Illinois Family Connects Early Evaluation Report

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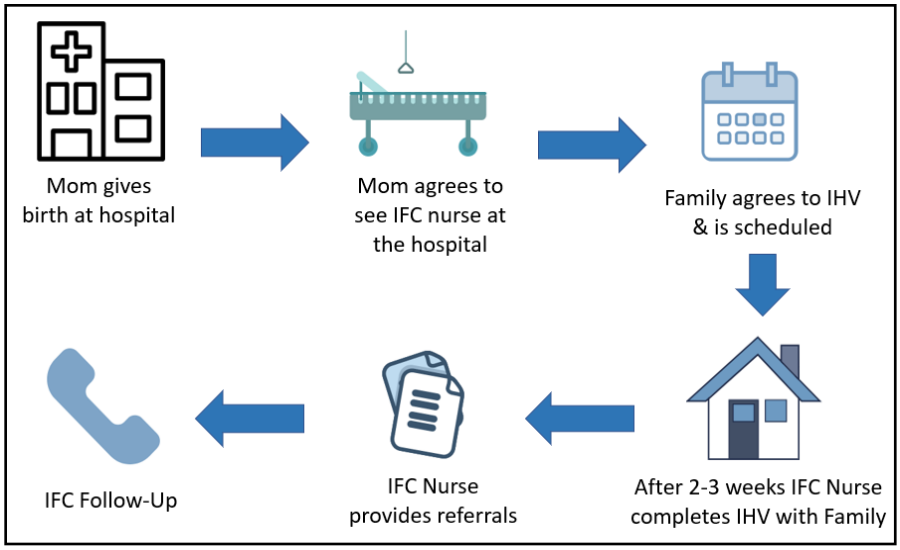
June 30, 2018



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I. Executive Summary

Illinois Family Connects (IFC) is a universal postpartum home visiting program introduced in 2017 by the Ounce of Prevention Fund in two pilot counties, Peoria County and Stephenson County; funding is provided through the Illinois Maternal, Infant and Early Childhood Home Visiting Program (MIECHV) as well as the Illinois State Board of Education (ISBE). IFC is based on the Durham Family Connects Program and includes the following major components: offering a home visit to all mothers who have given birth, while still in the hospital; providing a nurse home visit at approximately 3 weeks postpartum to all those who agree; utilizing a brief family risk assessment process based on a Family Support Matrix; and, providing referrals to needed services in the community including to more comprehensive home visiting programs, if appropriate. Some families receive an additional home visit or follow-up phone call and all families are expected to receive a phone call one month after case closure. The model is embedded in the community, and implemented by a community-based Lead Agency working in conjunction with community hospitals and a network of community health and social service providers. Beyond meeting the needs of individual families, IFC has an objective of identifying critical gaps in community services and resources.

This report presents the results of a very early formative evaluation conducted by faculty, staff, and students from the University of Illinois School of Public Health and the University of Illinois Center for Research on Women and Gender, which explores the planning process and four quarters of IFC implementation. The evaluation is based on Key Informant interviews conducted in January 2018 with key IFC administrators, staff, partners, and stakeholders in each of the two pilot counties. The report is also based on program implementation data from the IFC program from three quarters in 2017 and the first quarter of 2018 as well as information on the demographics of women delivering in participating hospitals in 2017, and on 2016 birth certificate data for both counties.

The results of this formative evaluation indicate an abundance of positive support for the IFC program, some early challenges and issues as well as some early successes, and possibly some unanticipated benefits. Based on the perspectives of the key informants, IFC has been very well-received by providers, women, families, and community partners. According to interviewees, acceptance by women of the home visit is based on the universality of the program, and the fact that the home visit is completed by a nurse who interacts with the family to ensure that all is well during a very vulnerable period. Because the IFC Integrated Home Visit happens early and IFC nurses do not plan to have an extended relationship with families, IFC does not appear to be duplicative of other home visiting and case management programs; in fact, IFC builds on and utilizes existing networks of services, another strength of the program.

The universal nature of the IFC program has resulted in spill-over effects such as increased support for home visiting and increased support for public health in general. While full universal implementation has not yet taken place at either site, Peoria or Stephenson, the potential positive impact on family and community health and well-being of a completely universal program was clearly envisioned by most key informants.

Results of this evaluation are presented according to themes which align with the components of the program and its implementation: **Pre-Implementation; Hospital Recruitment; Beyond the Hospital: Acceptance of the Integrated Home Visit and the Home Visit Experience; Beyond the Home Visit: Referrals; Beyond the Home Visit: Following-up after the Integrated Home Visit; and, Positive Consequences of IFC.** The key lessons learned to date are as follows:

- **Pre-implementation groundwork is very important for entire community and particularly for the participating hospitals.** A successful launch of IFC requires obtaining buy-in from key partners prior to implementation. In particular, it is essential to educate participating hospital staff and to obtain hospital executive and key staff buy-in, as the hospital is effectively the gatekeeper for the program. Education of all community partners, particularly other home visiting programs is also critical; this ensures that other agencies and service understand that IFC does not duplicate existing services but rather rests on and leverages the multitude of services/programs already available in a community.

- **Selection of an IFC Lead Agency with a robust set of services/established referral network facilitates implementation.** Because an effective IFC program is dependent on a strong referral network, it is important that IFC be housed in an agency with a referral network that is fully embedded in the social and health service fabric of the community in which the program is to be implemented. While the initial location of IFC in MIECHV communities which host a Coordinated Intake "portal" appears to be very helpful, as the IFC program spreads throughout Illinois to communities without MIECHV/Coordinated Intake, ensuring that there are other strong health and social service referral networks in place will be essential.

- **Selection of an IFC Lead Agency whose mission and purpose are closely aligned with IFC's mission is important for successful implementation.** Given the uniqueness of the IFC approach within the US social and health service delivery landscape, Lead Agency support for the universal nature of the program and its focus on reaching all families, not just the highest risk families, is essential; this will ensure that IFC staff do not ultimately end up prioritizing or targeting high-risk families, returning to the traditional approach to service delivery.

- **Successful IFC implementation requires a prenatal education component aimed at both women and providers.** To increase acceptance of the program by women and families when they are approached in the hospital by IFC nurses, providing information about the program before delivery will be extremely beneficial. This requires educating all prenatal health and social service providers in the community about IFC so they in turn can share information about IFC with women and families prior to delivery.

- **Marketing IFC to the entire community, both prior to launch and throughout ongoing implementation, is essential.** As a universal program for all women and families with newborns, endorsement by and support for the program from all community members is key to encouraging families of all infants to participate. As such, IFC sponsors should invest in an initial and ongoing community-wide marketing campaign which promotes the importance and benefits of an early nurse visit after birth for all families.

- **Sufficient staffing/funds for staff are required to carry out all of the components of the program.** As is true with all programs, adequate resources are needed to ensure success. Given the multiple components of IFC, it is important that none of the components, including those that may seem less urgent to staff such as conducting the Post-Visit Call, receives short shrift as implementation becomes more widespread.

- **There is a need for continuous quality improvement to increase the acceptance, completion, and reach of IFC and to ensure follow-through from the hospital to the Integrated Home Visit.** By continuous examination of both quantitative and qualitative data generated directly from the IFC program or from select evaluation efforts, it will be clear whether and where new strategies are needed to either increase women/families' acceptance of the program in the hospital, increase their willingness to participate in a home visit once at home with their newborns, and to increase their uptake and follow-through with referrals. As the IFC program continues, follow-up of women/families to determine the impact of referrals on women's well-being and on the well-being of their children and families will be essential. Ultimately, determining the cost-savings and/or return on investment associated with the program will be necessary. As the program spreads across Illinois, perhaps developing an IFC Collaborative to allow for the sharing of strategies and best practices across communities will be a useful approach to increasing effectiveness.

As IFC implementation moves forward in Peoria and Stephenson Counties and as IFC is introduced into new Illinois communities, attention to these key lessons learned from this formative evaluation of early implementation will be important. Moving from a pilot program to full implementation can be fraught with difficulty so a slow spread that pays attention to the nuances of program implementation, concerns of partner agencies at the state and community levels, and which addresses potential challenges and concerns will help to ensure success.

II. Introduction

Illinois Family Connects (IFC) is a program of universal postpartum home visiting introduced in 2017 by the Ounce of Prevention Fund in two pilot counties, Peoria County and Stephenson County; funding is provided through the Illinois Maternal, Infant and Early Childhood Home Visiting Program (MIECHV) as well as the Illinois State Board of Education (ISBE). IFC is based on the Durham Family Connects Program and includes the following major components: offering a home visit to all mothers while still in the hospital; providing a nurse home visit at approximately 3 weeks postpartum to all those who agree; utilizing a brief family risk assessment process based on a Family Support Matrix; and, providing referral to needed services in the community including to more comprehensive home visiting programs, if appropriate. Some families receive an additional home visit or follow-up phone call and all families are expected to receive a phone call one month after case closure. The model is embedded in the community, implemented by a community-based Lead Agency working in conjunction with community hospitals and a network of community health and social service providers. Beyond meeting the needs of individual families, IFC has an objective of identifying critical gaps in community services and resources.

This report presents the results of a very early formative evaluation which explores the planning process and four quarters of IFC implementation. The evaluation is based on Key Informant interviews of key IFC administrators, staff, partners and stakeholders in each of the two pilot counties in January 2018. The report is also based on program implementation data from the IFC program from three quarters in 2017 and the first quarter of 2018 as well as information on the demographics of women delivering in participating hospitals in 2017, and on 2016 birth certificate data for both counties.

A. The Importance of the Early Postpartum Period for Infants, Women, and Families

The period after the birth of an infant(s), the postnatal or postpartum period, is a critical time for mothers and their infants, and for families in general. Both mother and infant are in a time of transition and adaptation, with the risk of death highest for both mother and infant during this time (World Health Organization, 2015). The newborn infant has unique needs related to sleep, body temperature and self-regulation, feeding and growth, and must reach important neurodevelopmental milestones to ensure normal development. For the healthy newborn, there is also the potential for the development of respiratory problems, feeding difficulties, weight loss, and jaundice. Those born preterm or low birthweight or with other morbid conditions have additional challenges and are therefore the most vulnerable (Warren & Phillipi, 2012). Most importantly, during this time of critical development newborns are totally dependent on those in their environment, particularly their mothers, in order to successfully navigate all of these transitions and to get their most basic needs for sustenance and survival met.

During the early postpartum period, a time in which infants' needs are the greatest, mothers must recover from childbirth, a task made even more challenging if they have had a Caesarean section, while also adapting to multiple physical, social, and psychological changes of their own. Together with other members of her family, mothers have to learn how to feed and care for their infants while getting little sleep, possibly experiencing pain, and when they are at

risk of experiencing the "baby blues" or major postpartum depression (American College of Obstetricians and Gynecologists, 2016). In addition, many women experience a substantial amount of morbidity (e.g., diabetes, hypertension) during pregnancy, which often continues into the postpartum period (Callaghan, Creanga, & Kuklina, 2012). Women who have had a recent pregnancy are also at increased risk of unintended pregnancy compared to other women of reproductive age not using contraception (Fagan, Rodman, Sorensen, Landis, & Colvin, 2009) with rates up to 44% in the first postpartum year (Chen et al., 2010). Adequate birth spacing in the postpartum period is important for the health of mother and infant as pregnancies with a short interpregnancy interval (within 18 months of delivery) have been associated with increased risk of preeclampsia, preterm birth, and low birth weight (Gemmil & Lindberg, 2013).

While the mother and her infant(s) each have independent needs, the other major task of the postpartum period relates to the mother-infant dyad and the development of emotional attachment which is critical for normal cognitive and psychological development. This is a "dynamic bidirectional process" which involves the caregiver, most often the mother, nurturing the infant and the infant responding in turn, in order to receive the care needed for survival (Sullivan, Perry, Sloan, Kleinhaus, & Burtchen, 2011). While there is an assumption that "parenting" is a natural process, there is a significant literature suggesting that most individuals need to learn how to parent and may need support to do so (Wilder Foundation, October 2016).

All of this suggests that engagement with new mothers, infants, and families early in the postpartum period is critical. However, while the schedule for infant care in the US begins with a visit at two to five days and continues monthly (Hagan, Shaw, & Duncan, 2017), mothers have not been expected to attend their own postpartum visit until at least four to six weeks postpartum (Stumbras, Rankin, Caskey, Haider, & Handler, 2016). Importantly, however, in April 2018, the American College of Obstetricians and Gynecologists (ACOG) issued new guidance that states: "postpartum care should become an ongoing process, rather than a single encounter, with services and support tailored to each woman's individual needs. It is recommended that all women have contact with their obstetrician–gynecologists or other obstetric care providers within the first 3 weeks postpartum" (ACOG, 2018).

Although there are few studies that examine women's utilization of the postpartum visit, estimates for non-attendance vary (11%-40%) (Bryant, Haas, McElrath, & McCormick, 2006; Lu & Prentice, 2002; Chu, Callaghan, & Shapiro-Mendoza, 2004; Kabakian-Khasholian & Campbell, 2005; Weir et al., 2011). Among low-income Medicaid-insured women in Illinois, fewer than 55% received a postpartum visit in 2013 (Illinois Department of Healthcare and Family Services, 2016).

One possible approach to guarantee that all families receive a "touch" in the early postpartum period to ensure that the woman, infant, and family are managing successfully, is an early home visit. In fact, in all Northern Western European nations, women receive a home visit shortly after birth, or can rest and receive support with their families in maternity homes near hospitals (Cheng, Fowles, & Walker, 2006). In contrast, in the US, home visiting is not routinely part of postpartum care and for the most part, home visiting programs are neither universal nor designed with the perinatal period as their primary focus of implementation.

Brief overviews of the home visiting landscape in the US, of home visiting in the early postpartum period, and the Durham Connects model of universal and early postpartum home visiting are each provided below. This is followed by an overview of home visiting programs in Illinois and a discussion of the genesis of IFC.

B. Home Visiting Programs: The Overall Landscape

There are a multitude of home visiting programs with varying models, approaches, personnel, and schedules available to pregnant women and families with young children, both in the US and throughout the world. Some home visiting programs are initiated during pregnancy and continue into the early or extended postpartum period with a focus on perinatal outcomes including maternal and infant morbidity and mortality as well as infant feeding and growth and development. Other programs/models place a greater emphasis on early childhood with a range of outcomes including positive parenting, child development, school readiness, child maltreatment, and family self-sufficiency. Traditionally, US home visiting programs have targeted high-risk families who are assumed to benefit the most from this type of approach to care and service delivery (Stetler et al., 2018). This targeting is often done on the basis of demographic risk (e.g., income, age, parity), a narrow approach to defining risk which does not account for the true nature of risks in a community or population, perhaps providing services to families not in need while missing those who would benefit most from additional support (Dodge, Goodman, Murphy, O'Donnell, & Sato, 2013a).

There have been extensive reviews of home visiting programs with positive support demonstrated for several models focused on outcomes such as children's cognitive and socio-emotional development, child maltreatment, children's health status, parenting behaviors, and mother's employment and receipt of public benefits (Avellar & Supplee, 2013; Peacock, Konrad, Watson, Nickel, & Muhajarine, 2013; Sweet & Appelbaum, 2004). Studies of home visiting focused on children's early and long-term academic success also suggest positive outcomes (Olds et al., 2004; Olds et al., 2007; Kitzman et al., 2010). In the US, the results of these efforts led to the Community Preventive Services Task Force's support of early childhood home visits to prevent child maltreatment (Community Preventive Services Task Force, 2013), and the inclusion in the 2010 Affordable Care Act of a new section of the nation's Maternal and Child Health Program/Title V of the Social Security Act, the Maternal, Infant and Early Childhood Home Visiting Program (MIECHV). MIECHV is administered by the Maternal and Child Health Bureau (MCHB) of the Health Resources and Services Administration (HRSA) and the Administration for Children and Families, both within the US Department of Health and Human Services (DHHS). MIECHV provides funding to states, tribes and territories in support of evidence-based home visiting programs. After a review of 44 program models, 19 programs were found to meet the DHHS criteria for evidence-based models (Office of Planning, Research and Evaluation, 2015). Eighteen of these are currently listed on the MCHB MIECHV website.

While many home visiting programs provide home visits over an extended period of an infant or young child's life, a more specific subset of home visiting programs concentrate on home visiting in the early postpartum period. These programs have been developed in response

to unique conditions facing women, infants, and families in the vulnerable period right after birth.

C. Home Visiting in the Early Postpartum Period

In the last several decades of the twentieth century due to a confluence of factors including the de-medicalization of childbirth and a drive to reduce costs, postpartum hospital days declined dramatically; this trend was further codified in the US in the mid-1990's with the passage by the federal government of early postpartum discharge laws (DeClercq & Simmes, 1997). As a result, women with a normal vaginal delivery currently can expect to stay in the hospital for 48 hours or less, while women with a Caesarean section without complications can expect to stay 96 hours or less. In 2010, the average length of post-delivery stay for a woman in the US with a normal vaginal delivery was two days (Campbell, Cegolon, Macleod, & Benova, 2016).

Although the decline in postpartum length of stay was not associated with a mandate for one or more postpartum home visits, the World Health Organization (WHO) has recommended in multiple guidelines, including its 2013 Postnatal Care Guidelines (**Appendix A**), that home visits be provided for all women in the first week postpartum (World Health Organization, 2015). The expected benefits of home visiting in the early postpartum period are intuitive based on the opportunity to: provide support for mothers, infants, families; assess the health and well-being of the mother and newborn; deliver health education; offer infant feeding support; provide emotional and instrumental support; and, initiate referrals if needed to health providers, both for mental and physical needs, and/ or to other agencies in response to a variety of other issues (Yonemoto, Dowswell, Nagai, & Mori, 2017). To document actual rather than just anticipated effects of early postpartum home visiting, there have been a number of studies across the globe. An examination of the results of the strongest of these is found in a 2017 Cochrane Library Review of 12 randomized control trials (RCTs) focused on schedules and models of home visits in the early postpartum period (up to 42 days after birth). The results of this review did not find improvements in maternal and neonatal mortality and no consistent evidence for improvements in maternal health, including mental health. However, the review found some evidence for reduced infant health care utilization, increased exclusive breastfeeding, and increased maternal satisfaction with postnatal care. Of note, the 12 RCTs included in this review had varying inclusion and exclusion criteria for the participating women; in addition, there was variation in the number and type of visits across the trials with diverse outcomes considered. The trial which examined the most universal approach (MacArthur et al., 2002), compared a more individually-tailored universal home visiting program to a more structured universal home visiting program; this study primarily focused on women's physical and mental well-being and women's views about care. As such, this trial is not an appropriate test of the effectiveness of universal home visiting. The authors (Yonemoto et al., 2017) conclude: "Increasing the number of postnatal home visits may promote infant health and maternal satisfaction and more individualized care may improve outcomes for women, although overall findings in different studies were not consistent. The frequency, timing, duration, and intensity of such postnatal care visits should be

based upon local and individual needs. Further well designed RCTs evaluating this complex intervention will be required to formulate the optimal package."

D. Universal Home Visiting

As stated above, most home visiting programs are targeted at high-risk populations, typically based on demographic characteristics. However, according to Dodge et al. (2013a), the implementation of universal home visiting programs has multiple benefits. These include: 1) the reduction of stigma, which typically leads to increased program participation; 2) the opportunity to assess risks at multiple levels across the entire population which ensures that some families are not incorrectly identified as high risk and others are not completely missed; and, 3) increased community and political support because the program is not perceived as only benefiting a small segment of the population. Universal approaches to the provision of maternal and child health services is a common approach in Western Europe and is thought to partially explain their historically better outcomes (Miller, 1987).

Because home visiting services can be intensive and costly, Dodge et al. (2013a) recognize that in the US context, a universal home visiting program for families with infants needs to begin early, be short term, and have the ability to refer women, infants, and families to more intensive services based on an assessment of risk. As such, Dodge and his colleagues developed a program of universal early home visiting which includes a nurse assessment of risk in multiple domains, with a referral to more intensive home visiting as well as other services for those deemed in need. Durham Connects is described in detail below.

