

North Carolina
Maternal, Infant and Early Childhood
Home Visiting Program
State Plan

Affordable Care Act (ACA) Maternal, Infant and Early Childhood Home Visiting Program

Health Resources and Services Administration (HRSA)

Administration for Families and Children (ACF)

Supplementation Information Request: September 20, 2010

NC Home Visiting Program, NC Department of Health and Human Services; Marshall Tyson;
Phone 919-707-5640; Fax 919-870-4880; Marshall.Tyson@dhhs.nc.gov;
<http://www.ncdhhs.gov/index.htm>

Introduction

The North Carolina (NC) State Plan was completed in accordance with the Affordable Care Act (ACA), which amends the Social Security Act, Title V, Section 511 by creating the Maternal, Infant and Early Childhood Home Visiting Program. The program is designed: (1) to strengthen and improve the programs and activities carried out under Title V; (2) to improve coordination of services for at-risk communities; and (3) to identify and provide comprehensive services to improve outcomes for families who reside in at-risk communities.

Based on findings from the comprehensive state-wide needs assessment, the North Carolina Home Visitation (NCHV) program will implement a continuum of evidence-based home visitation services for families with children ages 0-8 that will support each child's physical, emotional, cognitive and behavioral wellbeing, and will provide children the resilience they need to enter school ready to achieve and on their way to success in life. Outcomes will be achieved by implementing or enhancing evidence-based home visitation (EBHV) programs, replicated with model fidelity, that fill gaps to meet the needs of these families living in high risk communities in the state. The NC Department of Health and Human Services (DHHS) is the applicant agency for this funding opportunity. Within DHHS, project activities will be managed by the Division of Public Health (DPH), which has been appointed by Governor Perdue as the lead state agency.

The proposed project builds on an existing public-private initiative to increase EBHV programs across the state. DPH will implement a two-pronged approach to sustain and expand EBHV programs in NC: it will both expand the state's existing EBHV infrastructure and implement new EBHV initiatives in communities where children are at greatest risk for poor outcomes. DPH will expand the state-level infrastructure needed to effectively support EBHV programs by hiring a project director, NFP State nurse consultant, program assistance, and data manager; it will also link this project with various state-level early childhood initiatives housed within DPH such as the Early Childhood Comprehensive Systems (ECCS) initiative, Project LAUNCH, and the Public Health Leadership Initiative (for the prevention of child maltreatment). DPH also recognizes the need to build community capacity to support EBHV programs; this issue will be addressed in our final plan. NC has already engaged in a three year strategic planning process aimed at expanding EBHV programs in the state. One finding from this process was that communities most in need of EBHV initiatives were frequently those least ready to implement these initiatives with fidelity. To develop an integrated infrastructure across home visiting programs, DPH will collaborate with other organizations to develop a state-wide home visitation referral triage system that aims to match families with appropriate level of services.

NC began the data collection process for the required needs assessment upon release of the enabling federal legislation. Key state level partners also began planning in late March/early April, 2010 to develop a shared vision for this project. An initial statewide needs assessment

meeting was held on June 30, 2010; several subsequent collaborative planning meetings are planned. In general, data capacity appears to be robust; the key data gap currently identified, relating to the quality and capacity of existing programs, will be addressed through a coordinated multi-agency survey of local capacity, which will provide DPH access to data reported from these programs.

DPH is collaborating with state level agencies, local communities, and families in all phases of this funding opportunity: this initial funding application, the needs assessment and the final state plan. This project will be a collaborative process which meets the goals and objectives of multiple state level agencies. The Governor's Early Childhood Advisory Council (Attachment A) will function as the NCHV Program's advisory committee.

Based on the results of the state-wide needs assessment, 30 counties were defined as most at-risk and deemed categorically eligible (Attachment B) for funding based on 13 indicators (Attachment C). The remaining 70 counties were defined as least at-risk (See Attachment E). A Request for Application (RFA) (Attachment D) was released to all 100 counties. Four models were chosen for implementation in North Carolina: Early Head Start-Home Based Option, Healthy Families America, Nurse-Family Partnership and Parents as Teachers. These models were chosen because there already existed in North Carolina, and it was deemed in our best interest to build on what was already being implemented. The 70 counties in the least at-risk category (Attachment E) were given the opportunity to submit an application at the sub-county lever (i.e., census track, township/city, zip code, etc.) to make a compelling case that the proposed sub-geographic area was equally at-risk as those counties in the categorically eligible group.

Twenty-five applications were received, reviewed and scored by at least four reviewers, which included representation from all the key stakeholder agencies. The top eight (8) applicants received a site visit to probe about their readiness to begin the project, ability to implement a model with fidelity, and level of community support. Five applicants were selected for funding:

1. Buncombe County Department of Health – Expansion of current Nurse-Family Partnership in the 28715, 28748, 28803 and 28806 zip codes in Buncombe County (Attachment F).
2. The Center for Child and Family Health – Expansion of Healthy Families America into the Northeast Central Durham zone, a 22 block area in Durham County (Attachment G).
3. Gaston County Health Department – Start up of Nurse-Family Partnership in Gaston County (Attachment H).
4. Northeast NFP Collaborative (Northampton County Health Department) – Start up of Nurse-Family Partnership in Northampton, Halifax, Edgecombe and Hertford Counties (Attachment I).
5. Toe River District Health Department – Expansion of Healthy Families America in Yancey and Mitchell Counties (Attachment J).

NC Home Visiting Program

TABLE OF CONTENTS

Introduction..... 2

Table of Contents 4

Section I: Identification of the State’s Targeted At-Risk Community(ies)..... 6

Section II: State Home Visiting Program Goals and Objectives..... 61

Section III: Selection of Proposed Home Visiting Model(s) and Explanation of How the Model(s) Meets the Needs of the Targeted Community(ies) 67

Section IV: Implementation Plan for Proposed State Home Visiting Program..... 89

Section V: Plan for Meeting Legislatively-Mandated Benchmarks..... 128

Section VI: Plan for Administration of State Home Visiting Program..... 147

Section VII: Plan for Continuous Quality Improvement 181

Section VIII: Technical Assistance Needs 189

Section IX: Reporting Requirements 193

Attachment A: Governor’s Early Childhood Advisory Council 195

Attachment B: Thirty Most At-Risk Counties 200

Attachment C: NC Home Visiting County-Level Indicators 201

Attachment D: Request for Applications (A-230 – NC Home Visiting Program) 202

Attachment E: Seventy Potentially Eligible Counties 257

Attachment F: Buncombe County Department of Health Application 259

Attachment G: Center for Child and Family Health (Durham) Application 323

Attachment H: Gaston County Health Department Application 365

Attachment I: Northeast NFP Collaborative (Northampton, Halifax, Hertford, Edgecombe) Application 428

Attachment J: Toe River District Health Department (Yancey and Mitchell) Application...	460
Attachment K: Letters from Model Developers/Purveyors	496
Attachment L: Memorandum of Concurrence from Key Stakeholders	504
Attachment M: Additional Letters of Support from Other Public and Private Partners	508
Attachment N: Listing of All Applications Received	518
Attachment O: HV Reviewer Score Sheet	520
Attachment P: Selected Model Descriptions and Developer Outcomes	534
Attachment Q: Division of Public Health O-Charts	539
Attachment R: Lauren Louison CV	524
Attachment S: NC Home Visiting Steering Committee	546
Attachment T: HomVEE Outcomes by Model and Domain	548
Attachment U: Key Position Descriptions	556
Attachment V: Revised State Plan Budget	571

Section 1: Identification of the State's Targeted At-Risk Community(ies)

The Updated State Plan should justify the selection of the at-risk community(ies), from among the communities identified as being at risk in the State's initial needs assessment.

North Carolina underwent an RFA process to identify the targeted communities we propose to serve through the MICEHV funding. The complete RFA is attached as Attachment D. The RFA was issued to all 100 counties in the state from the Children and Youth Branch in the Women's and Children's Health Section, Division of Public Health (DPH) seeking local agencies interested in implementing evidence-based home visiting programs with model fidelity in a specified geographic area. The RFA stated that awards will range between \$150,000 and \$500,000 per year, for up to three years. Pending funds availability and successful performance, awards can be extended for two additional years. The number of projects funded depends on the award amounts and total available funding. Funds can be used to hire and train staff, purchase curriculum materials, identify and recruit participants, implement the evidence-based (EB) home visiting models and comply with the models and State reporting requirements. Targeted communities must agree to participate in required training, meet data reporting requirements, and implement the programs with model fidelity to assure expected program outcomes.

To comply with Federal guidance that requires a subset of high-need counties be identified, North Carolina used indicators described in the HRSA Funding Opportunity Announcement (FOA) in combination with other county specific data to identify the 30 counties with the highest need. These 30 counties were considered categorically eligible to respond to the RFA. Groups formed of multiple counties were considered categorically eligible if their combined need indicators would place them within the group of 30 categorically eligible counties.

The remaining 70 counties that do not meet the need criteria were also allowed to apply for this RFA if they could demonstrate a comparable level of need for a specific sub-geographical area in the county (e.g., zip code, township, city, census track, etc.). Because most of the need criteria are not available at a sub-county level, applicants were asked to present a compelling qualitative and quantitative case that they have need levels consistent with the need demonstrated in the 30 identified high need counties. Applications for sub county areas were also required to demonstrate a sufficient number of consumers in their chosen geographical area to support the evidence-based model chosen for implementation.

No more than one application per identified geographical area was accepted. Early childhood providers in each geographical area were required to select one lead applicant organization to apply for this funding, while demonstrating the plan for support and collaboration among all of the pertinent early childhood agencies/providers. All local applications had to include a statement of collaboration signed by the heads of the following local agencies: the Health Department, the Division of Social Services, the Local Management Entity, the Head Start and the Smart Start agency. Additional stakeholder letters of support were considered appropriate. The applicant agency was not required to be one of the agencies mentioned above: local stakeholders were asked to meet and reach consensus on which local agency could best carry out this home visiting initiative successfully.

Communities most in need of EBHV initiatives received technical assistance during the RFA process to assure readiness to implement evidence-based home visiting initiatives with model fidelity.

NC DPH received twenty-four applications. In the first phase of the review process, each application was read by at least four reviewers and scores were assigned to each application. Applications to serve multi-county and sub-county geographical areas were assessed by the data team to determine the level of need that was demonstrated in the application, as compared to the group of 30 categorically eligible counties. Reviewers met and came to consensus in selecting eight applications to consider in the second phase of review.

In the second phase of review, a team including DPH staff with expertise in the proposed program models and consultants from NIRN (National Implementation Research Network) interviewed key partners at the lead agency and throughout the community to further assess the need of the community and the readiness of the agencies to implement their chosen evidence-based model. Following this second phase of review, a selection committee convened and came to consensus on five programs to fund. Counties in each geographic area of the state were represented, as were sub-county and multi-county applicants. Two evidence based models, Nurse Family Partnership and Healthy Families America were selected for implementation.

Targeted Communities Selected:

County/Counties	Lead Agency	Proposed EBHV Model	Initial Budget Proposed
Northeast Central Durham zone (a 22 block area) in Durham County	Child and Parent Support Services doing business as Center for Child and Family Health	Healthy Families America	\$342,752
Buncombe County zip codes 28715, 28748, 28801, 28803, and 28806	Buncombe County Department of Health	Nurse Family Partnership	\$109,018
Gaston County (38 census tracts)	Gaston County Health Department	Nurse Family Partnership	\$410,593
Yancey and Mitchell Counties	Toe River Health District	Healthy Families America	\$263,179
Northampton, Hertford, Halifax and Edgecombe Counties	Northampton County Health Department	Nurse Family Partnership	\$\$437,676

Requested information for each geographical area follows:

Durham

A detailed assessment of needs and existing resources, including:

- *community strengths and risk factors;*
- *characteristics and needs of participants;*

The East Durham Children's Initiative (EDCI) operates within the well-established East Durham neighborhood and consists of a 120-block contiguous area (1.2 square miles) east of downtown Durham. Durham is a mid-size city of 262,715 in a metropolitan area of 1.5 million. The EDCI neighborhood, targeted for this intensive intervention for high risk children and families, is bounded by Alston Avenue on the west, Holloway Street on the north, Miami on the East, and Hoover and 147 on the South. The EDCI population of 7,888 includes 2,491 households, with approximately 2500 children ages 0–18 and another 700 youth ages 18-24. There are approximately 200 births in the EDCI neighborhood each year. The neighborhood is 70% African American, 20% Hispanic, and 10% other ethnic groups. In 2008, the Children's Environmental Health Initiative (CEHI) at Duke conducted a community needs assessment and documented numerous health, safety, and environmental challenges in the EDCI community, leading to community consensus about EDCI needs and focus for supportive services.

Neighborhood geocoding done by the CEHI identified key indicators of distress (e.g., poverty, crime), as well as resources (e.g., early childhood and after-school programs) in the EDCI neighborhood, documenting that it possesses fewer resources and more risk factors — several times higher than in any other neighborhood within Durham, which in turn exceeds state and national levels for similar indicators. Please see the end of section 1 (page 11) for the summary of risk factors in the EDCI neighborhood.

The neighborhood's high rates of need and distress are evident from the level of crime, teen pregnancy, poverty, dropout rate, family violence, and lack of school readiness.

As an additional part of the community needs assessment, EDCI held a community roundtable in October 2009 in which residents identified similar concerns, including low performing schools, lack of high quality childcare, lack of school readiness, and few after-school programs. With the advent of Durham's EDCI focus, there is new optimism and hope that is mirrored by commitment from community leaders. Residents of the neighborhood show strengths such as caring about their community and wanting the best for their children. Commitments from city and county governments, local universities, local non-profits, and the residents themselves offer hope for change in this community, exemplified in the opening of the Holton Clinic and Resource Center in the heart of the EDCI neighborhood. Operated by Duke's Division of Community Health, the clinic provides comprehensive primary care for children and adults with more than 6,000 patient visits in its first year. There is great need but also a local priority and community hope; Healthy Families East Durham, as proposed, would not only assist family stability at this vulnerable time of early childhood but also facilitate access to the services that do exist, such as the Holton Clinic.

