MIECHV ANNUAL REPORT

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Center for Prevention Research and Development

University of Illinois

Executive Summary

The Center for Prevention Research and Development (CPRD) at the University of Illinois has been conducting the evaluation, benchmark analysis, and continuous quality improvement (CQI) processes for the Illinois Maternal, Infant, Early Childhood Home Visiting programs (MIECHV) beginning July 1, 2012. Over the past 18 months, CPRD has been working with the Office of Early Childhood Development and the Illinois Department of Human Services to develop and support the launch of Illinois MIECHV home visiting programs and execute an evaluation plan that collects and analyzes data, submits reports, and uses data for program improvement.

Although data reporting is still in the early stages of development, we can unequivocally report that Illinois programs are reaching the intended MIECHV population, as they are predominantly single mothers with income thresholds below 100% of the federal poverty levels, unemployed, and many are pregnant teenagers. In addition to poverty, mothers or caregivers report additional risk factors including tobacco use or exposure, child neglect or abuse, and developmental delays.

The degree to which Illinois home visiting services are delivered in terms of the program models or appropriate dosage has not been calculated at this time due to limitations of the database system. However, we do know that for FY 13 across the six communities, Illinois MIECHV conducted nearly 10,500 home visits and over 2,600 Doula visits for a total of 13,050 home visits. Additional analysis is needed to improve our understanding of the implementation of the programs, and to determine how visits vary by programmatic and other factors.

CPRD field data collectors have been working in MIECHV communities for just over a year, assessing key infant and child constructs related to MIECHV benchmarks, immediate outcomes, and intermediate outcomes. Baseline surveys and benchmark data provide a cross-sectional snapshot of families responses. For example, the results of a Parent Satisfaction Survey completed by program participants provide evidence that they are highly satisfied with their home visitor and their home visiting services.

Other outcome measures relate to maternal knowledge of infant and child development, parent-child interactions, environmental and home safety, and parent stress. These scores report modest variations across communities and programs, but most scale scores are at or above the levels of reference groups provided by the scale authors. However, one measurement tool - Parent Knowledge of Infant Development Inventory (KIDI) scores were similar to other reported disadvantaged samples, but significantly less than middle class samples (61.5% vs. 82.5%). Based on these KIDI scores, most Illinois MIECHV families need additional education and training for improving parenting knowledge and skills. Outcome measures need additional analysis to gain a better understanding of the relationships between home visiting services and multiple outcomes.

Lastly, CPRD's report describes the roll out and the early work of MIECHV's CQI process, also conducted by CPRD. Sites are currently working on their third CQI plan designed specifically to improve the quality of their home visiting services.

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I. Introduction and Background

CPRD: Background and Experience

The Center for Prevention Research and Development (CPRD), Institute of Government and Public Affairs (IGPA) at the University of Illinois was invited by the Illinois Governor's Office and the Illinois Department of Human Services (IDHS) in 2012 to serve as the external evaluator for the federal Maternal, Infant and Early Childhood Home Visiting (MIECHV) program funded by the Affordable Care Act (ACA) of 2010.

CPRD has extensive experience with translational research; that is, research addressing the implementation of research and policies into programs and practices. A foundational aspect of CPRD's work in evaluation has been the use of formative data collection methodologies in relation to ongoing policy development and programmatic reform. This approach to evaluation is also consistent with Continuous Quality Improvement (CQI) methodologies and procedures. For example, CPRD has for more than 20 years administered school self-study surveys, early childhood and after school program assessments, teen parenting program evaluation, and most recently, the implementation of a Brief Alcohol Intervention into several WIC pilot programs. This type of work with communities, schools and agencies helps stakeholders and program staff to understand, track and monitor progress for improving developmental, health promotion, and educational processes and outcomes.

Affordable Care Act and MIECHV

The ACA, signed into law in 2010, included an amendment to Title V of the Social Security Act that created the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program. MIECHV is funded in escalating amounts over a 5-year period from FY 2010 to FY 2014. Most of the funding is provided to states and territories to provide evidence-based home visiting services (HVS) in at-risk communities (HHS, 2010).

MIECHV legislation requires that grantees demonstrate improvement in six domains: (1) improved maternal and newborn health; (2) prevention of child injuries, child abuse, neglect, or maltreatment and reduction in emergency department visits; (3) improvement in school readiness and achievement; (4) reduction in crime or domestic violence; (5) improvements in family economic self-sufficiency; and (6) improvements in the coordination and referrals for other community resources and supports.

The legislation defines at-risk communities as those with high concentrations of: (1) premature birth; (2) low-birth weight infants; (3) infant mortality, including infant deaths due to neglect; (4) other indicators of at-risk prenatal, maternal, newborn, or child health; (5) poverty; (6) crime; (7) domestic violence; (8) high rates of high school dropouts; (9) substance abuse; (10) unemployment; or (11) child maltreatment.

MIECHV grants are available to states and territories through two mechanisms: *formula* grants and *competitive* grants. Formula grants were awarded to participating states and jurisdictions on the basis of the number of children living in poverty under the age of five years in that state or jurisdiction. Thus every eligible state had the opportunity to implement home visiting programs for their at-risk communities. The Illinois formula home visiting grant (X02) services 25 programs in six communities. The Doula program, which is part of Illinois competitive grant (D 89), is being implemented in five communities of which two are MIECHV communities and three are non-MIECHV. The competitive grants are structured such that states have opportunities to develop the

infrastructure to support early childhood home visiting services, test new innovations in supporting home visiting services, or expand services or innovations more broadly.

Illinois' MIECHV Approach

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

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

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

CPRD Background

CPRD was contracted to conduct the evaluation by the IDHS and the Office of Early Childhood Development (OECD) beginning July 1, 2012. The contract began with the challenge of building a MIECHV evaluation team that would manage program and performance data and collect family assessments to determine their impact on immediate, intermediate and long term outcomes.

The CPRD philosophy and approach to evaluation is grounded in the concept of collaborative evaluation or partnership evaluation. CPRD staff members assess processes, outcomes, and benchmarks to inform key stakeholders of the potential for development and program improvement. CPRD immediately addressed staffing issues and began the development of a data collection system for the six targeted communities: Macon County, Southside Chicago Cluster (Englewood, West Englewood, and Greater Grand Crossing), Rockford, Cicero, Elgin, and Vermilion County.

Completion of key evaluation tasks included:

- Submission of the MIECHV project for approval by the UIUC Institutional Review Board (IRB) (see Appendix 1).
- Approval of six field staff positions, developing job descriptions, and completing searches, interviewing, and hiring field data collectors (FDCs).
- Identifying appropriate technology and training for FDCs for conducting home assessments and returning it back to CPRD for analysis (laptops, iPads, video cameras, server access, etc.).
- Preparing and delivering initial training of six FDCs for conducting in-home assessments (December 14, 2012).
- Developing a system to schedule and conduct data collection visits for the selected four home visiting models at 25 program sites. Data collection for the Doula sites was added in April of 2013.

II. MIECHV Program and Community Services – Home Visiting, Coordinated Intake, and Community System Development

Illinois MIECHV's major goals, as outlined in the original RFA, address four primary areas that will be further elaborated below: (1) developing a statewide system and local infrastructure; (2) operating with fidelity to national models; (3) embedding home visiting in an overall system of services to families with young children; and (4) improving the lives of families in accordance with national benchmarks.

The primary services provided under the MIECHV grants are four evidence-based home visiting programs: (1) Healthy Families Illinois; (2) Parents as Teachers; (3) Early Head Start; and (4) Nurse Family Partnership. In addition, five sites provide Doula services that offer nonmedical pre-natal support and services for pregnant mothers. Finally, the MIECHV grant includes a common intake and referral system and community system development specialist who works to assess, align, and coordinate services to meet the needs of MIECHV participants; and who uses a standardized assessment tool to recruit, assess, and refer participants to the appropriate level of services.

Goal 1: The statewide system of evidence-based and innovative approaches to home visiting is enhanced, along with state and local infrastructure necessary to support effective service delivery.

Goal 2: Home visiting programs operate with fidelity to national models.

Goal 3: Home visiting programs are embedded in the overall system of services for families with young children.

Goal 4: Home visiting programs improve the lives of participating families in the areas described by the national benchmarks.

The agencies that were funded to provide MIECHV services are located in the following communities:

Table 1: Home Visiting Communities and Programs

Community	Community Based Agency	Home Visiting Program
Rockford	Easter Seals	Healthy Families Illinois
	Winnebago County Health Dept.	Coordinated Intake and Community System Development
	Rockford Public Schools 205	Parents As Teachers
	Rockford City of/Human Services	Early Head Start
	La Voz Latina	Healthy Families Illinois
Vermilion County	Center for Children's Services/Aunt Martha's	Parents As Teachers and Coordinated Intake
	East Central Illinois Community Action	Early Head Start
	Danville School District 118	Parents As Teachers
	Project Success	Community System Development
Macon County	Macon Resources Inc.	Parents as Teachers
	Decatur Public School District 61	Parents as Teachers

	Macon County Health Department	Healthy Families Illinois, Coordinated Intake and Community System Dev.
Cicero	Children's Center of Cicero-Berwyn	Parents As Teachers
	Family Focus Nuestra Familia	Parents As Teachers
	Family Services & Mental Health	Coordinated Intake and Community System Dev.
Elgin	Family Focus DuPage	Healthy Families Illinois
	Kane County Health Department	Nurse-Family Partnership/ Coordinated Intake and Community System Dev.
	Visiting Nurse Assn. Fox Valley	Healthy Families Illinois
	School District U-46/Elgin	Parent As Teachers
Englewood	Family Focus Inc.	Healthy Families Illinois
	Henry Booth House	Healthy Families Illinois
	Women's Treatment Center	Parents As Teachers
	ChildServ	Parent As Teachers
	Children's Home + Aid Society	Coordinated Intake and Community System Dev.
Doula Site	**Community Based Agency**	**Home Visiting Program**
Chicago	Chicago YMCA	Doula-Healthy Families Illinois
Lawndale	Family Focus, Inc.	Doula-Parents as Teachers
Waukegan	One Hope United	Doula-Healthy Families Illinois
Rock Island	Child Abuse Council	Doula-Healthy Families Illinois
Vermilion County	Center for Children's Services/Aunt Martha's	Doula-Parents as Teachers

III. Evaluation Capacity

CPRD staff participated in early MIECHV activities in Spring and early Summer 2012; however, the official evaluation contract with IDHS began July 1, 2012. Initiation of the contract prompted CPRD to convene and align an internal project team and began the process of searching for field data collectors (FDCs) in each of the six communities. CPRD already had in place professional and analytic personnel as well as data entry, data management, and business systems for conducting an evaluation of this magnitude. To move forward, CPRD needed to identify, hire, train, and monitor FDCs in a relatively brief time period—quickly preparing them to move into the field. The establishment of CPRD's evaluation capacity for MIECHV was a considerable and delicate undertaking, requiring large, complex information and data management systems, as well as preparing highly professional and skilled field staff. The FDC staff was preparing to enter into private homes as strangers and conduct a sophisticated and personal survey with vulnerable families. Below we describe the major components and activities related to CPRD's development of functional and sustainable evaluation capacity for Illinois' MIECHV programs.

Trainings

Regional trainings were held to explain MIECHV evaluation methods, benchmarks, and the role of CPRD in data collection and analysis. Site supervisors, home visitors, and FDCs were invited to meetings held between January 2013 to June 2013 in northern and central Illinois locations.

The initial FDC meeting and training session was held in Champaign, December 2012 to introduce the staff; to provide an orientation to CPRD and their responsibilities as data collectors—including client confidentiality and mandated reporting requirements; to review the survey instruments; and to discuss strategies for site engagement and scheduling of data collection visits. FDCs were also assigned equipment for use in the field, including video cameras, laptop computers, and iPads. Additional monthly trainings with FDC staff were held from December 2012 through April 2013 in order to provide ongoing training in the use of the five survey/assessment tools, to provide technical assistance with field equipment, and to continue to fine-tune their interview and engagement skills.

FDC weekly staff meetings

Weekly team conference calls with FDCs began in January 2013 in order to provide ongoing support and guidance, answer questions, track productivity, and address challenges in the field. These meetings give the FDCs and CPRD staff an opportunity to discuss challenging aspects of data collection, compare strategies to increase productivity, address scheduling issues, and generally support the remote staff. FDCs are encouraged to e-mail "difficult questions" for discussion regarding problems encountered in the field, such as: interpretations of specific questions on an assessment tool, struggles with engaging particular home visitors, and no-show rates. Weekly agendas are sent out on Tuesday mornings and conference calls take place each Tuesday afternoon. MIECHV project team meetings with internal CPRD staff are also held weekly in order to coordinate MIECHV evaluation activities, incorporate Continuous Quality Improvement (CQI), and discuss ongoing tasks, challenges, and solutions.

Relationship building with MIECHV sites

A key step in beginning data collection was relationship-building of CPRD/FDCs with home visiting staff in the six priority communities. Strategies included regional meetings to provide an overview of the data collection project shortly before its inception. This was followed by e-mails introducing FDCs to the home visiting staff, and by providing scripts for home visitors to use with participants (mothers) to introduce the field data collection project—followed later by trifold brochures (see Appendix 2). FDCs then visited each site to introduce themselves to home visiting program staff and begin scheduling visits.

Establishing an environment to facilitate data collection

Scheduling of data collection visits is done by the MIECHV participant's (mothers) home visitors; the home visitor coordinates her schedule with the FDC. Data collection visits are scheduled after the home visitor has enrolled the family in services and conducted 2-3 home visits in order ensure that the participant is interested in engaging in voluntary home visiting services and to allow time for the home visitor to establish a trusting relationship.

FDC training on interacting with parents and families

FDC training included strategies for engagement of participants, trust building, obtaining informed consent, and introduction of each survey instrument/assessment. Trust was enhanced by having each participant's home visitor schedule the data collection visit and having that home visitor present during the data collection visit. Training of FDCs included sessions reviewing how to most effectively interact with parents and families.

FDC professional development and training time also addressed cultural and socio-economic issues regarding interacting and working with disadvantaged families and ethnic/racial minorities, language and reading barriers, complex family relationships, and other struggles related to poverty. Since most FDCs had had experience in conducting home visits or in-home interviews, a broad array of issues were raised and discussed. A fundamental issue for all cultural interactions with families included a respectful and non-judgmental approach, ensuring their understanding of our request for participation, and obtaining their full, written consent. These discussions included issues related to FDCs' safety concerns.

Introduction to FDCs and performance measures

MIECHV supervisors and home visitors at each data collection site were sent a sample script to help them introduce the project to their MIECHV program participants (mothers). The home visitors were able to address questions and concerns, provide reassurance as needed, and get permission to bring an FDC into their home to complete data collection during an upcoming scheduled home visit. Having a trusted home visitor introduce the evaluation and answer questions has helped participants to feel comfortable with the data collection procedures. FDCs were able to review the project in more detail and obtain formal consent to participate during the actual home visit. The six field data collection areas varied in terms of the number of programs, home visitors employed, and participants enrolled. Doula sites were added after initial data collection began, with split visits before and after the birth of the baby.

CPRD staff site visits

An important aspect of the evaluation plan was CPRD staff conducting site visits to the six communities to meet with field data collection site supervisors and home visitors, and to shadow a FDC's home visit in order to gain insights regarding how sites and families are experiencing and responding to the field data collection process. During May and June 2013, CPRD staff arranged site visits to conduct interviews, focus groups and a home visit with each FDC. Interviews and focus groups were conducted with supervisors and home visiting staff. Our goal was to assess the successes and challenges that sites encountered during the early months of the field data collection process. The results of these sites visits are described below:

In general, CPRD staff found that field data collection has been a positive and productive process. All sites indicated that the additional home visits and data collection process have had no visible impact on either participation or cancelation rates.

CPRD evaluators also asked home visitors how real-world situations impact their ability to follow protocols while in the field. Home visitors indicated that it was somewhat difficult to obtain guardian informed consent for mothers less than 18 years, which created a moderate barrier to getting young mothers to participate. FDCs report that home visitors have been extremely cooperative and helpful in scheduling with the field data staff. One significant challenge presented to the FDCs and home visitors has been the frequency with which home visiting participants

cancel visits—often at the last minute. However, it does not appear that the data collection visits have caused or contributed to cancelations, as cancelations are a common occurrence for home visitors in general.

On these site visits, CPRD staff learned about how significant turnover among home visitors has created challenges. This required MIECHV site supervisors to engage and train new home visitors for 3-4 months before the home visitors was fully ready and comfortable with the home visiting procedures. Finally, home visitors reported to CPRD staff that the home visitors are subject to "burn out," because the extra work beyond basic home visiting services consumes a lot of their time and does not allow them to focus on parent-child bonding and their own bonding with the family.

Home visitors believe that training and technical assistance have helped them to understand what is being asked of them regarding data collection, and to better understand the benchmarks. However, several home visitors commented that some training was redundant. When asked about what could be done to assist them in their job, it was suggested by one home visitor that an administrative assistant might help to enter data, since there is significant paperwork and their files are getting quite thick. Another suggestion was to use a checklist or spreadsheet, which would make it easier to collect data. Finally, home visitors acknowledge that information gathering, consent forms, and assessments of the families require significant work for home visiting staff as well as their participants.

