
# Overview of the Family Connects Model

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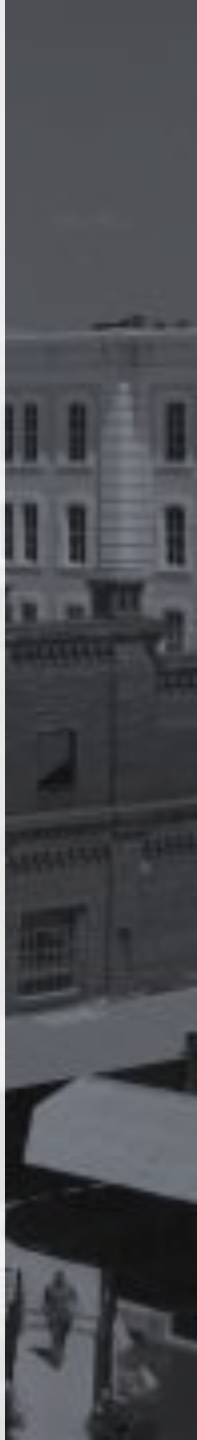
***"She (the nurse) addressed a concern that our pediatrician had missed (a floppy larynx), caught a problem with how I was bathing my daughter, and gave me a refresher on PURPLE crying (I had forgotten -- my last baby is 9 years old now). The kicker was that she offered to help us find a Speech Language Pathologist for our four-year-old foster son -- we're adopting him, and we need to find new providers for some of the services he's been getting through DSS."***

-new dad, privately insured, Durham NC, Nov. 2018

Family Connects was designed to start families on a positive path to health at a vulnerable time—helping insure key health measures are met, providing needed health teaching and linkages to resources to head off more expensive medical care or adverse experiences that might otherwise come down the road.

# Family Connects was Born in Durham, NC

- Evolved out of *Durham Connects*, a program of the Center for Child and Family Health in Durham, NC
- Partnership between: The Center for Child & Family Health, Duke's Center for Child and Family Policy, and Durham County
- Research and evaluation in Durham resulted in this proven model
- Model dissemination started in 2015



# Model Basics

- Universal scheduling at birthing hospitals before mom is discharged
- Visit scheduled for 3 weeks post partum
- Offered to all families with newborns
- 6-8 new cases per nurse per work week (est. 44 work weeks per year – 264-352 new cases per nurse per year)
- follow-up contact with families 4 weeks post visit to confirm successful linkages and follow up (i.e. Post Partum Visit, Well Child Visit)
- Visit is typically 90 minutes to 2 hours. Approx 30% receive 2nd or 3rd visit.
- Average cost of $500 to $700 per birth

# Why Offer the Intervention to All?

- This normalizes the program as “how we take care of families in this community/state”
- High rates of program acceptance and visit completion *Overall 85% accepted offer of visit in RCT. High uptake persists in dissemination.
- The system of supports is often fragmented across communities and states and can be overwhelming for any family to access, especially during the often chaotic early weeks of having a newborn.

# Family Support Matrix Domains

**Support for Health Care**

1. Maternal Health
2. Infant Health
3. Health Care Plans

**Support for Infant Care**

4. Child Care Plans
5. Parent-Child Relationship
6. Management of Infant Crying

**Support for a Safe Home**

7. Household Safety/Material
8. Family and Community Safety
9. History with Parenting

**Support for Parent(s)**

10. Parent Well Being
11. Substance Abuse in Household
12. Parent Emotional Support

**Each factor is rated as:**

**1 = No family needs**
**2 = Needs addressed during visit**
**3 = Community resources needed**
**4 = Emergency intervention needed**

# 18 month RCT-What did We Learn?

Every family is vulnerable at the birth of a child

***94% of families had 1+ need for nursing support or community resources**

Community-wide eligibility is essential to population change

***Does not replace intensive, targeted programs, but informs what families need**

Population Reach requires both a top down and bottom up approach

***Identify preventative system of care, align resources, reach all families**

***Assess individual risk, provide intervention, improve connections**

# Private Insurance Participation Rate in RCT I

- % of Mothers in Eligible Population with Private Insurance: 40%
- Scheduling Rate: 70.5%
- IHV Completion Rate: 87.3%
- Participation Rate: 61.5% vs. 69% overall
- Overall, participation rates for private insurance families were lower than Medicaid / No Insurance, but still relatively high. We know from our published research (Alonso-Marsden et al., 2013) that **private insurance families are more challenging to schedule, but participate at a higher rate if scheduled**.