D.1 Durham Connects: A Model for Universal Home Visiting and Triage

Durham Connects, now known as Family Connects, is a universal postpartum nurse home visiting program that aims to improve parent and child well-being across an entire community (Dodge et al., 2013a). The model was originally developed in Durham, North Carolina in 2002. The aim was to create a replicable universal home visiting program. Durham Connects was piloted for three years utilizing a process of continuous improvement before being formally tested in a randomized controlled trial. Key features of the Durham Connects model include: connection with every mother (and father) shortly after birth (while still in the hospital); nurse home visits; assessment using a risk matrix based on the Family Support Matrix (O'Donnell, Goodman, Murphy, & Dodge, n.d.); referral as appropriate based on risk; and the development of a robust community network of services to wrap around families.

The Durham Connects (DC) model was evaluated through a randomized control trial in which all residential births in Durham County (n=4777) were randomized into DC or care as usual based on even/odd birth date (Dodge, Goodman, Murphy, O'Donnell, & Sato, 2013b). Of the 2,327 families in which the birth occurred on an even date, 80% were contacted, consented, and enrolled in the program (Dodge et al., 2014). The results of the RCT demonstrated multiple positive effects. The program successfully scheduled 78% of DC-eligible families and 66% of eligible families completed at least one home visit (Alonso-Marsden et al., 2013). Random assignment to DC was associated with a 50% reduction in emergency medical care in the first 12 months of life (Dodge et al., 2013b). This effect was evident regardless of family demographic

characteristics (ethnic minority or majority, insurance status, single parent or two parent family, with and without medical risk at birth) (Dodge et al., 2013b). In this evaluation of DC, the cost savings associated with the program were substantial; for every dollar spent on the Durham Connects program, $3 was saved by age 6 months in emergency medical costs (Dodge et al., 2014). Durham Connects also has been shown to improve family wellbeing and connection to community resources. In the RCT, DC families were shown to have higher quality home environments and higher quality out-of-home child care, reported more positive parenting behaviors, and accessed more community resources compared to control families (Dodge et al., 2014). Additionally, DC mothers were less likely to report clinical anxiety compared to controls (Dodge et al., 2014).

Based on these encouraging findings, Durham Connects/Family Connects is considered an evidence-based early childhood home visiting program by MCHB for the MIECHV program (Office of Planning, Research and Evaluation, 2015). The DC model is now being implemented in 28 sites across 10 states in the US including Illinois. An early evaluation of the Illinois Family Connects (IFC) program is the focus of this report. The IFC pilot has been introduced in a very complex landscape of home visiting in Illinois, which is described below.

E. The Landscape of Home Visiting Programs in Illinois

Illinois has a long complex history with respect to home visiting, hosting a variety of programs focused for the most part on high-risk populations. There are a variety of funding streams to support these myriad programs including direct federal funding (e.g., Healthy Start, MIECHV), federal to local funding (Early Head Start), targeted state funding (e.g., Illinois State Board of Education-Early Childhood Block Grant), as well as state general revenue funding through the Illinois Department of Human Services (ASTHVI, 2016). Some of these programs are considered evidence-based while the evidence undergirding others has not been substantially tested.

Home visiting funding in Illinois totals approximately $50 million and supports a network of over 300 programs across the State serving approximately 17,000-20,000 families per year (ASTHVI, 2016). The federally-funded MIECHV program supports 25 sites (two sites are discontinuing which will leave 23 sites in SFY19.) All counties/communities in Illinois in which MIECHV home visiting programs are located have a Coordinated Intake agency, which is a single point of entry responsible for home visiting triage in that community/county (Personal Communication, Lesley Schwartz, MIECHV Project Director Office of the Governor, Office of Early Childhood Development, Spring 2018).

Illinois' home visiting infrastructure is robust and viewed as collaborative at the state and community levels (IL Early Learning Council, Home Visiting Task Force, 2013). Evidence-based models currently implemented in Illinois include:

- Healthy Families Illinois (HFI)
- Parents as Teachers (PAT)
- Nurse-Family Partnership (NFP)
- Early Head Start (EHS)

Not considered evidence-based, but historically seen as part of the Illinois Home Visiting landscape is the Family Case Management (FCM) Program developed in the early 1990s as part of the state's 9 x 90 Infant Mortality Reduction Initiative and its initial expansion of Medicaid to cover pregnant women not receiving cash assistance (AFDC). The aim of FCM is to reduce adverse pregnancy outcomes. While FCM is not primarily a home visiting program, contracted FCM providers across Illinois "hire staff who are responsible for assessment of client needs, linkage with Medicaid and primary medical care, referral for assistance with identified social needs, and coordination of care" (Illinois Department of Public Health, 2016). FCM does not require a home visit during pregnancy, but one home visit is required for infants up to 13 months. If an infant is at risk, in addition to the home visit, three face-to-face contacts are required (Personal Communication, Stephanie Bess, MS, RD, LDN, Interim Associate Director, Office of Family Wellness, Illinois Department of Human Services, Spring 2018).

A more targeted program of intensive case-management for high-risk pregnant women in areas of the state with high Medicaid costs associated with adverse pregnancy outcomes, the Better Births Outcomes Program, provides women with monthly face-to-face visits and one other contact during the month, with a home visit expected once each trimester. Additional visits are provided based on need (Illinois Department of Public Health, 2016).

What might be considered a "universal" home visiting program because eligibility is open to all infants who meet the medical status criteria (i.e., very low birth weight, congenital anomaly, newborn metabolic diseases, drug toxicity, etc.) regardless of income, is Illinois' Adverse Pregnancy Outcomes Reporting System (APORS) (Illinois Department of Public Health, n.d.). All licensed Illinois hospitals, as well as two hospitals in St. Louis, are required to report adverse pregnancy outcomes to APORS staff at the Illinois Department of Public Health (IDPH). IDPH then sends the information to the infant's county health department of residency. All APORS infants in Illinois (excluding fetal/neonatal deaths) are automatically eligible for High Risk Infant Follow-up services provided by public health nurse home visitors within 14 days of hospital discharge up to age two.

Healthy Start (HS), a federally funded program focused on improving adverse pregnancy outcomes offers some home visiting, although each HS project follows its own protocol. The service delivery model for HS is similar to Illinois' FCM program but in its last iteration (Healthy Start 3.0), this program incorporated new components including a focus on collective impact. Although only present in two areas of the state, the Chicago metropolitan area and East St. Louis, HS is a contributor to the home visiting landscape in these two urban areas, particularly in Chicago where five out of the six Illinois HS sites are located (Personal Communication, Timika Anderson, Access Healthy Start, Chicago, Spring 2018).

Given the multitude of home visiting programs available in Illinois, major considerations over the last decades include: 1) not all women/families are appropriately triaged to the program that best meets their needs; 2) there is duplication of effort in that some women/families are referred to multiple programs; and, 3) some families are completely missed and receive no home visiting services at all. All three of these issues occur because there is no overall effort to ensure that women who need home visiting actually receive these services, although within the Illinois counties/communities in which MIECHV home visiting programs are located there is

Coordinated Intake, a single point of entry approach (IL Governor's Office of Early Childhood Development Fact Sheet, n.d.).

The one approach that ensures that the needs of all women, infants, and families are considered is the Durham Connects model described above. In the ideal implementation of this model, all women are approached after childbirth in the hospital and offered a nurse home visit two to three weeks postpartum. With this ideal in mind, in 2017 the Ounce of Prevention Fund (the Ounce) piloted the implementation of a Family Connects program in Illinois in two counties in which the MIECHV program is operative. The Illinois Family Connects program is described below.

F. Illinois Family Connects

Illinois Family Connects was introduced in 2017 and is currently in its pilot phase in two Illinois sites, Peoria County and Stephenson County. The Lead Agency for Peoria County is Children's Home Association of Illinois (CHAIL), and for Stephenson County, the Stephenson County Health Department (SCHD). Although in a universal program it is expected that all hospitals in a county or geographic locale would be included, in the pilot phase in Peoria County, the partnering hospital is OSF St. Francis Medical Center (OSF). In Stephenson County, the one hospital that serves the entire county is FHN Memorial Hospital (FHN); this hospital is the main site of recruitment into the program. However, women in Stephenson County also deliver over the border in Wisconsin at Monroe Clinic, and this hospital has slowly been integrated into the program. In each community, women are approached in the participating hospital(s) by IFC nurses and are asked if they would like to participate in a nurse home visiting program [(Integrated Home Visit, (IHV)] open to all women; those who agree to be contacted are expected to be visited by a nurse in the home at two to three weeks postpartum. Women who accept the visit at their homes receive a risk assessment focused on four domains (Support for Health, Infant Care, Home Safety, and Support for Parents). This risk assessment provides the basis for referrals to appropriate health, social service, and educational providers. Most women only receive one home visit but for those who need more, additional visits are arranged. Ultimately, women in need of more intensive home visiting services are referred to other home visiting programs in the community. In both communities, networks of community services have been established and a process of integrated referral has been developed. One month after termination from the IFC, women receive an exit interview via phone.

In late November 2017, the Ounce of Prevention Fund approached researchers at the University of Illinois at Chicago (School of Public Health Center of Excellence in Maternal and Child Health; the Center for Research on Women and Gender) to request their assistance in conducting an early evaluation of the implementation of IFC's two pilot sites. The evaluation's methods and results are provided below.

III. Methods

The early evaluation of IFC was developed and implemented from December 2017 through March 2018**.** Although not a formal mixed methods approach, this formative evaluation relies on both qualitative and quantitative data.

A. Qualitative Data Methods

The qualitative aspect of the evaluation consisted of Key Informant (KI) interviews with primary stakeholders in each county in January-February 2018. A qualitative interview guide was developed by the evaluation team and reviewed by Ounce staff as well as staff from Durham Connects (**Appendix B**). The Ounce staff as well as the UIC researchers met with the IFC Project Coordinators in each county in December 2017 via telephone. Each Project Coordinator provided a list of all key staff, key hospital partners, and key community stakeholders. The UIC research team reviewed these names and position titles and developed a desired list of individuals who would be most important to include in the KI interviews. An email request was then developed and potential key informants were approached in each community. SCHD identified 23 potential KI to interview. Of the 13 contacted by the evaluation team, two did not respond to the invitation and two declined. CHAIL identified 19 potential KI to interview. Of the 10 contacted by the evaluation team, one did not respond to the invitation.

Ultimately, nine stakeholders were selected and agreed to be interviewed from each pilot site for a total of 18 individuals (Key Informant sector/positions are provided in **Table 1** below).

Table 1. IFC Early Implementation Key Stakeholder Interviews, Demographics, and Site and Role Information (n=18)

	Peoria County (n=9)	Stephenson County (n=9)	Total
Interviewee Role			
IFC Staff	3	3	6
IFC hospital partner	3	2	5
IFC partner outside agency (non-hospital)	2	1	3
IFC partner within IFC Lead Agency	1	3	4
Education			
Bachelor's Degree	3	6	9
Master's Degree	4	2	6
Doctorate	1	0	1
Associate's Degree	1	1	2
Race/Ethnicity			
White	8	9	17
Hispanic/Latino	1	0	1
Gender			
Female	8	9	17
Male	1	0	1

Interviews were conducted in January and early February 2018. All interviews were transcribed by a professional transcription service and imported into Dedoose version 8.0.35, a qualitative software package. Once the transcription was complete, a list of codes was developed through an iterative process involving all team members. Two team members (KZ and CG) then refined the code list and definitions using an iterative process in which transcripts were coded individually by each team member, followed by discussions of coding discrepancies. This process was repeated three times until agreement on code definitions was reached. The remaining transcripts were then coded by these two team members. Once the coding was complete, all transcribed verbiage was sorted according to codes. All four team members then reviewed all verbiage associated with each code. Based on this review, multiple themes emerged within key areas which align with the components of the program: **Pre-Implementation; Hospital Recruitment; Beyond the Hospital: Acceptance of the Integrated Home Visit and the Home Visit Experience; Beyond the Home Visit: Referrals; Beyond the Home Visit: Following-up after the Integrated Home Visit; and, Positive Consequences of Illinois Family Connects.**

B. Quantitative Data Methods

Quantitative data for this evaluation were derived from three sources: IFC quarterly reports (quarters are based on the calendar year) from each county, mainly three quarters from Peoria (7/1/17-3/31/18) and a full four quarters from Stephenson (4/1/17-3/31/18); hospital births from each county during IFC implementation in 2017 (only counting women who were residents of each county); and vital statistics (birth) data from each county in 2016. The IFC quarterly reports included seven tables: Population Report/ Scheduling, Activities Report, Post-Visit Contacts One Month after Case Closure, Nurse Referrals to Services/Resources, Participating Family Demographic Characteristics, Family Risk Matrix Scores by Risk/Need Factor, and Highest Family Risk/Need Matrix. Quarterly data were aggregated for each table to reflect the grand total of select variables across all quarters of available data. Data from these aggregated tables were used to provide a summary analysis of family characteristics and program activities for IFC overall and by each county.

County-level birth data and hospital birth data were used to provide context for the number and characteristics of families who participated in IFC. Demographic information from women who received an IHV through IFC were compared to the characteristics of residents of each county who gave birth in 2016 and to those who gave birth at OSF or FHN hospitals in the quarters in 2017 in which IFC was implemented. Information on breastfeeding at discharge from the hospital was also available from the vital statistics data and "compared" to the percentage of women still breastfeeding at the time of the IHV.

Hospital-level data were also used to determine the percentage of women who gave birth at OSF and FHN during the time of program implementation who were contacted by an IFC nurse at the hospital (Hospital Contact Rate). Using hospital and program data, **acceptance, completion, and reach rates** were generated. The acceptance rate was defined as the number of women scheduled for a home visit as a proportion of the number of postpartum women seen by an IFC nurse at the hospital. The completion rate was defined as the number of women who

received an IHV as a proportion of the number of women scheduled for a home visit. IFC reach was defined as the number of women who received an IHV as a proportion of the number of postpartum women seen by the IFC nurse at the hospital. These rates were calculated overall and for each county.

The percentage of families overall and in each county who reported some risk/need across the risk matrix utilized during the IHV, and the number of these risk/needs that were either mild, significant, or emergency (Highest Risk Across Domains), were also calculated. Within each domain (Support for Health Care, Support for Infant Care, Support for Safe Home, and Support for Parents), the percentage of reported risks/needs classified as no risk/need, mild risk/need, significant risk/need, or emergency (Highest Risk Within Each Domain) were examined. Further, the area(s) within each domain for which families reported the highest level of risk/need was documented. To summarize, the UIC team used the risk matrix to determine risk/need across all domains, within each domain, and within each area of every domain.

The UIC team also examined referral data overall and for each county. Referral frequency was assessed by looking at the percent of families who received at least one referral, and, of those who received at least one referral, the average number of referrals per family. Referral categories were examined in two ways: according to the risk matrix domain categories delineated above as well as according to service domains (e.g., medical, education, Department of Human Services, WIC services, etc.). For referrals categorized by the risk matrix domains, the most frequent specific referrals made in each domain were delineated (e.g., Illinois Tobacco Quit Line was categorized as Support for Parents). Further, each referral was categorized into a service domain based on the type of referral organization (e.g., Illinois Tobacco Quit Line was categorized as a Behavioral Health service). The UIC team ordered referrals by the service domain with the most number of referrals to the least. Within medical referrals, further detail about medical provider type is presented (i.e., OBGYN, pediatrics, family medicine and other medical care) in both the IFC domain categories and the service domain categories.

Finally, Durham Family Connects provided the UIC evaluation team with a de-identified individual level IFC dataset for Stephenson (4/1/17 to 3/31/18) and Peoria (6/1/17 to 3/31/18) counties. This allowed the UIC team to connect individuals in the program across the aggregated tables. In particular, the individual level dataset allowed the UIC team to determine the following: demographic differences between mothers who were rated highest risk/need compared to other participating mothers, and the relationship between the level of risk and whether a referral was made. Note, there are occasionally some slight differences between values calculated from the aggregated quarterly tables and values calculated from the individual level data set. The source and date range of the data are noted for every figure and table. **Appendix C** includes detailed tables used to create the figures.

IV. Results

The IFC early evaluation results are presented according to themes which align with the components of the program and its implementation: **Pre-Implementation; Hospital Recruitment; Beyond the Hospital: Acceptance of the Integrated Home Visit and the Home Visit Experience; Beyond the Home Visit: Referrals; Beyond the Home Visit: Following-up after the Integrated Home Visit; and, Positive Consequences of Illinois Family Connects.**

A. Pre-Implementation Themes

Pre-implementation activities include planning, staff recruitment and training, relationship building, and establishing the program processes necessary to introduce and launch IFC in each county. Interview participants, particularly IFC Lead Agency staff and hospital partner staff, described various pre-implementation activities, as well as factors that **facilitated or hindered** the IFC launch in each county in various ways. These are presented below in terms of lessons learned about pre-implementation to facilitate a successful launch.

Theme 1: ***Selecting an IFC Lead Agency with established history of providing services in the county/community facilitates implementation.*** In both Peoria and Stephenson counties, the Children's Home Association of Illinois (CHAIL) and the Stephenson County Health Department (SCHD), respectively, were viewed by interviewees as long-established entities in their communities, with histories of providing high-quality services related to IFC, including home visiting, and the populations served. In Peoria County, IFC is located within the Good Beginnings division of CHAIL, a division which provides a variety of services to pregnant women and parents of young children including doula services and home visiting services.

> *I think the relationship that [IFC Program Director] was able to develop with the hospital to let them in–that can be a challenge in our area, and then just the respect that Good Beginnings has in our community. So, when we say Good Beginnings has this idea or they're running this program, you know it's gonna be a quality program. So, you want to make sure you get to be a part of it.* (IFC Partner Outside Agency, Peoria County)

Similarly, in Stephenson County, IFC was viewed as one of many maternal and child health programs offered by SCHD for pregnant and postpartum women and their families; these programs are well-known in the community.

> *I think having established relationships in the community is helpful I think because we've had people that know us personally to trust that we would do what we said we were going to do. I think that was very helpful in us being able to become established and building those initial relationships that are so critical.* (SCHD IFC Staff, Stephenson County)

Given the importance of collaboration to the Family Connects model, several interviewees discussed the history and capacity of SCHD and CHAIL's Good Beginnings in being able to collaborate with local partners to implement IFC.

Good Beginnings (CHAIL) seems to be a good fit for that program because they're so connected in all the diverse home visiting programs and across our counties.… We're pretty fortunate in this area that everybody will come to the table. (IFC Partner Outside Agency, Peoria County)

Overall, we have a very collaborative nature in our community. People really want to work together, our agencies and organizations, so I feel like our program directors really make an effort to understand other people's services and partner with them as much as possible to help get people the help that they need. (IFC Partner within SCHD, Stephenson County)

Theme 2: ***Selecting an IFC Lead Agency whose mission aligns with IFC is essential.*** Interviewees from IFC Lead Agencies clearly articulated that the mission of their respective agencies is to support the health and well-being of everyone in their communities. These missions align with the IFC mission of universality, to support the health and well-being of all new mothers, infants, and their families.

Number one is our relationship with our Good Beginnings program and with the Ounce, and we're the largest social services agency outside of Chicago. And, so, we have a very big footprint in–not just Peoria but with middle Illinois and the state. And, so, I… thought this was ideal and really fit step-in-step with our other programming. And it gives another added benefit to the community as a whole, I think. …we'd be interested in expanding it even further with the other hospital because of the benefits it has from a community as a whole standpoint. (CHAIL Staff, Peoria County)

[IFC] harkens back to the days of yore where…county health department nurses went out and visited every newborn in the community or in the county… we knew that we had services already in place that would serve the part of the population that was at risk, and at the same time, we knew the importance of this to every new parent. (SCHD IFC Staff, Stephenson County)

Theme 3: ***Alignment of IFC with the mission of participating hospitals is key.*** Although ultimately, Family Connects is expected to work with each birth hospital in every community, during early implementation, working with hospitals that have a community health focused mission is crucial. In the pilot of IFC, staff from the partner hospitals in both counties also discussed how the universality of IFC aligns with their organizational and departmental missions.