CPRD staff also asked the home visitors if families were specifically concerned about any of the data collection procedures. Home visiting staff reported the most common concern raised by families was their participation in the videotaping of parent-child interactions. Staff indicated that participants reported that the video made them feel there were "eyes all around them" and that they were being judged—creating a sense of insecurity for some. However, these initial reactions were eventually attenuated after a detailed explanation of the process was provided by home visitors and FDCs.

Other concerns raised by home visitors related to safety, mental illness in the home, and finding a quiet place to conduct the assessment. Several home visitors thought that the assessments were written at too high a level for reading and understanding. As a result, CPRD reexamined the measures and language to reduce the complexity of assessment questions and improve their cultural relevance. CPRD evaluators also were told that the Spanish translations of the assessments were too literal and were not well understood by many Spanish-speaking families. To address these concerns, CPRD had three native Spanish speakers review and improve the quality of the translations. Finally, CPRD developed a data collection brochure (Appendix 2) to distribute to families to help them understand the purpose of the surveys and what were the risks and benefits to participation. This brochure was also translated and edited by several Spanish readers and home visitors in order to match local dialects and parent reading levels.

Both home visitors and their supervisors believe that providing Walmart Gift Cards as an incentive for families willing to participate has been a major contributor to participation, and has been greatly appreciated. A final concern raised by home visitors was the impact of the overall data collection load on their day-to-day work. MIECHV has benchmark reporting requirements that have increased the amount of data to be collected by home visitors. It is common for them to feel increased stress, with one home visitor indicating that at first it appeared to be like "a thousand-piece puzzle."

As home visitors have made progress, they have begun to realize that much of what is being asked of them is what they have already being doing; thus their original concerns were decreased. Furthermore, they have not indicated

that the data collection load has been a burden on families. Some respondents indicate that families are accustomed to this, that additional assessments and questions were commonplace, and that the data collection process enabled them to better serve families.

In contrast, respondents from several sites believe that many assessment questions are intrusive, that the scope of MIECHV is too large, and that too much pressure has been placed on home visitors. Finally, home visitors express a need for additional training and ongoing understanding in relation to the data collection process and results.

CPRD site visits provided the evaluation team a snapshot of what was working well and what issues and concerns need to be addressed. As a result of these visits, CPRD has provided both FDCs and home visitors with a list of questions and answers; has created more standardized procedures; has reviewed FDC staff introductions and communications with home visitors; and has had multiple Spanish speakers review and edit the assessment translations. This has also led to conducting additional translations in Arabic and Chinese for small groups of families in the MIECHV communities.

CPRD will repeat site visits and interviews this year (2014) in order to review key questions and to understand whether the evaluators' responses have addressed the issues raised last year. This qualitative approach provides for a deeper understanding of data collection activities and how they interface with MIECHV sites.

Data preparation, entry, and management

CPRD's preparation, collection, and management systems for MIECHV require significant efforts—not only for preparing, distributing, and collecting the assessments—but also for organizing, tracking, entering, and analyzing this information as it moves from CPRD to the FDCs and is subsequently returned to CPRD. This begins with preparation of surveys, consent forms, and gift cards, which are linked for both evaluation and audit purposes because gift card and consent procedures are accountable to UIUC research and administrative polices. Similarly, once the paper and pencil data are collected by the FDCs, they are returned to CPRD's main office, where they are logged, cleaned, scanned, matched, and prepared for analysis. This process requires a series of both administrative and data management tasks that move through CPRD data processing systems: every family and survey are linked and tracked after each data collection home visit. All original consents, gift card receipts, and paper surveys are stored on-site in locked file cabinets.

In addition, the ten minute parent-child interaction videos taken for the PICCOLO assessment are transferred to a secure server, where they are scored and rescored by CPRD staff in preparation for entry into the larger database. This scoring procedure can require over an hour for each video—depending upon the language, video environment (lighting, voice clarity, background noise, and language), and interruptions. To become proficient in reliably scoring the PICCOLO, CPRD has invested many hours of training and retraining, and conducted periodic inter-rater reliability checks. At this point CPRD has scored over 400 videos; the most recent inter-rater reliability was .68, which is acceptable. After both paper and pencil surveys and PICCOLO scales are scored, they are entered into a database that integrates these data with other performance benchmark data and prepared for statistical analyses.

Adapting data procedures for new system

When the decision was made to move from the ETO system to Visit Tracker, CPRD changed the way in which data was collected from the in-home visits. The original goal was to have the mother or FDC directly enter survey responses into the ETO database during the interview process; however, this did not work for the majority of FDCs

or families. Once the database was changed the direct data entry was no longer an option. This required CPRD to change to a pencil and paper survey format that could be used with a special TeleForm software system that CPRD uses. TeleForm creates scannable versions of the in-home surveys, thus eliminating the need for hand entry and assuring accuracy.

Gift cards

Research findings demonstrate that rewarding individuals for participating in research studies results in better participation and continuation. To that end, participants are given a $20 Wal-Mart gift card for completing the surveys in the Year 1 (baseline) visit, a $25 Wal-Mart gift card for the Year 2 follow-up visits, and a $30 gift card for completion of the Year 3 surveys. The incentive procedures were submitted and approved by the University of Illinois Institutional Review Board. As part of the consent procedures, participants review the goals, purposes, risks, and benefits of participation, and affirmatively consent to participate before beginning the surveys. After the completion of the consent procedures and assessments, the mother is given the appropriate gift card for their participation.

Process refinement

Doula visits have required a different approach to data collection, as participants usually enroll early in their pregnancy meaning that only two of the survey tools can administered prior to the child's birth. Once visits began with pregnant doula participants, the incentive structure was modified, with a $10 gift-card for a first visit, at which the Parent Satisfaction Survey (PSS) and Knowledge of Infant Development Inventory (KIDI) are administered; and a second $10 gift card given at the subsequent "1/2 visit" after birth when the Parent Stress Index (PSI), HOME inventory, and PICCOLO video are completed.

Field data collection challenges

As would be expected in creating an evaluation system (FDCs) of this size, a number of successes and challenges emerged that provide lessons learned and targets for attention. The following issues were encountered and needed to be addressed by CPRD.

- Scheduling across sites with multiple home visitors and using a variety of communication modes, including e-mail, shared Google calendars, texting, and personal visits to sites
- Early use of laptops and Efforts to Outcomes (ETO) and then transfer to use of Visit Tracker
- Lack of access to case lists due to transfer from ETO to Visit Tracker
- No shows, cancellations, and refusals
- Reluctance of some home visitors to schedule FDC visits
- Erratic schedules of doulas (attending births, transporting clients to prenatal visits)
- Translation of materials to Spanish and Arabic
- MIHOPE (Mother and Infant Home Visiting Program Evaluation) competing for HV time with participants and confusing participants who did not understand there were two simultaneous evaluation projects being conducted, and that they were asked to participate in both.

IV. Evaluation Reporting

The MIECHV legislation states that MIECHV programs and services should be designed to provide an array of evidence-based services to mothers and children at-risk for a range of adverse outcomes. HVS providers record and document using an MIS database to collect a full range of characteristics of the families they serve, screenings and assessments, types and number of services provided, and progress made towards established benchmarks and goals. The following section provides a description of the benchmarks and reporting requirements for MIECHV.

Performance Benchmarks

As part of the grant funding application, HRSA required that each state review and submit how they intended to collect MIECHV Performance Benchmarks (PBs). States were given some flexibility regarding the number, type, and tools for collection and reporting benchmarks; but were required to address the six MIECHV constructs. Over that past year, Illinois MIECHV has been using multiple methods and sources for collecting, analyzing, and reporting these PBs.

The reporting of Performance Benchmarks (PBs) and outcomes are derived from two major sources. First, the Visit Tracker data system serves as the case management system that captures descriptive and demographic statistics regarding the participant, the family, and services they receive. Health Services and Resources Administration (HRSA) requires an annual submission of performance benchmarks into the federal Discretionary Grant Information Systems (DGIS). The submission is divided into two major elements: Form 1, which contains the demographic and participation data**;** and Form 2, which contains both process and outcomes variables for PBs. As a result of the FY12 challenges in reporting PBs, the FY13 DGIS submission serves as Illinois baseline measures, and will be followed by cross-sectional and cohort comparisons with FY14. Although the Illinois MIECHV proposal submission focused on improving positive indicators and decreasing risk factors, it did not provide specific numerical targets, other than an acknowledgement that meeting home visiting standards would be derived from best practices and evidence-based policy (Healthy People, 2020, CDC, 2013; Office of Women's Health, 2012; U.S Preventive Services Task Force, 2012); position papers such as the American College of Obstetricians and Gynecologists, 2012; and normative scores from national, regional or "like" databases or samples available in the literature (MacPhee, 1981; Abidin, 1984; Innocenti & Roggman, 2007).

The lack of specific target goals and objectives requires that Illinois establish its own baseline, which will be the FY 13 data—the first full program year. Despite not having comparative baselines or predetermined target objectives, CPRD is presenting PBs by comparing local to state data as a within-project comparison that will allow sites to understand how they are performing relative to the state average, and to identify where they need to initiate practices or improvements. The state and CQI teams have already begun addressing improvement in data collection, entry, analysis, and reporting.

Performance Benchmarks Form 1

The initial evaluation question is related to the Illinois MIECHV target population. MIECHV was designed to target women and children in communities at highest risk for adverse maternal and child health outcomes. Based on the Illinois Assessment of Capacity and Need, these communities were identified as having the highest levels of socio-demographic risk and were selected from a public RFP process (Daro et al., 2010). The risk factors included in the Assessment of Need and Capacity included poverty, infant mortality, premature births, teen births, violence,

alcohol and drug abuse, and other indicators. To understand whether Illinois MIECHV programs are reaching the targeted or intended population states, the following evaluation question has been proposed:

Q 1.0 Who are the families receiving Illinois MIECHV programs and are they reaching the intended high-risk populations?

The current understanding of whether Illinois MIECHV- HVS are reaching their intended target population with the current data available is based on cross-sectional data from the DGIS Form 1. Table 2 presents the socio-demographic characteristics for HVS and Doulas using the inclusion criteria – new enrollees for FY 13. Last year HVS saw 528 primary caregivers and 542 target children who enrolled, increasing the total for the partial FY 12 year and FY 13 year to 916 caregivers and 944 target children. Doula services for FY 13 were provided to 154 new primary caretakers and 161 target children, increasing the total Illinois doula participation numbers from the initiation of the grant to 220 and 225, respectively.

To ensure MIECHV is reaching the intended audience, levels of poverty of the participants were ascertained. Table 2 shows the 86% of HVS enrollees and 94% of Doula enrollees are living below the 100 % poverty threshold. Thirty percent of HVS caregivers do not have a high school diploma and 73% are unemployed. Of doula participants—who are generally teen mothers—82% are not working and 30% are currently enrolled in school. It's worth noting that 90% of pregnant women and 74% of primary caretakers in HVS programs report having health insurance, and that doula pregnant mothers and caretakers report being insured at levels of 99% and 100%. Nearly 100% of the Doula target children and 96% of HVS children report having health insurance. The fact that most women have health insurance and are enrolled in a home visiting program provides improved opportunities for these children and families.

Demographic characteristic of MIECHV families enrolled in HV and Doula services generally reflect Illinois and the communities in which the services are provided. Thirty-seven percent of HVS participants report their race as black, with 29% reporting as multi-racial. The majority of HVS participants (61%) indicate they are non-Hispanic, and 39% identify their ethnicity as Hispanic.

The marital status of program participants provides another demographic dimension that adds to their risk factors. This relates to young mothers raising a family without the necessary income and family supports that are part of a two-parent or two-partner family. In this regard, the majority of mothers in both the HVS—63%—and Doulas – 91%—have never been married.

Table 2: Illinois MIECHV Participants- Socio-demographics FY 2013

	HVS (X02)		Doulas (D89)	
Number Enrollees	**New Enrollees**	**Total Served**		
Primary Caregiver	528	916	154	220
Target Children	542	944	161	225
Age of Target Child				
Less than 1 year	40%		85%	
1-2 years	50%		15%	
3 or more years	10%		0%	
Age of Pregnant Mothers and Primary Caregivers - Mothers	Mothers		Pregnant Mothers	Mothers
10-17	19%		25%	14.%
18-21	22%		55%	67%
22-29	43%		16%	17%
>30	30%		4%	2%
Race of Primary Caregivers				
Black or AA	37%		53%	
White	32%		22%	
More than one race (multi-racial)	29%		10%	
American Indian/Alaskan/Asian	3%		15%	
Ethnicity				
Hispanic	39%		19%	
Non-Hispanic	61%		81%	
	HVS		Doulas	
Marital Status				
Never Married	63%		91%	
Married	32%		8.1%	
Separated/Divorced	4.6%		1%	
Widowed	.1%		0%	
Insurance Status	HVS Medicaid, Tri-care, Private		Doulas Medicaid, Tri-care, Private	
Pregnant Women	90%		99%	
Female Caregivers	74%		100%	
Target Children	96%		99.5%	
HH Income Relative to Federal Guidelines				
< 100% of federal guidelines	86%		94%	
100-300 % of federal guidelines	12.6%		4.1%	
>300% of federal guidelines	1.4%		1.5%	
Level of Educational				

Attainment				
Currently Enrolled	4.3%		30%	
Less than high school completion	30%		24%	
GED or high school diploma	39%		38%	
Some College	15%		8%	
Associates degree	8%		5.6%	
Bachelor's degree or greater	3.4%		2.5%	
Employment Status				
Full Time Employed	15.4%		8.3%	
Part-Time Employed	15.4%		9.4%	
Not-Employed	73%		82.2%	

* May not add exactly to 100% due to rounding of totals

The age of women participating in the MIECHV program provides insights into the population served by HVS and doulas. The Doula program is designed for pregnant, mostly younger women between the ages of 10-21 (80%), while the young HVS mothers were only 41%. HVS mothers are significantly older than might be expected for MIECHV programs.

Lastly, 90% of the children participating in HVS are two years old or less, which seems somewhat surprising given they are an older cohort of mothers. This also may reflect the early stages of the MIECHV programming (less than 2 years), varying program models and their requirements. We also postulate that the shorter time frame participating in home visiting programs may be related to HVS success. That is, as families gain confidence, competence, and support systems, they may believe they no longer need HVS. However this hypothesis requires additional investigation, in terms of factors related to higher dropout numbers for HVS programs.

As second way that Form 1 reports on the characteristics of MIECHV participants is by the number and percent that are identified and categorized by ACA legislatively mandated priority populations. Table 3 represents the number of newly enrolled families for FY 13 in terms of the inclusion criteria established in the PBs for Illinois' two grant programs. This table further shows the greatest risk category is low income at 48.8%, while other risk categories range from a low of 0% for families with a deployed parent to 31% for pregnant women under the age of 21. As expected, Doula services report a higher level of pregnant young women, while HVS report two to three times the number of children with developmental delays. These differences likely reflect the distinct target populations served and purposes of the services—doulas only remain with the family for two months post-natal, while at least half of the children in HVS are age one or older. It should be noted that these percentages may represent duplicated counts since risk categories and behaviors are often interrelated

Table 3: Legislatively Mandated Priority Population Categories HV and Doulas (newly enrolled)

Population Categories	X02 HVS	D 89 Doulas
Low Income	48.83% (333)	44.52% (126)
Pregnant and not reached 21	9.24% (63)	31.10% (88)
History of abuse, neglect, or contact with DCFS	5.72% (390)	2.47% (7)
History or current need for substance abuse treatment	3.81% (26)	3.18% (9)
User of tobacco smoke in house	11.73% (80)	12.72% (36)
Child or children with low academic achievement	10.56% (72)	4.24% (12)
Child or children with developmental delays or disability	8.36% (57)	1.77% (5)
Military families deployed outside the U.S. multiple occasions	1.76% (12)	0.00%
Total No.	100% (682)	100.00% (283)

Number, Types and Quality of Home Visits

Another set of key evaluation questions address whether the families receiving HVS are receiving them in the way the program models intended. Despite the commonalties among the four home visiting models, each program identifies a different numbers of sessions or thresholds for participation to be effective (Azzi-Lessing, 2011). Three evaluation questions to address these differences were developed to assist in differentiating the intended "dosage" or exposure to the program model, and how these levels may impact outcomes.

Q 2.0 What is the average number of home visits received by the each MIECHV participant?

Q 3.0 What is the average length of home visits received by participant families?

Q 4.0 How do the number and length of home visits differ by model, and how do those differences influence immediate and intermediate outcomes?

At this point, data are only available for basic participation in raw numbers and percentages of the number of home visits received by the two MIECHV projects (Table 4). FY 13 results report that Illinois MIECHV provided over 13,000 home visits, including both HVS and Doula services. Of that group, HVS reports an average of 15 visits per family, while Doulas report an average of 12 visits—as expected due to the shorter program period. It should be noted that the number of home visits is easily skewed due to the wide range of services that families receive. For example, the number of visits varies somewhat by program, and levels of participation will vary by the time point at which they enter—from early pregnancy to through two year olds. Finally, both home visitors and doulas report what appear to be moderately high levels of dropouts, although these percentages are within ranges established by several published studies (Gomby, 2005; Ingoldsby, McClatchey, Luckey, Ramsey et al., 2013). In any event, the number of participants who drop out and their reasons for doing so provide important information to program and state staff for program improvement.