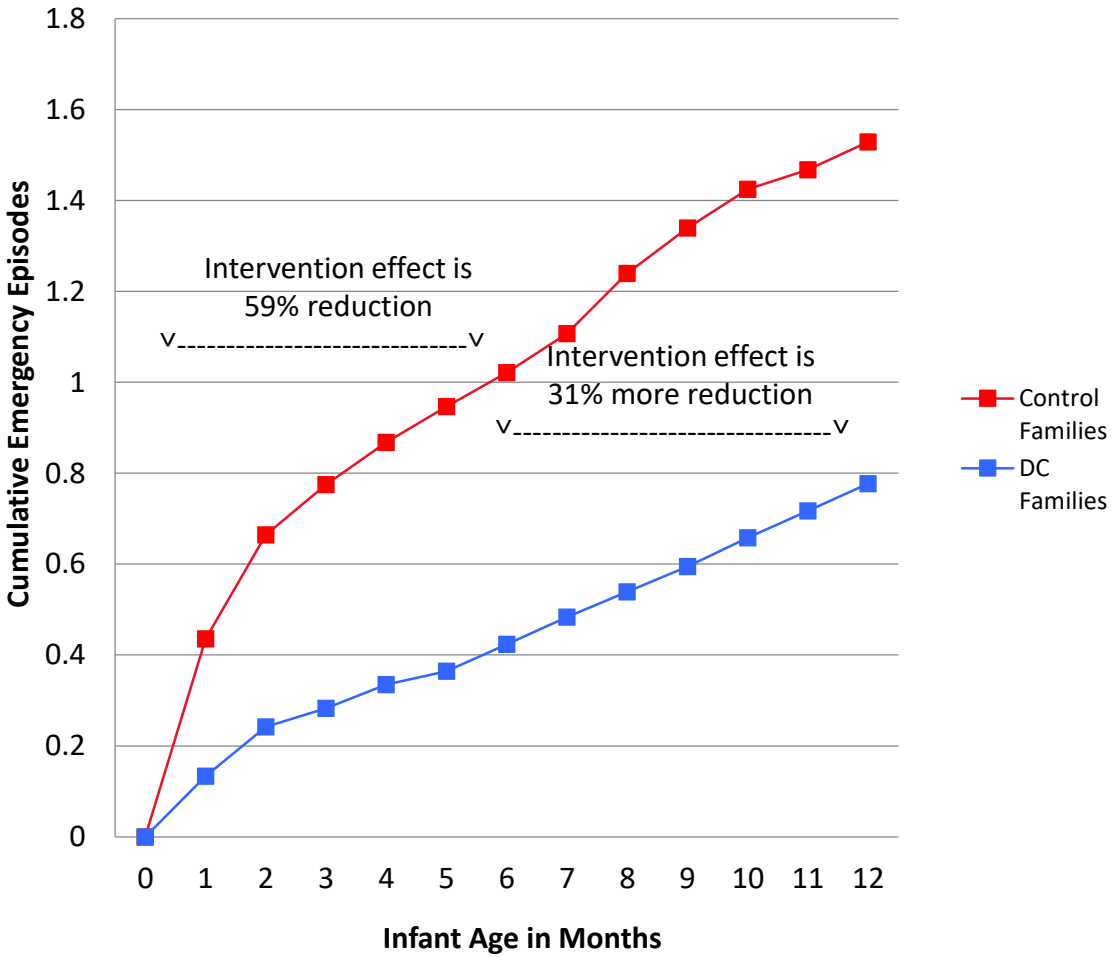
# RCT Evaluation Results:
## Child Hospital Administration Records