…the Illinois Family Connects program is targeted to come into new moms and babies' homes to provide further education, to check on them, to make sure everything is going well. And that really does mesh with our mission–is to make sure we're serving every

patient, not just within the walls of OSF, but outside into the community. (OSF Staff, Peoria County)

So this is not necessarily our organization's mission, vision, and philosophy, but on our OB unit, our mission is to care for these women–these mothers–in a very non-judgmental, unbiased, nurturing, and welcoming way despite their situation that they're presenting in, because we all agree that these–these women–regardless of their situation–will always remember the birth of their children and that experience. (FHN Staff, Stephenson County)

Theme 4: ***Preparing and training staff within the IFC Lead Agency are both important during the Pre-Implementation period.*** Lead agency interviewees discussed few internal challenges related to IFC pre-implementation; however, both agencies discussed the importance of **staffing and the training of staff** for a successful launch of the program.

- ***Staffing.*** Lead agencies discussed recruitment, hiring, and training qualified staff who are the right fit as home visitors, and ensuring staffing levels were sufficient to meet the needs of the program. Both Lead Agencies expressed concern regarding their ability to recruit qualified nurses in a competitive market.

  …you're looking for a nurse supervisor in a town that has two huge hospital systems and healthcare is the number two employer, and there are nurse positions posted at every hospital in the State of Illinois, maybe even the country, 100 percent of the time. You worry about being able to hire, but we've been–we've done okay with that. (CHAIL Staff, Peoria County)

At SCHD, the primary concern was being able to recruit and hire skilled nurses at the salary level for SCHD nurses, which is lower than nursing salaries in area hospitals and other healthcare settings. Despite these concerns, staffing has not been the challenge expected in either county.

…while there were dollars and suggestions from leadership in the Home Visiting Task Force to pay nurses an X dollar amount… [we] had to say we can't pay for nurses here more money than we pay nurses who have been here for 23 years. We'll have a riot. So, I think there was concern in the outset that if we're paying a lower wage, will we get a candidate, and qualified candidates that were interested in the job? It ended up not being a problem at all. (SCHD IFC Staff, Stephenson County)

Interviewees from CHAIL also discussed concerns related to hiring for a grant-funded position, which contributed to insufficient staffing levels in the early implementation period; they also commented on the need to hire additional staff as the program grew to achieve the appropriate staffing level for program demand.

I think the biggest fear was because it's grant funded, we wanted to–nurses are expensive positions to fill…we want to be sure we were matching our staffing to a number of births that we had in the area. So, we were monitoring that. And as the caseload built to–then we posted another position. (CHAIL IFC Staff, Peoria County)

As CHAIL's IFC program has grown, the need for clerical support has also become apparent. However, this concern was not expressed by SCHD IFC staff.

…we don't have clerical staff. I think it's something that we need. We're just now getting more nurses on board so we'll have a full team… (CHAIL IFC Staff, Peoria County)

- ***Training.*** With regard to pre-implementation planning, Lead Agency key stakeholders also discussed the importance of staff training. While the training provided by Durham Connects was perceived positively, some IFC staff expressed concern regarding the translation of this training to the situation in their own communities.

  …it was just a lot of unknown and you got handed a binder on this program and then you went for orientation in North Carolina, a different state, and you just shadowed and then you were expected to come in and implement that within your community and try to reach out to people that had no idea of this program that was gonna be coming out. (CHAIL IFC Staff, Peoria County)

Theme 5: ***Preparing IFC partner hospitals is also a necessary pre-implementation step.*** IFC Lead Agencies rely on partner hospitals to be able to introduce FC to families. Prior to implementation, the IFC Lead Agencies engaged in planning activities in collaboration with the partner hospital in each community. Lead Agency interviewees from both counties discussed the need to engage hospital stakeholders at multiple levels, including upper management and obstetrics department managers, as well as the need to work closely with hospital staff to develop and refine IFC processes and procedures within hospitals. Specific issues and related comments are presented below:

- ***Relationship building***. Interviewees in Stephenson County reported few challenges in working with their first partner hospital, FHN. However, they emphasized the need for approval from FHN's upper management prior to working with the obstetrics unit.

  Interviewee: I think one of the most difficult things was working through the linkages and how this would work with our first partner, FHN. …that is what really took the most getting it off the ground, I think, was making sure that that was in place with that hospital network, that we could get our foot in the door there and be able to come to the unit, and visit moms, and offer them the program…
  Interviewer: So, how did you resolve those challenges with the hospitals?

Interviewee: Meeting with the CEO, meeting with other key staff there, and then I think…early planning and discussion at community events and meetings [in our network]. (SCHD IFC Staff, Stephenson County)

However, once IFC gained full support of the FHN management, one interviewee described minimal challenges to working with the obstetrics unit at FHN. She attributed this to strong ties to FHN, established through implementation of a previous initiative to promote breastfeeding in the county.

…we had a breastfeeding task force that we developed, and we partnered with the OB unit at [FHN]. So, we had members of the OB staff and their director who helped us get all of the nurses on the OB unit trained as lactation consultants, helped us share a breastfeeding message in the community, create some common messaging, and that task force really strengthened–or actually, built, because we really didn't have a good partnership with the FHN OB unit, and I believe that it was that partnership that really allowed us our foot in the door to talk to them about this opportunity for the Illinois Family Connects program to be initiated in our community. …So, they were absolutely ready to engage as soon as we could. (IFC Partner within SCHD, Stephenson County)

After several months of implementation, the Stephenson County IFC program expanded to a second hospital in their service area, Monroe Clinic, with minimal challenges, and in part based on lessons learned through implementation with FHN.

The other hospital that we went to in Monroe, we set up a meeting with key staff, but not high-level staff. It was the director of the women's health services line and we had things slapped together in one meeting. I guess with regard to that, we also pretty much knew by trial and error from working with the first hospital what works, what doesn't, what we need to implement and stuff… (SCHD IFC Staff, Stephenson County)

In contrast to Stephenson County, in Peoria County, key stakeholders reported greater challenges to initiating IFC at the partner hospital, OSF, in part due to a less-established relationship between CHAIL and OSF, and challenges in determining the program logistics.

…Family Connects wanted to be associated with OSF Hospital here in Peoria…OSF is a larger system. So, we had worries that to be able to fast-track, this was gonna be a problem, and it ended up being a problem early on. [CHAIL] got involved from the program side to be able to talk to all of the necessary people from the OSF side and kinda went all in…all the way from their CEO on down to their exec team for making sure this got fast-tracked… Our relationship is a little better with the other hospital system because we do a lot of the behavioral health with that system…we have a better in… I understand why maybe OSF was chosen, but it did delay the program. …actually there were times we were really worried that we'd get this off the ground, but once we

did, it's great because OSF is good to work with. …now that we've got it going, I think you can chalk it up as–early on–as very successful. (CHAIL Staff, Peoria County)

- ***IFC processes.*** Interviewees from both counties emphasized the importance of **developing and refining processes** to support the ability of the Lead Agencies and obstetrics departments within partner hospitals to work together to implement IFC. However, interviewees discussed varying experiences related to preparation within the IFC hospitals.

  No one on the [OB] floor had any idea that, even the manager of the floor had no idea of this program that was gonna roll out. …I think they were trying to finalize something or get something in order like of a process of how we were gonna gain admission into the actual unit and have access to these moms. So, I was in that meeting that first week…and that's kind of when the ball started rolling as far as starting the program and getting stuff together and going to see doctor's offices. Like none of that was done so that was obviously kind of scary and a big challenge…things take time and just to start it and no one really knows about us…. Like are we gonna be successful? And I think we are. I mean we're running. We do have high, you know, our acceptance rate is good but it could improve by building those relationships. (CHAIL IFC Staff, Peoria County)

As part of a discussion of the preparation of hospital staff, key informants from both counties discussed the importance of ensuring hospital staff understand that IFC works to support services provided in the hospital and is a way to enhance continuity of care for women and their families.

I truly believe that the staff at FHN see the value in these nurses who are going out and continuing care for our patients where we're pretty passionate about caring for these women, so I think that we just see this as an extension, and we value that–as does the Illinois Family Connects nurse really value our report and take on patient situations and the information that we share with them related to our concerns or things that we want to be sure are addressed in their follow-up visits. (FHN Staff, Stephenson County)

In one of the hospitals, it was also important to assure staff that IFC would not be in competition with hospital services.

…I think there was a wariness at first. It's like, "Okay. What do you do when you impact our work?" And primarily, that was with the hospital. We had meetings over the phone and talked to the case managers and that, as well the social workers from the hospital just to be sure they knew what types of things we were looking at in the home visit, and so they didn't feel threatened by that. It was just once again, being as transparent as we could be so that they would know the scope of the work and understand like, "We're not

in competition here. We're all working towards the same end. And it isn't going to impact what you do with the families." (CHAIL IFC Staff, Peoria County)

From the hospital perspective, partnering with IFC also meant ensuring that the concerns of the hospital were addressed. For OSF, a primary concern was patient confidentiality and ensuring IFC adhered to privacy policies.

I think that the only concern that I had initially was just with HIPAA and–they're not part of the care team–just how we would work that out, but it was one that we were able to solve pretty effortlessly. (OSF Staff, Peoria County)

At FHN, staff were most concerned with understanding program logistics and communication.

We had met and discussed this partnership, and this is what we were doing, and then there were just certain things, like kind of closing that loop of communication…the team was going to North Carolina, I believe, to try to learn their charting, and paperwork, and files, and process. So when we first started, none of those answers were there, and so that just kind of made me feel a little uneasy with how we communicate back to physicians, and "What is your documentation?" and just those things. But that all–that all fell into place, and they had appropriate tools and processes, and all that communication was close-looped, so it all worked out okay. (FHN Staff, Stephenson County)

- ***Regular communication.*** In both counties, multiple interviewees discussed the importance of regular communication between the IFC Lead Agency and the partner hospital(s)—both informally when IFC nurses visit the hospital, and formally through regular meetings. Interviewees from both counties also indicated that meetings had become less frequent as the program progressed and there were fewer implementation challenges.

  I think that doing the legwork and the groundwork with the hospital prior to implementation made a pretty seamless operation right from the beginning. We had daily contact with the nurses on the phone because when they go to do outreach–and we do that seven days a week–we go to the hospital... We become familiar with the nurses on the floor who really are so cooperative and so helpful. The relationships are so positive. [We had] conference calls monthly with the floor nurses, the directors for the floor, just to make sure if there's any challenges or problems, that we get them resolved right away. And frankly, we've had to reduce those calls to bimonthly because they feel that everything is just moving along very, very well. (SCHD IFC Staff, Stephenson County)

  Now, we do meet with [CHAIL IFC Staff] regularly, not as often as we used to, to start with. We would review every month how we were doing, how many moms we had gotten, how it was going when they did do the visits. All the visits have been very positive and a

lot of our moms are very interested in participating in the program. And so they do come back and tell us what the participation rate is, and some of the outcomes, and share anything that they feel is important to show and demonstrate that we are increasing the health and well-being of the people that are participating in the program… It's more quarterly now. (OSF Staff, Peoria County)

Theme 6: ***Marketing to the community and leveraging existing community relationships to build support are both essential pre-implementation strategies.*** At both Lead Agencies, interviewees discussed activities to raise awareness in their communities about IFC prior to implementation, which largely built upon existing community relationships.

Interviewer: When you say presentations in the community, you are referring to organizations that provide services? Or did you also talk to actual community residents and women receiving services?
Interviewee: We've done both. Primarily, most of the presentations have been to different groups representing social service agencies throughout the community. Parents are usually invited to be part of that, but they don't often take advantage of it. …we've got posters and flyers in the community for families, anybody who wants to learn more about the program has that available to them. And then we've also done some presentations to the pediatric residents, to nurses of the hospital just so they have their questions answered and be educated so that they know once they move out into practice in the community, they'll have an awareness of what Family Connects is. (CHAIL IFC Staff, Peoria County)

Well I think we have a really good community collaboration, you know, with the hospital, with other agencies so we already had that in place for All Our Kids Network, and so this…really helped bring it all together and emphasized the importance of you know, working as a team…we were already working with the hospital with the lactation consultants here at the health department and OB nurses… So we had a lot of good things in place. We made it well known throughout the community what was going on, you know, just kind of getting the word out there. (IFC Partner within SCHD, Stephenson County)

However, there were also several comments noting that most IFC marketing relied primarily on one presentation by First Lady Diana Rauner, followed by word of mouth in the community from families and participants. There was a general sense that more effort was needed to introduce IFC to the community before its launch.

I think there is more communication now like because of word of mouth. You know, like people are getting used to us, you know, like I said, they've had a friend who's had a baby or something but I think in the community a lot of people still aren't aware of who we are; are unfamiliar with our program, the services and especially since we only offer

to Peoria County moms, and we're only at OSF Hospital... (CHAIL IFC Staff, Peoria County)

There was a press conference when the program kicked off that included First Lady Diana Rauner, but outside of that I'm not aware of any other information that's been – or communication of plan that's been done. (OSF Staff, Peoria County)

In the beginning, it was the media kickoff. After that, because we're a small community that's not direct media market, a lot of things are word of mouth, and being connected at the hospitals, working with the nurses and the medical professionals throughout both medical communities to make sure that they understand that we're there, and available, and educating them, and working with them, and sort of being seamlessly a part of their system. (SCHD IFC Staff, Stephenson County)

Theme 7: *Support from Funder and Developer of FC Model Critical Part of IFC Pre-Implementation.* An additional component of IFC pre-implementation preparation discussed by key informants was the support received from The Ounce of Prevention Foundation and Durham Family Connects.

…people have been very helpful; I mean the Ounce has been very helpful. …I've only been on one conference call, but there's a [name] from the Ounce who's been very attentive and helpful and sincerely appreciate her efforts. The nurse from North Carolina who's given me a lot of direction is a good source of support…; she's been extremely helpful. So, I think we're in a good place right now. (CHAIL IFC Staff, Peoria County)

…the biggest thing that worked is I just talked with the developer [in Durham] and had access to him and gave him access to my computer so he could kind of work through some of the things… (CHAIL IFC Staff, Peoria County)

B. Hospital Recruitment Themes

IFC nurses approach postpartum women and their families in the hospital to recruit them for IFC home visits, scheduled two to three weeks postpartum. This component of the IFC program includes IFC nurses' first contacts with patients to provide information about the program and schedule IFC home visits. Key informants described various issues related to hospital recruitment that affect successful implementation of IFC.

Theme 1: *IFC processes in hospitals affect women's awareness of and recruitment into the IFC program.* The first two IFC partner hospitals, OSF and FHN, use different strategies with respect to how IFC nurses are able to approach postpartum patients. At OSF, patients are informed about IFC by OSF staff, and must sign a consent form prior to IFC nurses being allowed in their rooms. The unit clerk then provides a list of consented patients to the IFC nurses

at their daily visit to indicate which patients they may meet with to discuss the program and to ask women if they would like a home visit with a nurse shortly after they return home.

> *That's why the families are educated on it and have to sign a consent to speak with them, so that when they do approach them, they've already consented to meet with them. They don't get to go approach anyone in any room. It's only the rooms with the postpartum moms that have agreed to speak with them.* (OSF Staff, Peoria County)

> *…the patient unit clerk gives us a list of patient stickers. They write down the room number so we have the patient's name and birthday and room number. And these are moms who have delivered and live in Peoria County, delivered in this particular hospital, and live in Peoria County. So, we get that sticker sheet every morning, go to the hospital, 8:00 one of us is there and then we round on the moms.* (CHAIL IFC Staff, Peoria County)

In contrast, at FHN, FHN nurses inform patients about IFC, and indicate that an IFC nurse will visit them on the postpartum unit to discuss their interest in participating in the IFC program.

> *It starts off, the [FHN] nurses are supposed to let that patient know that I will be stopping in–myself or one of the other nurses will be stopping in… So, I just introduce myself, introduce the program. I bring a brochure with me. With each patient, just explain what the point of the visit is, what we'd be doing at the home visit, how long the home visit's going to take, that it's typically a one-time visit, but we can do follow-up if needed. And then schedule and set them up for the appointment when I'm in the room.* (SCHD IFC Staff, Stephenson County)

These different approaches appear to affect the hospital contact rate at each hospital, or the proportion of women seen in the hospital out of total IFC-eligible births (**Table 2 below**). Specifically, Peoria County has an overall contact rate in the hospital of 61%, because those who do not initially agree to see an IFC nurse are not approached by IFC staff (**Table 2 below**). In contrast, in Stephenson County, the contact rate is 89%, likely because the IFC nurse has permission to visit each woman in the postpartum unit, even if the woman has not learned about the program first through FHN staff.

Theme 2. ***Acceptance of IHV is dependent on Multiple Factors***. The IFC IHV acceptance rate (**Table 2 below**) refers to the proportion of families that agree to a home visit among those recruited by IFC nurses. In Stephenson County, the acceptance rate has consistently remained above 90% since the inception of IFC. In Peoria County, although the number of women visited by IFC nurses has increased, as has the number of women accepting the program, the actual acceptance rate has decreased.

Table 2: IFC Eligible births, Hospital Contacts and Hospital contact rates, and IHV Acceptances and Acceptance Rates

	Peoria County				
Quarter	**Eligible births (n)**	**Women seen in hospital (n)**	**Hospital contact rate (%)**	**IHV accepted (n)**	**IHV acceptance rate (%)**
Q2 17	320[1]	24	NA[2]	24	100%
Q3 17	383	205	53.5%	193	94.1%
Q4 17	390	267	68.5%	224	83.9%
Q1 18	NA[3]	369	NA[3]	230	62.3%
Total	***1093***	***865***	***61.1%***[4]	***671***	***77.6%***
	Stephenson County				
	Eligible births (n)	**Women seen in hospital (n)**	**Hospital contact rate (%)**	**IHV accepted (n)**	**IHV acceptance rate (%)**
Q2 17	70	58	82.9%	57	98.3%
Q3 17	68	65	95.6%	59	90.8%
Q4 17	NA[3]	65	NA[3]	64	98.5%
Q1 18	NA[3]	97	NA[3]	89	91.8%
Total	***138***[5]	***285***	***89.1%***[5]	***269***	***94.4%***

[1] Represents total Q2 births in hospital but Peoria program not operative the entire quarter
[2] Valid denominator not available
[3] Data not available
[4] Peoria County totals include 2017 Q3 and Q4 only; [5] Stephenson County totals include Q2 and Q3 only
Source: Peoria and Stephenson Aggregate IFC Tables 4/1/17-3/31/18

According to interviewees in Peoria County, the lack of confirmed processes at the hospital (described above in the pre-implementation section) may have limited early uptake of the program due to IFC nurses' difficulty reaching patients. Despite extensive planning between CHAIL and OSF, one IFC staff member from CHAIL was concerned that partnership building at OSF to plan for IFC had not reached the OB staff who interact daily with IFC nurses. This perspective was echoed by OSF hospital staff, who eventually addressed the issue through additional education for hospital staff, affirming the value of IFC.

> *Interviewee: The only challenge that we had to start with was just really getting the staff to understand what the program was and that we need to truly offer this to everyone so that they have the opportunity to participate. Once staff understood the program and that they were true partners with us, it got a lot easier. Whenever you make a process change, it's a little bumpy. We didn't get as many moms to start with as we wanted. And then it's changed and we've gotten more… I just don't think that they understood how important it was that they talk to everyone… I think that they just didn't do it because it was one extra thing to do and they didn't see the value and the importance of it. And then once they did, we started to see that our numbers went up and people did want to participate. But they needed to tell them about it to start with.*
> *Interviewer: How do you think that they got to understand the value of it…?*
> *Interviewee: …[CHAIL] did give us information to distribute and flyers to put on the doors. And we did education in the huddle and I met with all of our patient care liaisons… And then we educated the nurses that they needed to review that with them and*

> *what to review—to have them sign so it was already in the chart by the time the mom delivered and came to postpartum. So, we just needed to refine our processes a little bit so that we would equally recruit everyone and try to recruit as many people as possible.* (OSF Staff, Peoria County)

In contrast, at FHN, IFC nurses have fewer restrictions on their access to postpartum patients. However, for this reason, patients may be unaware of IFC until the IFC nurse visits their hospital room.