Table 4: HV Services Delivered (FY 13)

	X02 – Home Visiting Programs		D89 - Doula	
Currently receiving programs	412	59.2%	73	33.2
Completed services	30	4.3%	65	29.6%
Stopped services prior to completion	254	36.5%	82	37.2%
Total participants	694	100%	220	100%
Total visits conducted by MIECHV	**10,449**		**2,601**	
Total number of home visits	**13,050**			

Illinois Performance Benchmarks - Form 2

The Illinois MIECHV PB system for Form 2 is a framework of measurable constructs defined and required by HRSA under the ACA. PBs were compiled and operationalized by Illinois in the grant submission to HRSA. Performance Benchmarks comprise a complex array of services, processes, and outcomes designed to track and measure performance indicators for Illinois HVS. These PB's, which are based on current research, are believed to be necessary, sufficient and synergistic to improve outcomes among Illinois high-risk families. The PB approach presents a particular challenge in terms of evaluation, because there are four different model programs being implemented in Illinois communities. Although the four programs are all considered to be research-based HVS models, they each have unique backgrounds, histories, and nuances that need to be adapted and adopted for targeting and attaining PBs. In fact, no single home visiting program model can fully provide the programs or services required to meet all PBs. Therefore home visiting programs must rely on partners, traditional institutions (e.g., schools, public health agencies, hospitals, mental health services), and other community services. This also includes the MIECHV Community Systems Development grantees who work to coordinate and build collaborations in order to reduce barriers and improve HV and ancillary services.

Interpreting Illinois PBs is also complicated by the specific ways in which PBs have been collected, measured, and reported. These data presented challenges related to complete reporting of all Illinois MIECHV participants' data based on specific PB criteria, such as: length of participation, age of the child, weeks' gestation, positive screens, and other factors. These complex criteria become evident by simply examining the numerators and denominators for the PBs, ranging from 1 to 508 participants. Illustratively, several PBs are not calculated unless the caregiver has been in the program for at least one year and\or the child is one year old. These criteria significantly limit the participants' inclusion criteria for that PB. The question that therefore must be addressed concerns how these data should be interpreted in relation to PBs.

A closer examination of Table 5 (below) shows how difficult it is to comprehend and interpret these PBs due to the lack of a standard or comparison group. Questions arise regarding what number or percent represents successful PB attainment, and which PBs need improvement. These judgments must all be made in the context of the PBs' operational definitions and the numbers that have been used in calculating them.

CPRD staff has researched and identified a number of studies that provide a comparative framework for Illinois PBs. CPRD concluded that using other state's statistics and samples for comparative purposes, particularly the service benchmarks, is too complicated at this time due to variations in: data collection time frames, ways in which questions are asked, response choices, and data entry into the MIS. Moreover, the comparison of large samples and statistics to Illinois PBs with a limited number of cases is problematic.

	MIECHV X02			Doulas D89		
	Denom.	Num.	% Attained	Denom.	Num.	% Attained
Improving Maternal and Newborn Health						
1) Increase no. of prenatal visits	172	60	34.88%	144	16	11.11%
2) Decrease prenatal use of ATOD use and abuse	24	14	58.33%	12	5	41.67%
3) Increase postpartum use of contraception	154	45	29.22%	108	43	39.81%
4) Increase mothers Interpartum Interval	154	112	72.73%	108	86	79.63%
5) Increase no. of mothers screened for maternal depression	166	114	68.67%	91	62	68.13%
6) Increase % of mothers breastfeeding	111	33	29.73%	31	6	19.35%
7) Increase % children receiving well child visits	16	9	56.25%	NA	NA	NA
8) Increase mothers with health insurance	249	190	76.31%	29	29	100.00%
Child Injuries, Abuse, Neglect and ED Visits						
9) Reduce child ER visits for all causes	249	31	12.45%	29	1	3.45%
10) Reduce mothers ER visits for all causes	245	21	8.57%	29	1	3.45%
11) Increase delivery of information on child injury prevention	508	256	50.39%	140	29	20.71%
12) Decrease child injuries requiring medical care	245	7	2.86%	29	0	0.00%
13) Reduce reports of suspected maltreatment	245	23	9.39%	29	3	10.34%
14) Reduce reports of substantiated maltreatment (children)	245	9	3.67%	29	1	3.45%
15) Reduce no. of first time reports for maltreatment	245	8	3.27%	29	1	3.45%
Increase school readiness and academic achievement						
16) Parent support for child learning and development	245	14	5.71%	29	2	6.90%
17) Parent knowledge of child development	165	14	8.48%	16	2	12.50%
18) Increase parenting skills and parent child relationships	130	29	22.31%	16	2	12.50%
19) Decrease parent social-emotional stress	164	26	15.85%	9	4	44.44%
20) Increase child communication & emerging literacy skills	164	108	65.85%	14	6	42.86%
21) Increase child's general cognitive skills	164	108	65.85%	14	6	42.86%
22) Increase child's positive approaches to learning	164	108	65.85%	14	6	42.86%
23) Increase child's emotional regulation and wellbeing	164	74	45.12%	14	4	28.57%
24) Increase child's physical health and development	16	9	56.25%	0	0	
Preventing, Identifying and Treating Domestic Violence						
25) Increase screening for domestic violence	245	145	59.18%	29	10	34.48%
26) Increase referrals to domestic violence services	6	5	83.33%	1	1	100.00%
27) Increase identified DV families developing safety plan	5	1	20.00%	1	1	100.00%
Family Economic Self-Sufficiency						
28) Increase household income and benefits	249	28	11.24%	29	2	6.90%
29) Increase employment or education of mother and father	89	15	16.85%	20	12	60.00%
30) Increase percent of family members with health insurance	245	168	68.57%	29	27	93.10%
Increase Coordination/Referral & Completion of Community Services						
31) No. of families identified for ancillary services	245	222	90.61%	29	25	86.21%
32) Increase identification of families needing services and receiving services	12	6	50.00%	2	1	50.00%
33) Increase families receiving and completing services	6	4	66.67%	1	0	0.00%

Nevertheless the FY 13 PB data does provide state and local programs with an opportunity to review HVS implementation, identify barriers or limitations to attaining PBs in communities, and prioritize those PBs that are most important to the goals of the programs.

Table 5: MIECHV Benchmarks (FY13)

Performance benchmarks and outcome measures

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

The evaluation questions that outline relationships between HVS and outcomes include:

Q. 5.0 What are the relationships between home visiting services and immediate, intermediate, and long-term outcomes?

Q 6.0 What home visiting services provide the most significant contributors to these outcomes?

Q 7.0 How does fidelity to the home visiting model influence outcome attainment?

The MIECHV outcomes are part of the performance benchmarks, and are collected through multiple sources including home visitors, field data collectors, and social indicator records such as DCFS.

CPRD's field data staff conduct five in-home assessments which capture multiple maternal-child constructs, including parent-child interactions, parenting knowledge and attitudes, parent stress, and parent satisfaction. Specifically, CPRD uses the following assessments: Knowledge of Infant Development Inventory (KIDI); Home Observation for Measurement of the Environment (HOME); Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO); Parent Stress Index-Short Form (PSI); and a Parent Satisfaction Survey (PSS). These measures address a number of benchmarks that are designed to promote improvements in immediate, intermediate, and long term outcomes.

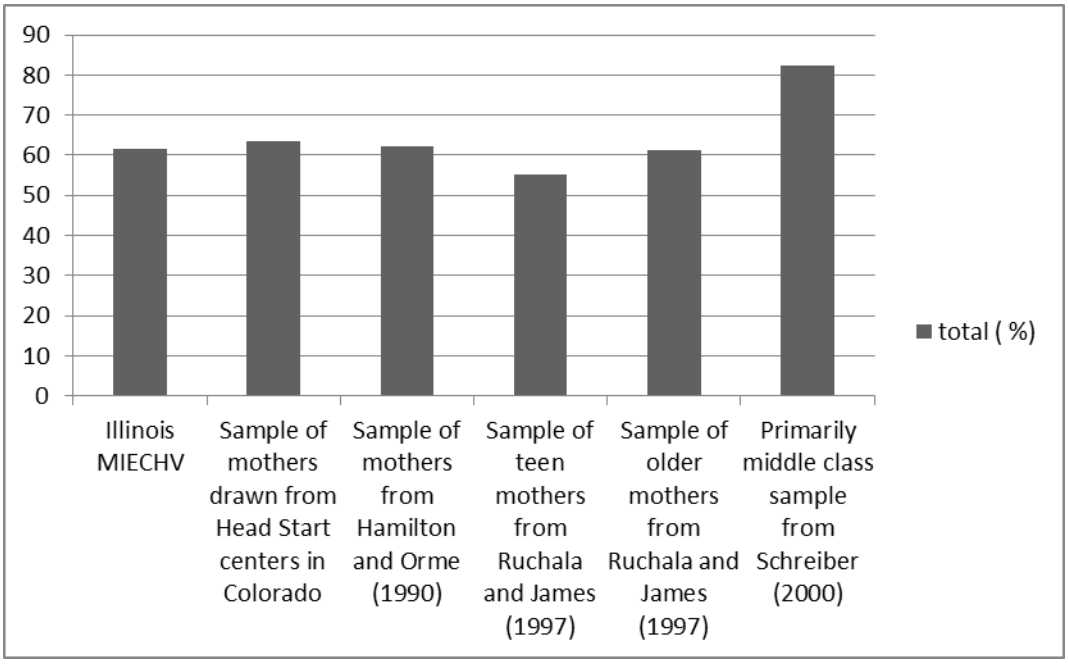
At this stage of the project, CPRD can only provide baseline basic descriptive statistics for each measure at the item, construct, and community level. The sample sizes vary from measure to measure based on the number of participants, number of refusals, and the quality and completion of the measures and videos. As mentioned earlier, doula mothers who are pregnant do not participate in the PICCOLO or HOME measures since they require a child to be present for parent-child interactions and observations. However, doula participants will likely receive these assessments at a post-natal assessment visit. This type of analysis provides comparisons among programs and communities and overall averages that show home visitors their areas of strength and areas needing additional attention. These data are being incorporated by project staff into MIECHV's CQI processes in order to develop and improve the quality of HVS delivery. The current analysis for each measure is reported below.

1. Knowledge of Infant Development Inventory (KIDI)

The KIDI assesses parent knowledge and beliefs related to infant and child development that has demonstrated positive relationships with positive parenting practices and child outcomes (MacPhee, 1981). The caregivers respond to a series of fifty-eight questions asking to agree or disagree with each statement. The evaluators use an answer key that determines the number of questions answered correctly and calculate the percent correct for each caregiver.

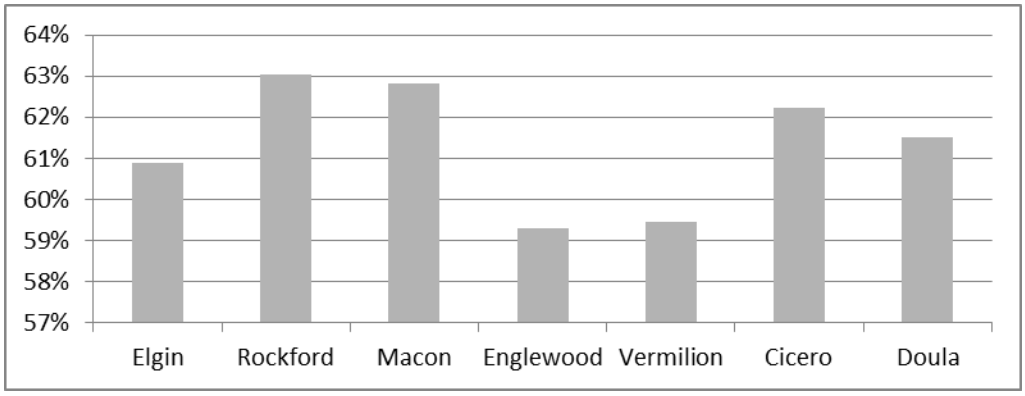
The results of the KIDI scores in Chart 1 show that compared to other low-income samples reported by the instrument developers, Illinois' MIECHV families report a similar knowledge level with 61.5% correct responses. However, Illinois KIDI scores are substantially lower than middle-class family samples, which report 82.5% correct. Significant opportunities exist to educate and support MIECHV families to improve their infant and child development knowledge.

Chart 1: Mean KIDI scores for various populations



The Illinois MIECHV KIDI results for the six communities and doula sites are below. Chart 2 shows Englewood and Vermilion MIECHV parents have the lowest scores of knowledge of infant development, while Rockford and Macon MIECHV parents have the highest score. However, it should be noted that the differences that exist among Illinois MIECHV communities are relatively minor when comparing the overall differences to the middle class sample, which should serve as the benchmark to demonstrate positive parent-child outcomes.

Chart 2: Percentage of correct answers on KIDI for MIECHV communities (N=356)



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

The HOME measure consists of six subscales: 1) Parental Responsivity, 2) Acceptance of Child, 3) Organization of the Environment, 4) Learning Materials, 5) Parental Involvement, and 6) Variety in Experience. Each subscale, and the total HOME scale score, reflects constructs that have demonstrated improved relationships and outcomes between families, children, and their environment (Bradley & Caldwell, 1984). Table 6 displays Illinois MIECHV median scores in comparison to reference median scores provided by the HOME's developer. Two hundred and seventy-three cases were collected during the first year of the MIECHV data collection process.

Results show that in a comparison to a reference sample provided by the scale developer, Illinois MIECHV participants' overall median score is above the reference group (Mdn. 35 vs 32). Further, in comparisons with the HOME subscales, Illinois MIECHV participants report the same scores for responsivity, acceptance, organization, and learning materials, and slightly higher scores for variety and parental involvement.

Table 6: HOME domain median scores comparison to MIECHV communities

Subscale	Illinois MIECHV median score	Reference median score	Comments
Responsivity	9	9	Same
Acceptance	6	6	Same
Organization	5	5	Same
Learning Materials	7	7	Same
Involvement	5	4	Illinois score higher
Variety	4	3	Illinois score higher
Total Score	**35**	**32**	**Illinois score higher**

Chart 3 displays the mean scores by each domain for the six MIECHV communities and Doulas. Highlights are summarized below:

- Elgin is doing well on the acceptance, organization, learning materials, and involvement domains.
- Rockford shows strengths in responsivity, but there is room for improvement on the organization and involvement domains.
- Macon is doing well on the acceptance domain, but could bolster the variety domain.
- Englewood is doing well on the variety domain, but can improve on the learning materials domain.
- Vermillion is doing well in responsivity, but has room to improve on the variety domain.
- Cicero is doing well on the variety domain, and has room to improve on the responsivity and acceptance domains.
- Doula services appear to be doing well on all measures: responsivity, acceptance, organization, learning materials, involvement, and variety.

Chart 3: Illinois MIECHV mean scores of HOME assessment; by domain

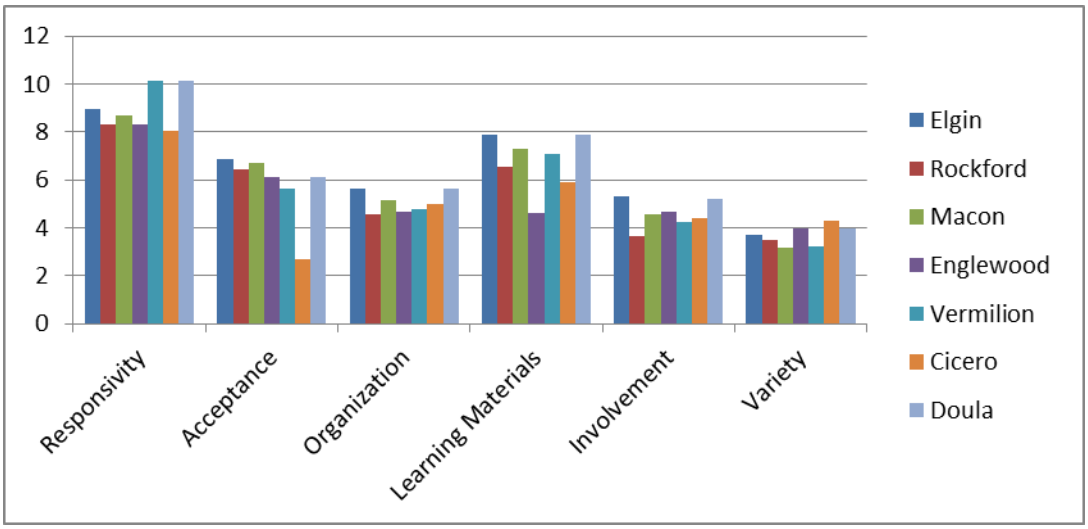
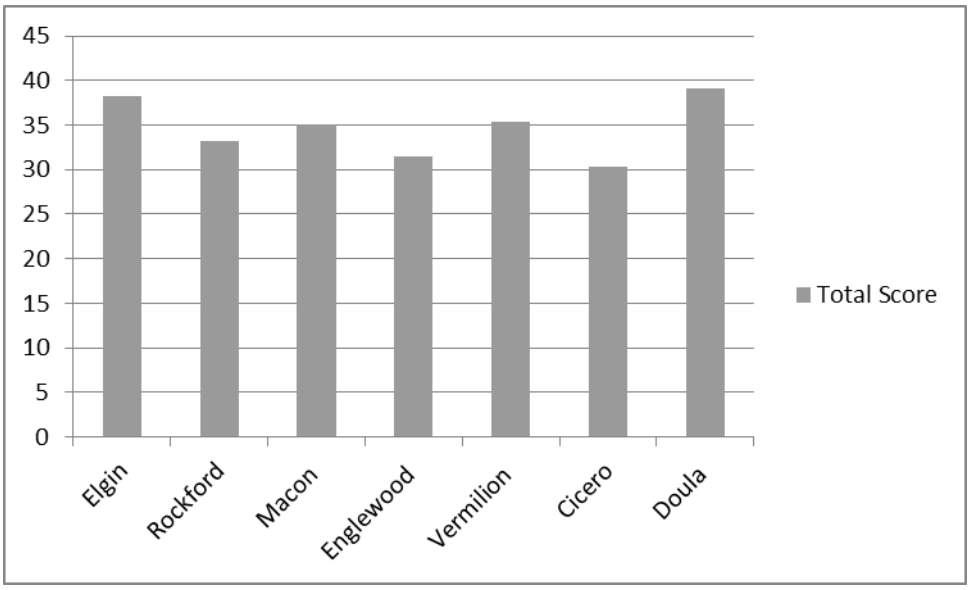


Chart 4 illustrates Illinois MIECHV mean total scores by community and Doula. Elgin and Doula have the highest scores; Cicero and Englewood have the lowest; other communities are in the average range, but once again these differences are relatively modest and, for the most part, meet the threshold for the reference sample. Further examination of these scales by site and program will provide opportunities for more precise feedback and program improvement.