**Results at infant age 12 months from aggregate hospital records**

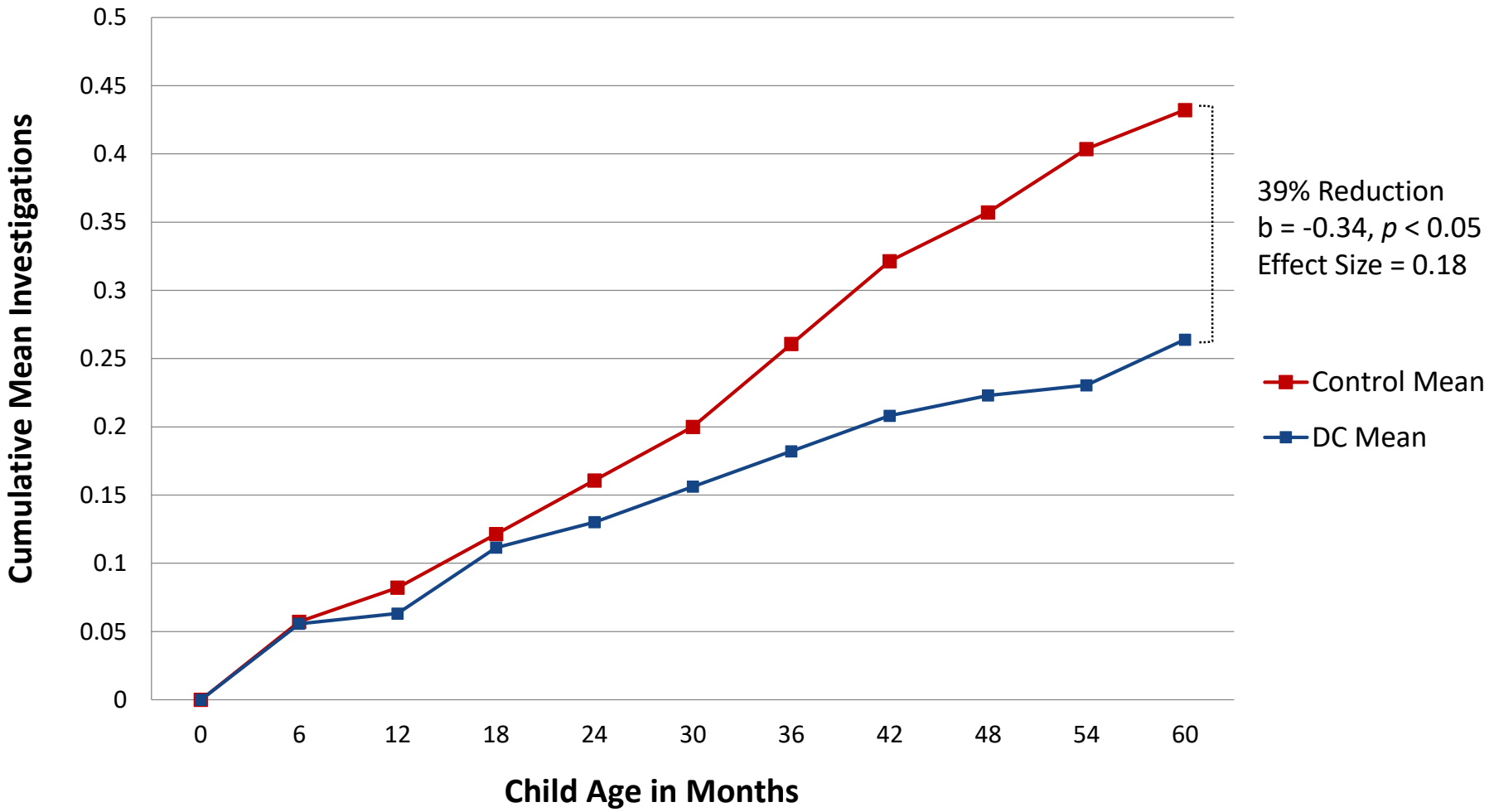
- *50% less total infant emergency medical care (ER visits + overnights in hospital)*

