remain a major challenge for Illinois MIECHV communities. One key strategy that may assist LIAs and communities would be reviewing, designing and strengthening policies and procedures for CI. It should also be noted that the HV/CQI survey was conducted in the summer of 2016, which was shortly after the loss of the Community Systems Development staff as well as significant turnover in the CI staffing.

Systems Planning and Doing. Several respondents identified continued changes related to the Illinois MIECHV program that included new benchmarks, new assessments, and updating the Visit Tracker system. One comment indicated that many of the tools were not "ready to go when rolling out the changes" and suggested "testing changes with a pilot group so that there are not so many clarifications or new changes to be made." "It seems like we are asked to hit a moving target." The changeover to new benchmarks and the requirements for changes in the Visit Tracker system have frustrated many HV programs.

Other Challenges and Suggestions. A final category derived from the open-ended questions is comprised of an amalgamation of single home visitor comments or responses that may be helpful to the MIECHV project staff. Most comments are well established concerns, and have been raised before, but it is important to hear from the field to balance and understand what issues remain salient.

Regarding CQI, one individual suggested that the number of CQI plans need to be reduced, and/or more time is needed to implement the CQI changes. Not surprisingly, several HVs commented on having "too much paperwork" (4 respondents), "having too many assessments," "large salary differentials" (up to $10,000), and "would like more time to work with families." One person identified "working in rural communities created greater challenges because of demographics and location." Finally, a HV suggested that families don't need another "form" to complete or improve skills, they need to be "listened to and encouraged."

Summary. The open-ended questions reflect both successes and challenges related to CQI and other HV issues. Many HVs appear to have a strong interest in and understanding of how CQI works in their program and that these efforts are paying off through benchmark improvements. Many respondents are delighted by the training and technical assistance received from the CQI Specialist and general sense of progress and improvement that provides a sense of efficacy in their work. Challenges remain related to the changeover to the new benchmarks, acquiring and sustaining required caseloads, and the need to support Coordinated Intake through CQI.

State Level CQI Activities

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.

During FY2016, the state-level CQI activities included:

- Continued work on data and benchmark alignment;
- Research on cost per family slot for each of the models and funders, and discussion of implications for state home visiting programs;
- Discussion of pay for performance best practices, approaches used in the state, and potential indicators for future use;
- Literature review of home visiting uptake and factors that increased and decreased family engagement; and
- Review of FY2015 CSD staff and membership survey results to learn more about collaborative accomplishments and challenges, roles and activities.

The state CQI team is currently going through a transition as a new state-wide group and has been exploring innovative ways to understand HV programs and services at an expanded and in-depth level. In other words, this is an expanded group from the current State CQI team that involves other program models, agencies and organizations that provide technical assistance and data monitoring for Illinois HV programs. The Infrastructure Group, as it is currently called, began in July 2016, and has met four times since then. The goal will be to move the State CQI work to this larger cadre of partners. Members of the MIECHV team have been participating in these meetings as

the new collaborative develops expanded goals and mission to include MIECHV State CQI.

Coordinated Intake

Coordinated Intake (CI) staff and services play an integral role in MIECHV communities. CI can enhance the capacity of Home Visiting Programs to meet the needs of pregnant women and families with young children by:

- Reducing the burden on HV programs to find participants to fill their caseloads;
- Matching families to the most appropriate programs and services to meet their individual needs;
- Providing a central point of entry for families seeking early childhood services;
- Helping families navigate an array of agencies and services; and
- Promoting programs and services to educate families on what is available in their community.

Other potential benefits include minimizing duplication of services and reducing competition among providers, improved data collection to document services provided and unmet needs in the community, as well as efficient management of wait lists to reduce time families wait for services and avoid having families fall through the cracks by providing follow-up.