Chart 4: Illinois MIECHV mean scores of HOME assessment, by community/Doula



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

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

The four domains of the PICCOLO are:

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

The overall analysis represents 319 cases collected during the first data collection year of Illinois MIECHV project. Overall, Illinois MIECHV families report significantly lower PICCOLO scores compared to the reference sample provided by the scale developer. When comparing the Illinois subscale scores to the author's reference scores, most family's scores trend from highest to lowest - Affection, Responsiveness, Encouragement and Teaching – which also appears to be the normal progression of scores reported by the scale developer.

Again, we divided the scores by six communities and four PICCOLO domains. Based on these results the PICCOLO scores by program and community can serve as powerful learning tool for both HV and caregivers. A summary of the results is as follows:

- All programs should review each subscale, with a particular emphasis on the teaching domain.
- Elgin, Vermilion, and Rockford appear to have the lowest scores for teaching.
- Rockford appears to have the lowest encouragement score, which may need additional examination.

Chart 5: PICCOLO mean scores by domain and community (n=319)

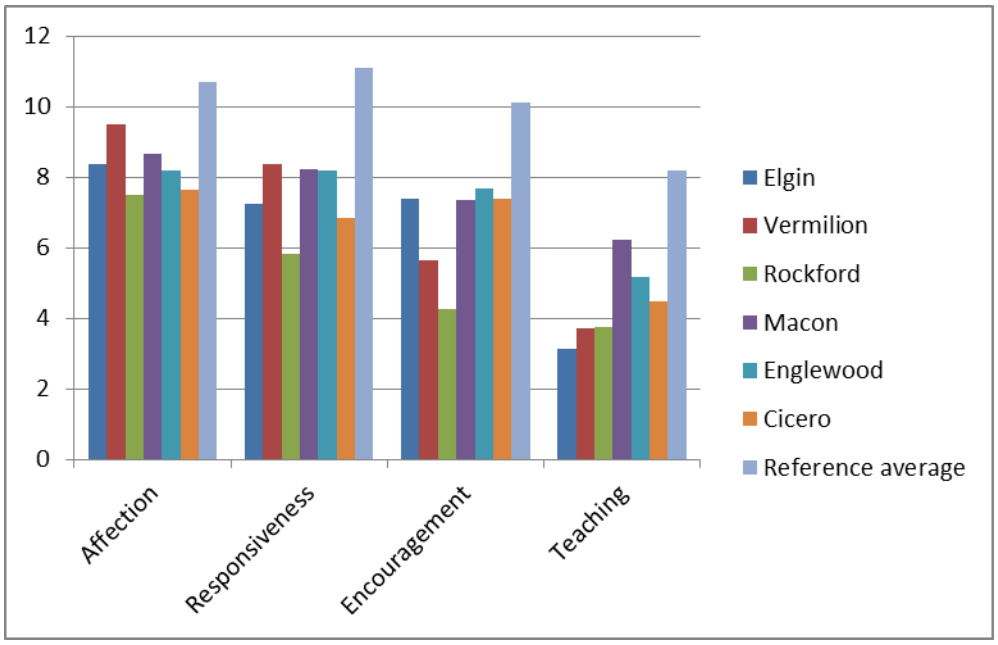
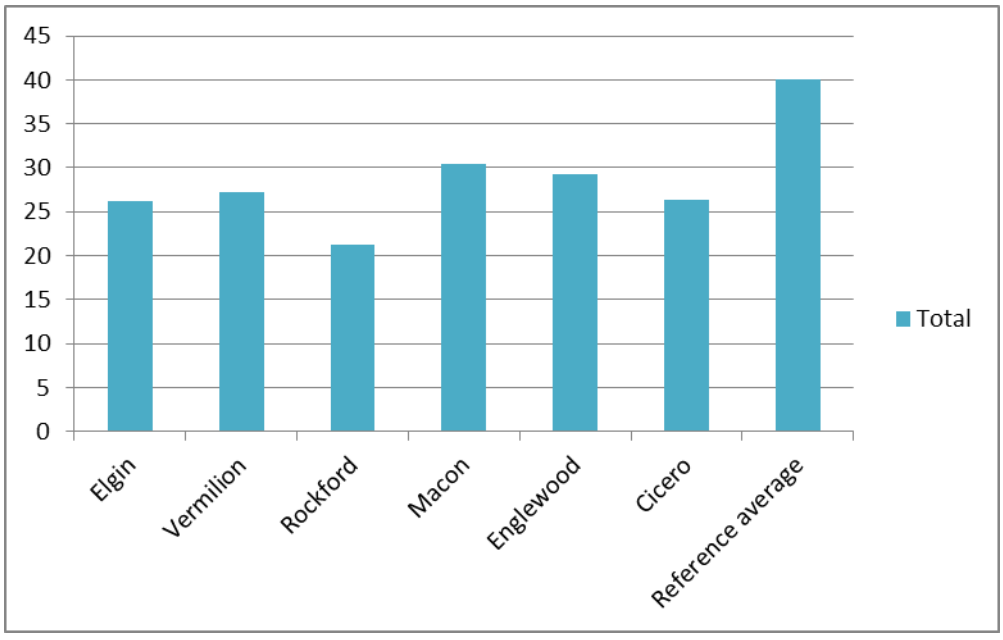


Chart 6 shows the same pattern of means for the PICCOLO total scores by community. Macon and Englewood have the highest PICCOLO scores, while Rockford has the lowest. All the communities place well below the Reference score average. Once again, with a few exceptions, most site differences are relatively modest, but substantially lower than the reference group average.

Chart 6: PICCOLO mean total scores by community (n=319)



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

The PSI-SF assesses the types, frequency, and magnitude of maternal stress related to parent-child relationships and interactions (Abidin, 1995). The three dimensions include:

1) parental distress (emotional distress in the parenting role);
2) parent-child dysfunctional interaction (problematic parent-child interactions);
3) difficult child (problematic child behavior or demands).

Illinois MIECHV state-wide results show a relatively normal or below reference group stress index as shown in Chart 7. The analysis includes 318 cases from the Illinois MIECHV first year of field data collection. According to the authors, the normal range for scores is within the 16th to 84th percentiles. Overall, the Illinois MIECHV PSI-SF scores for parent stress fall within the normal range (below the 50th percentile) with the most stress reported in the Parental Distress domain across MIECHV sites.

Chart 7: Illinois MIECHV Parental Stress Index (PSI) Statewide Results

Domain	**Total**	**Percentile**
Parental Distress	24.64	48
Parent-Child Dysfunctional Interaction	17.58	30
Difficult Child	20.26	23
Total Stress	61.86	29

In general, Englewood and Rockford MIECHV parents report slightly higher stress levels, while Elgin appears to have lower levels of stress, as illustrated in Chart 8 below.

Chart 8: Parental Stress Index (PSI) mean total stress by community

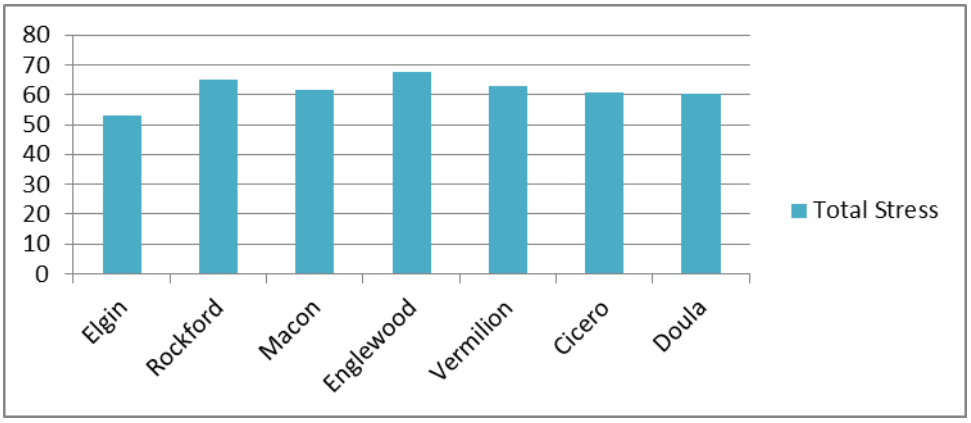
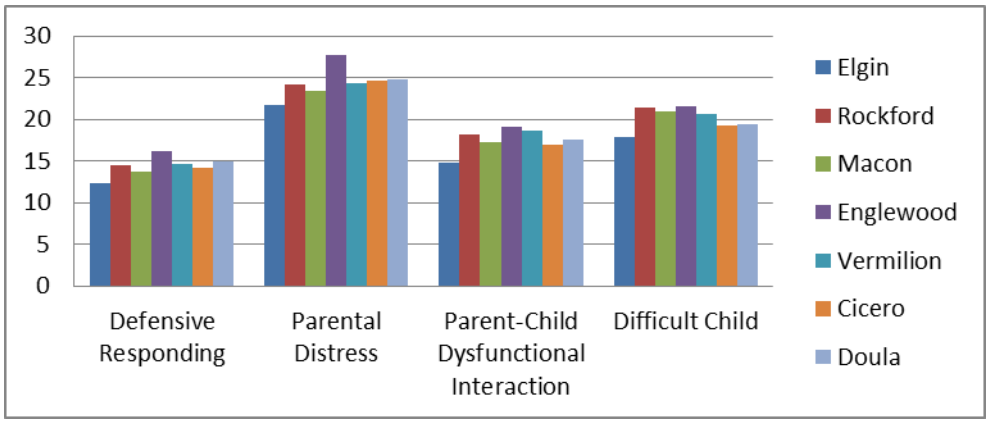


Chart 9: PSI mean scores by domain



Illinois MIECHV family responses to the PSI raise a number of questions for the evaluation and project teams, as all domains appear lower than the reference group provided by the authors. Experience tells us that pregnancy and infants create significant challenges for families, but it is apparently not being identified with this measure. The evaluation team may need to drill down into subgroups to determine any confounding or mediating factors.

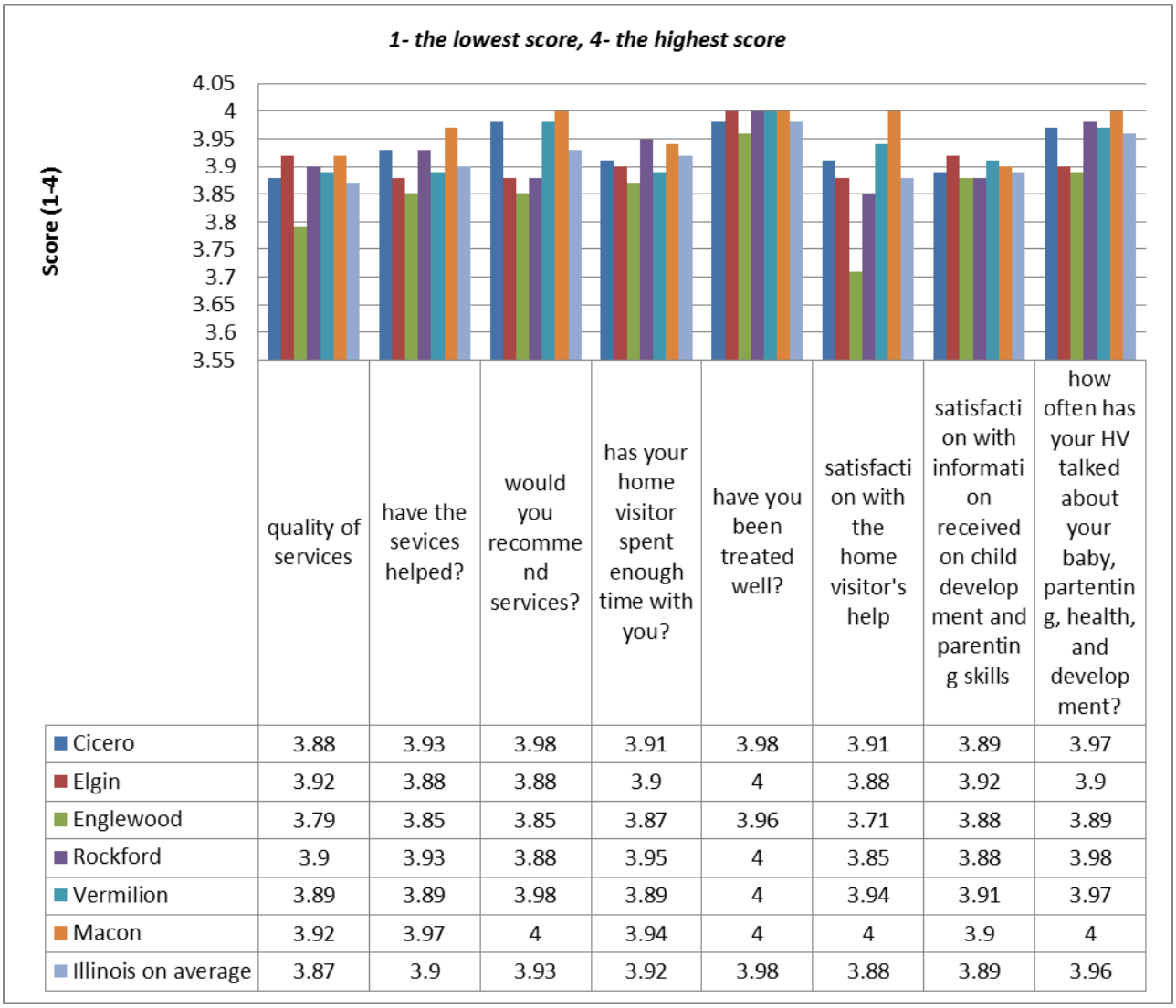
As noted, all MIECHV programs scored below the normative levels of stress when compared to the norms established by the instrument developer. The defensive responding scale is designed to determine whether respondents are attempting to deny or minimize parenting difficulties. It is computed based on items commonly endorsed by all parents, in order to determine whether the respondents' answers are considered valid. A score lower than 11 is considered to be "defensive." The Illinois MIECHV scores for defensive responding show that participants appeared to have answered openly and honestly to the questions.

5. Parent Satisfaction Survey (PSS)

The PSS was adapted from the Healthy Families Illinois satisfaction survey, which was designed to understand and report MIECHV participants' satisfaction with their respective home visitor and HVS. This multiple-dimensional measure assesses service quality, willingness to recommend, perceptions of good treatment, learning topics, and whether the caregiver believes she has received adequate time with her home visitor.

Across Illinois' MIECHV home visiting programs, reports of parent satisfaction are so high and positive that they create what is known as the "ceiling" effect, meaning that it is almost impossible to improve on existing scores. The positive responses and rating on the PSS indicate that participants have strong and trusting relationships with the home visiting staff, and enjoy their home visiting services. Participants also were asked open-ended questions at the end of the survey regarding the benefits and suggestions for improvement of HVS. These open-ended responses were also positive and supportive of HVS, providing additional insights related to participants' experiences with MIECHV programs.

Chart 10: Parent Satisfaction Survey (N=480)



	quality of services	have the sevices helped?	would you recommend services?	has your home visitor spent enough time with you?	have you been treated well?	satisfaction with the home visitor's help	satisfaction with information received on child development and parenting skills	how often has your HV talked about your baby, partenting, health, and development?
Cicero	3.88	3.93	3.98	3.91	3.98	3.91	3.89	3.97
Elgin	3.92	3.88	3.88	3.9	4	3.88	3.92	3.9
Englewood	3.79	3.85	3.85	3.87	3.96	3.71	3.88	3.89
Rockford	3.9	3.93	3.88	3.95	4	3.85	3.88	3.98
Vermilion	3.89	3.89	3.98	3.89	4	3.94	3.91	3.97
Macon	3.92	3.97	4	3.94	4	4	3.9	4
Illinois on average	3.87	3.9	3.93	3.92	3.98	3.88	3.89	3.96

V. Summary

The in-home assessments conducted by the FDCs provide rich and powerful information for MIECHV and the local home visiting programs. However, it must first be stressed that these data serve as the baseline for the in-home assessments, and we have not yet determined whether the assessments were administered in the early phase of a family's enrolling in HVS or whether they may have been in the program for up to one year. The potential difference for the range of variance regarding the initiation of HVS and the baseline outcome evaluation is likely due to the lag time for the evaluation team start-up. An analysis of length of time in the program by outcomes will

be important to conduct. These measures would most importantly serve as a starting point for MIECHV to improve home visiting practices, affirm the work of the home visitors, and delve deeper into how this information should be interpreted.