Existing home visiting services in the community, currently operating or discontinued since March 23, 2010, including:

- ***the number and types of home visiting programs and initiatives in the community;***
- ***the models that are used by identified home visiting programs;***

There are two home visiting programs currently operating in Durham: Healthy Families Durham and an Early Head Start home-based program.

Existing mechanisms for screening, identifying, and referring families and children to home visiting programs in the community (e.g., centralized intake procedures at the local or State level);

At present, there are several mechanisms for referring families to the home visiting program. *Durham Connects*, a program run collaboratively by Durham County Health Department, the Center for Child and Family Policy, and the Center for Child and Family Health, provides screening and referrals to the existing *Healthy Families Durham* program in Durham, including the EDCI neighborhood. *Durham Connects* is a universal, nurse home visiting program designed to address maternal and infant needs immediately following discharge from the birthing hospital in order to promote positive early development, connect families to needed resources, and prevent negative outcomes, such as child abuse and neglect. *Durham Connects* provides up to three nurse home visits following birth and continuing to approximately ten weeks of age. In the EDCI neighborhood, *Durham Connects* provides: universal, in-home nurse visits for families; infant and maternal health assessment; screening for domestic violence, substance abuse, and maternal depression and an opportunity to discuss issues and concerns centering on a new baby (e.g., breastfeeding, childcare, social supports, financial needs, parenting readiness); and connection to high intensity home-based interventions, such as *Healthy Families Durham*.

Durham Connects developed and is using an innovative assessment procedure that has now been studied for fidelity and reliability among nurse home visitors. The *Family Status Matrix* (FSM; O'Donnell et al., 2011) forms the basis for family assessment and referral to the Healthy Families/Parents as Teachers program. It is a high inference tool by which the nurse home visitor engages with the family in an informal conversational manner that addresses 4 domains and 12 risk factors for which families may or may not have needs. The 4 domains address health care for infant and family, child care, household needs and safety, and the well being of the parent(s). At the completion of the home visit, the nurse rates the family status in each of the 12 factors as (1) no concerns or needs, (2) concerns that were addressed during the home visit, (3) needs that require linkages to outside resources (such as the proposed program), and (4) family emergencies that require immediate attention. The FSM has been studied for adherence to the assessment protocol and inter-rater reliability in scoring and has been confirmed to be a consumer acceptable as well as a scientifically robust tool for identifying family needs.

Two secondary methods of screening and identifying families are active. Baby Love (Pregnancy Care Managers) completes an assessment on pregnant mothers who have Medicaid; the prenatal interview identifies health and psychosocial risk factors, such as substance abuse, mental health problems, and domestic violence. Those families identified with risk factors are referred to home

visiting services for more intensive support and education. Social workers at both Duke Primary Children's Care and Lincoln Community Health Center screen families at well-child appointments following the birth of the baby. If they identify risk factors and ascertain that the family has not previously been referred for home visiting, they make referrals. This multi method referral system assures that high risk families, across socioeconomic groups, are likely to be identified and referred to the home visiting program proposed here. The intense focus on the EDCI neighbor is facilitated since many of these families are followed at Lincoln Community Health Center and Duke High Risk OB/GYN, where they are seen by the Baby Love team and also receive *Durham Connects* home visits (which has an approximate 69% penetration rate of actual home visits for all births).

Referral resources currently available and needed in the future to support families residing in the community(ies);

The EDCI project in Durham began as a focused community effort in 120 blocks to address this highest risk area. Based on the Harlem Children's Zone model, the EDCI project has created a vision of a "pipeline of services," beginning with intense services for the 0-5 population. The East Durham Children's Initiative strives to work with families to prepare young children for kindergarten and eventual academic success. EDCI will achieve this milestone through several interventions designed to improve child-rearing strategies, stabilize families, and promote understanding of baby and toddler development. Children will experience improved well being and school preparedness as a result of efforts to support parents, both English and Spanish speaking, through home visiting, parent education, and linkage to community resources. Early home visiting, such as the one proposed, focused on child development, the relationships between parents and children, and prevention of child neglect and abuse is a universally accepted strategy for meeting these goals from the child's birth onward.

Though there are two home visiting programs in Durham, capacity is limited and, at present, cannot address the needs in the EDCI neighborhood. *Healthy Families Durham's* present funding sources have limited services to first-time parents only, and the program is already at capacity; so few services have been provided to the most vulnerable families who live in the targeted East Durham neighborhood. The Early Head Start home-based program is completely full at present, has very little client turnover, and has a waiting list. In order to increase capacity in the EDCI neighborhood, we are proposing to expand *Healthy Families Durham* referred to as *Healthy Families East Durham*, to serve an additional 45 families and not just first-time parents in this high need target area. The expansion in this area has the potential for even greater impact because it is embedded in an array of services. This would enlarge the continuum of care or "pipeline" of services offered by the existing EDCI project, increase the likelihood of saturating the area with home visiting services, and help meet the goal of families engaging in services from "cradle until graduation."

Healthy Families Durham is uniquely positioned to expand into the EDCI neighborhood, with fifteen years of experience providing home visiting in Durham. A credentialed Healthy Families program, this program uses the evidence-based Parents as Teachers curriculum to teach parents child development, health, and safety information. Case management is provided to stabilize the family, and there are periodic child developmental screenings for developmental delay using the

Ages and Stages Questionnaire (Bricker and Squires, Brooks Publishing Company, 1999). To meet the requirements of funders, benchmark data is carefully collected; and a comprehensive database has been created to store and analyze data. For 15 years, *Healthy Families Durham* has been audited by the Durham Partnership for Children and received excellent audit reports. In other words, the existing program has the experience required to collect, maintain, and analyze outcome data as required by the current request for proposals.

Durham Connects, as noted above, is a universal newborn screening program currently available to identify families in the EDCI neighborhood in need of home visiting services. Presently, there are two nurses assigned to this geographic area, one English-speaking and one Spanish-speaking. Every family who gives birth is offered a home visit to provide a physical examination for the mother and the baby and a psychosocial screen to determine what referrals would be helpful to the family (see description of the *Family Status Matrix* above). As of April, 2011, the completion rate for these visits was 69%. Funded by Duke Endowment and Durham Public Health Department, these initial nurse visits are an excellent way to assure the physical health of the baby for the short-term and to connect families to community services that will support them for the long-term, such as *Healthy Families East Durham*.

The Incredible Years (IY) parenting groups are another part of the continuum of services in the EDCI neighborhood. Welcome Baby, a Durham County cooperative extension program, will continue to provide IY Toddler and IY Basic (for parents of 2-5 year olds). These evidence-based groups provide the chance for parent interaction and peer learning and have already proven to be popular and effective in the Durham community. The future of IY Baby is uncertain at present, as there are preliminary data indicating that families with young infants may benefit more from home visiting than from groups.

The expansion of *Healthy Families Durham* in the EDCI neighborhood will offer not only much deeper saturation of home visiting but also heightened opportunities for linkages to other resources that are available in the broader Durham community. Many times, young parents are so overwhelmed by stress that they do not seek out the services that could actually lower their stress, so Family Support Workers from the *Healthy Families East Durham* program can provide the link between the family and some of the programs we discuss here, among others. Services of the Durham Public Health Department are invaluable to parents in this community: nutrition services, family planning, Care Coordination for Children, immunization clinics, and pregnancy coordination. Mental health services provide support for families, both through Durham Access (for emergency care) and the CCFH, which provides many evidence-based early childhood mental health models. The Department of Social Services stabilizes families by offering Work First, food stamps, and Medicaid. Parents with substance abuse difficulties find healing at Duke Family Care Program (FCP), a program specifically designed for women with children; FCP has been well accepted in Durham for over 20 years as a program young mothers trust and in which they persist in their recovery. Parents with concerns about domestic violence receive support from Durham Crisis Response Center. *Healthy Families Durham* has long term and positive relationships with all of these community services.

A plan for coordination among existing programs and resources in those communities (including how the program will address existing service gaps);

Well respected in the Durham community and well connected to other agencies, the Center for Child and Family Health (CCFH) is ideally situated to coordinate this expansion of *Healthy Families Durham* into the EDCI neighborhood. With expertise in the areas of maltreatment and trauma, CCFH offers three evidence-based early childhood mental health interventions that will benefit clients who need support beyond the traditional home visiting service. For parents who are having difficulty managing their child's behavior, Parent Child Interaction Therapy seeks to improve the parent-child relationship through changing parent-child interaction patterns and teaching skills to establish a positive relationship. Families who have experienced domestic violence or other trauma, will be referred to Child Parent Psychotherapy, a relationship based treatment for parents of young children that helps restore normal developmental functioning by focusing on restoring the attachment relationships that are negatively affected by violence and establishing a sense of safety and trust within the parent child relationship. Finally, families that are experiencing substance abuse issues or attachment difficulties would benefit from the Attachment and Biobehavioral Catch-up Initiative that focuses on improving children's emotional development by building parental empathy and caregiving skills (as well as facilitated referrals to Durham's successful Family Care Program). Parents who need mental health therapy will be referred to the Durham Center for assessment, triage, and referral to a community-based adult mental health provider.

Parents with substance abuse problems can receive treatment at Duke Family Care, a partner agency that focuses on substance abuse in parents of young children. Durham Crisis Response Center, a domestic violence prevention and treatment center, already works with many parents from *Healthy Families Durham*. Services are available in Spanish and English, and a telephone "hotline" is available twenty-four hours a day.

Healthy Families Durham and Care Coordination for Children (previously Child Service Coordination) already have a collaborative agreement wherein the directors share names of new clients and make decisions about which program is the best fit, thus reducing duplication of services. The Maternity Care Coordinators and nutritionists at Durham County Health Department work frequently with clients of *Healthy Families Durham*, and referrals go back and forth between the programs.

The Incredible Years parenting program offers a group-based option for parents who are having difficulty managing their child's behavior. These parenting groups are designed to promote emotional and social competence and to prevent, reduce, and treat behavior problems in young children. Provided collaboratively by CCFH and Welcome Baby, this successful intervention has been well received by Durham families and is showing impressive evaluation results. Welcome Baby also provides a "giving closet" where families can find free baby clothing, car seats, and supplies.

Families will be referred to *Early Head Start* for high-quality center-based care, though their waiting list is extremely long. At this time, it is very difficult to get daycare subsidies unless the family is involved in Work First at Durham Department of Social Services. Family Support

Workers will refer parents to Work First, even attending the registration appointment if the family feels more comfortable. *Healthy Families Durham* also works closely with the Prevention Worker at DSS in order to help families meet basic needs such as rent, food, and safety.

The program is also connected to Duke Pediatrics and Lincoln Community Health Center. Social workers at both locations work closely with Family Support Workers to assure that all babies are up-to-date in their immunizations and well-child checkups. The Healthy Families model requires that immunization records are checked on a regular basis and that well-child visits are carefully tracked.

Healthy Families Durham has a collaborative relationship with the Inter-Faith Food Shuttle. Twice a month, boxes of fruit are delivered to Healthy Families and then distributed to the families during home visits. Every Wednesday, Family Support Workers go by the Durham Farmer's Market at the end of the day to gather vegetables that the farmers are willing to donate to families. Through this project, healthy food that would have been wasted is distributed to low-income parents and children.

Letters with specific indications of support and ideas for further collaboration were submitted from:

Ellen Reckhow, County Commissioner
Sue Guptill, Director of Nursing at Durham County Health Department
Laura Benson, ED of Durham's Partnership for Children
Robert Murphy, ED of the Center for Child and Family Health
Ken Dodge, ED of the Center for Child and Family Policy
David Reese, ED of the EDCI
Angelica Oberleithner, Asst. Director of Durham's Partnership for Children
Jeanine Sato, Coordinator of *Durham Connects*
Karen O'Donnell, Director of Prevention, Center for Child and Family Health
Robin Roberts, NC Parents as Teachers
Pat Harris, Welcome Baby
Barker French, Fundraiser EDCI
Helen Wright, Director of CC4C, Durham Co. Health Department
Toby McCoy, Director of Duke Family Care (addiction care)
Melissa Mishoe, Director of Early Head Start
Sheryl Poinciano, Children's Development Services Agency
Nancy Kent, Children's Services, Mental Health
Jeannie Ownbey, Director of Healthy Families Catawba County

Healthy Families Durham is a credentialed program through Healthy Families America, and all home visitors are certified yearly by the national Parents as Teachers office. So, there is ongoing contact with the national offices of both programs.

We have discussed support for implementation with Robin Roberts, state coordinator of Parents as Teachers. Due to changes in the Parents as Teachers curriculum, all current home visitors will register for a three day additional PAT training in August, 2011. Newly hired home visitors would need to attend the weeklong foundational PAT training. Support for implementation has

also been discussed with the Healthy Families North Carolina workgroup, a network of NC Healthy Families programs; and plans have been made to share training expenses, support one another in the re-credentialing process, and conduct regular conference calls related to quality assurance issues.

Leaders at the Center for Child and Family Health are committed to providing supervision, human resource support, infrastructure support, IT support, and training for the expansion of *Healthy Families Durham* into the EDCI neighborhood. Previous research studies conducted by the Center for Child and Family Health have required the creation of agreements around data collection issues with Durham Department of Social Services and Duke Community Health. These agreements will serve as the springboard for partnerships necessary to gather the benchmark data required for this grant.

Gaston

A detailed assessment of needs and existing resources, including:

- ***community strengths and risk factors;***
- ***characteristics and needs of participants;***

The Gaston County Health Department (GCHD) provides low-income women in our community with high- and low-risk obstetric care and delivery services; in 2010 we delivered 42% of babies (1,129) born at Gaston Memorial Hospital, the sole hospital in Gaston County. In spite of our delivery of high-quality prenatal care, education, and social support to this population, Gaston County consistently exceeds the State Infant Mortality Rate and has not approached the Infant Mortality Rate of 6.3, cited in Healthy North Carolina Objectives for 2020 (Table 1).