Each of the six MIECHV communities has a full-time Coordinated Intake staff member whose role is to identify, recruit, engage and enroll eligible families and caregivers in HV programs. We know from focus groups and interviews with HVs that many of these positions have been challenging to fill and retain because of the complexity of position requirements and the different skill sets needed. That is, there are no program models per se for CI, since each system is unique to each community due to varying resources, geography, and populations. Another reported challenge is establishing a CI system for HV in a somewhat crowded early childhood services environment. In other words, there are multiple home visiting programs, both MIECHV and non-MIECHV that, in some ways, have to compete for caregivers. It should also be noted that the competition for families is likely in part due to changes in birth rates and other options that families may have in the communities. Illinois' birthrates have been on a downward trend for the overall population, and for teen mothers as well (IDPH, 2017). We also know that the Illinois Department of Human Services reported a decline in families entering Supplemental Nutrition Assistance Program (SNAP) and several case management programs designed to support new and high-risk families.

Worker skill sets required for CI include some overall knowledge of home visiting, Illinois program models and local community resources, but also include a variety of

other "linking" and "collaborating" skills related to connecting with diverse communities, facilitating referrals across an array of community resources, completing screenings for service needs, and in many cases rapidly enrolling families while they perceive HV as a benefit, and before they lose interest. These real time and daily work issues have been exacerbated by the lack of a state budget (heading into 2 years with 6 months of stopgap funding through 12/31/2016) for these services, resulting in high numbers of staff turnover (including CI staff), furloughs, and loss of the Community Systems Development staff. Moreover, the CI staff has been trying to move from a paper-based and Excel-based tracking system to the online Visit Tracker database, but the system remains in the development phase.

The CI system continues to have many challenges, and is currently undergoing a reconfiguration to adapt to changes from the loss of the CSDs, the state budget crises, CI turnover, downsizing, and program closures. CI staff are now working with the state MIECHV team and CQI staff to improve their outreach to community resources and potential HV recipients, increase standardization and refine their processes. The CIs continue to need technical assistance and new tools for enrollment, screening, tracking progress and decision making to guide and support their work.

Community Systems Development Programs

As mentioned in last year's Annual Report, the Illinois MIECHV Community Systems Development (CSD) staff were not funded after March 31, 2016. This change required each of the six MIECHV communities to identify ways to align and support a community-wide collaboration. The magnitude of change depended upon whether the CSD was the primary early childhood entity in the community or whether other entities such as Innovation Zones, AOK networks or other local early childhood councils were in place. Over the past 10 months the MIECHV staff has worked with the communities to address issues related to systems approaches, and worked to develop and expand the role of the Coordinated Intake workers.

Home Visitor Staffing Turnover

A highly trained, professional HV workforce is the quintessential ingredient for ensuring high quality home visiting programs and services. Home visitors have a long history crossing over multiple disciplines and levels of training, but typically are paid more in line with child care workers and early childhood teachers. As a result, home visiting overall is a relatively low-paying profession that makes it susceptible for high mobility and turnover. Illinois MIECHV, and other HV programs, have also experienced a steady turnover rate.

The evaluation team has surveyed home visitors for the past three years to assess factors or reasons that contribute to staff either departing or remaining in home

visiting at their agencies. As described in prior year reports, Illinois MIECHV scaled up a major home visiting system in a relatively brief period of time. Most MIECHV home visitors reported that their current home visiting position was their first job in home visiting, which likely contributed to their uncertainty regarding the home visiting profession in relation to higher paid positions.

For state fiscal year 2016, Illinois MIECHV shows a wide range of turnover from 3% for MIECHV HV/Doula Supervisors to 75% for Doula Home Visitors (see **Table 14**). These turnover numbers are based on the number of staff identified in their MIECHV contract with the Office of Early Childhood Development (OECD) for a specific position. However, turnover percentages need to be carefully interpreted as some positions have very few staff (Doula HV = 4), and any reported change may be overstated. Specifically, the largest number of contracted staff (39 HVs) were the MIECHV HVs that reported a 31% turnover last year, which is slightly less than one third of HVs in the past year. Equally concerning is the time is takes to fill a position. **Table 14** also shows the average length of vacancies and the average length of employment that again vary according to the number of people in a position and that job title. Nonetheless, the average length for employment of MIECHV HVs was 1.8 years, which seems relatively low and may contribute to a number of HV issues related to continuity of services, dropouts and the expense of hiring and training new home visiting staff.