VI. Barriers and challenges to data collection and reporting

The most significant barriers and challenges related to the evaluation, data collection and reporting by the evaluation and project staff for the FY 13 year include: 1) demands of scaling up and expanding (hiring, professional development, data requirements, etc.) a new home visiting initiative; 2) changing the MIS system; 3) home visitor staff turnover; 4) and implementing a CQI process across sites.

Launching a home visiting system

The incorporation of MIECHV into Illinois community-based services has created multiple opportunities to build and expand upon existing HVS. Illinois already had a number of existing well regarded home visiting programs, but the availability of HVS was below the identified need, as captured in Chapin Hall's Home Visiting Assessment of Need and Capacity (Daro et al., 2010). In a large and complex state such as Illinois, this effort required at least a 6-month lead-in period, including Request for Proposals (RFP); proposal review; scoring and selection of home visiting programs within the six target communities; support of local communities in hiring of new home visiting staff; arranging and conducting numerous programs and professional development workshops; and selection and adaption of a new data system. In fact, the scale of launching MIECHV was best captured in CPRD's CQI readiness survey in which nearly 60% of home visitors reported that this was their first home visiting position.

These challenges were exacerbated by Illinois' new and expanding procurement requirements which created significant delays, resets, and complex bureaucratic challenges. Thus the launching and full operation of the MIECHV project required approximately one year to complete; this is by no means uncommon for a project of this size and complexity.

Changing data systems

Data-based decision making is the cornerstone of the MIECHV project at federal, state, community, and program levels. A significant data-related issue surfaced when Illinois MIECHV decided to change from ETO, the original database system, to Visit Tracker. This required Illinois staff and home visitors to make two transitions -- learning and adapting to two data systems. Although some data was electronically transferred between the two systems, the reentering of data into the Visit Tracker system required significant staff time and energy. This meant that all MIECHV staff had to learn a new system, update their data, develop new data captures and queries, and determine the best ways to report information for Illinois MIECHV's Continuous Quality Improvement (CQI), Quality Assurance (QA), and HRSA's submission to DGIS.

Home visiting staff turnover

A major challenge for the MIECHV program and the evaluation team has been staff turnover at several of the home visiting sites. CPRD learned about these issues from the FDCs as they were attempting to gain access to participants in order to conduct the in-home assessment, and during CPRD's site visits. Although staff turnover is normal and expected in any agency or organizational setting, it can be particularly problematic with HVS, since the home visitor- participant relationship is considered one of the most powerful and important elements of HVS. This

issue became particularly significant to the FDCs, since they rely exclusively on the home visitors to provide the initial contact and connection with HVS clients for in-home assessments.

As staff turnover appeared to become a significant issue for home visiting sites and the evaluation contact, CPRD began calculating a crude percentage of turnover over the last year. When combining HVS and Doulas, 39% of the MIECHV staff turned over in 2013 (see Table 7). It also should be noted that staff turnover varies, with several sites having little or none, while others have experienced almost 100 percent loss of home visiting staff. Finally, staff turnover is of greatest concern in terms of its effect on reduced or delayed enrollment of families in home visiting services, and participants often leave HVS because they don't want to "start over" with another home visitor. This issue has been raised with the project staff and the state CQI Steering Committee.

Table 7: MIECHV Staff Turnover by Area, FY 13

Area	**Area**	**# Current Home Visitors/ doulas**	**# HVs who have left**	**# Current Supervisors**	**# Supervisor turnover**	**Notes**
Vermilion Sites Combined	Vermilion	11: 8-HV, 3 doulas	3	5	1	1 supervisor opening
Cicero/Lawndale Sites Combined	Cicero/ Lawndale	8 HV	1	3	0	1 HV opening
Elgin/Waukegan Sites Combined	Elgin/ Waukegan	10 HV	1 Doulas + 4 HVs	5	0	
Macon sites combined	Macon	6 HV	6	3	0	
Rock Island	Rock Island	2 doulas	0	1	0	
Rockford Sites Combined	Rockford	6 HV	5	5	1	
Englewood Sites Combined	Englewood	8 HV	0	5	1	
Total	**39 % turnover rate for HVs**	**51 current HVs and Doulas**	**19 HVs + 1 Doula**	**27**	**3**	**11% turnover rate for supervisors**

HV participation and attrition

The status of HVS shows that Illinois MIECHV served over 916 caregivers and 944 target children who participated in 13,050 home visits in FY 13. This extraordinary statewide effort exemplifies the hard work and commitment that local communities have exhibited in reaching Illinois' high risk population. A key factor that determines effectiveness of the four evidence-based model programs requires that the family receive the full "dosage" of the program and the ancillary support services. The quality of services and full implementation of the model program are usually the best predictors of whether the program participants attain intermediate and long term outcomes (Ingoldsby, Baca, McClatchey, Luckey, et al. 2013; Damashek, Doughty, Ware, & Silovsky, 2012). As a result, retaining clients to participate in the full spectrum of home visiting services is essential for program effectiveness. Premature loss of participants reduces the likelihood of improving maternal health outcomes and wastes scarce public resources. Full attention must be paid to addressing these attrition issues.

At this time, Illinois MIECHV's data system is unable to calculate the actual participation levels for each program model, but this query is under development. To date, an aggregate estimation has been calculated by reporting the number of participants receiving, completing, or stopping services (see Table 3). However, to obtain a more accurate understanding of potential attrition, we must be able to match the individual family and the program.

The attrition rate of home visiting participants has been widely reported in the literature ranging from 40-80% (Gomby, 2005). This major issue results in participants not receiving the proper levels of program activities or dosage that the research suggests is required to provide an opportunity to be successful. We also proposed that dropouts may also have something to do with families reaching a point of diminishing returns, where they no longer believe they need HVS. These questions and data will require closer attention in the upcoming year to determine the strategies or best practices could be used to encourage or support families to remain in the programs.

VII. Continuous Quality Improvement (CQI)

CPRD was also charged to engage Illinois MIECHV programs to develop CQI processes and procedures at the State, community and program level. This work began in earnest in April of 2013 and is now approaching the one year anniversary of the launching. During this time, the CQI team has developed a framework for engaging local programs and communities that use *Koality*, the Koala mascot (see picture below)

Continuous quality improvement (CQI) is a vital component of Illinois' MIECHV initiative, providing a mechanism to generate meaningful commitments from all levels of the program. For the purposes of programs in Illinois, CQI is the complete process of identifying, describing, and analyzing strengths and problems, and subsequently testing, implementing, and learning from and/or revising solutions. The CQI philosophy is that most things can be improved. Meaningful CQI efforts recognize that one learns as much from challenges and failures as from successes. The overall goal is to provide the best possible services to the children and families. Through quantitative and qualitative data collection, review, and analysis, the benchmark data offers new knowledge about potential challenges for the delivery of high-quality home visiting services. These data also serve to inform programs about training and technical assistance needs that may improve services. Ultimately the integration of CQI methods in the MIECHV program improves service delivery and participant outcomes.

CQI objectives

The broad goal of working with HVS was to provide with goals and objectives that would help them engage and succeed at developing CQI processes. The framework for these objectives includes:

- Engage internal and external stakeholders in the quality improvement process
- Provide on-going assessment and evaluation
- Identify strong and weak areas of service delivery, and carefully prioritize identified problems and set goals for their resolution
- Utilize strength-based strategies and practices
- Achieve measurable improvement in the highest priority areas
- Develop strategies and steps to diminish barriers and improve areas of performance
- Develop and incorporate new knowledge and practices in a data-driven manner
- Make data and improvement process transparent for all stakeholders
- Continuously improve services based on lessons learned and best practice
- Ensure that target populations are appropriately being pursued for home-visiting services

CQI culture of quality and supporting values

An important mind set for CQI is the development of a culture of quality that delineates an approach focusing on open, continuous learning and problem solving, where trial and error is accepted and the norm. Key components for creating this culture of quality include:

- Attitude: Everyone should strive to reach pre-determined and ambitious targets rather than "doing the best they can." It is important to recognize that every situation can be a learning experience.
- Transparency: We share practices and methods we use as well as results and outcomes. We always recognize individual contributions to a big picture and appreciate open communication.
- Data: We collect relevant, accurate and meaningful data, and utilize it to monitor progress towards established targets. We provide reports and findings to the state and local staff.
- Commitment: We want all team members to move from "us" to "we" and become committed to the quality improvement process.
- Understanding of current culture, mission, vision, and values is highly important. We always want to understand where we are today versus where we want to be.
- Understanding the system and processes is also highly important. It is process steps that lead to the outcomes. Outcomes will be measured against established targets.
- Understanding that the data can tell an important story about service delivery, and that the problems they experience can be gleaned from the data results and monitored for improvement.
- The cornerstone of the culture of quality is founded on the development of high-quality professional relationships between the MIECHV staff at the state and local levels. This requires a level of trust and openness that can only be created by engaging home visors to "own" CQI processes. Staff ownership and trust issues can only be realized by having a common vision for high-quality home-visiting services, engaging them in meaningful ways, ensuring their voices are heard and respected, and providing them with the tools, skills and support needed to be successful.

State CQI steering committee membership

The State CQI team membership is comprised of the representatives of the multiple MIECHV key stakeholders. The team had its initial meeting on February 23, 2014 by videoconference. The Illinois CQI Team consists of the MIECHV Program Director, the Manager of Program Evaluation, the Manager of Community Systems, and the Manager of Compliance from the Governor's Office of Early Childhood Development. The Steering Committee also includes members from the independent evaluator, CPRD: Peter Mulhall, Mary Anne Wilson, and Deborah Kemmerer, as well as members from Chicago Public Schools, Illinois Head Start Association, ISBE and IDHS (funders of home visiting). The ultimate goal of the state team will be to identify strengths and challenges in the MIECHV systems that state team and other policy-oriented members might be able to influence from a macro-level. Action or proposals at this level have the potential to create significant and cascading effects on local programs.

Challenges in data collection

As discussed earlier, data collection through a management information system (MIS) and case management system began through a system entitled "Efforts to Outcomes" (ETO) produced by Social Solutions. The highly-specific needs of the Illinois home visiting programs and variety of other MIECHV programs funded place a large burden on the developers of the data system. This along with significant changes and build outs appeared

overwhelming to the vendor. In the end, the adaption of ETO for Illinois MIECHV was unsuccessful, and resulted in a change of data systems to Visit Tracker, which is more user friendly and adaptable for our data collection and data reporting needs.

Reporting CQI data

The CPRD CQI Team led by Deborah Kemmerer, has been primarily responsible for working with the MIECHV sites in the development and utilization of the reports. The program sites are expected to design and implement a CQI process and develop a plan targeting program improvements. The primary goal of the implemented CQI plans at each site is to rely on the data to direct CQI efforts.

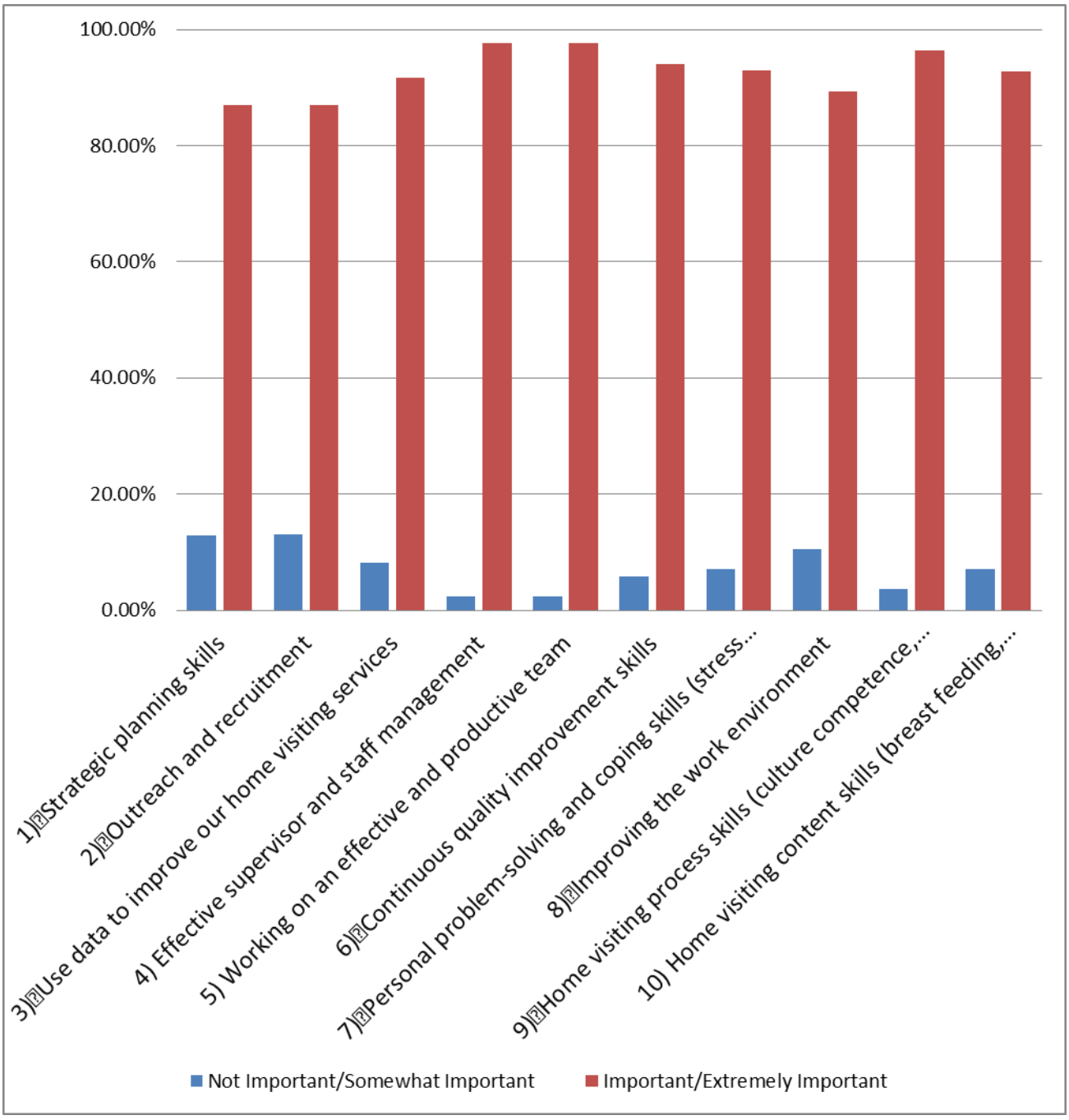
The CQI data reports and action plans serve as the cornerstone of the Illinois CQI process. Data made available to the programs serve as the major sources to identify key areas to address and to prioritize their efforts. It is important to have more than one source of data and preferably both quantitative and qualitative in nature. The CQI Specialist engages the local teams' planning process and works collaboratively across the communities. Our CQI model is a variation of the widely used Plan-Do-Study Act (PDSA) process. Programs are provided common CQI tools, such as SWOT analysis, logic models and data charts, to assist them in creating a data-driven Action Plan using SMART goals. These program-level Action Plans are submitted for review on a quarterly basis with feedback provided by the CQI Specialist for revisions.

Major CQI activities to date

CQI activities were initiated with a series of meetings in three regions of the state, which have been followed up with sites visits, and two major web training sessions. Once CPRD's CQI specialist was hired, concentrated work began with orienting sites to CQI, clarifying expectations and preparing programs for the first CQI plan submission last August 2013. In June 2013, CPRD team developed and conducted a CQI readiness survey that invited all MIECHV staff to participate. The response rate was 29%. The purpose of the survey was to assess the status of CQI at each site, determine prior staff experience with CQI, and identify perceived challenges to implementing a CQI process at their agency. Overall, the MIECHV sites reported having little experience with CQI, but most indicated an understanding of the importance of CQI to the success of HVS. Additionally, respondents identified a number of skills and practices that they believed were important to prepare them of conducting CQI (see Figure 1). The full CQI Readiness Report is provided in Appendix 3).

The CQI specialist, alone or with other CPRD or MIECHV staff, conducts monthly conference calls with each site to determine their progress, challenges and problems, and to provide support to the sites in planning and implementing CQI activities. This requires at least 25 conference calls that typically last one hour or more depending on the status of their plan and progress. There have been three CQI program plan submissions to date, and once a plan is submitted, CPRD staff reviews and scores the plan using a CQI rubric that provides objective and usable information for feedback.

Figure 1: CQI readiness survey results



Report development

CPRD data specialists work with Visit Tracker data, the CQI specialist, and evaluation team members to develop necessary reports. The focus on report development is to ensure that sites have the data they need to track program implementation progress and participant outcomes. In addition, local reports are reviewed from the state perspective to understand how statewide systems issues that may require statewide solutions.

Performance targets

The first year of CQI does not include any formal performance targets, as the goal is to focus on establishing a baseline of CQI efforts. The infrastructure is now established and we have begun working on specific problems. In addition, the state and sites are encouraged to develop targets around best practice; however, it is important that targets are authentic, realistic and flexible. The funder-based QA process contains mandated hard targets that sites are expected to meet, and we will position CQI to aid sites in meeting those QA targets as well.