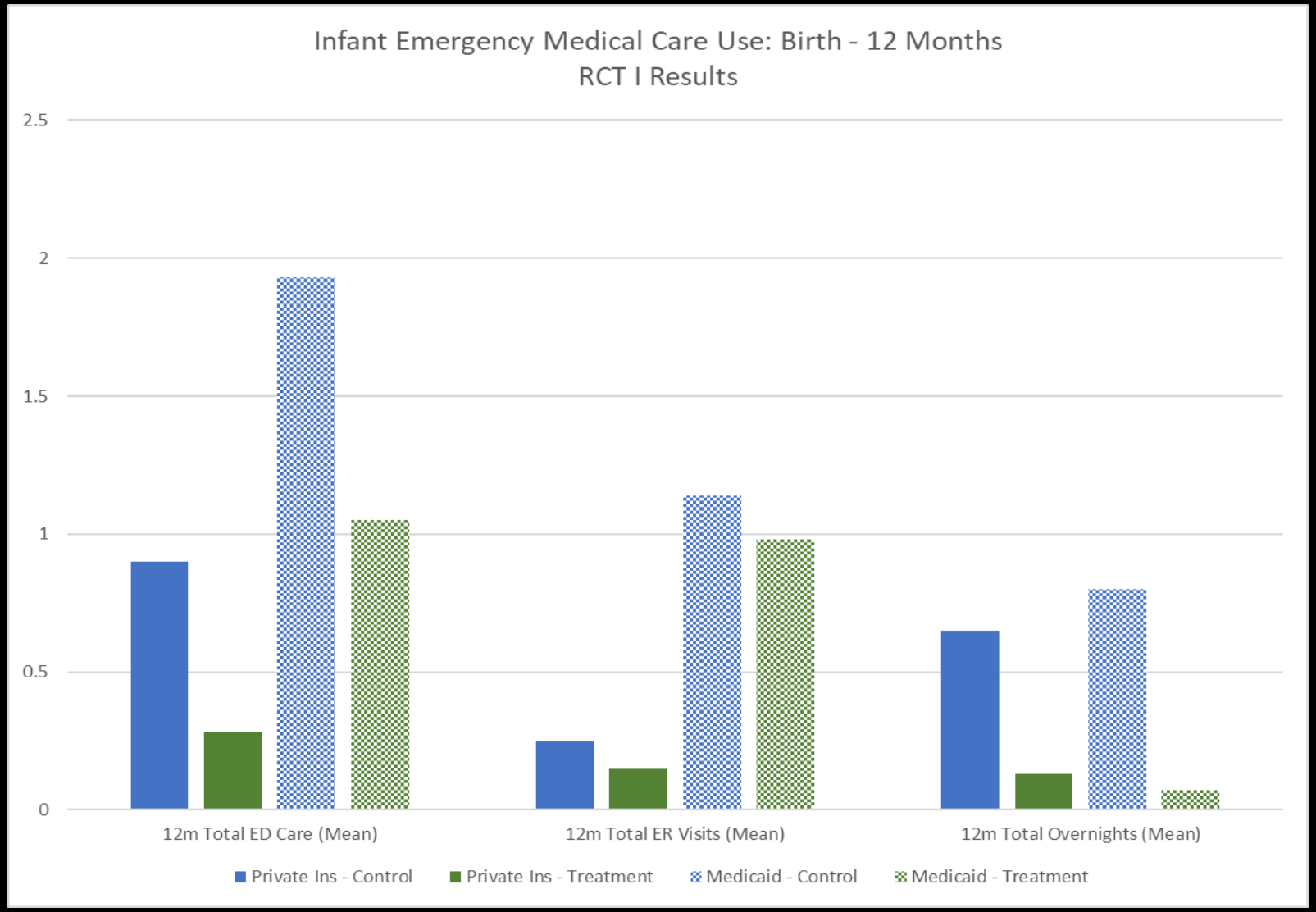
**Results at infant age 24 months from aggregate hospital records**

- *37% less total infant emergency medical care (ER visits + overnights in hospital)*



# RCT Evaluation Results:
# Age 60-month CPS Investigations






RCT had larger impact on ER utilization in the private insurance families. Effect of intervention on private insurance usage is statistical trend.