> *…the nurses are supposed to let that patient know that I will be stopping in–myself or one of the other nurses will be stopping in. That's been one of the challenges, probably, with one of the hospitals…just the nurses not, you know, letting them know that I'd be stopping in.* (SCHD IFC Staff, Stephenson County)

In fact, FHN staff reported that initially their nurses needed to be reminded to talk to patients about IFC.

> *Initially the challenges with my nursing staff [is] they were forgetting to talk to patients about it and so some of the patients were hesitant to allow somebody to come into their room and talk to them… As far as getting the program off and running I think it was just everybody trying to learn the program and the purposes and things like that. I think it was just learning it… I think [talking] to my nursing staff so they understand the program and the why behind the program has definitely helped to encourage them to talk to our patients more and I think our patients are more open to having the nurse come into their home. I think for the staff that I see they are understanding the back end of their program and the functionality of all their systems, so I think that's making their job easier.* (FHN Staff, Stephenson County)

Also highlighted, was the need for ongoing training to address lack of knowledge about IFC due to staff turnover within hospitals.

> *…there seems to be a turnover of staff there on their labor and delivery unit, and so sometimes we may run across new nurses that are on the floor that don't know about the program yet. So, that's something that kinda rolls around.* (SCHD IFC Staff, Stephenson County)

Theme 3: ***Use of common messaging with families in the hospital is key to IFC acceptance.***
When asked about recruitment messaging to families in the hospital, IFC staff member interviewees from both counties emphasized similar strategies. Specifically, interviewees discussed providing an explanation of the program using common messaging and a consistent approach with all families, and building rapport with families.

I don't present it differently. I let them know that this is the service that is offered, you know, they delivered at OSF, they're eligible for this visit, and all moms are offered this visit that live in Peoria County. ...I don't say, "Because of this or because of that." Because really, honestly we don't know anything about their background except when they delivered and that they live in Peoria County. (CHAIL IFC Staff, Peoria County)

I keep it pretty consistent. I try to keep it relaxed and talk about baby a lot. I generally will walk in, introduce myself, and talk about baby, like say congratulations first and look at baby and we talk about baby and have a little conversation and then I go into the program. (SCHD IFC Staff, Stephenson County)

Interviewees in both counties have found that families are generally receptive to IFC, particularly if they have experienced home visiting in the past, or once they learn more about the program. Interviewees speculated as to why some families might be less receptive to a home visit, and suggested those who do not feel a home visit is necessary, such as families that already have children, may be more likely to decline IFC during the hospital visit.

We do have a lot of moms who say yes. Acceptance rate is pretty high. …most moms who have already been exposed to some kind of home visiting or some kind of assistance, they always say yes. Some of the moms that are a little bit more skeptical maybe that population that we have trouble reaching are you know, moms who…already had other children, or like I said they've never been offered any services, they've never heard about this they're whole pregnancy so they're kind of skeptical of who we are and what is this all about. (CHAIL IFC Staff, Peoria County)

Interviewee: Once we explain the program to them, they're generally very happy to accept and then once we do get in the home, they seem to enjoy it. I can't say I've had a truly negative reaction yet by a mom. They seem to–it seems like no matter if they're a nurse or a stay at home mom, it doesn't matter how many kids they have, they always seem to learn something and they enjoy it.
Interviewer: Would you say that there are some women or families that are more accepting of the program than others?
Interviewee: …Not really because I feel like we've had a really low amount of people that decline, so few, there's not a real theme. (SCHD IFC Staff, Stephenson County)

Additionally, interviewees indicated that other family members in the room may be supportive or hesitant about IFC, and IFC staff in both counties reported adapting their communication accordingly for the situation.

Sometimes we have the dads in the room telling the mom that they don't need it and the mom kind of agreeing. And as best we can in the short amount of time without, you know, being to in your face, we try to just point out the benefits of the program. So, I'm not sure

that we're necessarily successful in turning–the dads like, "I don't think you really need it," and the mom kind of looks at him and says, "Oh, okay." But, you know that's kind of a family dynamic. We try to respect that as much as possible. Point out the benefits and then if they will agree and I think just about everybody does, we give them one of our folders so they can contact us if they should change their mind or have any questions so we have access to them. (CHAIL IFC Staff, Peoria County)

I've found that typically if like a grandma is in the room…a lot of them have commented on like, "Oh, that's such a neat program," or, "Oh, I wish I had that when I had you…" The fathers might be a little bit more leery about it, but I just kinda go with the flow of what mom says… (SCHD IFC Staff, Stephenson County)

Theme 4: ***The Appeal to Families: Universality and Nurse Attendance at the Home Visit.*** According to interviewees, two aspects of IFC considered particularly relevant to acceptance of the home visit are the universality of the program, and that home visiting will be completed by a nurse.

So, this is the biggest benefit that we've seen from this program is that it's ***universal,*** *which is amazing because we obviously get, here at the health department, the higher risk, higher need population, but we've been able to identify and link families with services that we have or would have come in contact with before had we not had the universal aspect of the program.* (IFC Partner within SCHD, Stephenson County)

Well one that it is not income-based. That it is ***universally*** *offered. The only commonality is that you're a mom. You've delivered, so I think that is unique. And we can see that we've had people from all different income levels accept the program. So, that's a really great feature. I think we're all proud of that that we're addressing just the unique needs of a mom.* (CHAIL IFC Staff, Peoria County)

I think just having medical personnel come in. Having a ***nurse****. Usually medical professionals not just nurses are trusted, you know, have a good rapport with most patients so it's nice having that peace of mind and having a medical professional come in to assess your baby and answer your questions and I think it's nice for moms and I think that makes it different from other home visiting programs.* (CHAIL IFC Staff, Peoria County)

…I think the biggest piece is the professional piece. I mean, I consider myself a professional. I'm not an RN, but I have a master's degree, and so I consider myself a professional…and I take what a nurse or what a doctor says over what someone who's just "studied" early childhood or have been trained in early childhood would say. So, I think people who have a ***nursing degree*** *hold more weight…* (IFC Partner within SCHD, Stephenson County)

Theme 5: ***Outreach to prenatal healthcare providers can increase awareness about IFC and acceptance in the hospital.*** While interviewees were pleased with acceptance of IFC in the hospital once processes and procedures were clarified and established, several recommended expanding outreach to increase awareness about IFC before delivery, during the prenatal period. The primary strategy recommended by interviewees in Peoria County was engaging **prenatal health providers** and other agencies that interact with families during the prenatal period to encourage discussions about IFC so they are aware of the program when they are approached in the hospital. In Stephenson County, engaging prenatal care providers was reportedly already taking place.

> *…just probably name recognition of people having an idea of when we come into the patient rooms; they know what it is we're talking about. We're presenting ourselves as a newborn follow-up program that they at least maybe heard of that through their OB, pediatrician, or some word of mouth.* (CHAIL IFC Staff, Peoria County)

> *…to me success would be having better relationships with the OB providers. …because that's who they go to when the need something, a lot of these moms and if they start finding out about us before and it becomes like, "oh this is something normal, we do this with all of our patients," it's gonna be more accepted within the community, more welcomed. And I feel like if we can get to that point where we get those moms their like, "Oh yeah, my doctor talked about this in the office…they said this was great. We definitely want to do this." Getting recommendations, because I think that's gonna help with more acceptance rate…* (CHAIL IFC Staff, Peoria County)

> *We talk about it [IFC] at our prenatal classes, again at our WIC appointments, through the hospital, you know, we have flyers so they give those out at the hospital. Getting in with the doctors, you know, the OB/GYNs and the pediatricians, meeting with them…* (Partner within SCHD, Stephenson County)

C. Beyond the Hospital: Acceptance of the Integrated Home Visit and the Home Visit Experience Themes

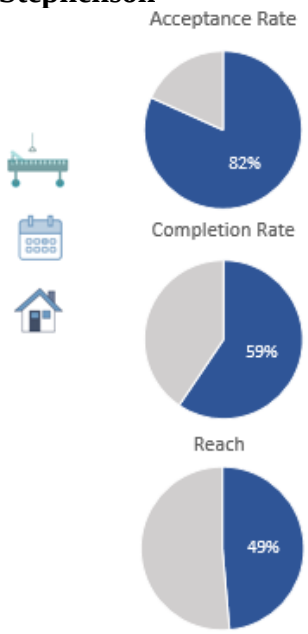
Based on the Family Connects model, the IFC Integrated Home Visit (IHV) is scheduled in the hospital, and takes place two to three weeks postpartum.

Theme 1: ***Understanding which Families Complete the Integrated Home Visit.*** During the first year of IFC implementation (4/1/17-3/31/18) across both IFC counties, 1,150 postpartum women were visited in the hospital by an IFC nurse, 82% accepted IHV in the hospital and were scheduled for a home visit (**Acceptance**), and 60% of scheduled home visits were completed (**Completion**) (**Table 3**). Across both counties, nearly half of postpartum women seen in the hospital completed a home visit (**Reach**).

Looking at these data by county, the IHV acceptance, completion and reach rates were substantially higher in Stephenson County than in Peoria County (**Tables 4 and 5**).

Table 3: IFC Acceptance, Completion and Reach Rates: Peoria and Stephenson

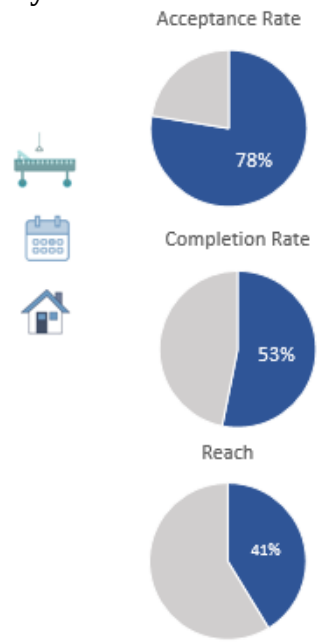
Category	Peoria & Stephenson
Post-Partum Women Seen by IFC Nurse at Hospital	1150
Number Scheduled for Home Visit (Accepted)	940
Number Received IHV (Completed)	559
Acceptance Rate (Accepted/Post-Partum Women)	82%
Completion Rate (Completed/Accepted)	59%
IFC Reach: Post-Partum Women with IHV (Completed/Post-Partum Women)	49%



Source: Stephenson and Peoria IFC data 4/1/17 – 3/31/18

Table 4. IFC Acceptance, Completion, and Reach Rates: Peoria County

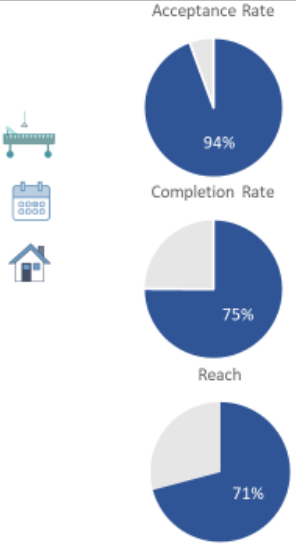
Category	Peoria
Post-Partum Women Seen by IFC Nurse at Hospital	865
Number Scheduled for Home Visit (Accepted)	671
Number Received IHV (Completed)	357
Acceptance Rate (Accepted/Post-Partum Women)	78%
Completion Rate (Completed/Accepted)	53%
IFC Reach: Post-Partum Women with IHV (Completed/Post-Partum Women)	41%



Source: Peoria IFC data 4/1/17 – 3/31/18

Table 5: IFC Acceptance, Completion, and Reach Rates: Stephenson County

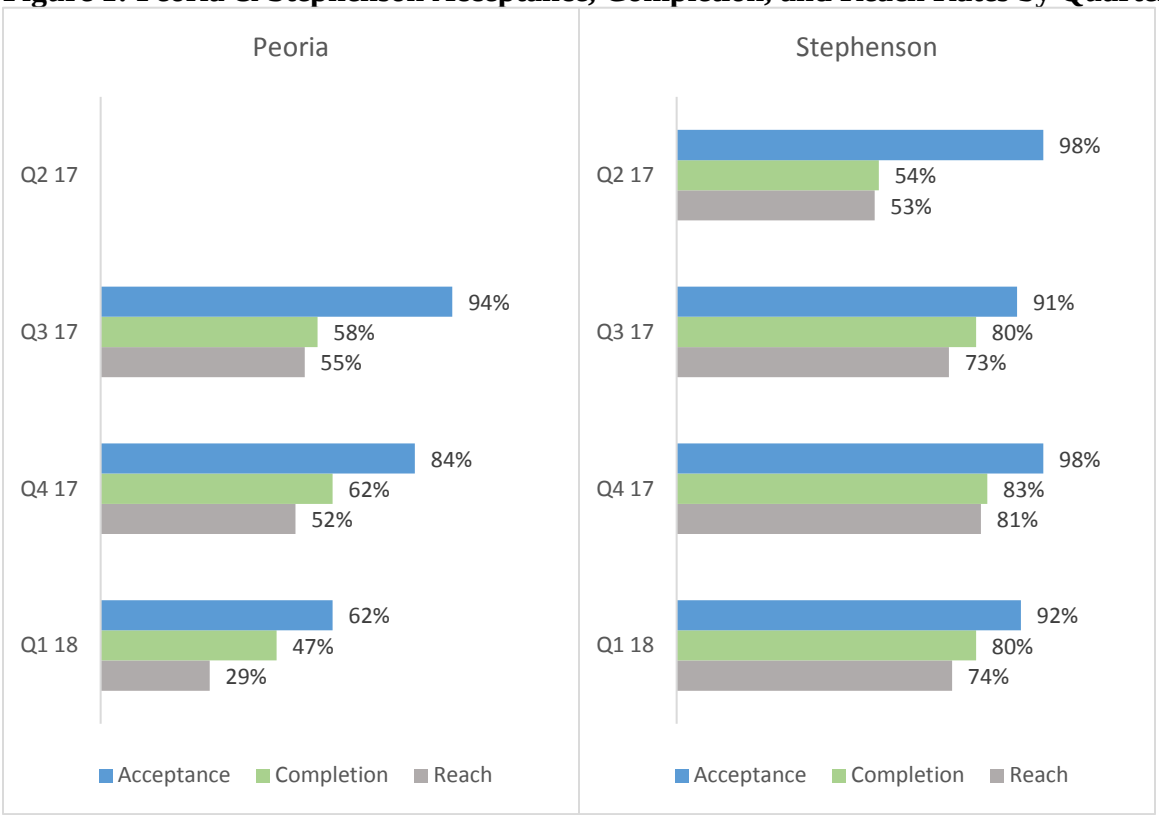
Category	Stephenson
Post-Partum Women Seen by IFC Nurse at Hospital	285
Number Scheduled for Home Visit (Accepted)	269
Number Received IHV (Completed)	202
Acceptance Rate (Accepted/Post-Partum Women)	94%
Completion Rate (Completed/Accepted)	75%
IFC Reach: Post-Partum Women with IHV (Completed/Post-Partum Women)	71%



Source: Stephenson Aggregate IFC Tables 4/1/17 – 3/31/18

When examining acceptance, completion, and reach rates by quarter, it appears that Stephenson's rates have stayed the same or increased over time, while Peoria's rates have stayed the same or decreased over time (**Figure 1**). (See **Table C.1 in Appendix C** for all quarter level data).

Figure 1: Peoria & Stephenson Acceptance, Completion, and Reach Rates by Quarter



Source: Peoria IFC Aggregate Tables 7/1/17-3/31/18, Stephenson IFC Aggregate Tables 4/1/17-3/31/18
Note: Peoria program did not run full length of Q2; data not displayed

Theme 2: ***Illinois Family Connects does not appear to interfere with the APORS High Risk Infant Follow-Up Program.*** For a subgroup of high-risk infants in Illinois, the Adverse Pregnancy Outcomes Reporting System (APORS) requires follow-up home visits from the High-Risk Infant Follow-up Program; these infants are expected to be followed for 24 months. When asked about confusion or conflict between APORS and IFC, the key informants in Stephenson County did not indicate that there have been any issues to date.

> *We have had a handful of babies that have been APORS that we've, you know, done a home visit first, or been in contact with first, just because we are in the hospital and we see them first. … I just let mom know about the program and what it is, and then the APORS nurse will go out later. …if she happens to be here at the office and is available, kind of go together and, like if I've already done a visit with the mom and met the mom, introduce [the APORS nurse] to them face-to-face.* (SCHD IFC Staff, Stephenson County)

> *I feel like if we're thoroughly educating what we're going to be doing and then ours is just a one-time–generally a one-time visit and we have different education stuff we go over. I think that helps distinguish the difference since APORS is more of a long term–just a little bit different focus than us. As long as we are clear about communicating that, there's not a big issue.* (SCHD IFC Staff, Stephenson County)

In Peoria however, there was some indication that the Nurse-Home Visiting aspect of APORS is on hold.

> *Currently it's non-existent because that program [APORS] doesn't exist in our community anymore… I think the hospital has to do some reporting back to the state in certain cases and I think that's what they're doing. So, as far as we can tell, there's a gap there unless somebody stepped in in the last couple of months unbeknownst to us, it just doesn't exist in our community anymore.* (CHAIL IFC Staff, Peoria County)

Theme 3: ***There are multiple reasons why a family might decide to decline an IHV.*** IFC staff had multiple hypotheses regarding why families might agree to IFC in the hospital but fail to answer the door for IFC nurses. These reasons included lack of time, feeling like the visit is not necessary, moving out of the area after childbirth, and having to return to work.

> *Families are really busy. They've got a lot going on. Sometimes they literally just forget about the visit and then you show up and their like, I'm not gonna answer the door. And then I think sometimes they even feel bad about that but instead of scheduling at a convenient time for them, they just kind of string you along for a little bit too. So, I think moms are just pressed for time.* (CHAIL IFC Staff, Peoria County)

…my perception is they've gotten home, and established a routine, and things are going well with their infant, and they don't feel like they need the service. I think that that's part of it, and then other ones could be parents that are higher risk and hard to locate are parents who are couch surfing, if you will, although the appointments come so soon after delivery that for the most part, they're in a stable place, but there's just some we can't find. And I think we also have a lot of families in our community that have relatives in the Chicago area, so sometimes they'll go home to their mom's house or something, and they're out of town. It's my best perception on what happens to those that don't take the service or don't show for the home visit. (SCHD IFC Staff, Stephenson County)

Theme 4: ***Lead Agencies are engaging in multiple strategies to increase a family's completion of the home visit.*** In both IFC communities, interviewees indicated using multiple strategies to ensure completion of IHVs, including reminding families about the visit through a postcard or phone call, and showing up without a reminder in hopes of catching the mother and infant at home.

And we're also finding that the acceptance rates, while they're pretty high at the hospital, would fall through in the follow-up visits sometime between the time they accept at the hospital and the time the home visit's supposed to occur at three weeks later, they tend to sometimes fall of the map, especially in those zip codes where they're a lot more likely to have less stability with their phone numbers and things like that. So, we use a lot of different strategies to try to engage the family. And so, some of those are text messaging. Sometimes participants have access to text messaging where they may no longer have their phone… Then we've also then done drive-bys to leave little notes and tell them, "We'd love to meet with you. You can contact us at this number so that we can come back out." So, I think that's one of the things that we're focused on now is we're working on the family engagement for the higher risk families. (CHAIL IFC Staff, Peoria County)

I think sometimes after they're home, and it gets to be about the three-week point, and you're coming to do the appointment, that they may think to themselves, "Oh, I guess I really don't need this visit. Things are going well," if they're going well. So, you might have some moms that feel that way. We used to call ahead of time and say, "Just a reminder, I'm coming for this visit today," and I think we would have a lot of people cancel and say, "Oh, that's okay. I don't really need the appointment," or blah, blah, blah, so I told my staff I really don't want them to call ahead of time. You've set the appointment at the hospital, you've given them an appointment card and telling them you're coming to their home, they've accepted this service, they've signed the paperwork. Just go to the home. It's just harder to tell you no if you're standing at the door than it is over the phone. I think sometimes if you call ahead of time, they kind of probably look around their house and go, "Oh, my house is a mess. I look a mess. I don't want people over here." It's easier for them to say, "I changed my mind." But when you present at the time you said you were supposed to present, and they remember they had an

appointment, you're standing at their doorstep, I think that makes a big difference, so we have not been calling ahead of time to remind. (SCHD IFC Staff, Stephenson County)

…if somebody's not there or somebody doesn't answer the door the first time, and yes, we might put a door hanger up or make a follow-up phone call, but we're not gonna stop right away. I think there are so many barriers and things that can happen early on after mom comes home, and baby come home from the hospital that it's worth us taking a second or third attempt to connect with families. Obviously, after they tell us no, they verbally told us no, but if they're a no-show or no answer, we continue to either follow-up with letters, drop by visits, and things like that so that we can get the visit done. (SCHD IFC Staff, Stephenson County)

IFC staff in both sites indicated that IHV completion was an ongoing challenge that requires further consideration and potentially new approaches to reaching families.