Summary of progress

The Illinois CQI system seeks to improve the provision of services with an emphasis on future results. It uses a set of analytical tools to understand subsystems and uncover problems. CQI objectives center around three main strategies:

- Improving capacity in terms of human capital and resource development (through technology transfer and professional development and training)
- Cultivating evidence-based practice (through exploration and evaluation) and data-driven decision making
- Improving access and guidance for public policies and decision making

To implement the first strategy, CPRD and the State MIECHV team offered significant support working in data systems and studying data to understand change. In addition, access to the management information system was made available to give all MIECHV sites universal access to quantitative data and reports to identify problems and track changes.

To implement the second strategy, CPRD offers extensive support in applying evidence-based practice. Through its technical assistance work with sites, CPRD hopes to continue to steer sites toward evidence-based programs, policies and practices.

As part of CPRD's close working relationship with the OECD and IDHS staff, the evaluation team regularly engages and participates in dialogues, problem solving, meetings, presentations and technical assistance that have implications for major and minor policy issues. These exchanges represent information sharing and problem solving at multiple levels from the state, communities, programs and even individual participants. In fact, CPRD most often hears about home visiting issues from the FDCs as they are in the field with the home visitors. This information may identify trends or patterns of issues that stakeholder need to become aware of and/or require a decision by program management. This multi-level access and communication provides for a dynamic flow of information sharing hierarchically and across people and systems that have the authority, resources and commitment to address an issue. CPRD staff have already identified and addressed several issues ranging from engaging DCFS families in the in-home surveys, involvement in the MIHOPE study, low census counts in

communities, and home visitor turnover. Of course, information also flows down from the state as they identify issues that need to be addressed by the evaluators or the home visiting agencies.

Since beginning the CQI process in June 2013 and completing three quarters of CQI work, the agencies are working on the following benchmarks:

- Referrals (includes documentation & follow-up)
- Injury prevention
- Prenatal visits
- Well-child visits
- Inter-birth intervals
- Screenings (includes general development, cognitive skills, positive approaches to learning, and emotional wellbeing)
- Insurance status (for mother, child & household)
- Visits of mothers to the Emergency Department
- Incidence of child injuries requiring medical treatment

Recommendations to improve CQI efforts

A high-performing team focused on a defined goal is the key to success of CQI. The process is most effective when agency teams work towards a common CQI goal over a period of time, and can learn from others in the community and within the state to identify how best to implement strategies that accomplish their goal. For instance, starting in the summer of 2013 agencies across the state all worked on improving the External Referral process. This was chosen as a goal because the 4P's data indicated that the acceptance rate of external community referrals was close to 25%.

Use qualitative and quantitative approaches to build a full picture of the home visiting effort. Collecting project narratives provides important information about implementation methods and approaches to translating lessons learned across sites, as well as process and outcome improvements. Quarterly CQI reports build upon these activities to ensure data is collected in a timely manner and accountability is maintained. Annual CQI reports aggregate the quarterly reports, with over-arching themes identified and summarized. The federally-mandated annual report of demographic, service utilization, process indicator, and benchmark data, together with the annual CQI report, allow for a richer picture of the strengths and opportunities for improvement within the MIECHV network. These reports are disseminated to MIECHV stakeholders to ensure transparency and to invite comments and suggestions for additional improvements.

Create a philosophy that supports CQI. In order to help establish the culture of quality and encourage site buy-in, the evaluation team adopted a mascot, the Quality Koala (or Koality). This cheeky character brings a sense of encouragement to the CQI process. CQI is about continuously improving quality improvement systems and environments in which home visiting takes place. This friendly Koala mascot helps to dispel the negativity that sites are not working hard enough, and it is intended to be a positive force for ensuring the best possible HVS.

Figure 2. Koality – MIECHV CQI Mascot

VIII. Conclusions and recommendations

Working with the MIECHV program staff, the first 18 months of the evaluation and CQI conducted by CPRD has resulted in the creation of a fully operational evaluation system capable of collecting data at the 25 HV programs across that state that can be aggregated to program, community and state levels. Despite the challenges faced by launching a project of this size, almost all the elements have been developed and integrated into data systems that can provide a snapshot of Illinois MIECHV services, and an evaluation system that captures not only data for the federal reporting requirements, but also information that can be constructively and critically used for improving the quality of services. These information and feedback systems provide the best opportunity for improving MIECHV program, community and state outcomes.

As Illinois MIECHV is in its second full year of programming and implementation, CPRD's evaluation work will, in a sense, continue to reflect the work of home visiting services; by providing information and opportunities for ongoing learning that contribute to program improvement. Only through this iterative approach will the MIECHV home visitors and project staff be able to understand how their programs are performing and what they need to do to improve services. All human service organizations or systems cycle through challenges and successes, and the only way to remain effective and efficient is to develop a commitment to learning and quality improvement. Based on what has been accomplished to date, the evaluation team proposes the following recommendations:

1) Finalize database queries that allow for regular, ongoing PB data quality, feedback and reporting to the state, communities and local programs.

2) Identify the most understandable and useful ways to present PBs and outcomes data to local programs and communities. Facilitate their knowledge and understanding of what PBs mean for their program and community.

3) Review and investigate PBs and outcomes that conflict or seem incongruous with the current results (PSI, PSS) to ensure a more in-depth understanding of what the data are telling us.

4) Identify ways to capture, calculate, and report on program model fidelity and dosage using Visit Tracker.

5) Support the development of action plans at the state and local level to respond to commonly recognized home visiting challenges – staff turnover, client attrition, data quality, referral services and follow-up.

6) Review, update and build consensus on key evaluation questions that will guide data and statistical analysis.

7) Identify key Illinois stakeholders and audiences and develop a communication plan for disseminating evaluation results.

8) Determine the MIECHV results that should be shared with audiences outside Illinois through reports, publications or policy recommendations.

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Appendix 1: IRB Approval Letter

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Office of the Vice Chancellor for Research
Institutional Review Board
528 East Green Street
Suite 203
Champaign, IL 61820

October 25, 2012

Peter Mulhall
IGPA/CPRD
510 Devonshire Drive
M/C 665

RE: *Maternal Infancy Early Childhood Home Visitation State Wide Evaluation for Illinois*
IRB Protocol Number: 12828

Dear Peter:

Your response to required modifications for the project entitled *Maternal Infancy Early Childhood Home Visitation State Wide Evaluation for Illinois* has satisfactorily addressed the concerns of the University of Illinois at Urbana-Champaign Institutional Review Board (IRB) and you are now free to proceed with the human subjects protocol. The UIUC IRB approved the protocol as described in your IRB-1 application with stipulated changes, as part of their monthly review. Certification of approval is available upon request. The expiration date for this protocol, UIUC number 12828, is 10/22/2013. The risk designation applied to your project is *no more than minimal risk.*

Copies of the attached date-stamped consent form(s) must be used in obtaining informed consent. If there is a need to revise or alter the consent form(s), please submit the revised form(s) for IRB review, approval, and date-stamping prior to use.

Under applicable regulations, no changes to procedures involving human subjects may be made without prior IRB review and approval. The regulations also require that you promptly notify the IRB of any problems involving human subjects, including unanticipated side effects, adverse reactions, and any injuries or complications that arise during the project.

If you have any questions about the IRB process, or if you need assistance at any time, please feel free to contact me or the IRB Office, or visit our Web site at http://www.irb.illinois.edu.

Sincerely,

Anita Balgopal, Director, Institutional Review Board

Attachment(s)

c: Matthew Poes

telephone (217) 333-2670 • *fax* (217) 333-0405 • *email* IRB@illinois.edu

Appendix 2: Data collection brochure

YOUR VERMILION COUNTY DATA COLLECTOR

Marilee Wright

Marilee Wright is a Licensed Clinical Social Worker with over 25 years of experience working with children and families in a variety of programs, including home visiting. She received her Bachelor's and Master's degrees from the University of Illinois. Marilee has a special personal and professional interest in addressing attachment and trauma related issues in families.

If you have any questions or would like more information, please feel free to contact:

Mary Anne Wilson

MIECHV Project Coordinator

mawilso@uillinois.edu

(217) 333-3231

University of Illinois
Institute of Government and Public Affairs
Center for Prevention Research and Development
510 Devonshire Drive
Champaign, IL 61820

UNIVERSITY OF ILLINOIS

MATERNAL INFANT EARLY CHILDHOOD HOME VISITATION (MIECHV)

DATA COLLECTION

CENTER FOR PREVENTION RESEARCH AND DEVELOPMENT (CPRD)
UNIVERSITY OF ILLINOIS

217-333-3231

UNIVERSITY OF ILLINOIS

MIECHV is the Maternal Infant Early Childhood Project. This project is part of the federal Healthcare Reform Act and allows us to expand much needed and important home visiting programs across the nation. The services you are receiving have not been widely funded or directly supported by the federal government in the past, and this gives us an opportunity to show the nation how valuable these services can be.

Our Time Together

Home visiting services are an important way to help families with young children. To learn how home visiting services can be improved, we need your participation in a very important study. As part of this program, we would like to join your regular home visitor for one visit per year. We will:

- Keep your information private.
- Ask you about your experiences with home visiting.
- Complete some interview tools about your family life.
- Make a 10-minute videotape with your child and you playing together.

We will be using the following set of interview tools (assessments) so we can better understand your experiences with home visiting.

MIECHV Assessments

- Knowledge of Infant Development Inventory (KIDI)

  To understand how parents improve their understanding of child development stages.

- PICCOLO Video

  To see how parents play with their children.

- Parent Stress Index (PSI)

  To see how parent's stress changes as their children develop.

- H.O.M.E. Assessment

  To capture the child's everyday life and experiences.

- Parent Satisfaction Survey

  To see how satisfied parents are with the home visiting services they receive.

Your home visitor will schedule our home visit with you.
To thank you for your participation, you will be given a gift card at the end of our visit.

In the event you have concerns with the actions of CPRD, you may contact the
University of Illinois
Institutional Review Board
Suite 203, MC-419
528 East Green Street
Champaign, IL 61820
(217) 333-2670

Appendix 3: CQI Readiness Survey Results

Continuous Quality Improvement Readiness Assessment for the Illinois MIECHV Programs

Conducted by the

Center for Prevention Research and Development

University of Illinois

December 17, 2013

Background

The University of Illinois' Center for Prevention Research and Development (CPRD) is responsible for conducting Continuous Quality Improvement (CQI) for the Maternal, Infant, Early Childhood Home Visiting program (MIECHV). In initiating the CQI portion of MIECHV, CPRD conducted a CQI Readiness survey (Appendix A) to measure agencies' culture of quality and to promote their adoption of such a culture. This assessment measures the level of preparation of organizations to implement CQI; i.e., their readiness. In order to conduct a thorough readiness assessment, CPRD evaluated the culture, leadership styles, performance, processes, and resources of participating organizations. Researchers could identify organizational needs and then proceed to develop a plan to introduce CQI goals to agencies across the state. Moreover, this tool can be used as a baseline measurement of organizations' "quality culture" and can identify "change agents" to enhance that culture.

Readiness assessment pertains to both organizational CQI program readiness and CQI project readiness. CQI program readiness is seen as a precursor of general and substantive project quality improvement. A readiness assessment determines if the organization is capable of successfully implementing change; it identifies available resources, staff characteristics, and areas in which an organization needs to improve. Thus an organization can prepare for any barriers that would otherwise hinder CQI projects. Such an assessment also helps to pinpoint organizational strengths that can be used to support CQI programs.

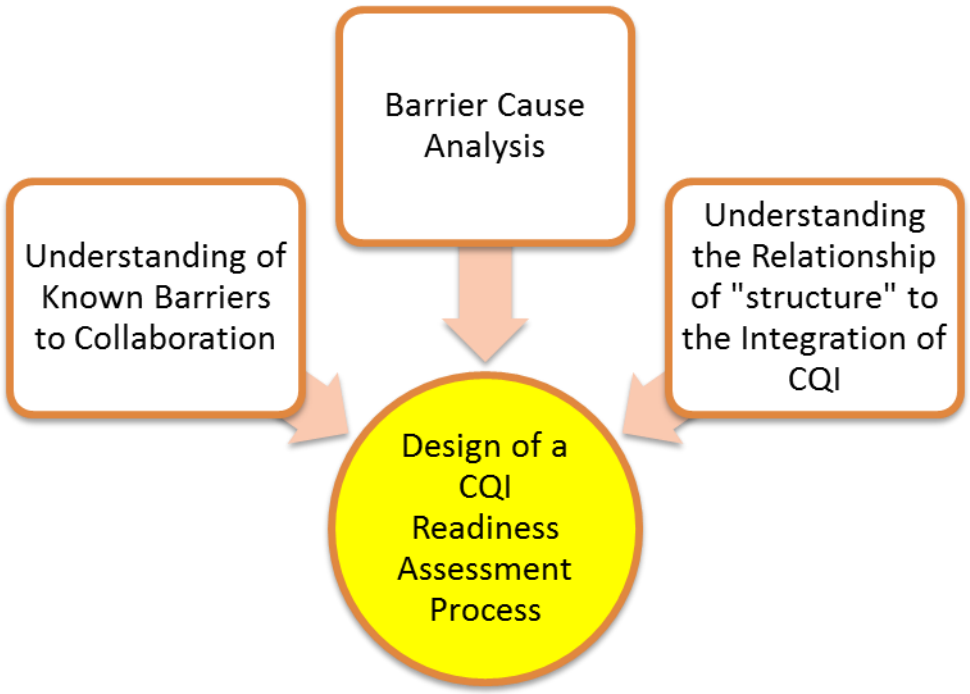
The purpose of readiness assessment is to help an organization identify and address obstacles and barriers that would otherwise delay CQI initiatives. Doing so avoids major problems, saves time and increases the likelihood of successful quality improvement. To this end, it is important for an organization to engage with staff during the assessment period. Such engagement strengthens employee relations and indicates that leaders care about how major changes will affect staff. Moreover, assessment findings may encourage an organization to alter its CQI planning efforts toward more realistic and positive outcomes. Nevertheless, the major goal of readiness assessment is to help an organization achieve its CQI aims without being stymied by unpleasant surprises.

Method and Design

CPRD's initiated the MIECHV/CQI readiness assessment process in April 2012, leading to a June 2012 survey conducted across the state. This web-based survey was sent to 290 recipients, including everyone involved with CQI: CQI representatives, agency supervisors, home visitors, coordinated intake staff, and system development staff. Survey recipients were asked to forward the survey to other involved agency staff, including administrative. This resulted in 85 responses. The survey was anonymous and did not include identifiers or information that could disclose a respondent's identity.

A thorough review of the literature included a search of professional journals on the use of a readiness assessment tool for quality improvement and a review of the Baldridge National Quality Program's organizational performance assessment tools. CPRD researchers identified three key elements to consider in the design of the CQI readiness assessment process and tool (Figure 1):

Figure 1: Design Relationships for CQI Readiness Assessment



The Relationship of Structure to the Integration of CQI:

In order to improve outcomes, procedures antecedent to those outcomes must be addressed and improved. Problems in inherent in collaboration are often related to "structure." In his exploration of the definition and measures of quality in health care, Donabedian1 identifies structure as the "relatively stable characteristic of the providers of care, of the tools and resources they have at their disposal, and of the physical and organizational settings in which they work. The concept of structure includes the human, physical, and financial resources that are needed to provide medical care."

Structure-related issues inherent in CQI are elaborated in the S-P model of TQM (Figure 2: Saunders and Preston model cited by Dalu and Deshmukh, 2002).

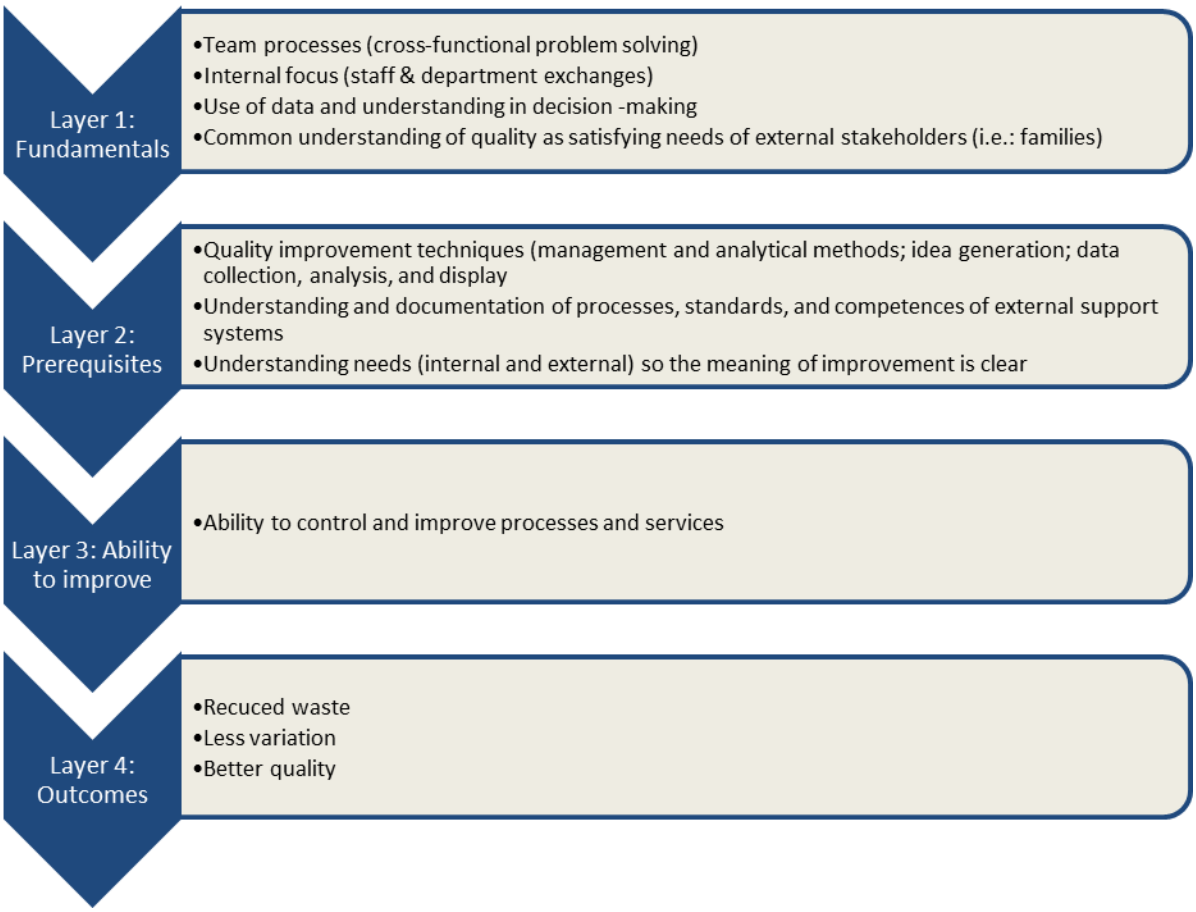
Layer 1 of this model indicates that in order to be successful in implementing and sustaining CQI, an agency or facility must: (1) use "cross-functional" team processes supported by a system of rewards to overcome organizational complications and barriers; (2) focus on the "internal customer" (employee and department) exchanges of work which create a chain of quality reaching the external customer; (3) emphasize the use of data in decision-making; and (4) have a common understanding of quality in relation to the needs of the external customer.