Table 1: Infant Mortality Rate, Gaston County & NC

Area	2005	2006	2007	2008	2009
Gaston County	9.8	11.8	11.2	9.6	10.3
North Carolina	8.8	8.1	8.5	8.2	7.9

Source: NC State Center for Health Statistics

Research suggests this is due to social determinants of health – especially poverty and education – and their influence on housing, nutrition, physical activity, stress, and receipt of medical care among low income women (*Exploring the Social Determinants of Health*, March 2011, Robert Wood Johnson Foundation). These effects of poverty are most acutely felt by Gaston’s African American and Latino populations, and are reflected in disparities when compared to our White population (Table 2).

Table 2. Birth Outcomes by Race and Ethnicity, Gaston County, 2009

Population	Pre-term Births	Low Birth Weight Babies	Infant Mortality Rate
White	9.5%	7.9%	6.1
African-American	14.2%	15.2%	25.6 for all minorities
Hispanic	11.5%	8.3%	

Source: NC State Center for Health Statistics

Other measures show Gaston County had poorer results in five of seven categories of maternal and child health when compared to NC ... with an exceptional difference for “Births to women with late or no prenatal care” (Table 3).

Measure	Gaston	NC	Year
Births to women <21	20.3%	16.5%	2009
Births to women w/late or no prenatal care	44.7%	15.4%	2009
Teen Birth Rate (15-19)	55.8	45.7	2008
Infant Mortality Rate	10.1	8.4	2008
Total Deaths Age 1-4	8.2	9.6	2008
Medicaid Funded Births	57.6%	51.7%	2008
Incidence of Child Abuse and Neglect	0.3	0.6	2006 - 2007
Mothers who Smoked while Pregnant	17.8%	10.2%	2009
Out-of-Wedlock Births	49.5%	42.3%	2009

Source: NC State Center for Health Statistics

Note: All rates are per 1,000 in the defined population.

Influences of poverty can also impede healthy child development by contributing to: family violence; insufficient nurturing and parenting; drug, alcohol, and tobacco abuse; crime; teen parents quitting school; and, the children of teen parents becoming teen parents.

Against this backdrop, Prevent Child Abuse NC authored *North Carolina Nurse-Family Partnership Sustainability and Expansion Resource Manual* (April 2010) and found Gaston County was the second highest “single county service area with high needs” for the Nurse-Family Partnership (NFP), ranking Gaston County 16th of the 22 highest-risk counties in NC, with four of 10 maternal and child risk factors and 600 first-time births.

GCHD read this report, and in July 2010 began working with Prevent Child Abuse NC. In spring 2011, we submitted an *NFP Implementation Plan* to the NFP National Service Office, which they approved in April 2011 thereby qualifying GCHD to conduct the program.

In pursuing NFP we seek to enhance our skills for influencing the social determinants that most affect the health of low-income and first-time mothers and their children. Specifically, we intend to help these mothers have healthy births, return to school, achieve financial self-sufficiency through meaningful employment, and raise healthy, capable, secure, and academically capable children. We are in a pivotal position for this task as GCHD is Gaston County’s largest obstetric practice (Table 4) and serves a population that is overwhelmingly composed of low-income women.

Measure	White	Black	Hispanic	Total
Total clients	1,719	653	53	2,440

Teenagers	69%	29%	2%	479
Medicaid Recipients	69%	30%	1%	1,889
Uninsured	79%	14%	6%	419

Source: Gaston County Health Department

Community Strengths and Risk Factors

Strengths

- Gaston County residents care about their community. Through Hope4Gaston, a program of local congregations, volunteers have repaired and renovated 105 homes in poor neighborhoods that low-income owners could not afford to maintain. And, through Run for the Money, county residents donate funds to local charities which are matched by the Gaston Community Foundation; this program has given more than \$9.1 million to local organizations over nine years.
- County residents place high priority on improving the health of newborns, infants and children.
They most often see these issues as related to teen pregnancy which, in the last Community Health Assessment (2008) was identified as the county's second or third highest rated health problem by all respondent groups: community leaders, community members, residents of neighborhoods with poor health and low income, and high school juniors.
- Health and health-related organizations collaborate under the auspices of the Gaston Community Healthcare Commission, our Healthy Carolinian Task Force. Among its successful programs are the: Adolescent Sexual Health Project Group, which brought the Parents Matter! program to Gaston County; the Fitness and Nutrition Council, which is making policy and environmental changes to promote physical activity and healthy eating through Project ACHIEVE; and, the Workplace Wellness Project Group, is successfully helping local businesses and industries adopt health-enhancing programs for employees.
- Several agencies conduct our Quality of Life / Community Health Assessment Survey. For our last two surveys (2004 and 2008) GCHD and the Gaston Community Healthcare Commission conducted the survey with the United Way of Gaston County, the Gaston County Schools, Gaston College, Pathways (mental health/developmental disabilities/substance abuse), and the Cooperative Extension. This joint approach facilitates greater response rates and better use of survey results.
- The Gaston County Cooperative Extension conducts Parents As Teachers, a Home Visiting Program that serves a caseload of 20 Spanish-speaking families; in its first 12 months of implementation (April 2010 – April 2011) it served 24 families with 27 children, ages birth to 3.

Risk Factors

- Gaston County has a large population of long-term unemployed and underemployed residents. With the demise of the textile industry, the Gaston County Economic Development Commission estimates more than 20,000 adults lost jobs and, with limited literacy many are long-term unemployed and uninsured.

- During our nation's recent recession, Gaston County's unemployment rate reached 14.8% (February 2010) and recently dropped to 11.1% (March 2011).
- The county's low rates of high school and college graduates are a risk factor for low-wages, poor birth outcomes, and poor lifelong health.
- Gaston also has a substantial number of higher-order births among teenage mothers. In 2009, 25.3% of all teen births were second, third, or fourth births in this population.

Characteristics and Needs of Participants:

- Come from families that have been poor for generations;
- Are unwed mothers, with many born to unwed mothers;
- Have not finished high school;
- Are unemployed and do not have adequate employment skills;
- Live in unsafe and inadequately heated and cooled homes;
- Live in poor neighborhoods with high crime rates;
- Live in neighborhoods where teen births and out-of-wedlock births are the norm;
- Live in neighborhoods with few grocery stores and fewer that sell fresh fruits and vegetables;
- Do not enter prenatal care early in pregnancy and do not keep all prenatal care appointments;
- Continue high-risk behaviors during pregnancy: smoking cigarettes, breathing second-hand smoke, consuming alcohol, abusing illicit and prescription drugs; and having multiple sex partners;
- Have experienced or observed domestic violence;
- Are emotionally unprepared and inadequately skilled to raise children;
- Receive inadequate family support for healthy pregnancies and for raising their children;
- Depend on family and friends for basic resources; and,
- Have not seen other parents: use age-appropriate discipline and nurturing; promote healthy play; read regularly to their infants and toddlers; and, make their homes child-safe and secure.

Existing home visiting services in the community, currently operating or discontinued since March 23, 2010, including

- ***the number and types of home visiting programs and initiatives in the community;***
- ***the models that are used by identified home visiting programs;***

There is one existing home visiting program, the Post-partum Newborn Home Visiting program which makes home visits to assess the health of mothers and babies and provide education on newborn care, umbilical cord care, breastfeeding, post-partum depression, Sudden Infant Death Syndrome, jaundice, and home safety. These visits take place in the two weeks after babies are born to Medicaid-enrolled mothers. As needed, the home visiting nurse refers mothers and babies to health and medical services in order to reduce the risk of infant death.

Existing mechanisms for screening, identifying, and referring families and children to home visiting programs in the community (e.g., centralized intake procedures at the local or State level)

There are currently no mechanisms for collaboratively screening, identifying, and referring clients among the six programs that serve low-income mothers in Gaston County: (1) Parents As Teachers; (2) Care Coordination Program for Children, formerly Child Service Coordination; (3) Pregnancy Medical Home Program, formerly Maternity Care Coordination; (4) Healthy Beginnings; (5) Post-partum Newborn Home Visiting; and, (5) Adolescent Parenting Program. Each program uses its own networks to find, screen, and enroll clients.

On January 27, 2011 staff from these programs met with two NFP Consultants to discuss NFP. After reviewing the number of low-income pregnant women in Gaston County, each acknowledged there are a sufficient number of women to sustain NFP and each of these programs. The staff endorsed NFP, and agreed for it to have “first pick” to enroll clients, given its strict enrollment criteria. Several weeks later, when Community Health Partners (CHP) was given the role of managing Gaston’s Pregnancy Medical Home Program and the Care Coordination Program for Children, it endorsed this arrangement.

Both programs will identify, track, and provide care management to Medicaid-enrolled pregnant women and their at-risk children. The Pregnancy Medical Home Program will defer its care management activities to NFP for the women in its care and the Care Coordination Program for Children will do the same for at-risk children. At least once every three months, NFP Nurse Home Visitors will review their clients’ status with a CHP Care Manager and, as needed, will request their help and assistance.

Each of the cited agencies will sign a Memorandum of Understanding confirming its commitment to a centralized referral system. This Home Visiting Committee will meet weekly to place pregnant low-income women – as identified by GCHD and Community Health Partners – in programs that will best serve their needs and will help place women in other programs if they quit NFP. After six months we expect the members would decide if they can conduct their business by phone and email.

GCHD will directly recruit pregnant women for NFP in its Maternity Clinics and by securing referrals from private physicians through Community Health Partners and its Pregnancy Medical Home Program. GCHD will also encourage community groups to encourage potentially eligible women to contact our NFP Supervisor to learn about the program.

Referral resources currently available and needed in the future to support families residing in the community(ies);

Gaston County has a vibrant health and medical care systems, a strong medical safety net, and a successful and expanding care management system:

- CaroMont Health is Gaston County’s independent not-for-profit health care system. Its resources include the 435-bed Gaston Memorial Hospital and the CaroMont Medical Group,

a network of 44 primary and specialty physician practices. CaroMont actively works with GCHD by: delivering our patients' babies in their state-of-the-art Birth Place; accepting GCHD specialty referrals for prenatal conditions; and, by partnering with us to improve community health, as CaroMont is an Accountable Care Organization whose Medicare and Medicaid reimbursements will be based on improved community health status.

- Gaston Family Health Services (GFHS), our county's Federally Qualified Community Health Center, was established in 1992 by Gaston Memorial Hospital and GCHD to serve publicly insured, under-insured, and uninsured county residents. Its largest medical and dental practices are co-located at the main GCHD office. GCHD and GFHS also built and co-operate a primary care clinic – where our staffs are integrated – in Highland, our county's largest minority neighborhood; both organizations will also share a clinic in Cherryville; and, GCHD operates Summit Midwifery & High-Risk Obstetrics in a facility built by GFHS on county-owned land near Gaston Memorial Hospital.
- Community Health Partners (CHP) is the Medicaid Managed Care Program that serves Gaston and Lincoln Counties. Created in 1998, CHP's care managers have helped the parents of Medicaid-enrolled children secure well-baby exams and referrals, use the Emergency Department correctly, and to adopt self-care practices. This nonprofit is based at the main GCHD facility, which will enable both organizations to work closely on the North Carolina's Pregnancy Medical Home Program and Care Coordination for Children Program, which will serve patients seen at GCHD and private medical practices.
- Pregnancy Medical Home Program: Formerly called Maternity Care Coordination, PMH will address the needs of a monthly caseload of some 400 at-risk, low-income, pregnant women – from pregnancy to two months postpartum – by: assigning high-risk patients to medical homes / practices; providing risk screening; conducting health assessments; developing patient care plans; providing care management to address high risk behaviors, poor health status, chronic medical conditions, medication issues, and access to services; and, by referring patients to care.
- Care Coordination Program for Children: Formerly called Child Service Coordination, CC4C will work with a monthly caseload of 1,800 at-risk children – ages birth to five – to: promote visits with primary care physicians within one month of discharge from neonatal intensive care; reduce their hospital admissions and emergency department visits; enroll children with special needs in medical homes; assess and track their ongoing health status, life progression skills, and development; provide care planning, parent education, and service coordination; and, refer children for developmental evaluations and early intervention services.
- Gaston County Health Department provides high- and low-risk obstetric care and delivery services to Medicaid-enrolled and uninsured women at three locations: its main clinic (Hudson Blvd.) which serves a largely low-income area of Gastonia; the Highland Health Center, which we built in a minority neighborhood with no health care resources; and Summit Place, a medical office park across the street from Gaston Memorial Hospital. GCHD's two FTE obstetricians, six Nurse Midwives, and two Midlevel providers deliver maternity services at each site. GCHD also has a WIC Program and conducts education programs to promote healthy birth outcomes, healthy child development, and prevent teen pregnancy.

- CenteringPregnancy integrates prenatal visits and group education for low-income women. Through this evidence-based program, participants receive science-based guidance to help them learn and reinforce healthy prenatal practices.
- The Teen Maternity Program works to increase the number of teens who use contraception properly and secure timely prenatal care. A Health Educator builds relationships with teens, answers their questions, and helps them work through barriers to care. GCHD will soon renovate its Maternity Clinic on Hudson Blvd. to accommodate this program.
- Through Healthy Beginnings a GCHD social worker meets monthly with 40 high-risk minority women, ages 13 to 22, during the final five months of pregnancy up to one month post delivery. To improve birth outcomes and child health, she provides education and support for: breastfeeding, safe sleeping, the use of folic acid, reproductive life planning, healthy maternal weight, good nutrition and fitness, eliminating tobacco use and exposure, and to ensure mothers' and babies' medical visits and immunizations are up-to-date.
- The Post-partum Newborn Home Visiting makes home visits to assess the health of mothers and babies and provide education on newborn care, umbilical cord care, breastfeeding, post-partum depression, Sudden Infant Death Syndrome, jaundice, and home safety. These visits take place in the two weeks after babies are born to Medicaid-enrolled mothers. As needed, the home visiting nurse refers mothers and babies to health and medical services in order to reduce the risk of infant death.
- Through Clean Air Tobacco Out (CATO) all GCHD nurses use the 5-A's with pregnant women – they Ask, Advise, Assess, Assist, Arrange – to help them quit tobacco products.
- Parents Matter! is an evidence-based CDC curriculum that teaches parents, with children in 5th and 6th grades, how to share their values about sex with their sons and daughters. Our goal is to prevent teen pregnancy and STIs among teens. We offer the program in English and Spanish.
- Teen Outreach Program provides two after-school sessions a week for at-risk middle school students to help them avoid teen pregnancy by setting life goals and developing life skills.
- Making Proud Choices, an evidence-based curriculum, encourages teens to be abstinent or to use condoms if they have sex.
- Through monthly group sessions the Adolescent Pregnancy Prevention Program helps teens prevent second pregnancies, child abuse and neglect, and to graduate from high school.
- The Gaston Healthy Baby Program serves teens and women in their 20's by providing education on abstinence, condom use, and healthy sexual behaviors before, during, and after conception.
- Gaston Youth Connected is a program of the Adolescent Pregnancy Prevention Coalition of North Carolina supported with a \$5.8 million, five-year CDC grant to reduce the incidence of teen pregnancy in Gaston County. GCHD is a core program partner and an advisor to its Youth Advisory Council, and will manage the council after the grant expires in 2015.
- Pathways is Gaston County's Local Management Entity which manages contractors who deliver government-funded mental health, substance abuse, and developmental disabilities services for county residents.