Table 14: *MIECHV Staff Turnover FY2016*

MIECHV Positions	Contracted FY2016	New Hires FY2016	Turnovers FY2016	% Turnovers	Avg Overall Length of Vacancy (months)	Avg Length of Employment (years)
CI	5	0	1	20%	5.6	1.9
CI Supervisor	5	1	3	60%	0.2	2.3
Doula	14	8	3	21%	1.2	1.9
Doula Home Visitor	4	3	3	75%	0.4	1.8
Home Visitor	39	13	12	31%	3.6	1.8
Other Staff	15	1	1	7%	2.3	3.2
HV/Doula Supervisor	29	6	1	3%	1.1	2.8
Grand Total	111	32	24	22%	2.6	2.2

Field data collectors: Triangulating Illinois MIECHV programs and processes

As described earlier, the MIECHV program underwent a series of both modest and major changes related to Illinois HV programs and services during the past year. One major change for FY17 was the termination of the field data collection arm, who worked in the six targeted communities collecting baseline and follow-up data from program participants. In fact, all but one of the FDCs served in that role for the four years of the project. These staff had up-close and personal relationships both with home visitors and to some degree with families when they entered their homes conducting in-home assessments for up to three years. As part of attempting to understand the FDC's perspective on the MIECHV project, the evaluation team conducted a summary focus group with the FDCs in September, 2016. The focus group data were recorded and transcribed electronically, and a PhD-level qualitative researcher conducted the analysis, findings and reporting. The summarized results from the focus group are provided below.

Major Challenges Associated with FDC Role

The most significant challenge reported by the FDCs was scheduling the visits for data collection. Because the research team wanted the home visitor to be present at the time of the data collection to bridge the relationship between the FDC and caregiver, this required significant communication and coordination across three people – HV, family and FDC – for just one home visit, which was exponentially complicated with multiple HV agencies and staff. The FDCs had specific time frames or windows that they needed to collect data, which added demands to the HV and FDC. Setting up a home visit, and entering a person's home and conducting an in-home assessment is a complicated exercise that requires substantial coordination and the cooperation of high needs families during some of the most chaotic life circumstances for families. Adding the FDC to the mix challenged the scheduling process:

"Okay, next week I've got any day available but Tuesday," and then when I talked to her on Monday, "Oh, I set up 2:00 for [Tuesday]."
"I got to the point where we're – you know, every week if they (HV) were dragging their feet, they'd just get a little text from me every week, push, push, push, push, push."

The HV also had the role of introducing the concept of field data collection and informing the families that FDCs were coming to the next home visit. This worked well most of the time, but FDCs were frustrated when the HV had not prepared the family, adding to the confusion of who the FDCs were, what they wanted, and making it more difficult for the family to decide if they wanted to participate.

"So it didn't happen a lot, but it did happen from time to time and it was not good."

"Several times caregivers became hesitant when they were surprised to learn they would be asked to participate in a 10 minute parent child interaction video. If a caregiver did look really bad I would say unless this gets pulled I'm the only person who's gonna see it and –so that was a benefit 'cause they did care what they looked like."

FDCs' View of HV Program Quality

The FDCs had the unique opportunity to see how HVs interacted with their caregivers, although to some extent the home visitors' role during the evaluation assessment was supposed to be more background support. Overall, many FDCs reported comments like this one:

"I was really impressed with most of what I saw. Maybe that's because I haven't done enough home visiting to recognize the good and the bad, but they were all different personalities, all different ages."