Layer 2 addresses the three requirements that enable a facility to improve its processes and services. The facility must (1) have a grasp of quality improvement techniques; (2) understand and document the work of suppliers and

[1] Avedis Donabedian (decreased) was considered by the Institute of Medicine (IOM) to be a great 20th century leader in the field of health care quality. He was a member of the Institute of Medicine, and leaves behind a rich body of work on the conceptualization and measurement of quality.

external support systems; and (3) understand customer needs. These first two layers are prerequisite to Layers 3 and 4: the ability to improve and ultimate outcomes.

Figure 2: S-P Model of TQM



Design for the CQI Readiness Assessment Process and Tool:

The design of the assessment process and measurement tool is based on these carefully considered and guiding assumptions:

1. Perceptions of facility employees are more reliably indicative of CQI readiness than assessments of leaders. There is often a "disconnect" between what leaders think and what employees perceive. Whether leaders feel that perceptions of the employees are correct is not relevant, because employees' opinions shape the agency's reality.
2. The assessment tool will be a climate survey in a Likert-type format administered to employees and using a simple, low-cost process. The climate survey will be as short as possible; survey statements will be easy for employees to understand and directly related to barriers and issues that relate to implementation of CQI.

3. The assessment process will include guidelines for internal administration of the climate survey by a group of workers trusted by their peers. External administration is not necessary, as results are primarily for internal use rather than external comparison.
4. Rules will also be provided for analyzing assessment results and linking them to recommended strategies.
5. The climate survey and related documents will not explicitly refer to "readiness," which implies a "pass/fail" result. Instead, the tool and process will be linked to preparation needed to improve CQI.

Results/Findings

General:

Likert Scale statements most agreed upon in survey questions 1 through 35 were:

- "I believe my home visiting job contributes to improving the lives of children and families."
- "The people I work with readily help each other."
- "Our home visiting team has respect for each other's ideas and opinions."

Likert Scale statements least agreed upon (i.e.: more "disagree" responses) were the following:

- "Implementing CQI processes will take away from the quality of home visiting services."
- "I believe I have been adequately trained to implement CQI."
- "We have had adequate training and technical assistance to implement the CQI process."

Based on survey questions regarding responder and work characteristics, the following results are worthy of note:

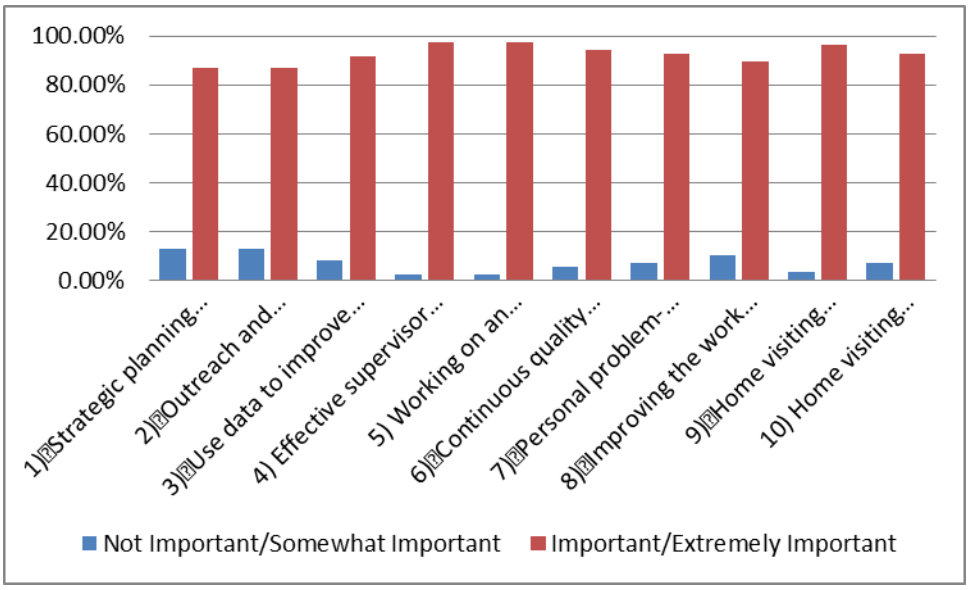
- CQI teams have not met yet (57%). This is understandable since the CQI process was just getting underway at this time.
- The majority of participants (99%) are female. This is consistent with the home visiting workforce in general.
- 89% of the home visiting staff is full-time.
- 57% of participants have worked as a home visitor for one year at their current agency, and 58% only have a year or less experience as a home visitor prior to work at their current agency. This indicates that the majority of MIECHV home visitors have relatively little experience as a home visitor.
- 85% of participants have a Bachelor's degree higher, including certificates beyond a Bachelor's.
- 50% of respondents are home visitors; 20% are supervisors of home visitors.

Items seen as most important toward the development of CQI skills and the improvement of home visiting services are:

- Effective supervisor and staff management
- An effective and productive team
- Home visiting process skills (culture competence, communications, parent-family interactions, conflict resolution, motivational interviewing, & recruitment)

Items seen as being least important in developing CQI skills and improving the quality of home visiting services are:

- Outreach and recruitment
- Strategic planning skills
- Improvement of the work environment



By Occupation:

Survey responses were sorted by occupation. On a scale of 1 to 5, with 1 being "strongly disagree" and 5 being "strongly agree," statements most agreed with by Home Visitors are:

- I believe my home visiting job contributes to improving the lives of children and families (4.6/5).
- The people I work with readily help each other (4.5/5).
- Our team shares professional materials and other information with each other (4.3/5).

Statements least agreed with by Home Visitors are:

- Implementing CQI processes will take away from the quality of home visiting services (2.41/5).
- I believe I have been adequately trained to implement CQI (2.66/5).
- We have had adequate training and technical assistance to implement the CQI process (2.73/5).

Among Supervisors and Administrators, statements most agreed with are:

- I believe my home visiting job contributes to improving the lives of children and families (4.79/5).
- Our agency/program is very open to using CQI methods (4.52/5).
- CQI is critical to ensure high quality home visiting services (4.5/5).

Among Supervisors and Administrators, statements least agreed with are:

- Implementing CQI processes will take away from quality home visiting services (1.88/5).
- Our team has adequate time to conduct our CQI procedures (3.04/5).
- We have developed a detailed CQI plan to guide our work (3.19/5).

Among Community System Development (CSD) and Coordinated Intake (CI) survey respondents, statements agreed with most are:

- I believe my home visiting job contributes to improving the lives of children and families (4.14/5).
- The people I work with readily help each other (4.07/5).
- Agency leaders are open to suggestions and ideas for improving quality home visiting services (3.93/5).

Statements agreed with least among CSD & CI respondents are:

- Implementing CQI processes will take away from quality home visiting services (2.5/5).
- We have developed a detailed CQI plan to guide our work (2.86/5).
- We have had adequate training and technical assistance to implement the CQI process (2.93/5).

Tables demonstrating more complete data are found in Appendix B.

Factor Analysis:

A factor analysis reveals that 28 of the questions clustered around the following four constructs: implementation readiness, communication, efficacy, and existing structure.

Factor 1 is labeled "CQI Implementation Readiness" and includes the following questions:

(1) I understand the difference between CQI and Quality Assurance.
(2) I have a thorough understand of how the CQI process works.
(3) CQI is critical to ensure high quality home visiting services.
(4) Implementing CQI processes will take away from the quality of home visiting services.
(6) I am aware of the benefits the CQI process has on home visiting services.
(8) Our agency/program is very open to using CQI methods.
(9) I am eager to implement the CQI process for our program(s).
(10) Our home visiting team is committed to the CQI process.
(12) Agency leaders are open to suggestions and ideas for improving quality home visiting services.
(16) We have a regularly scheduled meeting where we discuss home visiting concerns and challenges.
(34) Our supervisor is likely to support recommendations from the CQI team.
(35) My administrator and supervisor believe CQI is important for ensuring quality home visiting services.

Factor 2 is labelled "CQI Communication, Teaming, and Networks" & includes the following survey questions:

(21) Our home visiting program has strong partnerships with necessary community resources for home visiting families.
(27) Our home visiting team has open lines of communication.
(28) Our home visiting team has respect for each other's ideas and opinions.
(29) The people I work with readily help each other.
(31) Our team shares professional materials and other information with each other.
(33) I receive positive feedback for providing quality home visiting services.

Factor 3 is labeled "CQI Efficacy Readiness" and incorporates the following remarks:

(20) Our team has high quality information (data) to conduct the CQI process.
(24) I believe I have been adequately trained to implement CQI.
(25) We have had adequate training and technical assistance to implement eh CQI process.
(26) We can already see some the benefits of our CQI process.

Factor 4 is labeled "Existing CQI Structure and Integration" and includes the following questions:

(13) Our organization has a champion for the CQI process at our organization.
(14) We have developed a detailed CQI plan to guide our work.
(15) We have integrated CQI into our home visiting program.
(22) Our agency has adopted a culture of quality with CQI.
(30) We have a strong CQI team that works well together.
(32) The leader of our CQI team is well-organized.

By Community:

Appendix C shows the breakdown of factors by communities. When we break down these results by community, we find the following:

- **Cicero:**
  - Most Agreed with: "I believe my home visiting job contributes to improving the lives of children and families."
  - Most Disagreed with: "Implementing CQI processes will take away from the quality of home visiting services."
  - Other notable characteristics: More respondents have a degree or certificate beyond a bachelor's degree than everyone else (all the other communities combined).
- **Elgin:**
  - Most Agreed with: "I believe my home visiting job contributes to improving the lives of children and families."
  - Most Disagreed with: "Implementing CQI processes will take away from the quality of home visiting services."
  - Other notable characteristic: Effective supervisor and staff management was seen as most important to developing CQI skills and improving the quality of home visiting. services. Strategic planning skills were seen as least important to this mission.
- **Englewood:**
  - Most Agreed with (tie): "We have a regularly scheduled meeting where we discuss home visiting concerns and challenges" and " CQI is critical to ensure high quality home visiting services."
  - Most Disagreed with: "Implementing CQI processes will take away from the quality of home visiting services."
  - Other notable characteristics:
    - The majority of respondents (42.9%) stated their CQI team meets every couple of months. The majority of respondents in the other communities (59.5%) stated they had not met yet.
    - 100% of respondents said they have more than a Bachelor's degree.

- **Macon:**
  - Most Agreed with: "I believe my home visiting job contributes to improving the lives of children and families."
  - Most Disagreed with: "Implementing CQI processes will take away from the quality of home visiting services."
  - Other notable characteristics:
    - The majority of respondents (58.3%) knew they would be a member of the CQI team. In the other communities, the majority (49.3%) did not know if they would be a member.
    - Outreach and recruitment was seen as being most important to developing CQI skills and improving the quality of home visiting services. Strategic planning skills were seen as being least important.
- **Rockford:**
  - Most Agreed with: "I believe my home visiting job contributes to improving the lives of children and families"
  - Most Disagreed with: "Implementing CQI processes will take away from the quality of home visiting services"
  - Other notable characteristic: Working on an effective and productive team is seen as being most important to developing CQI skills and improving the quality of home visiting services. Outreach and recruitment is seen as being least important to fulfilling this goal.
- **Vermilion:**
  - Most Agreed with: "I believe my home visiting job contributes to improving the lives of children and families"
  - Most Disagreed with: "Implementing CQI processes will take away from the quality of home visiting services"
  - Other notable characteristic: 35.3% of respondents said they would not be a member of the CQI team. This is compared to 3.1% for other communities.

Implications/Recommendations

- Sites
  - Relative position (relationship) between their community & state
- Limitations:

Given that the workforce for MIECHV is inexperienced when it comes to longevity as a home visitor, it is important for agency leaders to address the agency culture and climate, and to support the readiness of the workforce to accept the philosophy and theories of CQI. It is also important for leaders to visibly model the behaviors that embrace the philosophy of CQI and moves the organization forward. To "set the stage" for CQI in the organization, it is important for leaders to:

- Clearly define roles and authority of key leaders in change initiatives.
- Identify and reduce the level of "fear" and "blame" for mistakes.
- Find and remove the impediments to cross-functional communication and problem-solving.
- Improve how leaders define, communicate, and demonstrate their commitment to meet customer needs.

- Adopt procedures to train, encourage, and empower employees to respond promptly and aptly to client issues.
- Reduce the level of organizational controls that limit adoption of best practices and evidence-based improvements.
- Develop policies and resources for employees to routinely learn about best practices that are related to their work areas and to join professional associations that help support improvement and growth.
- Share key organizational performance measurements with all employees and teach them how their work processes link to the organizational performance outcomes.

These are especially important given how much weight the employees feel management has in their opportunity to lead CQI processes in the agencies across the state.

Appendix A

Illinois Maternal Infant Early Childhood Home Visiting Program (MIECHV) program is committed to using a continuous quality improvement process to ensure high quality home visiting services. Below is a list a statements regarding the current status of the Continuous Quality Improvement (CQI) at your agency and program? This baseline survey recognizes that most home visiting programs are beginning the process. For example, we know that CQI teams have yet to develop a CQI plan at this point (see Question 14). Additionally, our goal is to provide you anonymous feedback, where appropriate, from this survey to support and expand your CQI skills.

Please indicate how much you agree or disagree with each statement.

	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
1) I understand the difference between CQI and Quality Assurance.	○	○	○	○	○
2) I have a thorough understanding of the CQI process works.	○	○	○	○	◉
3) CQI is critical to ensure high quality home visiting services.	○	○	○	○	○
4) Implementing CQI processes will take away from the quality home visiting services.	○	○	○	○	○
5) The CQI process has improved my home visiting skills.	○	○	○	○	○
6) I am aware of the benefits the CQI process has on home visiting services.	○	○	○	○	○
7) I believe my home visiting job contributes to improving the lives of children and families.	○	○	○	○	○
8) Our agency/program is very open to using CQI methods.	○	○	○	○	○
9) I am eager to implement the CQI process for our program(s).	○	○	○	○	○
10) Our home visiting team is committed to the CQI process.	○	○	○	○	○
11) Our performance review requires participation in CQI.	○	○	○	○	○
12) Agency leaders are open to suggestions and ideas for improving quality home visiting services.	○	○	○	○	○
13) Our organization has a champion for the CQI process at our organization.	○	○	○	○	○
14) We have developed a detailed CQI plan to guide our work.	○	○	○	○	○
15) We have integrated CQI into our home visiting program.	○	○	○	○	○
16) We have a regularly scheduled meeting where we discuss home visiting concerns and challenges.	○	○	○	○	○
17) We, as a team, analyze the root causes of problems before implementing any changes.	○	○	○	○	○
18) In our home visiting program, I see fewer quality problems today than in the past.	○	○	○	○	○

Please indicate how much you agree or disagree with each statement.