Our county's human service and educational sectors also work to prevent disease and promote health:

- Gaston County Department of Social Services manages WorkFirst, which prepares recipients of government assistance to become employed and achieve self-sufficiency; it also provides the Child Protective Services Program, Food Stamps, and Medicaid enrollment.
- The Gaston County Schools refer pregnant teens to GCHD for prenatal care.
- The Partnership for Children of Lincoln and Gaston Counties, our Smart Start agency, works with childcare centers and family care homes that serve children up to age five. Its programs educate employees on food and physical safety, promote policies to enhance child health, prepare staffs to conduct fitness / nutrition programs, awards child care subsidies, and conducts parenting education.
- The Shelter of Gaston County provides secure housing, counseling, and recovery programs for victims of domestic violence. It is a program of the Gaston County Department of Social Services.
- Gaston Together is a nonprofit that convenes county residents to solve community problems. Its programs include the: Gaston Community Healthcare Commission, our Healthy Carolinian Task Force; the Gaston County Clergy & Citizens Coalition; and, Keeping Families Intact, which builds coalitions of community groups to help families in need.
- The Alliance for Children and Youth conducts Communities In Schools, Gang Outreach, Teen Court, and Juvenile Restitution programs.
- Gaston College offers GED programs to help teens and adults earn high school equivalency degrees.
- Gastonia Housing Authority provides subsidized housing for low-income families.
- Gaston County ACCESS provides Medicaid and Medicare recipients with no-cost transportation to health care appointments.

A plan for coordination among existing programs and resources in those communities (including how the program will address existing service gaps)

The Implementation Plan GCHD submitted to the NFP National Service Office included letters from health, medical, human service, educational, and youth-serving agencies stating how they would work with our NFP; these letters and a new letter are attached. And, as previously described, the Parents As Teachers program will collaborate with GCHD to fully integrate this home visiting program with NFP and our county's other maternal and child service programs.

GCHD will expand its Healthy Beginnings Advisory Board to become the Healthy Beginnings / NFP Community Advisory Board, as both programs address the needs of low-income mothers and their children. We will build on the experience of the Healthy Beginnings volunteers by adding agencies that have agreed to serve as NFP partners.

With plans for a centralized intake/referral system by organizations that offer maternity and early childhood programs, the articulated support of health, medical, and human service agencies, and a joint Healthy Beginnings / NFP Community Advisory Board, GCHD has the capacity to successfully develop an integrated early childhood system.

Agreement with national model:

GCHD began working with Prevent Child Abuse NC in July 2010. In spring 2011, we submitted an *NFP Implementation Plan* to the NFP National Service Office, which they approved in April 2011 thereby qualifying GCHD to conduct the program.

Northampton, Halifax, Hertford and Edgecombe

A detailed assessment of needs and existing resources, including:

- ***community strengths and risk factors;***
- ***characteristics and needs of participants***

It has long been apparent that adults, children and youth in eastern North Carolina lack the opportunities and resources available in other regions of the state and across the country. In response to this need, Action for Children North Carolina, through its initiative Communities for a Better Tomorrow, in 2008 began a multi-county collaborative, including Halifax, Northampton, Hertford, Bertie and now Edgecombe counties. Communities for a Better Tomorrow's goal is to enhance community partnerships, and provide advocacy and technical assistance to ensure the desired results of all community stakeholders and as a vehicle to enhance the local efforts to keep troubled youth out of, or prevent their further involvement in, the juvenile justice system.

As an initial step, service providers, court counselors, judges, faith community representatives, law enforcement officers, business leaders and child and family advocates were brought together to complete a results-based planning process, which included assessing needs in the community. The concerns over the lack of transportation options, the complexity of the family environment and dynamics, and overwhelming poverty that many of these young mothers are experiencing led the group to identify the need for an intensive home visiting program that would provide the comprehensive support needed to change the trajectory of the community's youth. In response to this need, subsequent community meetings were held to discuss the potential of implementing the evidence-based Nurse Family Partnership (NFP) program in the four counties. Since then various constituents, policy makers and heads of human service agencies have continued to meet and collectively decided to submit their implementation plan to the Nurse Family Partnership's National Service Office (NSO) to be "approved" as a local site and to respond to this request for applications. Upon receipt of this grant for NFP, these partners and community leaders have further committed to working together to seek additional funding and support to enhance and expand partners' efforts across the continuum of services in the community around the pregnancy health, mother / child health, child development and early childhood education. The information that follows represents the months of hard work needed to build the collaboration and infrastructure needed to serve these most needy pregnant women and their children and ultimately the community.

The project area consists of four contiguous counties (Edgecombe, Halifax, Hertford, and Northampton) in the northeastern region of the state. The majority of the region is rural with US Highways 158 and 64 as well as Interstate 95 linking the project area. A drive through the area paints a picture of natural beauty, including rolling farmlands, and acres of loblolly pines (NC state tree). Paradoxically, this beauty is not reflected in the region's economic picture. Limited economic opportunity, high unemployment, and poor health status, especially for women and children, are major characteristics of this agricultural and manufacturing area. The four counties encompass an area of approximately 2,149 square miles, with a population of 149,854 residents

according to the 2009 census estimates. The non-white population, including Latinos, specifically in Edgecombe and Hertford Counties is now a growing majority as demonstrated in the table below.

Project Area Population: 2009 Census Estimates						
County	Population	% White	% African American	% American Indian	% Asian	% Hispanic Origin
Edgecombe	51,853	42.1	56.6	0.3	0.3	4.6
Halifax	54,582	41.2	53.7	3.5	0.7	1.4
Hertford	23,283	36.0	61.3	1.2	0.5	2.1
Northampton	20,136	40.9	57.7	0.4	0.2	1.2
NC State	9,380,884	73.7	21.6	1.3	2.0	7.7

Community Strengths

A major community strength is its long history of collaboration. Consistent with the community effort that preceded this application, these four counties have a long history of working collaboratively with their partners to address and develop creative solutions to many of the challenges faced by their respective populations. These efforts are based on acknowledging the unique attributes that each agency brings to the table, the limited community resources and that only together can they transform their efforts into a unified approach to solve community challenges. All four counties participate in various collaborative processes within their respective county in emergency preparedness, delivering quality services to the elderly and relevant to this project an interagency entity that is responsible for the coordination of outreach, management and home visiting programs for pregnant women and young children. Currently there is a system of care collaborative to address the needs of children with mental health needs and there is another one developing to address the mental health and substance abuse needs of adults. A collaborative that crosses county lines is spearheaded by the Rural Health Group. It involves the hospital, schools, departments of social services, faith-based organizations and all medical providers. This process has successfully addressed the issue of childhood asthma and is starting a process to develop strategies to respond to the childhood obesity epidemic.

Another example of this strong collaboration is the Northeastern North Carolina Partnership for Public Health (NENCPPH): a collaborative entity comprised of 15 different counties (including these four counties). The Partnership was established in 1999 to improve the health of people in the Northeastern region of North Carolina and to maximize the available resources and service potential of local health departments through cooperation with each other on public health issues. A special focus of the NENCPPH is to reduce geographic, socioeconomic, and racial health disparities in the region.

As evidenced by these multiple collaborative processes, collaboration is the basis of how business is done in these counties. This history of collaboration bodes well for the ultimate success of both the implementation and outcomes associated with the proposed home visiting program. A 2008 study of 16 NFP sites in Colorado found that the quality of the local collaborative process had a direct impact on mother attrition, thereby affecting the outcomes.

The capacity of the Northampton County Health Department to implement an evidence-based program with model fidelity is an important strength. It has a long history using grant funding to produce positive outcomes for its community members. For example, grant funding from Kate B. Reynolds Charitable Trust for the years 2005-2009 allowed the Health Department to decrease the death rate for breast cancer mortality by increasing the number of women screened for breast and cervical cancer. Community Health Grant funding from NC DHHS was secured by the health department to provide the resources needed for the purchase of a satellite clinic in Northampton. This additional clinical space increased accessibility and exposure to health screenings and promoted healthier lifestyles to populations who might otherwise not be served. Another example of soliciting funds to meet the needs of underserved populations is the grant received from a small Roanoke Chowan Foundation Grant to address diabetes through outreach to primarily minority churches.

Furthermore, Northampton County Health Department has a long history of competent management and fiscal operations. It is accredited by the North Carolina Local Health Department Accreditation Board, received clean financial audits and has had excellent DHHS monitoring scores for all programs.

Community readiness is a considerable strength of these counties. The National Service Office (NSO) uses four factors of community readiness when assessing communities as potential new sites. These factors include the correlation between needs of the community and the goals and outcomes associated with NFP; the local commitment to NFP; the community's interest in NFP and openness to new ways of operating, which are based upon an assessment of past experiences; and adequate resources such as an available workforce and an interested, capable implementing agency.

Finally, a significant strength of these counties is that they have already engaged in the planning process necessary to submit its implementation plan to the National Service Office (NSO) of the Nurse Family Partnership for approval including working with the Regional Program Developer. This planning process has involved the identification of needs, resources for referrals, and partner agencies; the development of an implementation model; recognition of challenges and the creation of potential solutions. The implementation plan has been submitted to the NSO for approval.

Unfortunately from a resource perspective, the four counties targeted for this initiative are severely challenged. This is evidenced by the continued designation of these counties, four out of thirteen of the state's 100 counties, as severely economically depressed "Tier One" counties by the NC Department of Commerce. Economic indicators used to determine "Tier One" status included unemployment, per capita income, and population growth.

Unemployment rates in the project area are high in comparison to the state as a whole. North Carolina's 2009 unemployment rate was 10.6. The rates for the four counties for 2009 were as follows: Edgecombe 16.1; Halifax 13.1; Hertford 9.3; and Northampton 10.9. Both Edgecombe and Halifax were among the 25 worst counties in NC for unemployment. It is important to note that unemployment has hit all areas of North Carolina; however these counties have been affected to a much greater degree as they already had a higher rate of unemployment before the

economic downturn. In 2006, the rates of unemployment were 8%, 6.5%, 5.5% and 5.7 respectively and the rate for the state as a whole was 5.3.

The lack of employment is then reflected in the poverty rates within the counties. The poverty rates, individuals either alone or within a family unit living below the federal poverty level, are significant for these counties and range from 22.6% to 26.6% representing an increase of 54% to 90% from the state level. When the rates of children living in poverty are considered the picture becomes more desperate. Approximate a third of all children in this region experience poverty as compared to less than a quarter at the state level.

Poverty Rates (%)		
County	Persons (2008)	Children (2009)
Edgecombe	22.6	34.8
Halifax	23.7	35.6
Hertford	27.7	34.6
Northampton	26.6	35.1
NC State	14.6	22.5

Child Maltreatment: The rate of investigation into child abuse and neglect has stayed constant across the state between 2005 and 2009, averaging a rate of 57.1 investigations per 1,000 children. The investigation rates in three of the four counties in this project area have followed this same trend however at a significantly higher level. As seen below, the investigation rates started at a higher rate and continued to stay above the state rate; from 2 points in Northampton to almost 36.5 points in Edgecombe.

County	Child abuse and neglect Inv rate 2005	Child abuse and neglect Inv rate 2009	Child abuse and neglect Substantiation rate 2005	Child abuse and neglect Substantiation rate 2007
Edgecombe	70.1	69.1	23.4	23.6
Halifax	71.1	92.5	16.8	37.8
Hertford	48.9	23.1	12.6	10.8
Northampton	61.3	58.0	12.4	14.5
NC State	57.9	56.1	22.6	25.3

Substantiation rates (incidence per 1,000 children; includes categories of abuse, neglect, dependency, services needed, services provided- no longer needed) in these four counties have varied over time, ranging from 10.8 in Northampton to 37.8 in Halifax in 2007.

Yet the most concerning data regarding child maltreatment is the increasing rate at which infants and children up to age 5 are reported for abuse or neglect. During SFY 2005, children under the age of 5 comprised approximately 46% of the children reported for child abuse and neglect. This rate increased to an average of 56.2% in 2009.

Crime: The incidence of crime within any given community has become one the country's leading social indicators over the years. The measure used is a Crime Index and consists of eight important offenses which are counted as they become known to the law enforcement agencies.

Crime classifications used in the Index are: murder and non-negligent manslaughter, forcible rape, robbery, aggravated assault, burglary-breaking and entering, larceny and motor vehicle theft. Arson was added as the eighth Index offense in 1979. Across the state the incidence of crime has been trending downward. The Crime Index incidence rate per 100,000 people has decreased from 4,581 in 2008 to 4,178, an approximate 9% decrease. Not only do the rates within these four counties mirror this trend but they seem to be decreasing faster; on average the Crime Index rates have decreased 10% in Halifax to a 23% decrease in Edgecombe.