# Risk / Needs: Results from Durham 2012 – 2016

***40.4% had private insurance*

**All Domains**: 94.6% of families with private insurance had some level of nurse-identified risk)/22.8% had significant risk (at least one Matrix score of '3')

**Health Care Domain** (Mother Health, Infant Health, Health Care Plans):

- 81% of **families** had some level of nurse-identified health risk
  - 14.4% had significant risk (at least one Matrix score of '3')
- 53.6% of **mothers** had some level of nurse-identified health risk
- 6.1% had significant risk (Matrix score of '3')
- 57.6%% of **infants** had some level of nurse-identified health risk
  - 5.3% had significant risk (Matrix score of '3')

**Mother Well-Being Domain** (Mother Mental Health, Substance Use, and Social Support):

- 45% of **mothers** had some level of nurse-identified well-being risk
- 7.1% had significant risk (at least one Matrix score of '3')
- 36.3% of **mothers** had some level of nurse-identified mental health risk
- 5.9% had significant risk (Matrix score of '3')

- **48.1% of mothers did not have a regular health care provider beyond OB/GYN**
- **19.0% of mothers had not scheduled their 6wk postpartum visit at the time of the IHV**

- 8.0% of mothers screened positive for PPD; Matrix score of 3 and/or Edinburgh score > 10)
- **47.6% of mothers had some identified mental health risk/concerns; Matrix score of 2+ and/or Edinburgh score > 5)**

- 5.2% of mothers had inadequate family planning; failure to abstain from sex and/or no contraception plan)

# Other Health & Well-Being Data

# Examples of Health Risks Identified

**MOTHER**

- High and elevated blood pressure
- Lower/bilateral limb swelling
- Post partum pain
- Incision infection
- Breast pain
- Lactation support
- Possible Mastitis
- Tdap and influenza vaccine

**BABY**

- Thrush
- Baby not gaining adequate weight
- Respiratory concerns
- Painful latch
- Umbilical cord care
- Diaper rash
- Eye infection

# Examples of Key Quality Measures Family Connects Can Impact

A nurse home visit within 3 weeks postpartum aligns with ACOG Committee Opinion 736 issued in May of 2018 recommending that all women have contact with their OB/GYN or other obstetric care providers within the first 3 weeks postpartum (during the "fourth trimester"). As many as 40% of women do not attend a postpartum visit at all. Universal home visits assess for postpartum illnesses that require immediate care and link all mothers to the routine follow-up care they need.

This can also be a time to insure the baby's 1 and 2 month well child visits are scheduled and mom understands the importance of compliance the vaccine schedule through childhood and teen years (and checking that mom is current in her vaccinations including influenza).

# Top referrals in Durham for Privately Insured Families

- Literacy (Dolly Parton Imagination Library and Book Babies)
- OB/GYN
- Primary Care
- Pediatrician
- Child Care Resource and Referral
- Mental Health Support
- Post Partum Support program