"Even though I (FDC) was there, the HV would be engaged with the child while the mom was filling out paperwork, and you could just tell by the way the children responded to them when they came through the door, you know, or when they left they'd cry."

Although HVs had a supportive role with the family – entertaining other children, keeping family members out of the video - several FDCs were a little frustrated by HVs who did not apparently know the names of the children, brought food to the home and ate lunch in front of the whole family, or attended to their cell phones. One FDC was concerned that a HV may have violated confidentiality when a client asked a HV, *"'Did you see my cousin?' The HV said 'Oh, yeah, and she's pregnant.' There still needs to be a barrier, yeah."*

Overall, the praise for home visitors was high:

"There was a connection – some of them were there and doing their job and were good– I think it can be a great thing."

Lessons Learned

One important point referred to the role of fathers in home visiting. A few FDCs pointed out the involvement of fathers during their visits, while the programs nearly always primarily focus on the mother. One FDC observed: *"I clearly saw that a lot of the home visitors knew the dad –– interacted with the dad. They were aware the dads made a point of being there if they could."* Another FDC mentioned the role of fathers while recording playing: *"I had a couple of videos that the dad was in. And fathers can play*

so differently. And some of the fathers I saw them play and they were better at it than these moms." And another FDC explained:

"*Is there some kind of addendum that could connect the fathers with the home visiting program? I mean there's a lot of fathers in the communities that I worked in that are really involved and in some instances more involved than the mother. 'cause it just seems like – they're saying like we have this anti against family, against male figure in household.*"

Conflicting priorities: HV versus employment

Some FDCs pointed out the irony of mothers getting jobs as a program goal and a benchmark, since employment makes is difficult to remain in a HV program. This viewpoint corroborates the earlier dropout discussion as to when caregivers get a job the HVs report caregivers leaving a program before completion. Employment may also contribute to moving from the MIECHV community, which was another major reason for leaving HV. The FDCs saw it this way:

"*A lot of the mothers started getting jobs, which is a good thing. It's one of the benchmarks. But it's ironic that you accomplish the benchmark and then suddenly – for the home visitor –it gets much harder to do your home visits.*"

Some working moms changed their schedule to accommodate home visiting*: "I had some who did it 5:00, 5:30 in the afternoon – when they get home from work.*" Yet this can create problems for those who work as home visitors and don't care to work that late in the day: "*Another thing is that some home visitors just did not want to work past 5:00. And that was a problem when they started to work when they didn't get home till 5:00 and they wanted to continue the program, but she would close them out. She didn't want to work past 5:00.*"

Importantly, another FDC added to this comment about safety: "*Well in some instances it would be dangerous to work past 5:00, in the summer especially.*" Safety became a major concern is all MIECHV communities as gun violence and criminal behavior are not uncommon in many of the MIECHV communities. Safety issues and policies were studied and addressed with HVs in 2015.

The FDCs provide a unique perspective on the day to day planning, implementation and evaluation of HV programs and services. Five of the six original FDCs spent four years conducting in-home visits with HVs and families. This perspective provides an additional source of information to understand the quality of HV, identifying several key issues that surfaced over the years as part of their ancillary role. These perspectives need to be layered on to other sources of data and information to gain a full understanding of Illinois MIECHV.

VI. Summarizing FY2016 Illinois MIECHV Evaluation Results

Illinois MIECHV completed the fourth full year of HV services in six communities, 19 HV programs and five doula sites, serving priority populations across the state. FY16 was a particularly challenging year primarily attributable to lack of a state budget for the full fiscal year that directly and indirectly impacted hundreds of state-funded community-based agencies that provide basic health and human services to Illinois families. Although federal funding allowed MIECHV HV programs to continue in targeted communities for FY16, other community-based agencies were gingerly walking on thin ice to remain in business. Some agencies briefly closed, some furloughed, while others were able to remain in business because of local funds, loans and deep reserves. Some HV staff left agencies to find more stable work environments. In addition to the financial strife, Illinois MIECHV received continuing HRSA funds beginning July 1, 2016 that resulted in the expansion of HV and doula programs to eight new LIAs, and three new special populations projects targeting child welfare, homeless families, universal primary screening and community engagement. Overall, Illinois MIECHV benchmarks continued to improve, with some variation, across the six major benchmark constructs. Lastly, HV outcomes continue to demonstrate improvements for those participants who remained in the HV programs at 1 and 2 year follow-ups.