School Drop-out rates/Educational Attainment: Educational attainment, a contributing factor to the depressed economic, health, and social indicators of the area is low. According to the Department of Public Instruction, Accountability Services Division “4-Year Cohort Graduation Rates”, the number of students entering as ninth graders who graduated after four school years (or earlier) for the 2008/2009 academic year, Edgecombe, Halifax and Hertford were the ranked in the worst 13 counties in the state, with Halifax ranked as the worst with a rate of 54.8% as compared to state’s rate of 71.7%. Only Northampton mirrored the state rate at 71.6%

Early Educational Success: Proficiency in math and reading at both the third and eighth grades is a predictor of high school graduation. The percent of students with “proficient” scores on 3rd grade end of course tests in reading across the project area ranges from 30.3% to 35.6% as compared to the state rate of 54.5%. Unfortunately these rates worsen as children complete the end of grade tests in eighth grade. In 2008, eighth grade reading rates for the four counties were: Edgecombe - 35%; Halifax - 25.9%, Hertford - 26.8%, Northampton - 32.4% as compared to the state rate of 54.2%. Both third and eighth grade math proficiency rates follow this same pattern.

The lack of proficiency at 3rd grade is directly correlated to dropping out of high school which of course can then lead to the several poor outcomes for the mother and child.

County	2008 3 rd grade math	2008 3 rd grade reading	2008 8 th grade math	2008 8 th grade reading
Edgecombe	63%	35.3%	53.5	35
Halifax	49.7	30.5	38.1	25.9
Hertford	51.7	30.3	43.2	26.8
Northampton	48.8	32.6	61.4	32.4
NC state	73.2	54.5	68.2	54.2

Early Care and Education: As evidenced by recent reports in the news regarding Smart Start investments; the research states that investments in early childhood initiatives leads to better educational outcomes for children, which in turn lead to higher graduation rates, lower crime rates and a better-educated work force that strengthens the economy. In the four counties of the proposed project area, the percent of children (0-5) enrolled in regulated child care receiving subsidies was as follows: Edgecombe - 41.2%, Halifax - 48.6%, Hertford - 25.3%, Northampton - 40.1% as compared to the state average of 36.5%. Although the rates are consistent with the state average, they however do not tell the whole story. Two of the counties in 2005 had waiting lists of children eligible for subsidies; Edgecombe had 482 children or 33% of total children eligible for subsidy and Hertford had 232 children or 45% of total children eligible for subsidy. As child care and child care subsidies have proven to help reduce poverty and the related risk factors by providing parents access to safe, stable, high-quality care for their children while also

supporting the recruitment, retention, increased income, and productivity of employed parents the situation in these counties is concerning with regards to these desired outcomes.

The picture of women and children for these communities does not improve when one considers the traditional factors that are used to judge the overall wellbeing of a community. These factors include infant mortality, low birth weight, teenage pregnancy and educational attainment of children, and the women’s educational levels at the time of giving birth.

Low Birth Weight: While the majority of infants in the project area began life at an acceptable weight, far too many are born weighing too little. The overall rates in 2009 ranged from 11.8% to 17% which was significantly higher than the state average of 9.1%. All four counties were included in the 25 worst counties in the state. This picture worsens when the rates of minority births are considered. The rates were as follows: Edgecombe 12.5%; Halifax 16.0%; Hertford 19.1% and Northampton 18.1%. Three counties have significantly higher rates as compared to the state average of 13.5. Another factor to consider is that the rates for low birth weight in these counties were increasing while the incidence across the state was holding steady for the period from 2005 to 2009.

Infant Deaths: Historically, the project area contributes to a disproportionate share of infant deaths to the state total. Whereas the state as a whole has made progress in decreasing the rate of infant mortality, going from an overall rate of 8.8 deaths per 1,000 births in 2005 to 7.9 in 2009, three of these four counties have either seen an increase in the incidence or only a minor diminishment. As with many health outcomes, the disparity between whites and non whites is reflected in these infant deaths. The rates for minority infant deaths are even more disturbing as it seems that in several of the counties these deaths represent the majority of the incidence across time. See table below for the specifics of these rates.

Infant Mortality Rate					
County	Edgecombe	Halifax	Hertford	Northampton	State
Rate	Total/Min/White	Total/Min/White	Total/Min/White	Total/Min/White	Total/Min/White
2005	15.3/16.9/12.2	13.0/15.4/8.5	18.5/16.9/22.7	12.3/16.5/0.0	8.8/14.9/6.4
2006	8.6/11.3/3.9	18.6/23.4/8.8	16.4/13.8/23.0	18.7/26.3/0.0	8.1/13.6/6.0
2007	17.9/23.8/6.9	15.1/19.1/7.8	17.1/19.1/11.9	8.2/6.4/11.6	8.5/12.8/5.8
2008	12.7/13.0/12.0	15.0/20.5/4.3	24.0/25.5/20.2	4.2/6.4/0.0	8.2/13.5/6.0
2009	8.5/8.6/8.4	9.2/11.1/4.9	20.0/27.3/0.0	4.6/6.7/0.0	7.9/14.1/5.4

Infant mortality is a complex problem with medical, social, and economic components. A lifetime of poverty, inadequate nutrition, poor housing, and limited access to preventive and primary health care reduce the odds for a healthy pregnancy. Several risk factors attribute to unhealthy birth outcomes that are prevalent in the project area as described throughout this section.

Prenatal Care: The vast majority of the women who gave birth in the project area during 2009 entered care during the first trimester. Only the women in Edgecombe County significantly delayed entering care while pregnant; approximately three times the state rate. (7.1% versus 2.4 %.)

Domestic Violence: Physical violence against women is a serious public health concern that affects the mother, infant and entire family. The North Carolina Council for Women data reflects an increasing trend in incidence as measured by calls. The number of calls in North Carolina increased by approximately 50% between state fiscal year 2008 and state fiscal year 2010. Three of the four counties in the project area followed this trend; however Hertford showed an 83% increase over this time period. The number of women referred to shelters varied across the four counties during this period of time. During the fiscal year 2008, 92 women in Edgecombe County were housed in shelters and 5 women were referred to other shelters due to lack of space; whereas 108 women were housed in shelters during the following year in Hertford County.

Substance Abuse: Substance abuse is a concern among residents in the project area. Although hard data about the true prevalence of substance abuse is lacking, many community groups and providers feel strongly that the prevalence of substance use is high and increasing in the project area. In addition, substance abuse is a contributing factor to infant mortality and morbidity. The prevalence of substance use among women at delivery in the project area is unknown, as no routine drug screening surveillance occurs at birth. North Carolina encourages all providers to follow federal guidelines as to screening and testing for substance use. There is not a North Carolina statute that requires testing of pregnant women at the time of delivery for substance abuse.

In North Carolina, the main data available on alcohol use during pregnancy comes from the birth certificate. While there is a question on alcohol use during pregnancy on the birth certificate, the data reported is highly suspect. Women are unlikely to report drinking or drug use on the birth certificate with the social stigma attached to these behaviors, not to mention the potential legal ramifications. Of the 4,351 women in the Eastern region of NC, including these 4 counties, who answered the question on alcohol use on the 2006-2008 PRAMS survey, 6.9 % reported consuming an alcoholic drink in the last three months of the pregnancy as compared to 4.8% in 2004-2006 survey.

The MH/DD/SAS Community Systems Progress Report for the second quarter SFY 2010-2011, report performance indicators regarding the needs of the state level populations and their receipt of services. The performance indicator for substance abuse is measured by comparing the number of persons who received *treatment* for a substance abuse during a year with *prevalence*, the number of persons estimated to have substance abuse issues in a given year to get *treated prevalence*, or percent of the population in need who receive services through community service system for that condition within a year. The state wide goals for this indicator are 10 and 9 for adults and adolescents respectively. Although the treated prevalence rate in these counties is meeting the state goal, this still translates into a significant number of child-bearing women who are challenged with substance abuse issues needing services.

Maternal Health: Teenage pregnancy is another risk factor associated with poor outcomes for children. The teenagers in the four counties of the proposed project area have significantly greater incidence rates for pregnancy than the rest of the state. The rates, as measured by the rate of pregnancies per 1,000 girls ages 15-17, range from 36, consistent with the state average up to 64 in Edgecombe County which more than doubles the state average of 30. This trend holds true of young minority women in these counties but again at a much higher level. The rates among

adolescent minorities in these counties range from 41 to 75.7. Teen pregnancy has important implications for their children’s health and development that includes premature and low birth weight babies; increased risk for child abuse and neglect, less chance of completing high school, and increased chance to live in poverty.

2008 Teenage Pregnancy Rate			
County	Total	Minority	White
Edgecombe	64	75.7	36.5
Halifax	44	46.7	32.3
Hertford	42	50.8	15.7
Northampton	36	41.0	23.6
NC State	30	41	24

Maternal Education: Another significant risk factor for poor outcomes for both mother and child is the education level attained by the mother. This is measured by the rate of births to mothers with less than 12 years formal education as compared to the total births. In 2008, that state rate was 36%. Two of the counties, Hertford and Northampton, within the proposed project area were lower than the state average; one, Halifax, was consistent with the state and one was higher, Edgecombe (39.5%). This is of concern for the children born to these mothers as a direct correlation has been found between maternal education, children’s academic school readiness and the home environments.

Maternal Smoking: percent: Of the total births in 2008, women in the project area reported smoking during pregnancy at a rate either consistent with or lower than the state average. The rates were as follows: Edgecombe 11%; Halifax 11.3%; Hertford 10.0% and Northampton 12.1%, state average 12%.

Existing home visiting services in the community, currently operating or discontinued since March 23, 2010, including

- the number and types of home visiting programs and initiatives in the community;
- the models that are used by identified home visiting programs;

Name of program or practice	Agency	Contact person	Contact email
Parents as Teachers	CADA—Hertford Co CADA--Northampton Edgecombe County Schools	E Mitchell Pamela Faison Annette Walker	emitchell@nc-cada.org pfaison@nc-cada.org awalker@ccps.us
Incredible Years	Down East Partnership for Children	Cornelia Singletary	csingletary@depc.org
Early Head Start	CADA	Christine Stephenson	cstephenson@nc-cada.org

Parents as Teachers (PAT) Program is an international parent education and family support program serving families throughout pregnancy until their child enters kindergarten, usually age 5. The program is designed to enhance child development and school achievement through parent education accessible to all families. It is a universal access model. The service includes personal visits (monthly, bi-weekly or weekly), group meetings, screenings, and resource networking. Programs take an active role in establishing ongoing collaborative relationships with other organizations that serve families. This program is provided by the Choanoke Area Development Association in Hertford County and by Edgecombe County Schools for tier families. Approximately 215 families are being served in Edgecombe, Northampton and Hertford counties.

Incredible Years (IY) Parent Training Program is an evidenced-based program that fosters healthy development in young children by strengthening parenting skills and promoting children's academic, social and emotional skills and to prevent children from developing conduct problems. This program is being offering to families who have children ages 3-5. Approximately 350 families are served in Edgecombe County by the Down East Partnership for Children along with More at Four (the local Smart Start agency).

Early Head Start (EHS) is a community-based program for low-income families with infants and toddlers and pregnant women. Its mission is to promote healthy prenatal outcomes for pregnant women, enhance the development of very young children, and promote healthy family functioning. The program, delivered under the auspices of CADA, does not have a home-visiting component and is currently serving a total of 86 children representing 75 families in Halifax, Hertford and Northampton counties.

Existing mechanisms for screening, identifying, and referring families and children to home visiting programs in the community (e.g., centralized intake procedures at the local or State level)

All four Health Departments use the mandated state provided forms and screening tools, such as Comprehensive Health Assessment (CHA), Life Skills Progression (LSP), Stratification, and Pregnancy Assessment form to screen pregnant women and young children and then refer to the most appropriate services. Several areas of concern to the well-being of both the women and the child include age of the mother, nutrition, smoking and substance use, education level, other health related risks as well as eligibility for programs based upon income and other needs. Women and families are then referred to the most appropriate services available in the community. Upon implementation of the NFP Program, this process will become even more consistent across the four counties as fidelity measures are put into operation.

Referral resources currently available and needed in the future to support families residing in the community(ies)

There are several service organizations and practitioners that have already agreed to serve as referral sources to the proposed Nurse Family Partnership. These resources may also provide services to “moms-to-be” and families of young children and are described in further detail in Section 3. The following is a brief description of the population served and how many

individuals are expected to be referred. The number anticipated to be referred is in the chart below; there will be many more eligible and refuse.

Anticipated Referral Source	Brief Description of Population Served	Estimated # of Eligible Referrals (monthly)
Obstetricians	Pregnant women	6
Halifax Regional Medical Center	Pregnant women	1
Pregnancy Care Management	Pregnant Medicaid recipients at risk for poor birth outcomes	10
High School Staff	Pregnant teenagers	2
Middle School Staff	Pregnant teenagers	2
Pregnancy Support Centers	Pregnant women	1
WIC	low-income pregnant, postpartum women, infants and children up to age 5	12
Early Head Start	low-income pregnant women and families with infants and toddlers	5
Care Coordination for Children (CC4C)	all Medicaid children birth to age 5 determined to be high-risk	8
DSS	Pregnant women applying for Medicaid	4
Day reporting centers	Day reporting works with court system to provide interventions to prevent incarceration for minor infringements, usually teens or young adults (male and female)	0.5
	Total monthly referrals:	51.5

The agencies listed above have well established relationships and have been referring women and families to each other for services. To ensure the population of women who are in need of support, such as women of color and immigrants, either stronger or additional relationships will be developed with other agencies such as the Department of Social Services, minority faith based organizations, local sororities, schools and other non-profit agencies in all four counties. Media campaigns using local newspapers and radio stations will also be implemented to reach the underserved target audience. All materials will also be translated into Spanish to reach the Latino seasonal migrant farm workers.

A plan for coordination among existing programs and resources in those communities (including how the program will address existing service gaps)

Each of the four counties has several components necessary to develop a coordinated early childhood system. The Local Partnership for Children in each county is responsible for developing a comprehensive community-based early childhood system with a goal of

strengthening families and ensuring that young children are healthy and ready to succeed when they enter kindergarten. Also each Health Department has developed its own system to coordinate care for pregnant mothers and young children to ensure access to the appropriate services and supports. As described above, the four counties have participated in a cross-county collaborative process that has built a system of care for different populations and involved many, if not all, the parties necessary to build an early childhood system and in the preparatory work in order to submit the NFP implementation plan to the NSO.

Furthermore, once funding is confirmed, a Community Advisory Board, a model element of the NFP program, will be established that will act as the governance body for the proposed initiative.