Interviewer: Are there some women or families that are more accepting of the program than others?
Interviewee: You know, I don't think so. We've talked a little bit about this and we are starting to look at maybe tracking to see if some of our higher risk zip code areas, if where some of those clients who agree to the visits, are they actually completing the visit or are they rescheduling more than the other populations? …we haven't really seen any specific issue with that that's come to our immediate attention. But we're gonna kind of look at that just to track it. (CHAIL IFC Staff, Peoria County)

We try to engage them at least three different times in a couple of different ways. But since we have new staff, new people bring new ideas so that will be something that we'll be talking about as a staff. (CHAIL IFC Staff, Peoria County)

Things that persist. I think getting your foot in the door, although I guess we have a pretty high rate of success in seeing families, but sometimes you'll get a family that says they want this service, and then they change their mind. So, we're doing a little bit of work toward that, and I would say that that's always probably gonna be something that's out there. (SCHD IFC Staff, Stephenson County)

Theme 5: ***IFC serves women and families from diverse race, class, insurance and education groups.*** Overall, IFC served 545 families in 2017 and early 2018. Among new mothers served by IFC, over half were Medicaid recipients, the majority were non-Hispanic White (56%) or non-Hispanic Black (24%), a large proportion had some post-secondary education (61%), and half were married. Few IFC participants were adolescents (3%). (**Table 6**).

Table 6: Demographics of IFC Mothers who Received an IHV: Peoria & Stephenson

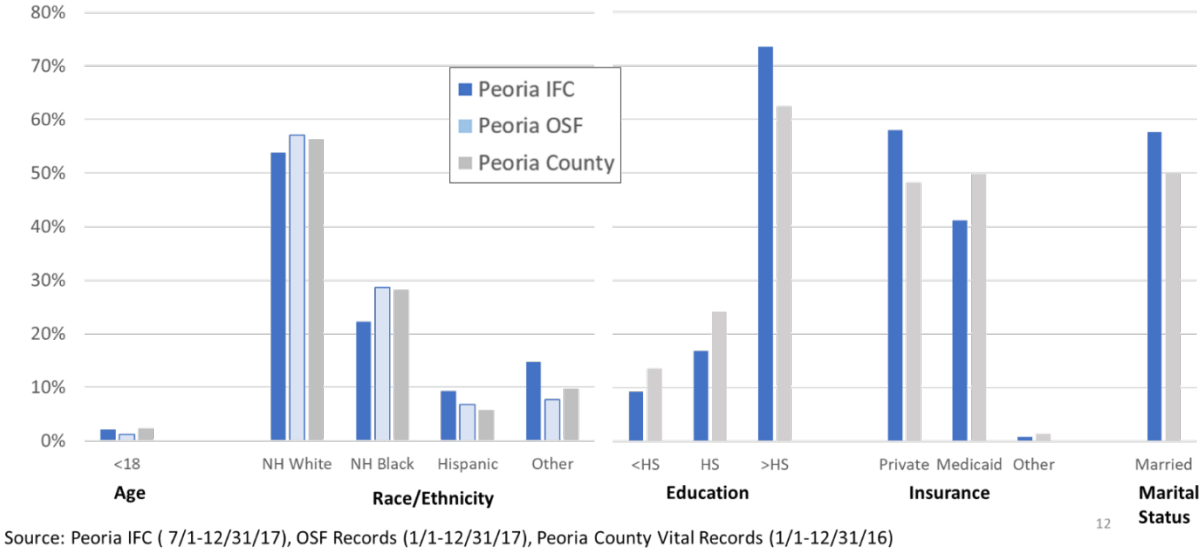
Category	Peoria County (n=342)	Stephenson County (n=203)	Total (n=545)
Insurance			
Medicaid	41%	72%	52%
Private Insurance	58%	28%	47%
Other (No Insurance)	1%	0.5%	1%
Race/Ethnicity			
White	52%	64%	56%
Black	24%	25%	24%
Hispanic	9%	6%	8%
Other	15%	5%	11%
Education			
< High School	11%	17%	13%
High School Degree	19%	37%	26%
> High School	70%	45%	61%
Adolescent Mother (<18 years)	2%	5%	3%
Married	57%	39%	50%

Source: Peoria Aggregate IFC Tables (7/1/17-3/31/18), Stephenson Aggregate IFC Tables (4/1/17-3/31/18)

In Peoria County, IFC served a higher percentage of Hispanic women and women of "Other" race/ethnicity groups and fewer non-Hispanic White and non-Hispanic Black women compared to those who delivered at OSF overall (2017) and compared to the characteristics of the mothers from Peoria County who gave birth in 2016 (**Figure 2 below**). (See **Table C.2 in Appendix C** for all values). Compared to women from Peoria County who gave birth in 2016, IFC recipients had a higher proportion of women with a high school degree, a higher proportion with private insurance, a lower proportion with Medicaid, and a higher proportion of married women. However, education, insurance, and marital status data are not available from OSF so we are unable to ascertain whether IFC participants reflect the hospital population with respect to these characteristics.

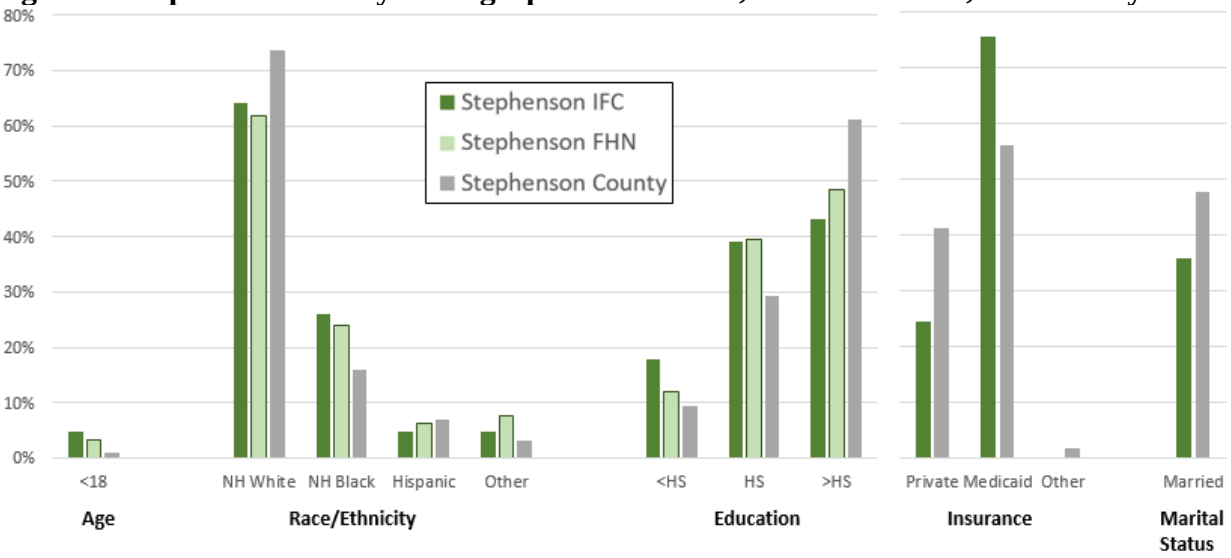
In Stephenson County, women who received an IFC IHV in 2017 pretty closely reflected the racial distribution of FHN hospital deliveries (2017) overall (IFC served slightly more non-Hispanic White and slightly more non-Hispanic Black women and fewer Hispanic women than the FHN birth population). However, IFC served a larger proportion of non-Hispanic Blacks and a lower proportion of non-Hispanic Whites compared to the characteristics of the women from Stephenson County with live births in 2016 (**Figure 3 below**). (See **Table C.3 in Appendix C** for all values). A higher proportion of IFC recipients also had less than a high school degree compared to overall FHN deliveries and overall Stephenson County women with live births. Compared to Stephenson County births overall, IFC served a higher proportion of women on Medicaid and unmarried women. IFC also served more women who did not graduate high school compared to the FHN birth population. However, insurance, and marital status data are not available from FHN so we are unable to ascertain whether IFC participants reflect the hospital population with respect to these characteristics.

Figure 2: Peoria County Demographics: IFC IHV, OSF Deliveries, and County Births



Source: Peoria IFC (7/1-12/31/17), OSF Records (1/1-12/31/17), Peoria County Vital Records (1/1-12/31/16)

Figure 3: Stephenson County Demographics: IFC IHV, FHN Deliveries, and County Births



Source: Stephenson IFC (4/1-12/31/17), FHN Records (1/1-12/31/17), Stephenson County Vital Records (1/1-12/31/16)

Theme 6: ***Universality leads to diversity in "touch" and appears to decrease stigma and increase acceptance of home visiting.*** According to interviewees in both sites, women and families served by IFC appear to reflect the diverse socioeconomic, racial/ethnic, and educational groups in their communities, as intended in a **universal program.** As such, IFC is reaching women not typically targeted by any public health and social service programs and is also ensuring that women who are typically targeted by a variety of programs do not fall through the cracks.

> *I think [IFC] gives everybody an opportunity to be able to have those services and there's no guideline other than being–having it be a part of Peoria County. And, so, race and income and all that doesn't play into it, and I think that is one of the things that makes this successful because it gives a true picture of the community. I actually think that it would be advantageous to even expand the program to the other hospital system to be able to offer these services…* (CHAIL IFC Staff, Peoria County)

> *The women who are not income eligible for other programs, I feel like they almost need a little bit more because they don't have–they're either unaware or they just don't have access because their income isn't at the level–they're not income eligible for a lot of programs, but that doesn't mean they still don't need the education…* (SCHD IFC Staff, Stephenson County)

Theme 7: ***Universality leads to increased acceptance of public health programs in general, and home visiting in particular.*** Interviewees in both counties suggested that the universality of IFC might help to reduce the stigma of public health programs including home visiting, thereby increasing acceptability (this issue is also discussed in the **Positive Consequences** section).

> *I've run into some families who've never had someone in their home, no medical person or anything in their home, and just the home visitor in general is kind of scary to them, but they let me come in because it's a one-time thing and they're like, yeah, that's fine. So, when I do the visit and they're very happy and they enjoyed it and then I talk about other programs about this is kind of home visiting isn't as scary as it sounds and then they're generally more apt to sign up for HFI or a parent enrichment program because they had a small, small glimpse of the home visitors.* (SCHD IFC Staff, Stephenson County)

Interviewees in Peoria County suggested that the program might be particularly successful in reaching middle-income families, who may have fewer barriers to completing IHVs.

> *I feel like they reach a good part of our population. I think a lot of the people that are agreeing to the home visits are not necessarily the most at-risk families. They're more families who kind of fit that middle ground which definitely could use the support but not as much as maybe an at-risk teen parent or something along those lines.* (IFC Partner Agency Staff, Peoria County)

On the other hand, in Stephenson County, interviewees highlighted the links between IFC and other programs administered by SCHD for low-income women. Interviewees expressed that these linkages facilitated IFC participation among low-income women who have relationships with SCHD through other programs.

Interviewee: …lately we've been sending a postcard a week before to kind of help remind them…certain breastfeeding moms, if they're WIC, they have someone else, but if they're non-WIC, we will contact them a couple days after they get out of the hospital and talk to them about breastfeeding just to make sure they don't have any concerns or anything or want us to meet early for a pre-home visit and that kind of thing to establish rapport and they're more likely to follow through on the visit.
Interviewer: So is it a little bit easier to stay in touch with women who are on WIC than women who aren't on WIC?
Interviewee: Technically yes because at WIC a lot of times we'll actually just run into them while we're at WIC, like when we're in the building, we'll run into them and personally talk to them and see if they would want to reschedule or schedule again. That part makes it easier. (SCHD IFC Staff, Stephenson County)

Theme 8: ***Family satisfaction with the IHV appears high.*** Despite implementation challenges, interviewees perceive that families who engage with IHV have a high level of satisfaction with the program, as demonstrated through positive feedback directly to IFC Lead Agency personnel, recommendations about IFC to pregnant friends, and acceptance of the program among healthcare professionals who are themselves IFC participants.

…I really do believe they're really appreciative. We get a lot of, "Oh, wow. I wish I'd known about this with my other child," or you know, "I got to tell my friends about it." I've personally gotten I think two texts, well maybe one text and one might have been an in person face-to-face the client mentioned to me, "Hey I have a friend, how come they didn't get called?" Well, it turned out that they weren't in our county. So, we couldn't talk. But it was really interesting because, you know the word of mouth. If people are telling their friends about it, it's a good thing. We have seen a number of physician assistants; one of our nurses just recently saw a cardiologist. I think we might have all seen a peds resident. So, the fact that they accept the program, allow us to engage in their homes, that says a lot about the program, what they think about the program and afterwards they're thanking us and coming and visiting. (CHAIL IFC Staff, Peoria County)

[IFC] sort of brings the parent back to we're all alike. I'm a new parent, I have anxiety, or worries, or concerns, or thoughts about this, that, or whatever. And I think the thing about that is that most people are knowledgeable enough to know that even if this isn't their first child, that one baby isn't always the same as another baby, and that research and things have changed about what's best, and that all parents want what's best for their kids, and if this visit will bring some of that information to me, give me that education, link me to resources, and then also just the peace of mind of having an RN come in and do an exam on my infant right there in my home so I don't have to run out to the doctor's office when they're so small and tiny, I think those are all things that are attractive about it. (SCHD IFC Staff, Stephenson County)

Theme 9: ***Risk/Need Assessment during the Home Visit is a fundamental component of IFC.*** During the home visit, the nurse assesses the family's risk and/or needs in four domains: 1) Support for Health Care; 2) Support for Infant Care; 3) Support for a Safe Home; and, 4) Support for Parents. Within each of these domains are three sub-areas (**listed in Table 7 below**). For each domain, the nurse records whether there is: 1) no risk or immediate need; 2) mild risk/need addressed during the home visit; 3) significant risk/need requiring follow-up and community referral; or, 4) emergency situation for the family.

> *…we complete at least two visits a day as far as in-home visits and we are responsible for doing a full assessment on infants, weigh, measure, going over just healing, discussion with mother, make sure she's feeling okay, make sure that she doesn't have any questions about baby. We talk about anticipatory guidance also with mom and making sure that the home is safe and also connect mom with any needed or requested resources within the community depending on each mom's needs.* (CHAIL IFC Staff, Peoria County)

> *…there's education, and there's weighing and measuring the baby, and looking for those key pieces where they can educate. And then they're also doing an assessment to see are there any gaps in care that need to be escalated and maybe the doctor needs contact. That if not–and they need to help the mother be able to figure out what she needs to do to get the care that they need at that point in time. Most of the time it's just gonna be education.* (OSF Staff, Peoria County)

> *We do, for the visits, a lot of safety for the babies, and screeners for moms, like depression, alcohol, substance abuse, domestic violence. So, we take care of mom and baby… So, we check, you know, educate on baby blues for postpartum depression, safe sleep, –gosh –PURPLE crying, just ways to soothe baby. Go over like breastfeeding education or any kind of breastfeeding support, even like making formulas. Sleeping. What babies should be like, you know, tummy time. Reading to baby. …And we do like the medical side of it too. You know, we're assessing mom and baby, so we're hitting the education part plus the medical side of it.* (SCHD IFC Staff, Stephenson County)

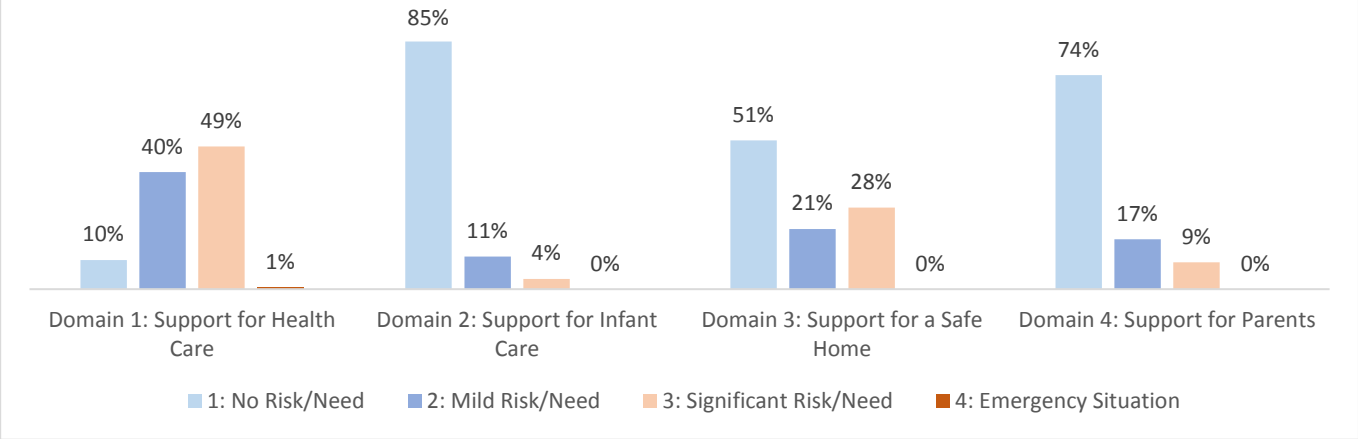
To evaluate the extent of risk/need for IFC families on a county level, risk/need scores were reviewed to determine the highest risk *within* each domain and the highest risk/need *across* all domains. The example risk/need matrix below (**Table 7**) shows how a single family may be assessed during their risk/need assessment. In this example, the highest risk/need <u>across</u> all domains is a "significant risk/need." In this example, the highest risk/needs <u>within</u> each domain are: Domain 1: Mild Risk/Need for infant health; Domain 2: Significant Risk/Need for management of infant crying; Domain 3: No Risk/Need; and, Domain 4: Mild Risk/Need for parent emotional support. These categories were used to calculate the overall risk/need across all IFC families in Peoria County, Stephenson County, and across both counties.

Table 7: Example Family Risk/Need Matrix Completed by IFC Nurse during Home Visit

	1: No risk /need	2: Mild risk /need	3: Significant risk/need	4: Emergency situation
Domain 1: Support for Health Care				
Parent health	X			
Infant health		X		
Health care plans	X			
Domain 2: Support for Infant Care				
Child care plans	X			
Parent-child relationship	X			
Management of infant crying			X	
Domain 3: Support for a Safe Home				
Household / material supports	X			
Family and community violence	X			
History of parenting difficulties	X			
Domain 4: Support for Parents				
Parent well-being	X			
Substance abuse	X			
Parent emotional support		X		

- ***Peoria Risk/Need Assessment.*** In Peoria, the domain in which families had the greatest need during the time period reviewed (7/1/17-3/31/18) was Domain 1: Support for Health Care, where 49% of families had a significant risk/need and only 10% of families reported no risk/need in Domain 1 (**Figure 4**). Within Domain 1, the areas of greatest risk/need were Parent Health and Infant Health. The second greatest area in which families had a high level of risk/need was in Domain 3: Support for a Safe Home, in which 28% of families were determined to have a significant risk/need. Within Domain 3, the area of greatest/risk need was household/material supports (rather than family/community violence or history of parenting difficulties). Most of the families were determined to have no risk/need or mild risk/need for Domain 2 (96%) and Domain 4 (94%).