	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
19) Our team has adequate time to conduct our CQI procedures.	○	○	○	○	○
20) Our team has high quality information (data) to conduct the CQI process.	○	○	○	○	○
21) Our home visiting program has strong partnerships with necessary community resources for home visiting families.	○	○	○	○	○
22) Our agency has adopted a culture of quality with CQI.	○	○	○	○	○
23) Working with CQI, has provided me opportunities to gain new knowledge and skills (domestic violence, health care, parenting knowledge) to improve my home visiting practice.	○	○	○	○	○
24) I believe I have been adequately trained to implement CQI.	○	○	○	○	○
25) We have had adequate training and technical assistance to implement the CQI process.	○	○	○	○	○
26) We can already see some of the benefits of our CQI process.	○	○	○	○	○
27) Our home visiting team has open lines of communication.	○	○	○	○	○
28) Our home visiting team has respect for each others' ideas and opinions.	○	○	○	○	○
29) The people I work with readily help each other.	○	○	○	○	○
30) We have a strong CQI team that works well together.	○	○	○	○	○
31) Our team shares professional materials and other information with each other.	○	○	○	○	○
32) The leader of our CQI team is well-organized.	○	○	○	○	○
33) I receive positive feedback for providing quality home visiting services.	○	○	○	○	○
34) Our supervisor is likely to support recommendations from the CQI team.	○	○	○	○	○
35) My administrator and supervisor believe CQI is important for ensuring quality home visiting services.	○	○	○	○	○

Continuous Quality Improvement Survey

1. How often does your CQI team meet?
   - ○ Have not met yet
   - ○ b. Once or more a week
   - ○ c. Several times a month
   - ○ d. Every couple of months

2. How do you describe the structure of your agency's or organization's CQI team? (select the one that best characterizes your CQI team)
   - ○ a.We are part of a one agency wide team
   - ○ b. We have one CQI team across multiple home visiting models (PAT, HFI, EHS, NFP)
   - ○ c. We have one CQI team for each home visiting program team (PAT, HFI, EHS, NFP)
   - ○ d. Community wide CQI team – multiple agencies and programs across our communities
   - ○ e. Other possible structures: (please limit your answer to 255 characters)

3. What is your gender?
   - ○ a. Male
   - ○ b. Female

4. How would you describe your home visiting position at this agency?
   - ○ a. Full-time
   - ○ b. Part-time

Continuous Quality Improvement Survey

5. How many years have you worked as a home visitor at this current agency?

○ a. One ○ b. 2-3 ○ c. 4-5 ○ d. 6-10 ○ e. 10 or more years

6. How many years have you worked as a home visitor prior to this current agency?

○ a. One year or less ○ b. 2-3 ○ c. 4-5 ○ d. 6-10 ○ e. 10 or more years

6. Which of the following academic degrees do you have?
   - ○ a. No degree or certification
   - ○ b. High School Diploma/GED
   - ○ c. Associate degree or certification
   - ○ d. Bachelor's degree
   - ○ e. College degree or certificates beyond Bachelor's degree

7. Which of the following title or position best describes your position at this agency\program? (Please select one)
   - ○ a. Home visitor
   - ○ b. Supervisor of home visitors
   - ○ c. Systems development coordinator
   - ○ d. Coordinated Intake member
   - ○ e. Administrator
   - ○ f. Other (please limit your answer to 255 characters):

8. Will you be a member of the CQI team?
   - ○ a. Yes ○ b. No ○ c. Don't know

Continuous Quality Improvement Survey

Below is a list of possible topics that may help develop your CQI skills and improve the quality of home visiting service. Please rate on a scale of 1 to 4 (with 4 being "Extremely Important") the importance of knowing those skills for you and your program's work.

		Somewhat		Extremely
1) Strategic planning skills	○	○	○	○
2) Outreach and recruitment	○	○	○	○
3) Use data to improve our	○	○	○	○
4) Effective supervisor and staff management	○	○	○	○
5) Working on an effective and productive team	○	○	○	○
6) Continuous quality improvement	○	○	○	○
7) Personal problem-solving and	○	○	○	○
8) Improving the work environment	○	○	○	○
9) Home visiting process skills (culture competence, communications, parent - family interactions, conflict resolution, motivational interviewing, recruitment)	○	○	○	○
10) Home visiting content skills (breast feeding, immunizations, health education, etc.)	○	○	○	○
11) Other: (please specify below):	○	○	○	○
12) Other: (please specify below)	○	○	○	○
13) Other: (please specify below)	○	○	○	○

11) Other: (Please limit your answer to 255 characters)

12) Other: (Please limit your answer to 255 characters)

13) Other: (Please limit your answer to 255 characters)

14. What do you think are the most important factors for developing a CQI process at your organization? (Please limit your answer to 255 characters)

15. How can we change or improve the CQI process for your agency or organization? (Please limit your answer to 255 characters)

Appendix B

		Count	Column Valid N %
1. How often does your CQI team meet?	a. Have not met yet	46	56.79%
	b. Once or more a week	5	6.17%
	c. Several times a month	13	16.05%
	d. Every couple of months	17	20.99%
	Total	81	100.00%

		Count	Column Valid N %
3. What is your gender?	a. Male	1	1.18%
	b. Female	84	98.82%
	Total	85	100.00%

		Count	Column Valid N %
4. How would you describe your home visiting position at this agency?	a. Full-time	72	88.89%
	b. Part-time	9	11.11%
	Total	81	100.00%

		Count	Column Valid N %
5. How many years have you worked as a home visitor at this current agency?	a. One	42	56.76%
	b. 2-3	8	10.81%
	c. 4-5	4	5.41%
	d. 6-10	7	9.46%
	e. 10 or more years	13	17.57%
	Total	74	100.00%

		Count	Column Valid N %
6. How many years have you worked as a home visitor prior to this current agency?	a. One year or less	43	58.11%
	b. 2-3	8	10.81%
	c. 4-5	4	5.41%
	d. 6-10	8	10.81%
	e. 10 or more years	11	14.86%
	Total	74	100.00%

		Count	Column Valid N %
7. Which of the following academic degrees do you have?	a. No degree or certification	0	0.00%
	b. High School Diploma/GED	3	3.61%
	c. Associate degree or certification	9	10.84%
	d. Bachelor's degree	37	44.58%
	e. College degree or certificates beyond Bachelor's degree	34	40.96%
	Total	83	100.00%

	Home visitors vs everyone else			
	Home Visitor		Everyone Else	
	Valid N	Mean	Valid N	Mean
1) I understand the difference between CQI and Quality Assurance.	42	3.45	41	3.98
2) I have a thorough understanding of the CQI process works.	42	3.19	41	3.61
3) CQI is critical to ensure high quality home visiting services.	42	3.95	41	4.32
4) Implementing CQI processes will take away from the quality home visiting services.	41	2.41	42	2.10
5) The CQI process has improved my home visiting skills.	40	3.20	41	3.32
6) I am aware of the benefits the CQI process has on home visiting services.	42	3.55	42	3.83
7) I believe my home visiting job contributes to improving the lives of children and families.	42	4.57	39	4.56
8) Our agency/program is very open to using CQI methods.	40	3.90	41	4.27

9) I am eager to implement the CQI process for our program(s).	41	3.54	41	3.93
10) Our home visiting team is committed to the CQI process.	42	3.69	40	3.90
11) Our performance review requires participation in CQI.	41	3.34	41	3.78
12) Agency leaders are open to suggestions and ideas for improving quality home visiting services.	42	4.05	42	4.14
13) Our organization has a champion for the CQI process at our organization.	41	3.44	41	3.63
14) We have developed a detailed CQI plan to guide our work.	41	3.22	42	3.02
15) We have integrated CQI into our home visiting program.	40	3.23	39	3.18
16) We have a regularly scheduled meeting where we discuss home visiting concerns and challenges.	41	4.05	41	4.24
17) We, as a team, analyze the root causes of problems before implementing any changes.	42	3.83	42	3.88
18) In our home visiting program, I see fewer quality problems today than in the past.	41	3.27	40	3.55

19) Our team has adequate time to conduct our CQI procedures.	41	3.15	41	3.15
20) Our team has high quality information (data) to conduct the CQI process.	40	3.28	41	3.46
21) Our home visiting program has strong partnerships with necessary community resources for home visiting families.	41	4.05	41	4.02
22) Our agency has adopted a culture of quality with CQI.	41	3.54	42	3.64
23) Working with CQI, has provided me opportunities to gain new knowledge and skills (domestic violence, health care, parenting knowledge) to improve my home visiting practice.	39	3.51	40	3.48
24) I believe I have been adequately trained to implement CQI.	41	2.66	42	3.12
25) We have had adequate training and technical assistance to implement the CQI process.	41	2.73	41	3.10
26) We can already see some of the benefits of our CQI process.	38	3.13	42	3.36
27) Our home visiting team has open lines of communication.	41	4.29	39	4.10

28) Our home visiting team has respect for each others' ideas and opinions.	41	4.29	40	4.20
29) The people I work with readily help each other.	42	4.48	41	4.27
30) We have a strong CQI team that works well together.	39	3.38	42	3.55
31) Our team shares professional materials and other information with each other.	41	4.32	41	4.15
32) The leader of our CQI team is well-organized.	39	3.46	42	3.57
33) I receive positive feedback for providing quality home visiting services.	41	3.95	40	3.95
34) Our supervisor is likely to support recommendations from the CQI team.	41	4.02	41	4.02
35) My administrator and supervisor believe CQI is important for ensuring quality home visiting services.	41	3.93	40	4.15

Scale ranges from 1: Strongly Disagree to 5: Strongly Agree

	Supervisor of Home Visitor & Administrator		Everyone Else	
	Valid N	Mean	Valid N	Mean
1) I understand the difference between CQI and Quality Assurance.	25	4.16	58	3.52
2) I have a thorough understanding of the CQI process works.	25	3.68	58	3.28
3) CQI is critical to ensure high quality home visiting services.	26	4.50	57	3.96
4) Implementing CQI processes will take away from the quality home visiting services.	26	1.88	57	2.42
5) The CQI process has improved my home visiting skills.	25	3.48	56	3.16
6) I am aware of the benefits the CQI process has on home visiting services.	26	4.12	58	3.50
7) I believe my home visiting job contributes to improving the lives of children and families.	24	4.79	57	4.47

8) Our agency/program is very open to using CQI methods.	25	4.52	56	3.89
9) I am eager to implement the CQI process for our program(s).	26	4.00	56	3.61
10) Our home visiting team is committed to the CQI process.	24	4.04	58	3.69
11) Our performance review requires participation in CQI.	25	3.80	57	3.46
12) Agency leaders are open to suggestions and ideas for improving quality home visiting services.	26	4.23	58	4.03
13) Our organization has a champion for the CQI process at our organization.	26	3.88	56	3.38
14) We have developed a detailed CQI plan to guide our work.	26	3.19	57	3.09
15) We have integrated CQI into our home visiting program.	23	3.26	56	3.18
16) We have a regularly scheduled meeting where we discuss home visiting concerns and challenges.	25	4.44	57	4.02

17) We, as a team, analyze the root causes of problems before implementing any changes.	26	4.23	58	3.69
18) In our home visiting program, I see fewer quality problems today than in the past.	24	3.67	57	3.30
19) Our team has adequate time to conduct our CQI procedures.	25	3.04	57	3.19
20) Our team has high quality information (data) to conduct the CQI process.	25	3.56	56	3.29
21) Our home visiting program has strong partnerships with necessary community resources for home visiting families.	26	4.04	56	4.04
22) Our agency has adopted a culture of quality with CQI.	26	3.85	57	3.47
23) Working with CQI, has provided me opportunities to gain new knowledge and skills (domestic violence, health care, parenting knowledge) to improve my home visiting practice.	24	3.63	55	3.44
24) I believe I have been adequately trained to implement CQI.	26	3.23	57	2.74

25) We have had adequate training and technical assistance to implement the CQI process.	25	3.24	57	2.77
26) We can already see some of the benefits of our CQI process.	26	3.42	54	3.17
27) Our home visiting team has open lines of communication.	23	4.26	57	4.18
28) Our home visiting team has respect for each others' ideas and opinions.	24	4.38	57	4.19
29) The people I work with readily help each other.	25	4.36	58	4.38
30) We have a strong CQI team that works well together.	26	3.54	55	3.44
31) Our team shares professional materials and other information with each other.	25	4.24	57	4.23
32) The leader of our CQI team is well-organized.	26	3.73	55	3.42
33) I receive positive feedback for providing quality home visiting services.	24	4.04	57	3.91

34) Our supervisor is likely to support recommendations from the CQI team.	25	4.24	57	3.93
35) My administrator and supervisor believe CQI is important for ensuring quality home visiting services.	24	4.38	57	3.89

Scale ranges from 1: Strongly Disagree to 5: Strongly Agree

	Systems development Coordinator & Coordinated Intake Member		Everyone Else	
	Valid N	Mean	Valid N	Mean
1) I understand the difference between CQI and Quality Assurance.	14	3.64	69	3.72
2) I have a thorough understanding of the CQI process works.	14	3.43	69	3.39
3) CQI is critical to ensure high quality home visiting services.	13	3.92	70	4.17
4) Implementing CQI processes will take away from the quality home visiting services.	14	2.50	69	2.20
5) The CQI process has improved my home visiting skills.	14	3.14	67	3.28
6) I am aware of the benefits the CQI process has on home visiting services.	14	3.29	70	3.77
7) I believe my home visiting job contributes to improving the lives of children and families.	14	4.14	67	4.66

8) Our agency/program is very open to using CQI methods.	14	3.86	67	4.13
9) I am eager to implement the CQI process for our program(s).	13	3.85	69	3.71
10) Our home visiting team is committed to the CQI process.	14	3.64	68	3.82
11) Our performance review requires participation in CQI.	14	3.79	68	3.51
12) Agency leaders are open to suggestions and ideas for improving quality home visiting services.	14	3.93	70	4.13
13) Our organization has a champion for the CQI process at our organization.	13	3.23	69	3.59
14) We have developed a detailed CQI plan to guide our work.	14	2.86	69	3.17
15) We have integrated CQI into our home visiting program.	14	3.07	65	3.23
16) We have a regularly scheduled meeting where we discuss home visiting concerns and challenges.	14	3.86	68	4.21

17) We, as a team, analyze the root causes of problems before implementing any changes.	14	3.29	70	3.97
18) In our home visiting program, I see fewer quality problems today than in the past.	14	3.43	67	3.40
19) Our team has adequate time to conduct our CQI procedures.	14	3.36	68	3.10
20) Our team has high quality information (data) to conduct the CQI process.	14	3.36	67	3.37
21) Our home visiting program has strong partnerships with necessary community resources for home visiting families.	13	3.92	69	4.06
22) Our agency has adopted a culture of quality with CQI.	14	3.29	69	3.65
23) Working with CQI, has provided me opportunities to gain new knowledge and skills (domestic violence, health care, parenting knowledge) to improve my home visiting practice.	14	3.21	65	3.55
24) I believe I have been adequately trained to implement CQI.	14	3.00	69	2.87

25) We have had adequate training and technical assistance to implement the CQI process.	14	2.93	68	2.91
26) We can already see some of the benefits of our CQI process.	14	3.29	66	3.24
27) Our home visiting team has open lines of communication.	14	3.86	66	4.27
28) Our home visiting team has respect for each others' ideas and opinions.	14	3.93	67	4.31
29) The people I work with readily help each other.	14	4.07	69	4.43
30) We have a strong CQI team that works well together.	14	3.64	67	3.43
31) Our team shares professional materials and other information with each other.	14	3.93	68	4.29
32) The leader of our CQI team is well-organized.	14	3.36	67	3.55
33) I receive positive feedback for providing quality home visiting services.	14	3.79	67	3.99

34) Our supervisor is likely to support recommendations from the CQI team.	14	3.64	68	4.10
35) My administrator and supervisor believe CQI is important for ensuring quality home visiting services.	14	3.71	67	4.10

Scale ranges from 1: Strongly Disagree to 5: Strongly Agree

Appendix C

Cicero

	Cicero Vs Everyone Else			
	Cicero		Everyone Else	
	N	Mean	N	Mean
F1: CQI Implementation Readiness	13	4.0	64	3.8
F2: CQI Communication, Teaming, and Networks	12	4.4	66	4.1
F3: CQI Efficacy Readiness	13	3.3	66	3.1
F4: Existing CQI Structure and Integration	13	3.6	65	3.4

Elgin

	Elgin Vs Everyone Else			
	Elgin		Everyone Else	
	N	Mean	N	Mean
F1: CQI Implementation Readiness	21	3.9	56	3.9
F2: CQI Communication, Teaming, and Networks	22	4.2	56	4.2
F3: CQI Efficacy Readiness	21	3.3	58	3.1
F4: Existing CQI Structure and Integration	21	3.4	57	3.4

Englewood

	Englewood Vs Everyone Else			
	Englewood		Everyone Else	
	N	Mean	N	Mean
F1: CQI Implementation Readiness	5	3.9	72	3.9
F2: CQI Communication, Teaming, and Networks	6	4.1	72	4.2
F3: CQI Efficacy Readiness	6	3.2	73	3.1
F4: Existing CQI Structure and Integration	6	3.4	72	3.4

Macon

	Macon Vs Everyone Else			
	Macon		Everyone Else	
	N	Mean	N	Mean
F1: CQI Implementation Readiness	12	3.7	65	3.9
F2: CQI Communication, Teaming, and Networks	10	4.1	68	4.2
F3: CQI Efficacy Readiness	12	2.8	67	3.2
F4: Existing CQI Structure and Integration	12	3.3	66	3.4

Rockford

	Rockford Vs Everyone Else			
	Rockford		Everyone Else	
	N	Mean	N	Mean
F1: CQI Implementation Readiness	10	3.8	67	3.9
F2: CQI Communication, Teaming, and Networks	12	4.0	66	4.2
F3: CQI Efficacy Readiness	11	3.0	68	3.1
F4: Existing CQI Structure and Integration	10	3.4	68	3.4

Vermilion

	Vermilion County Vs Everyone Else			
	Vermilion County		Everyone Else	
	N	Mean	N	Mean
F1: CQI Implementation Readiness	16	3.8	61	3.9
F2: CQI Communication, Teaming, and Networks	16	4.1	62	4.2
F3: CQI Efficacy Readiness	16	3.1	63	3.1
F4: Existing CQI Structure and Integration	16	3.3	62	3.4