Buncombe

A detailed assessment of needs and existing resources, including:

- ***community strengths and risk factors;***
- ***characteristics and needs of participants***

Buncombe County has a population of more than 230,000 people with 1,530 Medicaid births in 2009. Of these births, 534 or 35% were first time moms. Nurse Family Partnership (NFP) is serving 105 first time low income women. Buncombe County Department of Health (BCDH) has 78 women that have qualified for NFP this fiscal year but have not been able to be enrolled since the program is full. BCDH is requesting one additional NFP nurse to build our capacity to serve an additional 25 women for a total of 125 women in Buncombe County.

The County began to explore the possibility of implementing the Nurse Family Partnership in May 2007. In researching best practices for child abuse and neglect issues, staff with the Department of Social Services (DSS) and BCDH visited Allegheny County, Pennsylvania, in July of 2007, where the NFP had been implemented since 2002 within an integrated human services system. At the same time BCDSS and BCDH leadership were noting the strengths of the program, a community collaborative tasked with reducing infant mortality was beginning to review a Health and Human Services grant for NFP. On the heels of a very successful *Shaken Baby Campaign*, the Infant Mortality Task Force, made up of hospital, social services, health department, Smart Start, and multiple other community partners began to research the NFP as well. Task force staff talked with regional NFP consultant who mentioned the NFP collaborative that was looking to fund sites in NC. In June 2007, the decision was made to begin to work towards implementation of the NFP in Buncombe County.

In early 2008, Buncombe County held a series of meetings with key stakeholders to ensure proper support existed within the community and determine who would be the most appropriate agency to implement the NFP program. The stakeholders in these meetings consisted of BCDH, DSS, Smart Start, Mission Hospitals, Mountain Area Health Education Women's Center and numerous community agencies. BCDH was identified as the most appropriate agency to implement NFP due to skills at implementing evidenced based practices, billing Medicaid and access to the target population of first time low income mothers.

The Buncombe County NFP was awarded funding in July 2009 and implementation began in October 2009. The NFP supervisor (nurse mid-wife with her master's in nursing) was hired in

September of 2009. BCDH transferred four home visiting bachelors prepared registered nurses from the Community Health Nursing Program to NFP to begin to enroll first time low income mothers and their babies into the new program. BCDH has aligned itself with key partners willing to refer and support NFP. During the first year of implementation we had a full caseload of 100 first time low income moms within the first 9 months. NFP has denied service to 78 eligible clients this fiscal year due to the program being full. This shows the community is ready to expand to one additional caseload of 25 women by adding one home visiting nurse position to the NFP program.

BCDH has met all of the implementation guidelines set by NFP to assure model fidelity. BCDH NFP has received approval from the NSO to expand by one nurse based on our data reports and community needs. NFP served 70 clients in FY10 (start-up year) and have served 105 clients this fiscal year to date (July 1, 2010-April 30, 2010). Of these clients served this year, 1800 visits have been made by the NFP team. Early results show that the preterm birth rate is very low at 4.4% and there has been no substantiated abuse or neglect.

The regional NFP consultant stated that Buncombe County reached a full caseload faster than any other NC county with the program in place. In addition, University of Colorado Prevention Research Center for Child and Family Health has chosen our site as one of 3 in the nation to implement the second feasibility wave of a research based curriculum known as Dyadic Assessment of Naturalistic Caregiver-child Experiences (DANCE).

BCDH has revised its strategic direction to focus less on clinical services and more on population health. In July 2011, BCDH will transition the Prenatal Clinic to the local federally qualified health center, WNC Community Health Services (WNCCHS). Pregnancy Care Management services will still be provided by BCDH and co-located at all Pregnancy Care Homes so referrals into NFP will not be affected. BCDH is one of few local health departments that provides Community Health Nurse (CHN) home visiting services including medically indicated nursing home visits for prenatal clients with a physician order; and newborn assessment and postnatal assessment for Medicaid-eligible residents. Having this program has improved our capacity to implement NFP by having staff well versed in pregnancy home visiting programs as well as understanding Medicaid billing requirements. BCDH moved four nurses from the CHN Program into NFP to begin to transition to this model. BCDH will be eliminating the Community Health Nursing Program and the remaining two Community Health Nurses at the end of this fiscal year. This fiscal year 25 women received 92 medically indicated home visits. This means there will be medically high risk pregnant women that qualify for NFP who will be without services unless we are able to expand NFP. BCDH is working to assure any medically indicated care is received from either NFP (if they met criteria) or through the Pregnancy Care Management Program.

The estimated population of Buncombe County in 2009 was 231,452, (88% White, 7% Black, 5% other) with an estimated continued growth of approximately 1.3% per year. The estimated Hispanic population in 2007 was 3.9% and in 2009 was estimated to have increased to 4.6%. Approximately 14% of all residents are living at or below the poverty level. The 2009 teen pregnancy rate for Buncombe 15-19 year olds was 42.8, lower than the state average of 56.0. However for the five year period 2005-2009, Buncombes minority teen rate exceeded the state

average 4 out of 5 years, and the white minority rate exceeded the state average 2 out of 5 years. Because of Buncombe's low percentage of minorities, its overall rate is frequently lower than the state, while rates by race exceed state averages. In 2009, there were 22,683 children 0-18 years of age that were eligible for Medicaid. Kids Count Data Centers states that 34.4% of Buncombe children 0-18 years of age are enrolled in Medicaid (which is greater than the State percent of 32.6%).

Currently, 65% of all births are to women with Medicaid. Of the 534 first time Medicaid births in Buncombe County in 2009, 78% were White; 12.7% were African American, 1.3% other and 11.2% were Hispanic. NFP served 19.7% African American women and 26.5% Hispanic women. This shows the program is reaching a higher portion of minority women. When we look at the needs of our community, we noted that 51.3% of first time Medicaid mothers reside in the city limits and 41.4% reside in the western section of the county. Of the clients currently enrolled in NFP, 65% live in the city and 41% live in the western area of the county. This shows that we are targeting the larger majority of NFP services where the highest concentration of 1st time Medicaid mothers live. Of the clients currently enrolled in NFP, 43% are adolescents and 46% have one or more risk factors (36% have a mental health diagnosis, 36% are in an abusive situation, and 14% are low functioning).

The infant mortality rate is commonly used as the one health indicator that best describes the overall status of community-wide health. Those infant deaths caused by prematurity are often linked to the overall health of the mother before she became pregnant or very early in pregnancy. A significant racial disparity exists in Buncombe County infant deaths. Black babies are almost twice as likely to die as are white babies. The 2004-2008 infant death rate for Buncombe County whites is 5.9 compared to 11.3 for blacks and the 2004-2008 low birth weight rate for whites was 8.4 and for blacks was 14.2 (NC Vital Statistics). The five year average (2005-2009) of pregnant women in Buncombe County who reported being current smokers was 12.2% which exceeded the state average of 11.0%.

In 2009 there were 2,579 live births to Buncombe County residents:

- 59.3% (1530) of all Buncombe births were to Medicaid mothers (SCHS Report – 2009)
- 581 of Medicaid births were to first-time mothers in 2009 (24% of all births and 37.9% of all Medicaid Births—SCHS – 2009)
- 1 in 5 of all County births meet the criteria for the NFP initiative
- Total women currently in Buncombe NFP Program is 105
- Nationally, NFP estimates that one half of all eligible women will agree to participate. With 78 unable to be served through NFP due to the Program being full, we could potentially served 39 additional women.

Existing home visiting services in the community, currently operating or discontinued since March 23, 2010, including

- ***the number and types of home visiting programs and initiatives in the community;***
- ***the models that are used by identified home visiting programs***

Nurse Family Partnership (NFP) is serving 105 first time low income women. Buncombe County Department of Health (BCDH) has 78 women that have qualified for NFP this fiscal year but have not been able to be enrolled since the program is full. BCDH is requesting one

additional NFP nurse to build our capacity to serve an additional 25 women for a total of 125 women in Buncombe County.

Existing mechanisms for screening, identifying, and referring families and children to home visiting programs in the community (e.g., centralized intake procedures at the local or State level)

The nurse supervisor meets with key referral sources regularly to discuss who to refer, how to refer, and educate them on the benefits of NFP. Community organizations are also updated regularly on the status of the NFP program so they are aware of availability of slots. The NFP Advisory Committee meetings and agency Leadership Team meetings serve as vehicles to assist in managing the ebb and flow of the referral process.

There are outreach efforts on an ongoing basis with the private medical offices and agencies that provide prenatal care and/or services to low-income pregnant women. The NFP supervisor works closely with the Pregnancy Care Management (PCM) supervisor at BCDH to coordinate referrals. As part of the changes in the PCM program, we have centralized all referrals through the PCM risk assessment. The Pregnancy Care Home (PCH) completes the risk assessment and it is given to the PCM. As we have done in the past with MCC's, the PCM's will refer all first time low income moms to NFP. The PCM's will complete their assessment. Once we get the referrals, we will open up those women who meet the criteria of the NFP Program who wish to participate if there is an opening. If NFP has the capacity to enroll the client into the Program, the PCM will work in collaboration with NFP and put this client as "low risk" on her caseload because the NFP nurse will be providing the majority of care to the client. If the client declines to receive NFP services, client will be referred back to the PCM.

NFP get referrals from the Mission Hospitals social work team if they have a patient that fits the defining criteria for NFP. Referrals also come from MAHEC Family and MAHEC Women's Health Center. As the Pregnancy Care Homes are established, they will have the PCM continue to handle the referral which allows consistence and one centralized intake process. Other BCDH programs that are key referral sources for the NFP program include WIC, School Nurses and the walk-in service for pregnancy testing within Family Planning.

The NFP supervisor has established a strong relationship with all the major obstetric providers in Buncombe County. A referral form has been developed and is being used by all of our referral sources. The NFP Supervisor receives all new referrals to the NFP program from the referral source. She validates each referral for the first time mother and low-income status, and that the prenatal client is not beyond 28 weeks gestation. Upon ensuring that the client is an NFP client candidate, the NFP Supervisor prioritizes the referrals based on gestational age of pregnancy, high risk medical and/or social factors, and lowest income. Clients closest to the 28 week gestation have priority enrollment into the program until NFP reached 75% enrollment capacity. Then clients were prioritized by their high risk medical condition and/or social risk factor. Those with the lowest income became a higher priority once our case loads were almost full. This helped ensure that the highest need clients are offered NFP services first. The Supervisor reviews all referrals and assigns them to the NFP nurse based on the client's zip code. The NFP

nurses work in geographically assigned zones as part of a human service geo-districting plan. Latino clients are assigned to the bilingual Spanish speaking nurse who serves the entire county.

A total of 380 clients have been referred into NFP between October 1, 2009 (start-up) and May 2, 2010 (present). Based on NFP average that states 50% of women offered the program will participate, of the 78 women that have not been served by NFP, we can anticipate 39 clients would be willing to participate. To date, 105 NFP mothers have been served, 90 babies have been born and 1800 visits have been provided.

Referral resources currently available and needed in the future to support families residing in the community(ies)

BCDH: BCDH serves first time low-income pregnant women. Clinical services will transition to WNC Community Health Services in July 2011. A contract is being developed to assure comprehensive care continues. WIC, PCM, CC4C, Disease Control, Child Care Health Consultants, Family Planning and School Nursing Programs provide essential support services for families.

WNCCHS provides primary, behavioral and dental services to the community for 13,000 clients. MAHEC Women's Health Center (WHC) provides prenatal services to first time low-income pregnant women. BCHC has collaborated on provision of care for indigent clients for years and has a MOA since 1995 that outlines coordinated care.

Mountain Area Child & Family: Have home visiting slots and a child care center. Refer clients to NFP that met criteria and have higher needs. NFP refers children for child care.

Asheville City Pre-School-Early Head Start provides home visiting slots and child care services. BCDH provides a part-time nurse since 1996. Have formal contract with EHS.

YWCA MotherLove provides pregnancy support services to pregnant teens to stay in school.

Project NAF (Nurturing Area Families) provides pregnancy support to African American teenagers living in the city limits. BCHC has strong working relationship with Project NAF since the programs development in 1996.

Asheville Pregnancy Support and Planned Parenthood provide support services for early identification, referral and resources for pregnant women.

DSS provides Work First, Medicaid enrollment, Child Protective Services support and guidance and Food Assistance for eligible clients. Also has at-risk social workers co-located at schools.

Others Referral Resources

Educational Resources

- Emma Resource Center – ESL Classes
- ABCCM – medical/job training.

Workforce Preparation

- Community Action Opportunities
- Job link - Vocational Rehab

Substance Abuse/Mental Health

- APR Phoenix
- Mary Benson House
- Families Together

General Health Care

- Private physician offices
- Carolina Dental Clinic

Child Care

- Buncombe County Child Care Services
- Smart Start, Head Start & EHS
- Asheville City Preschool

Interpersonal violence

- Helpmate
- Our Voice
- Pisgah Legal Services

Miscellaneous

- ABCCM
- Salvation Army
- Housing Authority – City of Asheville
- Mountain Housing Opportunities

In addition to referral resources outlined above that refer clients into NFP, the NFP Supervisor monitors a services linkages report that outlines all the referrals being made to other services by category. The referrals that have been made since the program started in October 2009 are:

Government Assistance

TANF/Welfare	13
Medicaid - Client	88
Medicaid - Child	13
Food Stamps	75
Social Security/SS Disability	4
Unemployment Benefits	13
WIC	147

Crisis Intervention

Intimate Partner Violence	21
Child Protective Services	3

Mental Health

Mental Health Treatment	62
Relationship Counseling	2

Substance Abuse

Smoking Cessation	8
Alcohol abuse	
Drug abuse	2

Health Care Services

Primary Care Provider - Client	69
--------------------------------	----

Developmental Disabilities (Adult) 1

Education Programs

GED/Alternative High School	48
Further Education Beyond HS	16

Other Services

Subsidized Child Care	3
Child Care Referral Services	84

A plan for coordination among existing programs and resources in those communities(including how the program will address existing service gaps);

Buncombe County is fortunate to have a community with a broad array of organizations serving the needs of children. Mission Hospital is the primary birthplace for infants. Here the medical home or primary care provider is identified for all infants. The state of the art NICU provides care to the most vulnerable newborns. Premature infants continue to receive services through the Neonatal Follow-up Unit to ensure that any infants who have a diagnosed special health care need both receive those services and are connected into the early intervention (EI) system. Families who are not followed through the Neonatal follow-up or NFP are offered Care Coordination for Children (formerly Child Service Coordination) through BCDH.