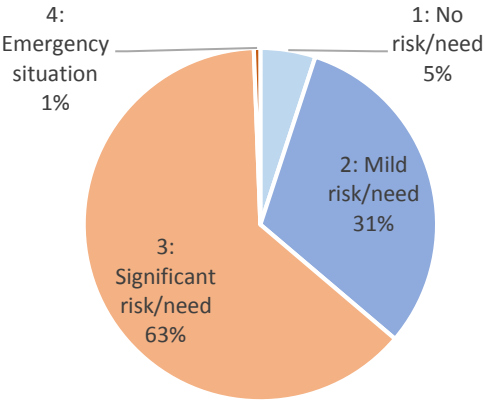
Figure 4: Peoria: Highest Risk/Need by Family within Each Domain (n=338 Families)



Source: Peoria Aggregate IFC Tables 7/1/17-3/31/18

Across all domains, only 5% of Peoria County families reported that they had no risk/need (**Figure 5)**. This means 95% of families served by IFC had at least one identified risk/need that IFC nurses could address within the home or through a community medical/social referral. An area of significant risk/need requiring follow-up and community referral was indicated for 63% of Peoria families. This emphasizes that nearly all women and families have need for various type of supports in the early postpartum period.

Figure 5: Peoria County Highest Risk/Need across All Domains (n=338)



Source: Peoria Aggregate IFC Tables 7/1/17-3/31/18

Table 8: Peoria County Risk/Need Level by Receipt of Referral and Mother's Demographics (n=341 families)

	n	Low Risk: 1-2 (n=112)	High Risk: 3-4 (n=229)
Overall	341	33%	67%
% Received Referral	341	8%	89%
Insurance Status			
Medicaid	132	18%	82%
Private	200	43%	58%
Uninsured	3	0%	100%
Marital Status			
Unmarried	142	20%	80%
Married	193	42%	58%
Race/Ethnicity			
White	174	38%	62%
Black	77	20%	81%
Hispanic	33	28%	72%
Other	52	37%	64%
Education Level			
No HS	33	15%	85%
HS/GED	63	25%	75%
Post-secondary	236	39%	61%
Age			
Not Adolescent	331	33%	67%
Adolescent	4	0%	100%

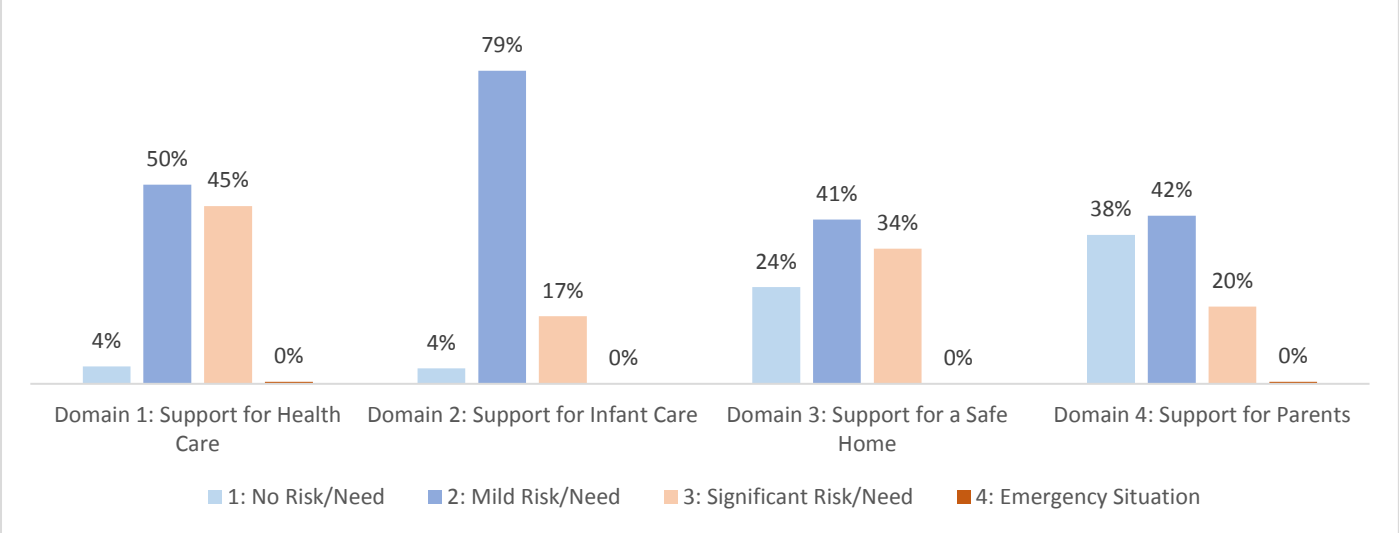
Source: Peoria Individual Level Dataset 6/1/17 to 3/31/18

- ***Peoria: Risk/Need and Referral Patterns by Demographics.*** The level of risk/need in families differs by their demographic characteristics. In Peoria County, 33% of families had no risks or a mild risk/need, classified here as low risk/need. Sixty-seven percent of women had significant risk/needs or an emergency situation, classified here as a high

risk/need. There is a larger proportion of families with high risk/need among women with Medicaid (82%) or no insurance (100%); who are unmarried (80%); who are Black (81%), Hispanic (72%), or other race/ethnicity (64%); women without a high school degree (85%) or with only a high school degree/GED (75%); and, among adolescents (100%). For families who were in the low risk/need category, about 8% received a referral, compared to 89% of women who received a referral in the high risk/need category (**Table 8 above**). The percent of referrals was consistent across most characteristics except for high risk/need women in the Other race/ethnicity category where only 71% received a referral (Data not shown, see **Table C.4 in Appendix C** for the percent of women within each high and low risk category who received a referral).

- ***Stephenson Risk/Need Assessment.*** Compared to Peoria County, Stephenson County families were more likely to be assessed as having more areas of higher risk/needs in the time period reviewed (4/1/17 to 3/31/18) (**Figures 6 and 7**). There are no domains for which the majority of respondents were determined to have no risk/need. In Stephenson County, the domain in which families had the greatest need was Domain 1: Support for Health Care, since 45% of families had a significant risk/need and only 4% of families had no risk/need in Domain 1. In Domain 2: Support for Infant Care, only 4% of families had no risk/need, while 79% were determined to have a mild risk/need. For both Domain 1 and Domain 2, nurses documented similar risks/needs across all areas within each of these domains. In Domain 3 (Support for a Safe Home), and Domain 4 (Support for Parents), mild or significant risk/need was documented for about 75% and 62% of families, respectively. Within Domain 3, the area of greatest risk/need was household material supports and within Domain 4 the area of greatest risk/need was parent well-being.

Figure 6: Stephenson: Highest Risk/Need by Family Within Each Domain (n=205 families)

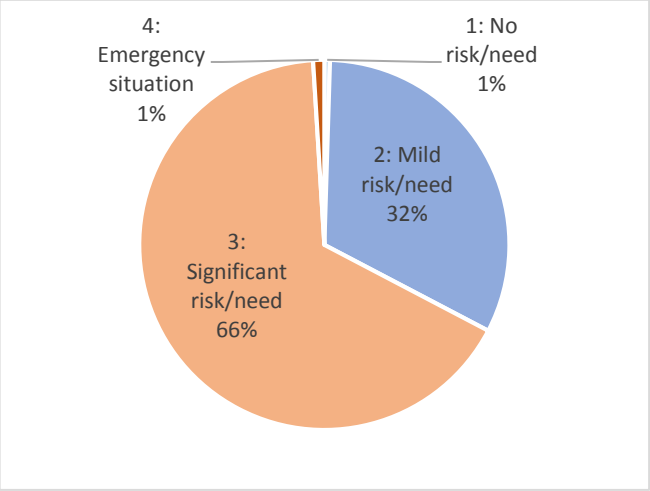


Source: Stephenson Aggregate IFC Tables 4/1/17-3/31/18

In Stephenson across all domains, fewer than 1% of families reported that they had no risk/need (**Figure 7**). This means the IFC nurse was able to help greater than 99% of families address a risk/need within the home or through a community medical/social referral. Overall, 66% of families reported an area of significant risk/need requiring follow-up and community referral.

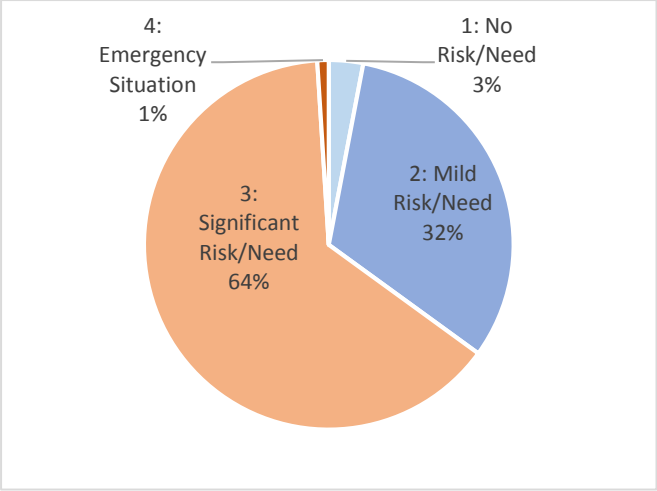
While the individual needs of families may vary across the domains and areas, the risk/need assessment reveals that most families in both counties had some significant need. Of all the families who received an IFC home visit in both Stephenson and Peoria, 97% of them had some risk/need. Sixty-four percent of families had a significant risk/need requiring follow-up or a community referral (**Figure 8**).

Figure 7: Stephenson County Highest Risk/Need across All Domains (n=205 families)



Source: Stephenson Aggregate IFC Tables 4/1/17-3/31/18

Figure 8: Highest Risk/Need across All Domains Overall (Stephenson & Peoria Counties n=543)



Source: Peoria Aggregate IFC Tables 7/1/17-3/31/18, Stephenson Aggregate IFC Tables 4/1/17-3/31/18

- ***Stephenson Risk/Need & Referral Patterns by Demographics.*** As in Peoria County, the level of risk/need of IFC families in Stephenson County differs by demographic characteristics. In Stephenson County, 34% of women had a low risk/need and 66% had a high risk/need (**Table 9**). There is a larger proportion of families with a high risk/need among women with Medicaid (74%) or no insurance (100%); unmarried women (78%); women who are Black (76%), Hispanic (73%), and other race/ethnicity (82%); mothers with no high school degree (78%); and, among adolescents (98%) (Table 9). Regardless of risk level or demographic characteristics, over 90% of women in Stephenson received a referral (data not shown, see **Table C.5 in Appendix C** for the percent of families within each high and low risk category who received a referral).

Table 9: Stephenson County Risk/Need Level by Mother's Demographics (n=200 families)

	n	Low Risk: 1-2 (n=67)	High Risk: 3-4 (n=133)
Overall	200	34%	66%
% Received Referral	200	93%	99%
Insurance Status			
Medicaid	143	26%	74%
Private	56	54%	46%
Uninsured	1	0%	100%
Marital Status			
Unmarried	120	22%	78%
Married	80	50%	50%
Race/Ethnicity			
White	128	39%	61%
Black	50	24%	76%
Hispanic	11	27%	73%
Other	11	18%	82%
Education Level			
No HS	27	22%	78%
HS/GED	74	30%	70%
Post-secondary	92	41%	59%
Age			
Not Adolescent	190	35%	65%
Adolescent	10	10%	90%

Source: Stephenson Individual Level Dataset 4/1/17 to 3/31/18

D. Beyond the Home Visit: Referral Themes

Theme 1: ***Referral systems in both counties leverage the existing referral networks of the IFC Lead Agencies.*** Based on the Family Connects model, IFC nurses determine the referrals that are necessary based on the risk and needs of the family identified during the IHV. In both Peoria and Stephenson counties, the referral network rests on already established networks of diverse providers. In Peoria, CHAIL's Good Beginnings division hosts a Healthy Families IL (HFI) home visiting program, doula services, a Coordinated Intake program (serving all home visiting programs in Tazewell and Peoria Counties) and IFC, and has long-established relationships with the Peoria County Health Department, Peoria hospitals, WIC, social service agencies and other community-based organizations, which provides a solid foundation for nurse referrals. In Stephenson County, the SCHD hosts a variety of programs including WIC, Family Case Management, doula services, HFI home visiting program, Coordinated Intake, and the All Our Kids (AOK) Network. Importantly, 90% of agencies providing services to children and families in Stephenson County are linked with the AOK Network. The Coordinated Intake programs in both Peoria and Stephenson counties serve as a single point of entry for all other home visiting programs; this allows for the coordination of efforts and reduces duplication and redundancy.

Coordinated intake [is]… the centralized intake of all home visiting programs ideally. When the Family Connects workers find a family, they can get the information from that family and fill out–we call it a C-app. They fill out that information, and they are able to find out, these are the needs of the family. And then they can make that referral to Coordinated Intake and she knows the programs really well, so she knows who to reach out to, who has openings, and who would be the best support for that family. (CHAIL IFC Staff, Peoria County)

Nurses in both counties also provide families with a list of additional resources so even if no referrals are made as a result of the visit, families receive information on general community resources they can access if needed.

We give all families I think it's a two-page, two-sided, so four pages of general community resources so again, when we leave, if we haven't been able to identify something but they might have questions to at least give them some information how they could find a childcare provider, how they get signed up for WIC, you know, what the health department number is, those kind of things. (CHAIL IFC Staff, Peoria County)

Interviewer: Can you…describe what the referral network is like that IFC uses in the community?
Interviewee: …Oh wow. Yeah. There's so many. So you know, it could anything from, you know, they screen for depression so it could be for counseling services, medical services, a link to a rep at DHS for insurance or the link part of medical cash assistance or food stamps, what they used to be called. They can be for educational services, employment, breast feeding support… they hand out a nice little card that tells about all the different services that might be available to the community that our All Our Kids Network puts out. It's a great little card that has all the numbers and you know, like I said, every agency in town I could possibly think of. (IFC Partner within SCHD, Stephenson County)

Theme 2: ***Referral patterns differ between the two IFC counties.*** Although both Peoria and Stephenson use Coordinated Intake for home visiting referrals and both have a network for other community referrals, the IFC referral patterns in the two counties are distinctly different. In Peoria County, the vast majority of referrals are medical or to the Department of Human Services (DHS). In contrast, the majority of Stephenson County referrals are to community resources such as the Dolly Parton's Imagination Library book-gifting program, the AOK network, behavioral health services, and the SCHD (fewer than 30% of Stephenson families received a Medical referral). (Note: The aggregate IFC data reports do not allow for an analysis of unique referrals for each woman).

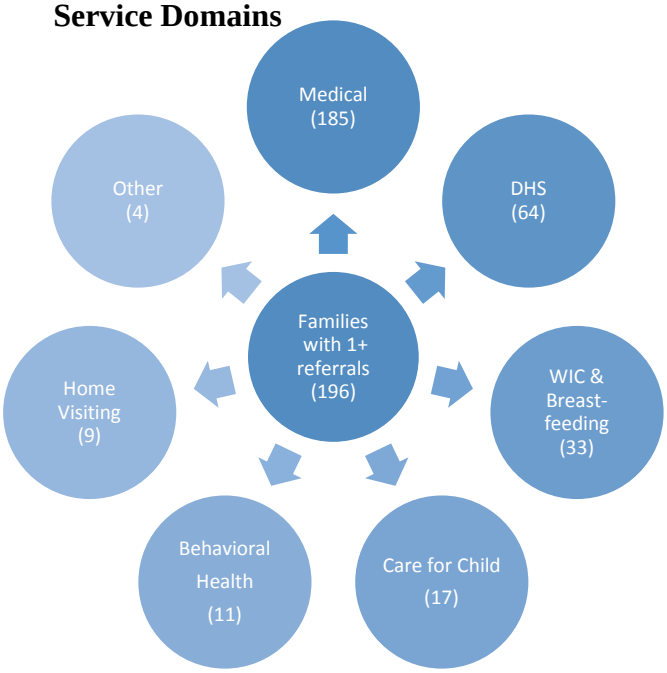
- ***Peoria Referrals.*** Between 7/1/17 and 3/31/18 Peoria IFC nurses completed 357 home visits and made at least one referral to 196 families. In total, Peoria IFC nurses made 334

referrals with each family receiving an average of 1.7 referrals. Compared to Stephenson, Peoria had a larger percent of referrals to medical care.

A lot of our referrals, like I said, are medical. They're back to the OB providers; they're back to the pediatricians. We do refer to other agencies within the area but as far as I guess having relationships with these other agencies and stuff, I feel like that could be improved. (CHAIL IFC Staff, Peoria County)

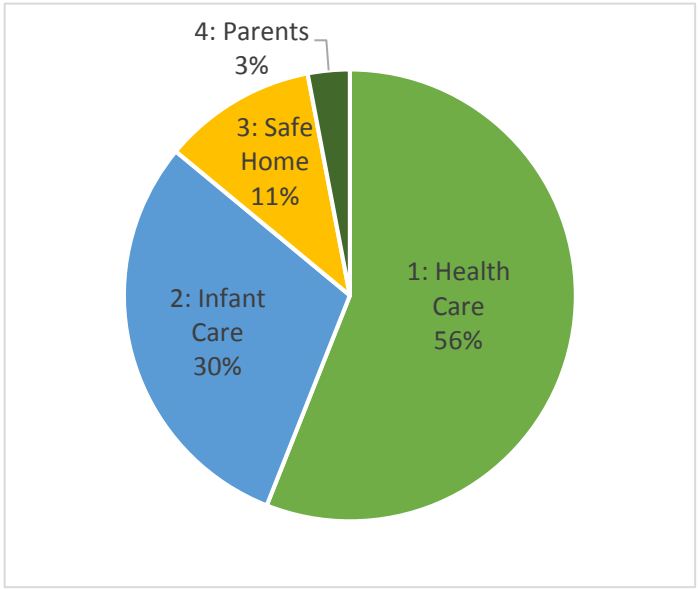
Looking at referrals by service domain, the largest number of referrals were made to medical providers (n=185) with 115 referrals to OBGYNs, 56 referrals to Pediatrics, and 14 referrals to another kind of medical professional/facility (**Figure 9**). The next two largest referral categories were DHS (64) and WIC & Breastfeeding (33). Looking at referrals by risk/need categories, 56% of referrals were related to Domain 1: Support for Health Care, 30% were related to Domain 2: Support for Infant Care, 11% were related to Domain 3: Support for a Safe Home, and 3% were related to Domain 4: Support for Parents (**Figure 10**). (**Table C.6 Appendix C** provides information about the specific organizations in each Service or IFC Domain).

Figure 9: Peoria Referral Categories by Service Domains



Source: Peoria Aggregate IFC Tables 7/1/17-3/31/18

Figure 10: Peoria (n=435 referrals categories) by Related Domain



Source: Peoria Individual Level Dataset 6/1/17-3/31/18
Note: One referral can fall into multiple related domain categories

Most Key Informants in Peoria indicated that the current referral network of services is adequate to meet families' needs. Rather than adding more resources to the network, respondents stated that the challenge was in connecting families to those resources.

> *We're a very resource-rich community. It's just getting people where they need to go. And then as far as providers, we have several providers. [Clinical Services Agency] is probably our number one, where most of our clients go to, and getting them connected with those providers. But from my perspective, I don't see that as being an issue. I think they're pretty good about–but that's certainly an important aspect of that position, is knowing what resources are out there and available.* (CHAIL IFC Staff, Peoria County)

However, other respondents identified needs such as cribs, diapers, money, and community parental support.

> *A lot of our clients need more money and diapers… Some of our parents…need good role models and they need parenting support. I mean, we try to provide information of course in the visit but they just need ongoing information especially if they haven't had good role models growing up…* (CHAIL IFC Staff, Peoria County)

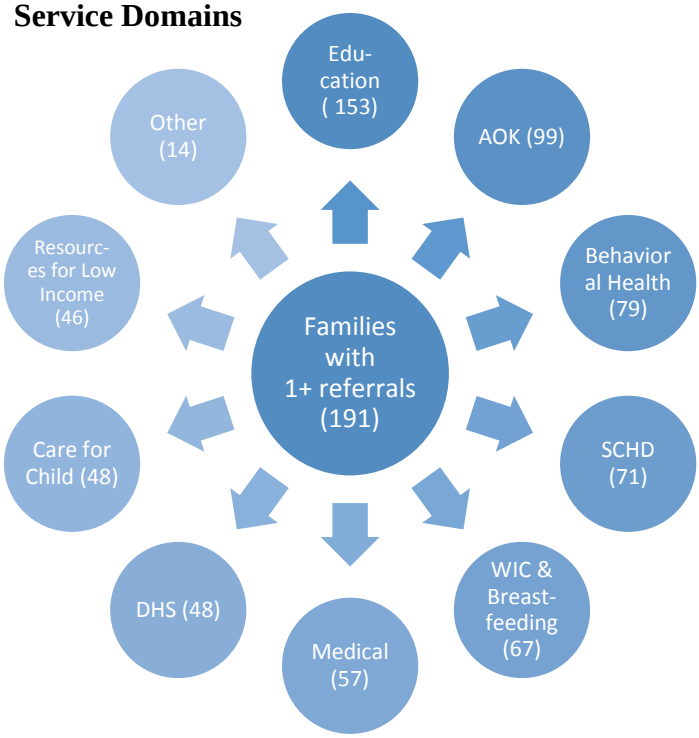
Stephenson interviewees spoke highly of the AOK network and the wide variety of services available for referrals in the community.