Illinois MIECHV Statewide Rubric Assessment

To summarize the enormous amount of information described in this Annual Report, the evaluation team sought to find a better way to communicate this year's and prior years' evaluation efforts in a meaningful, concise and accurate way. A promising idea that surfaced from the discussion, was the creation of a learning rubric (see **Table 15** below) that would rate the quality, expectations and status for each indicator using data and information from formative and summative evaluation activities.

Based on the literature and multiple years of evaluation experience, the research team proposed key metrics or indicators that purport to assess quality factors for the MIECHV statewide home visiting system. Subsequently, the team reviewed qualitative and quantitative data and information from multiple sources to create four comprehensive domains comprised of 29 indicators. The purpose of the approach is to provide a blueprint of key components, determine whether these elements are important to the state, create evidenced-based documentation for a rating, and provide an evidence-based, unbiased assessment for each indicator. In other words, Illinois Home Visiting Systems Rubric (IHVSR) is designed to create consensus by key stakeholders regarding what's important to quality home visiting systems, identify the key metrics for what's important, and determine what evidence is available to support or critique a specific indicator. It should also be noted that several data elements do not currently have an indicator to rate at this time, which should be identified or eliminated.

Finally, the most critical aspect of IHVSR is to use the information to create consensus on indicators, identify and prioritize those critical indicators, validate the rubric, and use it across systems to ensure that Illinois HV systems and programs continue to reach families in need and to improve the quality and effectiveness of HV services.
The development of a rubric learning assessment to rate and validate key metric indicators is believed to be essential in developing a high quality, high performing home visiting state system.

Illinois Home Visiting Systems Rubric

Instructions: Review each home visiting system and program indicator and rate the indicator using the following metric.

A = Highest Performing - Systems, services and programs are rated highly on multiple sources of data. Applies to the majority of the system.

B =High Performing – Systems, services and program positively rated across multiple data sources and scope. Additional reach and efforts are needed to be more consistent across the systems, services and programs.

C = Meets Expectations - Services, systems and programs are meeting minimal levels of quality and reach. Systems, services and programs have mixed indicators reporting both positive and negative ratings.

NI = Needs Improvement – Systems, services and programs are marginally functional, and cause or contribute to perceptibly reducing the effectiveness and efficacy of HV programs.