Buncombe County has an Interagency Management Team (IMT) that provides agency leadership around child health issues in this county. IMT agencies include DSS, Department of Juvenile Justice, BCDH, both school systems, all major mental health agency representatives, Western Highlands (our local management entity), and Community Care of Western North Carolina. As a result of *Innovative Approaches*, a community grant supporting improving systems of care for children with special health care needs, there was a need identified to improve coordination around children’s health issues. IMT has been expanding from a Systems of Care oversight group to help improve coordination of care for children for both mental health and medical issues. This Team oversees the work of the Buncombe County Children’s Collaborative and the Local Interagency Coordination Council. By expanding this oversight group to include CCWNC, the hope is we can improve the coordination of care between mental health and medical care providers. Local projects that have been brought to the IMT include the initial implementation of the Nurse Family Partnership, Innovative Approaches and Pregnancy Care Management/Care Coordination for Children, as well as how to utilize the provider portal to improve care coordination between mental health and physical health agencies.

Within NFP, the supervisor works with the Transition to Kindergarten program that assures children are ready to start school. As NFP begins to transition families out of the program at age 2, they work with the mom’s to assure caregivers provide strong educational/developmental guidance to the child. If children may be entering child care, NFP works with Early Head Start, Head Start and Smart Start to get the child into a program that promotes early childhood growth and development. Referrals would start to be made around the child’s year and a half mark so that as NFP moves out of the home there are next secure next steps for the family and toddler. Childcare Health Consultants work within child care centers and develop plans for children with special health care needs. These nurses coordinate care of children entering kindergarten with School Nurses serving school aged youth. School Nurses coordinate care between the schools, medical provider and family. School Nurses refer pregnant teens that are still in school to NFP for services. This network provides a strong web that helps to support children and families.

Yancey and Mitchell

A detailed assessment of needs and existing resources, including:

- *community strengths and risk factors;*
- *characteristics and needs of participants*

Nestled in the rural mountains of Western North Carolina are the adjacent counties of Mitchell and Yancey. Yancey County boasts the highest average elevation of any county in North Carolina, with five (5) of the highest peaks east of the Mississippi River including Mt. Mitchell, the highest point in eastern America. The region's natural beauty, mountainous terrain and geographic isolation provides the setting for an idealist, rural lifestyle; but unfortunately has contributed to underdeveloped roadway and transportation systems, limited economic development, low per capita incomes, high rates of poverty, decreasing family incomes and increasing unemployment rates (Table 1).

The population in Yancey County is 17,774 with 1,623 living in Burnsville the county seat. Mitchell County population is 15,687 with a population of 400 in the county seat of Bakersville and 2,000 in its largest township, Spruce Pine. The residents are hard-working and possess a strong mountain ethic of self-sufficiency and independence. Community pride and duty are the norm; however life in the rural Appalachia region presents significant socioeconomic challenges.

Table 1: Economic Indicators

County	Per Capita Income	Persons Living Below Poverty	Median Household Income	Unemployment Rates
	2000	July 2008	2008	Jan. 2009
Mitchell	\$15,780	17.2%	\$35,195	11.842
Yancey	\$16,335	18.4%	\$35,707	11.700
North Carolina	\$20,307	14.6%	\$46,574	9.7

Sources: NC Pocket Guide; NC Employment Security Commission; and US Census 2000 and 2010

Transportation infrastructure is limited with virtually the entire region being served by two lane highways. Winter weather often makes roads impassable, and many homes are accessible only by 4-wheel drive vehicles. Historically, the economic base of the region has depended upon agriculture—primarily, burley tobacco production along with textile and furniture manufacturing, mining and asphalt production. With these sectors being adversely affected by the current economic climate, Mitchell and Yancey Counties have experienced extensive job losses. Unemployment rates exceed state rates and remain in the double digits.

Mitchell County continues to be designated as a Tier I county and Yancey County a Tier 2, or severely economically distressed communities, by the North Carolina Department of Commerce. Unfortunately, “socio-economic problems, such as low literacy rate, high drop-out rates, unemployment and greater reliance of state and federal assistance programs...” are prevalent trends associated with lower tier communities (North Carolina Smart Growth Alliance) and Mitchell and Yancey counties are not immune to these issues (Table 2).

Table 2: Socio-Economic Indicators Prevalence in Mitchell and Yancey Counties

County	Percent with Less than High School Education	Graduation Rates	Drop Out Rate 9-12 Grade per 1000	Medicaid Enrollment Percent of Total Population 2006-2007	Medicaid Eligible Age 0-20 yrs per 100 pop. 2007
Mitchell	31.4	61.9	5.91	21.0	45.6
Yancey	28.9	74.6	5.56	21.6	47.6
NC	21.9	68.1	5.24	19.0	40.7

Sources: NC Rural Economic Development Center, NC Health Statistics Pocket Guide, 2007 NC-CATCH, NC Division of Public Health

Children are not immune to the unstable economic crisis occurring in our region and often are even more adversely affected. Action for Children (May 2006) reports the following indicators of child economic (in)security in Mitchell and Yancey counties (Table 3).

Table 3: Economic (In)Security

	Mitchell County	Yancey County	North Carolina
Children in Poverty (2003, \$20,000 for family of 4)	21.6%	24.4%	19.1%
School Children Enrolled in Free/Reduced Price School Meals (2005)	53.8%	51.2%	47.7%
Children Receiving Food Stamps	19.2%	23.3%	18.2%

Source: 2006 Action for Children, North Carolina Children's Index County Cards

The State Center for Health Statistics Databook (2009) paints an even more dismal picture, reporting that 25.1% of children in Mitchell County and 27.9% of children in Yancey County live in poverty. For children less than five years of age, 12.645% in Mitchell County and 23.203% in Yancey County are living in poverty.

North Carolina ranks second in food insecurity for families with children under age five. According to Feeding America (2009), 24.1% of families with a child under age five are food insecure. Manna Foodbank, serving Mitchell and Yancey counties reports (2006) that 71% of the households with children they serve are food insecure. As unemployment has risen, it is likely more children and families face food insecurity on a daily basis.

Substandard housing is a significant challenge. In Mitchell 21.4% and in Yancey 20% of households have housing problems defined as families spending more than 30% of their income for housing, inadequate plumbing or kitchen facilities or overcrowding. Homeownership rates and rental rates vary within the region with Mitchell and Yancey counties as follows; Mitchell County is 80.8% with a median home value of \$78,800 and Yancey County is 80.2% with the median value of \$93,000. Minimum monthly rental prices for existing housing in Yancey County is \$519 and in Mitchell County \$585.

Each independent socioeconomic factor has a direct impact on both individual and community behaviors and development. Families experiencing economic instability face increasing challenges and need, but are often reluctant to seek assistance, citing a strong mountain ethic of self-sufficiency. Prenatal and child/family support programs are not adequately accessed placing families and children at risk for the negative consequences of ineffective coping and placing children at an increased risk for maltreatment (Table 4).

Table 4: Adverse Experience Rates

	Crime Rate per 1000	Domestic Violence Rate per 1000	Substantiated Child Maltreat Rate per 1000	Percent Adults Un-served Substance Abuse
Mitchell County	27.982	76.21	39.82	89.462
Yancey County	13.154	33.46	88.24	87.082

Source: NC Division of Public Health

New Directions for North Carolina: A Report of the NC Institute of Medicine Task Force on Child Abuse Prevention proposed an Ecological Model of Child Maltreatment, outlining the different cultural, community, parental and child factors that placed children at-risk for child maltreatment. Community factors include employment, poverty, housing and informal/formal family support. Parental risk factors included single parent families, low income, teen parenting and inadequate knowledge of child development.

For children, healthy development can be complicated by additional issues affecting birth outcomes: age of mother while pregnant, mother’s educational attainment, maternal smoking, and birth weight. Table 5 summarizes these risk factors for Mitchell and Yancey counties.

Table 5: Maternal Risk Factors

	Pregnancy Rate 15-19 yrs. Per 1000	Percent Births to Mothers with <12yrs. Ed.	Percent Maternal Smoking	Percent Low Birth Weight
Mitchell	48	25.940	26.3	8.380
Yancey	46.6	24.040	20.3	7.345

Local maternal smoking rates are higher than state and national averages. The NC rate of maternal smoking is 11.9%. In Mitchell County, the maternal smoking rate is 26.3% and in Yancey, 20.3%. Additionally, 30% of NC pregnant women reside in households where there is at least one smoker.

Children in Mitchell and Yancey counties suffer health disparities in access to health and medical care, health insurance coverage and dental services. Both counties are designated as medically underserved areas, and Health Professional Shortage Areas for Primary Care and Dental Care. In Mitchell County 47.2% of children 0-5 are enrolled in Medicaid, with an additional 39 children enrolled in Health Choice. The percentage of children entering kindergarten with untreated tooth decay is 20.8%. In Yancey County 37.9% of children ages 0-5 are enrolled in Medicaid with an additional 11.6% enrolled in Health Choice. The percentage of children entering kindergarten with untreated tooth decay is 31.9%.

Immigration has significantly changed the ethnic make-up of the region. In the 1990's immigrants began arriving from Mexico seeking work in the rich agriculture industries in the Western North Carolina Mountains. In Yancey County there was a Census documented 900% increase in the Hispanic population between 1990 and 2000. This population is largely undocumented and is likely closer to 15% of the total population based on Health Department records and school enrollment. Centro de Enlace, the Yancey County Hispanic human services organization commissioned a study by Mars Hill College to review the immigration patterns, family composition, number of years in Yancey County, educational attainment, language(s) spoken in the home and other relevant family and social issues of the Hispanic population. Most of the residents are families with young children. Spanish is usually the first language (91.8%), though some families speak one of the native languages first, either Trarasco or Purechepa (8.2%) with Spanish as a second language. Most native Mexican adults have less than a third grade education. While this information is specific to Yancey County, it does illustrate the needs of Hispanic children and pregnant women in the region. Children who are dual language learners acquire English language proficiency in four to six years.

While Mitchell and Yancey counties possess a high level of need for a coordinated, integrated home visiting service, both communities have significant strengths and resources to build upon: 1-early childhood education programs; 2- breastfeeding support/WIC; 3-access to child dental health services for low-income children; 4 public transportation services; 5-targeted Hispanic advocacy agencies; and 6-domestic violence programs.

Existing home visiting services in the community, currently operating or discontinued since March 23, 2010, including

- ***the number and types of home visiting programs and initiatives in the community;***
- ***the models that are used by identified home visiting programs***

Unfortunately, the primary family support services available in Mitchell and Yancey counties are agency-based and reach a limited number of needy children and families who are willing to seek them out. There are currently no intensive home based services available to high risk families.

Existing mechanisms for screening, identifying, and referring families and children to home visiting programs in the community (e.g., centralized intake procedures at the local or State level); and referral resources currently available and needed in the future to support families residing in the community(ies)

The existing mechanisms for screening, identifying and referring families and children to intervention programs in Mitchell and Yancey counties are changing as the traditional Maternal Care Coordination and Child Service Coordination programs are transitioning to a broader based program with less home visiting interventions necessitating the need for the development of a supplemental home visiting program.

Women receive a High Risk Assessment by their health care provider at their first OB visit. If any concerns are identified, a referral may be made to the Pregnancy Care Manager located in the local health department within the appropriate county. The Pregnancy Care Manager (PCM),

previously known as Maternal Care Coordinator, targets pregnant women up to two months post-partum. With primarily a medical focus, the program strives to assure women have appropriate medical homes and medical follow-up through telephone calls and office visits corresponding with scheduled medical visits. Home visits are infrequent but may be provided if necessary.

The Care Coordination for Children (CC4C) program, previously known as Child Services Coordination, targets children from birth to age five with case management based services. No routine home visits are scheduled and follow-up is completed through telephone calls and coordination with medical visits. CC4C ranks infant/child risk factors and can be used to determine referrals and acuity of service. Targeted outcomes for CC4C include increasing referrals to Children's Developmental Services Agency (CDSA) in the first twelve months; decreasing utilization of emergency room services; and increasing immunization rates.

Health care providers, hospital labor and delivery departments and department of social services may also refer any newborn up to eight weeks of age for a post-partum newborn home visit. A home visit is made to assess for any social, environmental, educational, parenting issues that may place the infant at-risk. Any issues identified are referred to the appropriate agency for follow-up.

The Children's Developmental Services Agency of the Blue Ridge (CDSA-BR) is the provider of Early Intervention (EI) services in the service area. CDSA-BR has exceeded NC State Performance Guidelines in percent of population aged 0-3 and 0-1 enrolled in EI services. The number of children in Mitchell County receiving EI services has increased, while in Yancey County the number of children receiving EI services has decreased over the past 3 years. CDSA Early Intervention Specialists work with children in a variety of settings including home visits and child care facilities.

Like many communities across the United States, Mitchell and Yancey counties have experienced an increase in Methamphetamine and prescription drug abuse. In 2008, 44% of the referrals to the CDSA-BR in Yancey County for EI were drug related and 33% of Mitchell referrals were drug related during the same period. Most of those referrals were for Methadone exposure for mothers in treatment for prescription drug addiction. Through June 2009, the CDSA-BR for Yancey County received 19 of 61 referrals for "noted" substance abuse. In Mitchell County, 14 of the 29 referrals were for noted substance abuse. In 2005, there were only 3 substance abuse related referrals for Mitchell County and in Yancey County only 4.

A plan for coordination among existing programs and resources in those communities (including how the program will address existing service gaps)

The system of family support and case management in Yancey and Mitchell Counties, as elsewhere is extensive and fragmented with some families receiving extensive services and some few or none. The leadership team of the MY HFA project will take responsibility for keeping all stakeholders informed of service and assuring that HFA home visitors have access to all appropriate referral sources.