> *There's so many [resources]… it could be anything from… counseling services, medical services, a link to a rep at DHS for insurance or the link part of medical cash assistance or food stamps… educational services, employment, breast feeding support. It's very wide.* (IFC Partner within SCHD, Stephenson County)

- ***Stephenson Referrals.*** Between 4/1/17 and 3/31/18, Stephenson County IFC nurses completed 202 home visits and made at least one referral to 191 families. In total, Stephenson County IFC nurses made 827 referrals. This means that 95% of families who received an IHV received at least one referral; the average number of referrals per family was 4.3. Compared to Peoria County, a higher percentage of Stephenson County families received a referral and received a larger number of referrals per family. Stephenson County also provided a more diverse set of referrals, with the minority of referrals being medical (**Figure 11**).

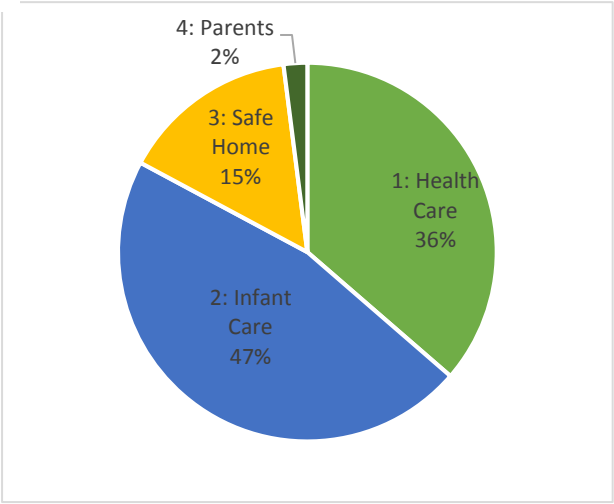
SCHD categorizes referrals by a referral based on need/risk *(ref)* and community referrals made as an added support *(comm*). The majority of Stephenson's referrals were categorized as *ref*; however, referrals for Education and All our Kids Network (AOK) were mostly categorized as *comm* (**Table C.7 in Appendix C** provides the full breakdown of *ref* and *comm* by service domains). **Figure 11** includes all referrals combined (*ref+comm*). Looking at referrals by IFC risk/need categories (**Figure 12**): 36% of referrals were related to Domain 1: Health Care; 46% were related to Domain 2: Infant Care; 16% were related to Domain 3: Safe Home; and, 2% were related to Domain 4: Support for Parents. (**Table C.8 in Appendix C** provides details with respect to how specific organizations align with Service or related IFC Domains).

Figure 11: Stephenson Referral Categories by Service Domains



Source: Stephenson Aggregate IFC Tables 4/1/17-3/31/18

Figure 12: Proportion of Referrals in Stephenson County by Related Domain



Source: Stephenson Individual Level dataset 4/1/17-3/31/18
Note: One referral can fall into multiple related domain categories

When asked what resources needed to be added to the referral network, Stephenson interviewees consistently reported the need for more resources in the following areas: substance abuse, mental health counseling (specifically postpartum depression), and transportation.

> *The one thing in our community we're working on is we try to get people into counseling, make it more accessible. It's very challenging because there's a waiting list. We only have one provider in the area that accepts the medical card. Transportation is an issue if, you know, to even be able to go outside of the Freeport area.* (IFC Partner within SCHD, Stephenson County)

> *…we have also identified that we don't have any local inpatient substance abuse treatment programs for pregnant moms who are using drugs or alcohol. So, that's something that our AOK Network will be looking at how can we provide that service, or get that service, here locally.* (IFC Partner Outside Agency, Stephenson County)

E. Beyond the Home Visit: Following-up after the Integrated Home Visit Themes

Theme 1: ***Both counties have experienced obstacles in documenting referral follow-through.*** Despite working closely together, because health and social service providers in each county do not utilize a common database, and because there is a need to maintain family confidentiality and

privacy, it can be difficult to determine whether a family followed up with a referral. Between 7/1/17 and 3/31/18, SCHD's IFC staff sought to assess the outcome of 162 referrals made in that period. Of the 168 Post-Visit Calls (PVC) cases assigned, 59 (35%) PVC interviews were completed. Based on the aggregate data reports, it appears women followed through on 106 referrals and 86 received services as a result of these referrals. Peoria's IFC started conducting PVCs and assessing referral outcomes in the first quarter of 2018, so their data are too preliminary to report on (only 12 PVC interviews were completed and 16 referral outcomes assessed).

Interviewees in both counties shared that whether families follow through on referrals largely depends on several factors including the type of referral, family receptivity to the information provided, and barriers in accessing services including service availability, financial barriers, and transportation.

> *I would say a higher percentage of families follow through on, for instance, childcare services because there's money for that and there's a lot of providers, but we don't have a lot of moms…engaging in postpartum depression services, and we've identified a couple reasons for that. Some moms just say they don't want the services…and the fact that we don't have enough providers for postpartum depression…* (IFC Partner Outside Agency, Stephenson County)

Both Stephenson and Peoria interviewees shared that they also believed there is a higher degree of follow-through to the referral when IFC nurses are able to help the family schedule a healthcare appointment or other service while still in the home. It is more difficult to track the success of referrals when families are making the calls themselves.

> *Interviewer: So, to what extent do you think women are following through on referrals? Interviewee: I'm not sure. That's a good question. I'm not really sure. Some of them we know because we engage in the home and we'll actually say, "Hey, let's make this appointment." I'm not sure what the success rate is, I mean I'd like to think that it's fairly high that they're following through, because more often than not is we're all talking about our visits and sharing our experiences or questions, we're letting each other know that the client seemed in interested and agreed to follow through on this. I mean, sometimes it's hard to tell. I mean, you can make a doctor's appointment or have the client make a doctor's appointment with you in the home and then no show for it.* (CHAIL IFC Staff, Peoria County)

Theme 2: ***Completing Post-Visit Calls can be challenging***. Both counties reported experiencing obstacles in completing the PVC (which is supposed to occur 30 days after closing the case). For example, one interviewee from Stephenson County expressed that at 30 days, some of the women were already back at work, or that for some women, phone numbers had changed. A challenge identified in Peoria County was insufficient staff for completing follow-up calls, which CHAIL planned to resolve moving forward. Between 7/1/17 and 3/31/18, Stephenson County

IFC staff attempted 168 PVC calls, and completed 59 interviews. Peoria staff did not complete any PVC calls between Q2 17 and Q4 17 and completed 12 PVC calls in Q1 18.

F. Positive Consequences of Illinois Family Connects Themes

Key informants reported multiple positive consequences of the early implementation of IFC in their communities. Benefits to families, hospital partners and community perceptions of public health programming were some of the exciting and possibly unanticipated benefits of the implementation of IFC in Peoria and Stephenson counties. These positive consequences are discussed below.

Theme 1: ***Exposure to IFC decreases the stigma of Home Visiting.*** One of the positive consequences of IFC is the decreased stigma of home visiting programs generally due to the universality of the program.

> *I think we all recognize when they shifted home visiting to only being able to serve those below a certain income, they had very big concerns about those families that could have benefited from some additional follow-up but were eliminated from that opportunity because they made too much money. Once again, domestic violence, substance abuse, they don't really–developmental delay… they aren't necessarily tied to income. So, I think being universal–plus, we also talked about the fact that it normalizes home visiting somewhat. Some of the stigma is not necessarily attached to it because it's open to everybody. And so, we recognize that sometimes people feel like home visiting is for the poor people. It's kind of how it's perceived. Well, with Family Connects, it's like this big bonus that you get this follow-up visit from a nurse to tell you that your baby is absolutely fabulous or not. And then if there are challenges, if there are things that are concerning, that they've got a person that they can feel free to talk to about it who's an authority and has got some knowledge. So, I think that that's seen as a real benefit.* (CHAIL IFC Staff, Peoria County)

Theme 2: ***The IFC experience increases support for Home Visiting in general.*** Key informants also noted that a positive experience with IFC might make families more accepting of a referral for another home visiting program. (**See Acceptance of IHV and Home Visiting Experience, Section IV.C)**

Theme 3: ***The universal nature of IFC increases support for public health***. Multiple key informants, particularly in Stephenson County reported that the universality of IFC changed the perception of public health programs as only for-low income individuals. In Stephenson County, the implementation of IFC also reinforced the public health mission of the health department among community members.

> *I don't think it would be effective if it was not there to be quite honest because it would be just another program that was available for one singular group of people. And we do*

have a high poverty population, but still, it does a couple things. It gives the health department more of a public health look versus we only serve poor people because now we have a program that serves everybody. So, if you have a nurse who's a professional, who's going into a home and saying, "I'm from the health department," it changes the stigma of health department services in the community. So, I think it goes deeper than just I'm a professional coming into someone's home, but it really does help to change the stigma around what public health services are. (IFC Partner Outside Agency, Stephenson County)

I sit in a lot of meetings in the community, and people kind of roll – they don't really roll their eyes, but you can just see the looks on their faces when you talk about will we hold nutrition ed. classes? Okay, well, that's only for poor people. It's not…you know. No, it's a public health service. So, I really think that it really does, and I don't know if other people have realized that, but I see a different look in people's eyes when we talk about Illinois Family Connects serving everyone. (IFC Partner Outside Agency, Stephenson County)

Theme 4: ***IFC appears to lead to an increased enrollment in WIC.*** Two key informants from Stephenson County reported that IFC has helped them increase the number of WIC enrollees in their county. Key informants from Peoria County did not have a similar observation.

Now, for instance, WIC, we've had a great increase in new enrollees in WIC because of the IFC program. Either moms didn't know they would qualify, or didn't know about the program, and so they've done a really good job of enrolling new families in WIC. (IFC Partner Outside Agency, Stephenson County)

It's also helped with referrals to WIC and case management and those numbers are low across the state, and across the nation really for WIC, so a lot of times those moms aren't on during pregnancy. IFC sees them afterwards and they've helped get a lot of moms back on the program, so that's been huge. (IFC Partner within SCHD, Stephenson County)

Theme 5: ***IFC has the potential to benefit its hospital partners.*** Key informants in each county indicated that IFC has the potential to lead to many benefits for hospitals, as mothers and families receive additional education and engage in more healthy behaviors. Some speculated that IFC will eventually reduce hospital readmissions among infants.

So, for a new mom who's never experienced parenthood, this is a great service for her, so that when she leaves – you know, the patients come and go so quickly. They come in and they have their baby, and they're discharged within 48 hours. Or a lot of times, 24 hours. And they're getting a lot of education in a short period of time. So, this program actually helps with the follow through. So, when the new moms get home – and they're kind of on

overload in the hospital. So, they get home, and then they think about other things that they may or may not know. And so, having this nurse come in and do a follow-up visit, check on her and the baby, and answer any questions and providing education, I think is huge to help with potentially readmission, feeding problems, those types of things. (OSF Staff, Peoria County)

Plus, if it decreases our infant readmissions because we're catching problems before they become a big deal – babies that normally would have been dehydrated or maybe had higher bilirubins that needed to go back and see the doctor before they had to go under bili lights. Those sorts of things are being addressed. And so the babies are healthier and can stay at home rather than have to be readmitted to the hospital. (OSF Staff, Peoria County)

But we should be seeing success in a lot of different ways. Should see less visits into the doctor. We should have healthier babies. We should see more educated parents. I mean we should see success across a continuum really. We should see less hospitalization for these kids because they are well. We should see less failure to thrive because these nurses were in there sooner. You should see lots of things. (FHN Staff, Stephenson County)

Theme 6: ***IFC is expected to increase breastfeeding rates.*** Key informants also expect that IFC will support women's ability to engage in exclusive breastfeeding and help solve problems with feeding early in the postpartum period.

Really, it's gonna help with the exclusive breastfeeding rates for the first year of life and we all know that that decreases your morbidity. So, yeah, anything we can do to support these mothers at home, and get their questions answered, and give them the resources they need is a great thing. (OSF Staff, Peoria County)

I am hoping that our breastfeeding longevity rates will be increasing. It's not long enough to see super great results, but I'm hoping to see that. (FHN Staff, Stephenson County)

The need for early lactation support among non-WIC participants was a gap that has already been identified and addressed in Stephenson County.

What we learned very quickly is if mom is breastfeeding and they're a WIC eligible client and coming to WIC, they have access to all these certified lactation specialists, peer counselors, and whatnot to provide assistance to help them be the most successful as they can be at breastfeeding. For those other mothers that did not qualify for those services, once they left the hospital, because of the size of our community, there was no one to provide that follow-up or support to those moms. So, that was one of the first things I did was make sure that my staff were trained so that for those moms that are non-WIC, if

> *they're breastfeeding and have a problem or need assistance, the IFC nurses are trained lactation consultants and can help them. So, that was a gap we had in our community that we filled right away.* (SCHD IFC Staff, Stephenson County)

However, more attention may be needed to meaningfully increase breastfeeding rates. Seventy percent of mothers in Peoria and Stephenson counties report breastfeeding at hospital discharge (based on 2016 birth data for both counties), but only 50% of mothers at the IFC home visit 2-3 weeks after birth, report breastfeeding **(**Based on IFC aggregate report data: Stephenson 4/1/17-12/31/17; Peoria 7/1/17-12/31/17; data not shown).

Theme 7: ***Women and families across income levels utilize and support IFC.*** Finally, as presented above in **Section IV.C,** key informants in both counties report that the program has been very positively received by women and families. They also indicated that families from all socioeconomic backgrounds are utilizing the program, which is also supported by the quantitative data in **Section IV. C.**

V. Conclusions, Recommendations, and Next Steps

Although early in its implementation in two sites in Illinois, it appears that IFC is poised to be an effective approach to meeting the needs of families in the early postpartum period. In line with the 2013 WHO guidelines (World Health Organization, 2015) and the recently updated postpartum care guidance from ACOG (2018), a universal early home visit at 2-3 weeks postpartum with a nurse, ensures that all families receive an assessment, as well as education, support, and referral to services during a vulnerable period for the entire family.

The results of this formative evaluation indicate an abundance of positive support for IFC, some early challenges and issues, as well as some early successes and possibly unanticipated benefits. Based on the perspectives of the key informants, IFC has been very well-received by providers, women, families, and community partners. According to interviewees, acceptance by women of the home visit is based on the universality of the program, and the fact that the home visit is completed by a nurse who interacts with the family to ensure that all is well during a very vulnerable period. Because the IFC Integrated Home Visit happens early and IFC nurses do not plan to have an extended relationship with families, IFC does not appear to be duplicative of other home visiting and case management programs; in fact, IFC builds on and utilizes existing networks of services, another strength of the program.

The universal nature of the IFC program has resulted in spill-over effects such as increased support for home visiting and increased support for public health in general. While full universal implementation has not yet taken place at either site, Peoria or Stephenson, the potential positive impact on family and community health and well-being of a completely universal program was clearly envisioned by most key informants. The key lessons learned to date are as follows:

- **Pre-implementation groundwork is very important for entire community and particularly for the participating hospitals.** A successful launch of IFC requires obtaining buy-in from key partners prior to implementation. In particular, it is essential to educate participating hospital staff and to obtain hospital executive and key staff buy-in, as the hospital is effectively the gatekeeper for the program. Education of all community partners, particularly other home visiting programs is also critical; this ensures that other agencies and service understand that IFC does not duplicate existing services but rather rests on and leverages the multitude of services/programs already available in a community.

- **Selection of an IFC Lead Agency with a robust set of services/established referral network facilitates implementation.** Because an effective IFC program is dependent on a strong referral network, it is important that IFC be housed in an agency with a referral network that is fully embedded in the social and health service fabric of the community in which the program is to be implemented. While the initial location of IFC in MIECHV communities which host a Coordinated Intake "portal" appears to be very helpful, as the IFC program spreads throughout Illinois to communities without MIECHV/Coordinated Intake, ensuring that there are other strong health and social service referral networks in place will be essential.

- **Selection of an IFC Lead Agency whose mission and purpose are closely aligned with IFC's mission is important for successful implementation.** Given the uniqueness of the IFC approach within the US social and health service delivery landscape, Lead Agency support for the universal nature of the program and its focus on reaching all families, not just the highest risk families, is essential; this will ensure that IFC staff do not ultimately end up prioritizing or targeting high-risk families, returning to the traditional approach to service delivery.

- **Successful IFC program implementation requires a prenatal education component aimed at both women and providers.** To increase acceptance of the program by women and families when they are approached in the hospital by IFC nurses, providing information about the program before delivery will be extremely beneficial. This requires educating all prenatal health and social service providers in the community about IFC so they in turn can share information about IFC with women and families prior to labor and delivery.

- **Marketing IFC to the entire community both prior to launch and ongoing throughout implementation, is essential.** As a universal program for all women and families with newborns, endorsement by and support for the program from all community members will be the key to encouraging families of all infants to participate. As such, IFC sponsors should invest in an initial and ongoing community-wide marketing campaign which promotes the importance and benefits of an early nurse visit after birth for all families.

- **Sufficient staffing/funds for staff are required to carry out all of the components of the program.** As is true with all programs, adequate resources are needed to ensure success. Given the multiple components of IFC, it is important that none of the components, including those that may seem less urgent to staff such as conducting the Post-Visit Call, receives short shrift as implementation becomes more widespread.

- **There is a need for continuous quality improvement to increase the acceptance, completion, and reach of IFC and to ensure follow-through from the hospital to the Integrated Home Visit.** By continuous examination of both quantitative and qualitative data generated directly from the IFC program or from select evaluation efforts, it will be clear where new strategies are needed to either increase women/families acceptance of the program in the hospital, increase their willingness to participate in a home visit once at home with their newborns, and to increase their uptake and follow-through with referrals. As the program continues, follow-up of women/families to determine the impact of referrals on women's well-being and on the well-being of their children and families will be essential. Ultimately, determining the cost-savings and/or return on investment associated with the program will be necessary. As the program spreads across

IL, perhaps developing an IFC Collaborative to allow for the sharing of strategies and best practices across communities will be a useful approach to increase effectiveness.

As IFC implementation moves forward in Peoria and Stephenson counties and as IFC is introduced into new Illinois communities, attention to these key lessons learned from this formative evaluation of early implementation will be important. Moving from a pilot program to full implementation can be fraught with difficulty so a slow spread that pays attention to the nuances of program implementation, concerns of partner agencies at the state and community level, and which addresses potential challenges and concerns will help to ensure success.

VI. References

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Appendix A: 2013 World Health Organization Postnatal Care Guidelines

Table 1. Provision of Postnatal Care to Mothers and Newborns: Policy and Programme Actions Based On the New WHO Guidelines

WHO Recommendation 2013	Policy/Programme Action
RECOMMENDATION 1: Timing of discharge from a health facility after birth	
After an uncomplicated vaginal birth in a health facility, healthy mothers and newborns should receive care in the facility for at least 24 hours after birth.* **(NEW in 2013)** * *For the newborn, this care includes an immediate assessment at birth, a full clinical examination around 1 hour after birth and before discharge.*	• Ensure respectful, women-centred quality care[a] is provided for all births. • Review if increased infrastructure (beds, etc.) and staff in postnatal wards are required to provide care respectfully and comfortably for women to stay longer. • Align policies (such as national institutional delivery incentive and insurance schemes) with recommendation. • Adapt and use a simple discharge checklist.[12]
RECOMMENDATION 2: Number and timing of postnatal contacts	
If birth is ***in a health facility***, mothers and newborns should receive postnatal care in the facility for at least 24 hours after birth.[a] **(NEW in 2013)**	• Ensure that national standards, quality improvement tools and training curricula promote three assessments in the first 24 hours for the newborn: an immediate assessment at birth; a full clinical examination around 1 hour after birth and again before discharge. • Coordinate postnatal care with the Baby-Friendly Hospital Initiative[13] to ensure that facility-based procedures and outreach to the community support optimal breastfeeding practices. • Update facility-based providers and promote best practices in postnatal care including pre-discharge counselling, according to the new guidelines.
If birth is ***at home***, the first postnatal contact should be as early as possible within 24 hours of birth. **(NEW in 2013)**	• Review current policies and programmes to strengthen delivery and early postnatal care for home births by midwives, other skilled providers and/or well-trained, supervised CHWs.