Table 15: *Illinois MIECHV Rubric Assessment*

System	Rating	Evidence
Coordinated Intake		
Systems development	C	Systems redesigned in FY16, CI staffing and capacity significantly varies across communities
Eligible Population	B	Participants meet special population criteria, not certain how many caregivers are eligible or need HV services, and not receiving them
Outreach	Undetermined	No consistent data collection
Screenings/referral to HV	Undetermined	No consistent data collection
Referrals to other services	Undetermined	No consistent data collection
Home Visiting Programs and Models		
Enrollment	C	Some LIA's are challenged to maintain full caseloads (e.g. low referral volume, staff turnover)
Model fidelity	Undetermined	No consistent data collection
Case complexity	Undetermined	No consistent data collection
Quality – Participant Report	A	HV services are rated highly (> 95%) on satisfaction surveys
Quality – External Evidence	B	All LIA's are certified or recognized by program models
Participant Completion	C	Significant dropouts prior to program completion
Transition out of HV to other programs	Undetermined	No consistent data collection
HV Staff Turnover	C	The turnover rates appears to have fluctuated over the past four years. Improved data tracking showed improvements over the first three years and then a decline in 2016
Referrals and Supports		
Provided for positive screenings	A	MIECHV benchmark data available
Community resources availability	Undetermined	No current indicator
Acceptability	Undetermined	No current indicator
Effectiveness	Undetermined	No current indicator
Completion	C	MIECHV benchmark data available
Benchmark Attainment		
Data quality	B	Benchmark data are of high quality. Significant variation across non-benchmark data (e.g. case notes)
Sensitivity to Change	B	Most benchmarks have improved
Reporting	A	Benchmark data are submitted on time and approved by HRSA
Available for CQI	B	Benchmark data are available to CQI staff and LIA's
Continuous Quality Improvement		
Coordinated Intake	B	Met HRSA systems benchmarks, but limited by CI redesign and availability of data in Visit Tracker
Local Implementing Agencies	B	Completed CQI plans show demonstrated improvements. Limited by availability of data in Visit Tracker

System	Rating	Evidence
State Systems and Policy	B	Addressed safety, core indicators, salaries and mental health. Development of HV infrastructure committee
State Infrastructure		
Workforce Development	B	Strong training and TA system, some HV report access issues (waiting lists, next cycles), CI needs specialized training
Data Systems and Integration	C	Visit Tracker redesign still under development, non-benchmark reports are limited
Communication and Messaging	Undetermined	HV meetings, conferences, IGROW web site, newsletters. Need to identify acceptable metric at this time
Pro Home Visiting and Family Policies	A	Illinois has strong commitment to HV with multiple stakeholder groups
Fiscal Management	NI	Major challenges with IDHS last year

VII. Conclusions and Recommendations

The Illinois HV rubric presented above provides a snapshot or status check of what we know regarding various elements of Illinois MIECHV, empirically based on qualitative and quantitative data. Several rubric components do not have indicators at this time and data may be inadequate to provide a confident assessment of others. Nonetheless, based on these results, we provide conclusions and recommendations for the six rubric areas to improve MIECHV programs, services and systems.

Coordinated Intake is the gateway into HV services and programs. The CI systems were disrupted last year in several communities with the elimination of the CSDs. Communities and staff are working to restructure the CI system with help from state staff and full integration of Visit Tracker and CQI. The data support that virtually all MIECHV participants meet the special population criteria delineated by HRSA, but additional information is needed to assess the number or percent who are eligible for HV, who are touched through the outreach and engagement process, and how they are reached. If possible, it would be helpful for MIECHV to determine if the other indicators -- outreach, screenings, referral and model fit -- should be a priority for CI, and if so, how that information should be collected, analyzed and reported. Lastly, the CI staff require additional training and technical assistance to ensure they understand what is expected of them and how they are progressing on meeting those expectations in the unique community context in which they work.

Home Visiting Programs and Models are the core services of the MIECHV initiative. Illinois has three model and doula programs that have been well tested and deemed effective. The challenge to MIECHV is to determine if the programs are delivered with fidelity to the models. The evaluation data unequivocally show that participants who enter and remain in the HV programs up to 2 years report exceedingly high ratings of satisfaction and benefits from their HV. This positive reporting holds true for participants at the end of one year. All MIECHV HV programs are certified by the

respective models providing external evidence for program quality. The evaluation team also has done two small studies with dropouts or lost caregivers who also report high levels of program satisfaction and benefits. HV programs need to continue efforts to maximize the degree to which caregivers initiate HV and remain in a program to a point of satisfactory completion. More information should be collected regarding fidelity to the model, case complexity, and transitioning to other programs. The VT system should be able to assist in the reporting and the collection of data for these indicators. Staff turnover remains challenging in Illinois as the unstable funding environment continues, and must be continuously monitored due the deleterious effects on caregivers, caseloads and continuity of HV services.