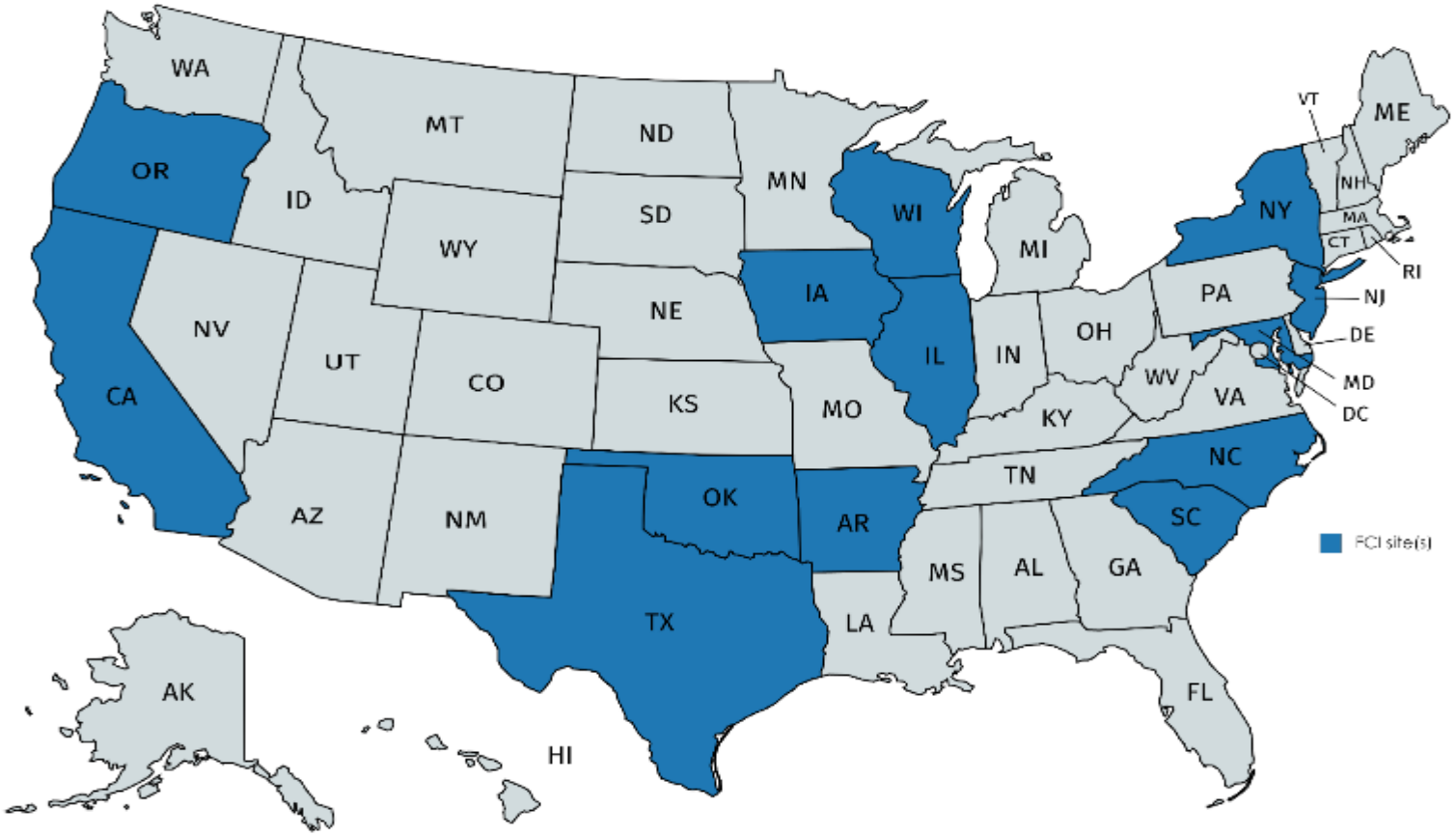

COMMUNITY ADVISORY BOARD
AGENCY FINDER
NURSE CASE CONFERENCE
POST VISIT CALLS
COMMUNITY COLLABORATIVES
COMMUNITY SYSTEMS
DATA REVIEW
COMMUNITY ALIGNMENT

# Examples of Nurse Assessments during Visit

- Physical exam of mother and baby incl. mother bp, weight/measure baby, check C- section suture
- Breastfeeding support
- Perinatal mood disorder screening and referral (with follow-up)
- Post partum care and well baby confirmation (with follow-up)
- Safe sleep/SIDs prevention
- IPV screen with referral
- Drug/tobacco usage screen/referrals
- Health insurance coverage, child care, social services
- Reinforce connection to medical home

# Family Connects

## National Dissemination Sites



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