WHO Recommendation 2013	Policy/Programme Action
At least three additional postnatal contacts are recommended for all mothers and newborns, on day 3 (48–72 hours), between days 7–14, and 6 weeks after birth. **(NEW in 2013)**	• Ensure national standards, quality improvement tools, training curricula and behaviour change communication (BCC) messages/materials to explicitly promote the three additional postnatal care checkups (a total of four from birth in the first 6 weeks) through home visits and facility-based care. • Review/revise national monitoring systems to include the process indicator for postnatal care visits—number of mothers/newborns who received postnatal within 2 days of childbirth (regardless of place of delivery)—for all births.
RECOMMENDATION 3: Home visits for postnatal care	
Home visits in the first week after birth are recommended for care of the mother and newborn.	• Determine how best to integrate home visits for postnatal care into responsibilities and training of midwives, other skilled providers and/or well-trained, supervised CHWs. • Explore appropriate mHealth strategies to communicate with mothers who may be difficult to physically reach.

[a] WHO guidelines, *Pregnancy, childbirth, postpartum and newborn care: A guide for essential practice*, define this standard of care; they can be found at http://www.who.int/maternal_child_adolescent/documents/924159084x/en/.

Appendix B: Key Informant Interview Guide (Peoria Example)

Key Informant Interview for Illinois Family Connects Formative Evaluation
PEORIA COUNTY

Interviewee Name:	
Agency Name:	
Interview Date:	

PRE-INTERVIEW SCRIPT:

My name is [name] and I'm calling from the University of Illinois at Chicago for our scheduled interview regarding the Illinois Family Connects program in Peoria County. Is this still a good time to talk?

As a reminder, this interview is for a study about the early implementation of the Illinois Family Connects program from the perspective of individuals involved in the implementation. You have been asked to participate in the study because you are involved in the IFC implementation, either because you are a staff member of an agency implementing the IFC program, or you are a staff member of an IFC partner agency. Your participation in this study is voluntary. You are able to skip any question and can discontinue the interview at any time.

Do you agree to participate in the interview? Do you have any questions before we start? Do I have your permission to record the interview?

INTERVIEW QUESTIONS:

All Participants:

1) Let's start by talking about your current role with Illinois Family Connects.
    a. How long have you been working with Illinois Family Connects?
    b. What is your role?
    c. Can you describe the responsibilities associated with this role?

2) How long has your agency been working with Illinois Family Connects?

3) Now thinking directly about the IFC program, who it serves and its objectives, how would you describe IFC?
    a. How would you describe the target and reach of IFC?
    b. How would you describe its key features?

Children's Home Association of Illinois IFC Staff Only:

4) Where were you working before joining IFC and what were your responsibilities in that position?
    a. What drew you to work with IFC?

5) What is your educational and professional background?
    a. How is your background related to your current role with IFC?

6) Do you know why the Children's Home Association of Illinois wanted to participate in IFC?

IFC Collaborating Agencies/Programs Only:

7) If you are currently working with an agency or program that interfaces directly with the IFC program, what is the mission of your program? What services does your program provide?
    a. What is the nature of your relationship with IFC?
    b. How did your program become connected with IFC?
    c. How does your organization or program interface/communicate with IFC?
        i. How often do you/does your program interface with IFC?
    d. What challenges do you face in collaborating with IFC?
    e. In what ways is your relationship with IFC effective/productive?
    f. How does your relationship with IFC support the mission of your organization?

All Participants:

8) Given that IFC has been implemented for less than one year:
    a. What are the key factors that have facilitated implementation of the IFC program to date?
        i. What has IFC been doing with respect to "advertising" or "talking up" the program?
    b. What would you describe as the initial challenges in getting this program off the ground in this community?
        i. Have these challenges been resolved? If so, how?
        ii. What implementation challenges persist?
    c. Are there any aspects of program implementation that you were initially worried about which turned out to not be problematic?
    d. **Children's Home Association of Illinois IFC Leaders/Managers only:** What challenges have there been related to hiring and staffing? Training staff? Staff turnover?
        i. How have these challenges been addressed?

Children's Home Association of Illinois IFC Staff Only:

9) What is your impression of women's/families' acceptance of the IFC program, both in the hospital and in their homes? Are there some women/families that are more accepting than others? If yes, could you say more? Probes: How do nurses talk about IFC differently with the new mom versus other family members? Is there ever a need to persuade another family member besides the new mom?
    a. What is your perception of the women who agree to participate in IFC in the hospital but don't actually see a home visitor and those who follow-through?
        i. **IFC nurses who do intake at the hospital only:** At the hospital, how do you talk about IFC with women/families? Do you use different messages with different women?
    b. What factors have facilitated completing home visits, providing referrals, and completing follow-ups?
    c. What challenges have you faced related to providing home visiting, referral services, and follow-up? How have you addressed these challenges?

All Participants:

10) Can you describe the referral network utilized by IFC in this community? Types of services and providers? Relationship to each other?
    a. What do you think influences the referrals that are made? Women's needs? Nurses perceptions? Knowledge of what is available?
    b. To what extent do you think women are following through on referrals? What makes you say this?
    c. Are there additional services or providers that should be added to the referral network? If so, describe.
    d. Are there services that families need that are not available through the referral network? If so, explain.

11) From what you observe, are there major gaps in the service delivery system for families with new infants in your county? What are these gaps?
    a. Who in the community is raising concerns about these gaps?
    b. Who do you view as having the power to address these gaps in this community?
    c. Have any of these gaps been addressed? If so, how?
    d. Does IFC help to address (or have the potential to address) any of these gaps? If so, how? If not, why not?

12) Are you aware of the APORS program (Adverse Pregnancy Outcomes Reporting System)? ***If yes, continue asking questions and b below. If no, skip to question 13.***
    a. What is your perception of the interface between IFC and APORS?

b. Is there any confusion that has resulted from the nurse home visiting services associated with an infant ending up on the APORS list and the home visiting services of the IFC program?

13) Are you aware of other home visiting and/or case management programs in your community? If so, what is the relationship between IFC and other home visiting and/or case management programs?
    a. What do you think are the unique features of IFC compared to other home visiting programs? If you are not familiar with other home visiting programs, just reflect on any features you believe are special to this program.
    b. Do you think the "universal" concept of IFC has support, or lack of support, from your agency? The community? women and families?

14) How will you know if IFC is successful?

15) Is there anything else you would like to share with us today?

16) Before we close, I would like to ask you some demographic questions for classification purposes:
    a. What is the highest degree or level of school you have completed?
    b. What is your gender?
    c. What is your age?
    d. How would you describe your race or ethnicity?

Appendix C: Additional Tables

Table C.1: IFC Eligible births, Number of Hospital Contacts, Number of IHV Accepted and Completed, Completion Rates, and Reach

	Peoria County						
Quarter	**Eligible births (n)**	**Women seen in hospital (n)**	**IHV accepted (n)**	**IHV completed (n)**	**IHV completion rate (%)[4]**	**IFC reach (%)[5]**	**Overall reach (%)[6]**
Q2 17	320[1]	24	24	0	NA	NA	NA
Q3 17	383	205	193	111	57.5%	54.1%	29.0%
Q4 17	390	267	224	138	61.6%	51.7%	35.4%
Q1 18	NA[2]	369	230	108	47.0%	29.3%	NA
Total	***703***	***865***	***671***	***357***	***53.2%***	***41.3%***	***32.2%***
	Stephenson County						
Quarter	**Eligible births (n)**	**Women seen in hospital (n)**	**IHV accepted (n)**	**IHV completed (n)**	**IHV completion rate (%)**	**IFC reach (%)**	**Overall reach (%)**
Q2 17	70	58	57	31	54.4%	53.4%	44.3%
Q3 17	68	65	59	47	79.7%	72.3%	69.1%
Q4 17	NA[2]	65	64	53	82.8%	81.5%	NA
Q1 18	NA[2]	97	89	71	79.8%	73.2%	NA
Total	***138***[3]	***285***	***269***	***202***	***75.1%***	***70.9%***	***56.5%***
	All IFC (Peoria & Stephenson)						
Quarter	**Eligible births (n)**	**Women seen in hospital (n)**	**IHV accepted (n)**	**IHV completed (n)**	**IHV completion rate (%)**	**IFC reach (%)**	**Overall reach (%)**
Q2 17	390	82	81	31	38.3%	37.8%	44.3% (S)
Q3 17	451	270	252	158	62.7%	58.5%	35.0% (S&P)
Q4 17	NA	332	288	191	66.3%	57.5%	35.4% (P)
Q1 18	NA	466	319	179	56.1%	38.4%	NA
Total	**841**	**1150**	**940**	**559**	**59.5%**	**48.6 %**	**36.2% (S&P)**

[1] Total Q2 births in hospital but Peoria program not operative the entire quarter
[2] Valid denominator not available
[3] Data not available
[4] IHV completed/IHV accepted; [5] IHV completed/women seen in hospital; [6] IHV completed/eligible births
Source: IFC Aggregated Tables Peoria and Stephenson

Table C.2: Demographics of Peoria County: IFC IHV (2017), OSF Deliveries (2017), Peoria County Births (2016)

Category	CHAIL IFC[1] (n=238)	Peoria OSF[2] (n=1455)	Peoria County[3] (n=2537)
Insurance			
Medicaid	41%	[4]	50%
Private Insurance	58%	[4]	48%
Other (No Insurance)	1%	[4]	1%
Race/Ethnicity			
White	52%	57%	56%
Black	24%	29%	28%
Hispanic	9%	7%	6%
Other	15%	8%	10%
Education			
< High School	11%	[4]	13%
High School Degree	19%	[4]	24%
> High School	70%	[4]	62%
Adolescent Mother (<18 years)	2%	1%	2%
Married	57%	[4]	50%

[1] Source: Peoria Aggregated IFC tables 7/1/17-12/31/17
[2] Source: OSF Records (1/1-12/31/17)
[3] Source: Peoria County Vital Records (1/1-12/31/16)
[4] Data not available

Table C.3: Demographics of Stephenson County: IFC IHV (2017), FHN Deliveries (2017), Stephenson County Births (2016)

Category	SCHD IFC[1] (n=123)	FHN[2] (n=251)	Stephenson County[3] (n=467)
Insurance			
Medicaid	75%	[4]	56%
Private Insurance	25%	[4]	41%
Other (No Insurance)	0%	[4]	2%
Race/Ethnicity			
White	65%	62%	74%
Black	26%	24%	16%
Hispanic	5%	6%	7%
Other	5%	8%	3%
Education			
< High School	17%	12%	9%
High School Degree	39%	39%	29%
> High School	45%	49%	61%
Adolescent Mother (<18 years)	5%	3%	1%
Married	37%	[4]	48%

[1] Source: Stephenson Aggregated IFC Tables 4/1/17-3/31/18
[2] Source: FHN Records (1/1-12/31/17)
[2] Source: Stephenson County Vital Records (1/1-12/31/16)
[4] Data not available

Table C.4: Peoria County Families Risk/Need Level by Mother's Demographics (n=341)

Peoria (n=341)	n	Low:1-2 (n=112)	% of low risk who received a referral	High:3-4 (n=229)	% of high risk who received a referral
Overall	335	33%	8%	67%	89%
Insurance Status					
Medicaid	132	18%	8%	82%	95%
Private	200	43%	8%	58%	84%
Uninsured	3	0%	0%	100%	100%
Marital Status					
Unmarried	142	20%	11%	80%	94%
Married	193	42%	7%	58%	85%
Race/Ethnicity					
White	174	38%	9%	62%	93%
Black	77	20%	0%	81%	94%
Hispanic	33	28%	11%	72%	91%
Other	52	37%	10%	64%	71%
Education Level					
No HS	33	15%	0%	85%	100%
HS/GED	63	25%	6%	75%	94%
Post-Secondary	236	39%	9%	61%	86%
Age					
Not Adolescent	331	33%	8%	67%	89%
Adolescent	4	0%	0%	100%	100%

Source: Peoria individual level Dataset 6/1/17 to 3/31/18

Table C.5: Stephenson County Risk/Need Level by Mother's Demographics (n=200)

Stephenson (n=200)	n	Low:1-2 (n=67)	% of low risk who received a referral	High:3-4 (n=133)	% of high risk who received a referral
Overall	200	34%	93%	66%	99%
Insurance Status					
Medicaid	143	26%	92%	74%	100%
Private	56	54%	93%	46%	96%
Uninsured	1	0%	0%	100%	100%
Marital Status					
Unmarried	120	22%	93%	78%	100%
Married	80	50%	93%	50%	98%
Race/Ethnicity					
White	128	39%	92%	61%	99%
Black	50	24%	100%	76%	100%
Hispanic	11	27%	67%	73%	100%
Other	11	18%	100%	82%	100%
Education Level					
No HS	27	22%	83%	78%	100%
HS/GED	74	30%	95%	70%	98%
Post-Secondary	92	41%	92%	59%	100%
Age					
Not Adolescent	190	35%	92%	65%	99%
Adolescent	10	10%	100%	90%	100%

Source: Stephenson individual level dataset 4/1/17 to 3/31/18

Table C.6: Peoria Top Referrals by Service Category and Domain Type

Service Category (Source: Peoria Aggregate IFC Tables 7/1/17-3/31/18)	
Medical	OBGYN (115), Pediatrician (56), Other (12)
DHS	Department of Human Services (64)
WIC & Breastfeeding	Peoria City/County Health Department-WIC Nutrition Program (15), Breastfeeding Resource Center (17)
Care for Child	Crittenton Centers (5), Child Care Connections (4), Center for Prevention of Abuse (4)
Behavioral Health	211 Community Resource Line (10)
Home Visiting	Coordinated Intake (6), Children's Home Association of Illinois - Good Beginnings (2)
Other	Low income resources (6), miscellaneous (4), and Health Department (1)
Related Domain (Source: Peoria Individual Level Dataset 6/1/17-3/31/18)	
Domain 1: Health Care	OBGYN/Primary Care (115), Pediatrician (56), Breastfeeding Resource Center (9)
Domain 2: Infant Care	Department of Human Services (61), Peoria City/County Health Department-WIC Nutrition Program (15), Crittenton Centers (5)
Domain 3: Safe Home	OBGYN/Primary Care (29), Center for Prevention of Abuse (6)
Domain 4: Support for Parents	Crittenton Centers (3), 2-1-1 Community Resource Line (2), Coordinated Intake (2)

Table C.7: Stephenson Referrals 4/1/17-3/31/18 by Referrals and Community Support Categories

	Total Q2 17*	**Referrals Q3 17-Q1 18 *(Ref)***	**Community Supports Q3 17-Q1 18 *(Comm)***	**Total**
Education	12	22	119	**153**
AOK	8	1	90	**99**
Behavioral Health	7	59	13	**79**
SCHD	2	44	25	**71**
WIC & Breastfeeding	8	58	1	**67**
Medical	6	51	0	**57**
DHS	9	46	1	**56**
Child Care	0	41	7	**51**
Low Income Resources	0	41	5	**44**
Other	3	9	2	**8**

*Note: Q2 17 Stephenson did not categorize referrals by “ref” and “comm “categories in this quarter. Bubble chart uses totals from Q2 17 to Q2 18 but Community Supports and Referrals analysis only includes Q3 17 to Q1 18.
Source: Stephenson Aggregated IFC Tables 4/1/17-3/31/18

Table C.8: Stephenson Top Referrals by Service Category and Domain Type

Service Category (Source: Stephenson Aggregate IFC Tables 4/1/17-3/31/18)	
Education	United Way-Dolly Parton's Imagination Library (118), Mother Hubbard's Kiddie Cupboard (30)
AOK	AOK I-Grow (99)
Behavioral Health	FHN Family Counseling Center -Outpatient Behavioral Health Care (29), New Horizon's Counseling Center-Individual, Marital and Family (23), Illinois Tobacco Quitline (12)
SCHD	SCHD- Infant Massage (49), SCHD-Healthy Families Illinoi (HFI) (7),
WIC & Breastfeeding	SCHD-Women, Infant, Children (WIC) Supplemental Nutrition (36) SCHD-Breastfeeding Education, Support & Breast Pump Loan (31)
Medical	OBGYN (26), Pediatrics (16), Family Medicine (4), Other (16)
DHS	Illinois Department of Human Services (DHS) (33), IL Health Connects (23)
Care for Child	YWCA of Rockford Child Care Solutions-Child Care Assistance (33), Family YMCA of Northwest Illinois-YMCA Children's Center (10)
Resources for Low Income	Northwest Illinois Community Action Agency (NICAA)-Low Income (30), Pretzel City Transit (5)
Other	Elevate Stephenson (2), Freeport Park District- Recreation (2)
Related Domain (Source: Stephenson Individual Level Dataset 4/1/17-3/31/18)	
Domain 1: Health Care	SCHD-Breastfeeding Education, Support & Breast Pump Loan Program (30), SCHD-Infant Massage (24), SCHD-Healthy Families Illinoi (HFI) (13), OBGYN/Primary Care (13), Illinois Tobacco Quitline (13), Pediatrician (10)
Domain 2: Infant Care	SCHD-Women, Infant, Children (WIC) Supplemental Nutrition Program (38), Northwest Illinois Community Action Agency (NICAA)-Low Income Heating and Energy Assistance Program (LIHEAP) (31), Illinois Department of Human Services (DHS) (23), Mother Hubbard's Kiddie Cupboard (23), YWCA of Rockford Child Care Solutions-Child Care Referrals (for parents/guardians) (19), SCHD-Women, Infant, Children (WIC) Supplemental Nutrition Program (18)
Domain 3: Safe Home	FHN Family Counseling Center-Outpatient Behavioral Health Care (26), New Horizon's Counseling Center-Individual, Marital and Family Counseling (19)
Domain 4: Parents	FHN Family Counseling Center-Outpatient Behavioral Health Care (2), CONTACT-Reassurance Contact (2)

Appendix D: List of Acronyms

ACOG	American College of Obstetricians and Gynecologists
AFDC	Aid to Families with Dependent Children
AOK	All Our Kids Network
APORS	Adverse Pregnancy Outcomes Reporting System
ASTHVI	Association of State and Tribal Home Visiting Initiatives
CHAIL	Children's Home Association of Illinois
DC	Durham Connects
DHHS	Department of Health and Human Services
DHS	Department of Human Services
EHS	Early Head Start
FC	Family Connects
FCM	Family Case Management
FHN	FHN Memorial Hospital, Freeport, Illinois
HFI	Health Families Illinois
HIPAA	Health Insurance Portability and Accountability Act
HRSA	Health Resources and Services Administration
HS	Healthy Start
HV	Home Visiting
IDPH	Illinois Department of Public Health
IFC	Illinois Family Connects
IHV	Integrated Home Visit
IL	Illinois
ISBE	Illinois State Board of Education
KI	Key Informant
MCHB	Maternal and Child Health Bureau
MIECHV	Maternal, Infant and Early Childhood Home Visiting
NFP	Nurse Family Partnership
OB	Obstetrics
OB-GYN	Obstetrician Gynecologist
Ounce	Ounce of Prevention Fund
OSF	OSF St. Francis Medical Center, Peoria, Illinois
PAT	Parents as Teachers
RCT	Randomized Control Trial
SCHD	Stephenson County Health Department
UIC	University of Illinois at Chicago
WIC	Special Supplemental Nutrition Program for Women, Infants, and Children
WHO	World Health Organization