Continuous Quality Improvement has been highly operational for three full years now, demonstrating incremental improvements for required HRSA benchmarks. It should be noted Illinois has met HRSA's criteria for meeting performance benchmarks over the past four years. Since not all benchmarks are equally attainable and others appear to fluctuate from year to year, CQI should identify the priority benchmarks and the resources and supports needed to attain those benchmarks. CQI for CI has been expanded this year, and the availability of more robust VT data, when available, will assist efforts to improve CI's outreach and engagement.

The state CQI team is in the process of integrating into a larger group of HV agencies and organizations to reduce duplication of time and resources. The existing state CQI team has been successful in identifying key issues related to core outcomes, safety practices, children's mental health and other salient state system factors. Once the new state infrastructure team has been formalized, an assessment of the new directions and priorities should be conducted to resume study and improvement of state level policies and practices.

Illinois Home Visiting Infrastructure efforts have an extensive and impressive system embedded in the state's larger early childhood initiatives. Early Childhood and Home Visiting Task Forces, Research Groups, Infrastructure Group, and Funder Group meetings, collectively and individually work to raise the profile, understanding, efficacy and effectiveness of Illinois HV programs and services. Illinois HV and early childhood stakeholders are the leaders for home visiting polices both at the state and national level.

Workforce development is a priority that is currently under study in terms of competencies for certification based on HV models and skills. MIECHV staff are not the lead entity for this work, but are partners with other state HV systems. Illinois has no fewer than 5 data systems that track and monitor home visiting programs activities and outcomes. Again, this issue is beyond the scope of the MIECHV team per se, but it can continue to work to improve and contribute to core data measures and identify indicators that can best be used for CQI and demonstrating program outcomes. As

mentioned in a prior section, Illinois state government has not had a budget for 21 months, which has had cascading influences from the state offices to local community-based agencies. FY16-17 was a difficult and challenging time for HV programs and other health and social service agencies, as contracts and funds were not received in a timely matter. These issues were complicated not only by the political stalemate in Springfield, but also the introduction of the Illinois Government Accountability and Transparency Act of 2014 that updated Illinois grants and contracts systems to be in compliance with the federal government's Uniform Administrative Requirements, 2014.

As MIECHV home visiting programs enter the fifth year of full operation, they are being scaled up with the expansion of home visiting and doula services to eight additional LIAs in seven new communities. This expansion, along with the streamlining of the HRSA benchmark requirements, provides new opportunities and challenges to reach more high risk families, provide high quality services, and utilize continuous quality improvement practices. This new scale up occurs in a context of an experienced and well developed system that has worked out many of the glitches associated with early roll out of MIECHV programs in a state with a large number of existing home visiting programs. That is, MIECHV systems and programs have confronted a myriad of challenges that are now better understood and these efforts are addressing Coordinated Intake, staff turnover, participant drop-out and community referrals and resources. Although optimizing and delivering the highest quality home visiting services remains the "gold standard" for Illinois home visiting programs, the state leadership and key stakeholders must continue to require incremental improvements through continuous quality improvement, professional development, evaluation and state and LIA policy enhancements. These efforts will continue to pay off, and are positive steps towards reaching and serving even more of Illinois most vulnerable early childhood populations, and improving MIECHV child and parent outcomes.

VIII. References

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IX. Appendix

Links

The products listed below can be linked to at the CPRD website:

a. 2016 Illinois MIECHV Benchmark Glossary for Doulas

b. 2016 Illinois MIECHV Benchmark Glossary for Home Visitors

c. 2016 Illinois MIECHV Infographic

d. HRSA Benchmarks for 2017

e. History of Illinois MIECHV Infographic 2012-2016

f. Illinois MIECHV Benchmark Performance Summary 2014-2016

g. MIECHV Dropout Study, 2016

h. Home Visiting Safety Poster (Safety First: Addressing Home Visitor Safety in High-Risk Communities)