The local health departments' Pregnancy Care Managers (PCM) will be a crucial connection for the HFA home visitors. Proximity and ready access to the PCMs is the reason the health department was chosen as the lead agency for the project. All prenatal providers in the two counties are registered as Pregnancy Medical Homes (PMH) with North Carolina Division of Medical Assistance. As a PMH the providers are required to complete a pregnancy risk screening form on all of their pregnant patients who have Medicaid, and are encouraged to complete the screening on all pregnant patients. The risk screenings are delivered the PCM at the local health department for further assessment to determine level of risk and need for services. Approximately 80% of pregnant women in Mitchell and Yancey Counties qualify for Medicaid. This program provides the PCM access to nearly 100% of the at risk pregnant women in the county. The PCM and HFA home visitors will be in the same building and work together daily to assure the most appropriate prenatal referrals are made to the HFA program.

Similarly, the local health departments' Care Coordination for Children (CC4C) program receives referrals from county child health care providers for Medicaid children under age 6 and provides care management for children at various level of intervention based on risk assessment. Most of the children at risk for abuse and neglect will be captured by the CC4C program and the same benefits of proximity will exist as for the PCM program.

The care managers and HFA home visitors will act as a team to decide which families will be assigned to HFA. The plan is to assign the families at higher risk for abuse and neglect to the HFA program with the health department care manager providing support and less frequent meetings with the families than would be required without the HFA program. The team model will avoid duplication of services, reduce the number of different "workers" demanding time from the families and give families access to both nursing and social work services depending on need.

Local and State capacity to integrate the proposed home visiting services into an early childhood system, including existing efforts or resources to develop a coordinated early childhood system at the community level, such as a governance structure or coordinated system of planning

Local capacities to integrate the home visiting services into an early childhood system are addressed in each local profile above. At the state level, North Carolina has strong leadership and a variety of efforts currently in place to expand a coordinated early childhood system.

Strong leadership exists in North Carolina to support the continued development of an early childhood system. In 2010, the Governor's office established North Carolina's Early Childhood Advisory Council (ECAC) to be a comprehensive initiative designed to address the whole early childhood system rather than a subcomponent of the system.

The Governor has called upon the North Carolina ECAC to lead the state in creating and sustaining a shared vision for young children and a comprehensive, integrated system of high quality early care and education, family strengthening, and health services that support ready children, families, and communities. The NC ECAC has established the following major goals for its initial efforts.

1. **Develop an integrated, comprehensive 3-year strategic plan** for high-quality health, family strengthening, and early care and education services that support ready children, families, and communities.
2. **Strengthen awareness and commitment** among families, business, and policymakers to ensure that all young children in North Carolina are healthy, learning, and thriving.
3. **Strengthen the quality of programs** and expand opportunities for young children and their families to participate in high-quality programs.
4. **Strengthen coordination and collaboration** across service sectors to promote high-quality, efficient services for young children and their families.
5. **Support the implementation of an integrated data system** that meets the individual and collective needs and capacities of state-funded programs serving young children birth to age five.

For numerous reasons including the Governor’s focus on an Early Childhood Advisory Council, the Early Childhood Comprehensive Systems (ECCS) grant, the Alliance, maternal and child health program development, Smart Start, More at Four, and political and philanthropic interests the wide range of child serving agencies have successfully been working toward a more collaborative approach for at least the last five years.

In addition to aligning the early childhood vision, mission and goals, the Governor’s Office has aligned staff roles in order to support the work of the broader early childhood efforts and allow for complementary and coordinated early childhood system building work involving the Division of Public Health and its partners. The early childhood partners are working as a well coordinated team to advance shared goals.

The ECCS Grant Program has worked with a number of partners in initiatives designed to address gaps in supports for social emotional development for young children in North Carolina. These projects include the SAMHSA-funded LAUNCH project, the North Carolina Institute of Medicine’s (IOM) Task Force on Young Child Mental Health, the Foster Care Medical Home Collaborative and the Division of Public Health/Children and Youth Branch’s efforts to incorporate a developmental science framework into the work across the Branch. Collaboration achieved at the state level to implement these projects can be extended to benefit the state Home Visiting program.

The Alliance for Evidence Based Family Strengthening Programs funds the infrastructure or “scaffolding” needed to support quality implementation of evidence-based programs. This scaffolding may include technical assistance with organizational and community readiness, model fidelity, quality service delivery, and program evaluation. At this time, the Alliance is collaboratively funding program implementation and scaffolding for the following activities:

- Eight Nurse-Family Partnership sites
- Twenty-eight Incredible Years sites with over 70 (parent training) groups, and
- Fifteen Strengthening Families sites (approximately 35 groups).

Members of the Alliance agree that successful implementation of evidence based programs requires scaffolding for community-based agencies.

Child Maltreatment Prevention Leadership Team in the North Carolina Division of Public Health

In September 2005, the North Carolina Institute of Medicine (IOM) Task Force on Child Abuse Prevention named the North Carolina Division of Public Health as the state level agency responsible for the development and implementation of primary child maltreatment prevention efforts. The Division received a recurring state appropriation to fund a Director to carry out these activities. By participating in PREVENT Institute training, staff were provided an opportunity to create a vision for an integrated, comprehensive state-wide infrastructure, led by the Children and Youth Branch in the Division of Public Health, to expand evidence based child maltreatment prevention efforts and increase the health and well-being of North Carolina’s children.

Current Programs within the Early Childhood System

The Division of Public Health has an internal structure for leadership and planning early childhood system work. The group is co led by two branches in the Division, Children and Youth Branch and Women’s Health Branch. This forum provides a linkage for the broader work being done statewide. Many important projects across the state form the “pieces” of this system. Collaborative work among partners strengthens the system of care for families in the state. The following projects share aspects of the vision, goals and the responsibilities for improving outcomes for young children and families with the home visiting programs to be funded through MIECHV. Strengthening state infrastructure can help to insure that the lessons learned across a variety of projects are shared, thus benefitting the entire system.

Sample of Collaborative Projects in Early Childhood : Table 6

	Agency/Organization	Early Childhood Service(s)
DHHS	Division of Public Health Women and Children’s Health Section (WCH) Ex. Director for Child Maltreatment Prevention Chronic Disease and Violence Prevention Section Injury and Violence Prevention Branch	<u>WCH Section: Title V</u> Children and Youth Branch ; home visiting , EB parenting programs, genetic counseling, physical therapy consultation, children’s care coordination, school health nurses, school health centers, school health nutrition services, newborn metabolic and audiology screening, special needs help line, child fatality review teams, child fatality task force, child and family teams, family advisory council for children with special needs, Innovative Approaches systems building initiative, well child care, treatment and preventive health exams, infant abandonment program, State lead for NFP programs, State child care health consultant, Early childhood grant, Office on Disability and Health, CHIPRA outreach, CHIPRA special needs children, newborn home visiting, Early Hearing Detection and Intervention, Women’s Health Branch ; Maternal Health, Pregnancy Care Management, Healthy Start Baby Love Plus, Healthy Beginnings – Minority Infant Mortality Reduction, Sickle Cell, Perinatal Substance Use, Project Connect (Young Moms Connect: Communities Supporting Young Families) Preconception Health, Family Planning, Family Planning Waiver, Latino Outreach, Teen Pregnancy Prevention Initiatives, Women’s Health and Tobacco Use, Sudden Infant Death Syndrome (SIDS)

			<p>Early Intervention Branch: service Coordination, physical, occupational and speech-language therapies, family support, special instruction , and assistive technology</p> <p>Nutrition Branch: WIC, specialty infant formulas, Child Food Program, Helpdesk, Summer Food Service Program for Children, Child and Adult Care Food Program, Nutrition Education and Training, WIC Farmers' Market Nutrition Program</p> <p>Immunization Branch: vaccine services, data collection & analysis, field services, and communication, outreach & professional development.</p>
		Division of Child Development (DCD)--Strong partner in child care centers. They fund child care health consultants and C & Y provides oversight and guidance through State Childcare position. Co fund Stare Resource and Referral Center	<p>Child care regulation and support service</p> <p>Behavioral Health Consultants for child care centers</p> <p>Resource and referral centers for placement assistance of children in child care facilities.</p> <p>Head Start/ Early Head Start and Migrant Head Start</p> <p>Smart Start (State appropriations flow through DCD, but 501C3 status).</p>
		Office of Educational Services	<p>Services for children who are deaf or hard of hearing.</p> <p>Position share audiologist positions</p> <p>Joint planning and implementation of services with C & Y</p>
		MH/DD/SAS*	<p>Community-based mental health services, other social and behavioral health services, substance use, developmental disabilities programs, co location of mental health and primary care physicians; C & Y co leads the Behavioral Health Group for the Commission for CSHCN; joint planning committees; MH/SAS focuses mainly on chronically ill individuals--does not provide many preventive activities. They do sponsor Incredible Years parenting program; member of the Alliance for Strengthening Families and Home Visiting Steering Committee</p>
		Division of Social Services	<p>Child welfare, child abuse and neglect intervention, foster care system, adoption. Work closely on data system for abuse and neglect; medical homes for foster care children, evidence based parenting programs, Alliance for Strengthening Families, Home Visiting Steering Committee and planning meetings.</p>
		Division of Medical Assistance	<p>Health insurance (Health Check (Medicaid) and NC Health Choice (CHIPRA). We work closely with DMA on all child health and maternal health related programs.</p>
		Head Start/Early Head Start/Migrant Head Start	<p>Home Visiting Steering Committee, C & Y staff train HS staff in medication administration, hearing screening, developmental screening, and partner on numerous health related, social, behavioral work development and planning activities.</p>
Other Governmental			
		NC Partnership for Children	<p><i>Smart Start</i> early childhood program, member of the Alliance for Strengthening Families, co workers in developmental screening projects, child care center consultation and leadership, care coordination projects, parenting projects, trainings, coordination of work related initiatives, Innovative Approaches.</p>
		Office of the Governor	<p><i>Early Childhood Advisory Committee, Advisory group to the Home Visiting Program, More At Four</i> school readiness initiative, child and family teams,</p>

	Department of Public Instruction	Exceptional Children's Services and Title I pre-school services
	NC Office of Rural Health	
	Department of Juvenile Justice and Delinquency Prevention	Child abuse detection, prevention services, primary prevention of anti-social or criminal behavior
Parent, Advocacy Groups		
	WCHS Family Advisory Council	Consultation to WCHS programs for children with special needs
	Early Childhood Assistance Center	State Parent Training and Information (PTI) Center
	Child Advocacy Institute	Statewide advocacy group
	Family Resource Coalition	Family support
	Family Support Network	Family support
	Prevent Child Abuse NC	Child abuse prevention, family support activities, advocacy, former member of the Alliance for Strengthening Family, provide coaching and instruction in evidence based parenting programs for the State. Members of the Child Fatality Task Force, partner in prevention activities, co sponsored training in Framing, evidence based services, and child abuse prevention issues.
Universities		
	Duke University Center of Children and Families	Best practice models, program development, program evaluation
	UNC Chapel Hill; UNC School of Public Health Department of Maternal and Child Health UNC Center for Child Development UNC Clinical Center for Development and Learning	Contractor for Title V maternal and child health training program for C & Y including expanded role nursing training for health departments; sponsors conferences for our Early Hearing Detection and Intervention Program, Child Health Nurse Conference and School Health Conference. Staff teach public health courses at the University; contract for numerous direct services with UNC CH; co chair the EHDI advisory committee, the Commission for CSHCN. Joint planning and implementation in numerous projects. Clinical practice models, program development, program evaluation LEND Title V training program, child development services; Providing ongoing training to C & Y staff in early brain development, trauma related issues in early childhood,
	UNC G Systems Improvement/Community Capacity Development	Partner in the LAUNCH grant located in Guilford County; Works with contracted counties to improve systems of care for CSHCN; Piloting data gathering of the Kindergarten Health Assessment information, Strong partners in early childhood services and training.
	Other clinical programs, research centers	
Professional Organizations		
	NC Pediatric Society	Partnership in CHIPRA grant for increasing enrollment in the State, co chair with C & Y of the Committee for Increasing Health Care Coverage, partners in the Medical Home for Foster Care Children, close partners in immunization policy development, encourage participation in their quarterly and annual meetings, Strong partners in numerous activities that are related to children's health or social well being.
	NC Assistive Technology Program	Strong partnership in providing assistive technology services for children and adults

	NC Cooperative Extension Service	Nutrition programs, parenting education
Philanthropic Organizations		
	The Duke Endowment	Funds NFP and many other early childhood programs
	Kate B. Reynolds Foundation	Funds NFP and many other early childhood programs
	Blue Cross/Blue Shield Foundation	Funds NFP and many other early childhood programs

** Division of Mental Health, Developmental Disabilities and Substance Abuse Services*

Innovative Approaches Initiative

The Division of Public Health’s Children and Youth Branch recognizes that a system of health and human services that is family centered, well coordinated, accessible, comprehensive and culturally competent is critical to the success of children and youth with special health care needs and their families. The Branch recently awarded Innovative Approaches grants of approximately \$250,000 to four local health departments to improve community-wide systems of care for families of children with special health care needs. This initiative requires local health departments (LHDs) and local Community Care of North Carolina (CCNC) networks to collaborate as lead agencies for this project.

Funded projects are addressing factors that create barriers to effective system functioning, including categorical funding and service provision, uncoordinated care, incompatible data systems, inadequate access to services, and the inability to assess system performance and carry out quality improvement activities. The goals for this project include: (1) families of children and youth with special health care needs will partner in decision making at all levels, and will be satisfied with the services they receive; (2) all children and youth with special health care needs will receive coordinated ongoing comprehensive care within a medical home; (3) all children will be screened early and continuously for special health care needs; (4) services for children and youth with special health care needs and their families will be organized in ways that families can use them easily; (5) all children and youth with special health care needs will receive the services necessary to make appropriate transitions.

Linking Actions for Unmet Needs in Children’s Health (LAUNCH)

NC LAUNCH, funded by the Substance Abuse and Mental Health Services Administration, is a system building initiative that is designed to promote environments for children ages 0-8 that support physical, emotional, cognitive and behavioral health. The main goal is that all children reach physical, social, emotional, behavioral and cognitive milestones.

NC LAUNCH is currently implementing a state and local collaborative effort in Guilford County. State and local partners are working together to: (1) increase integration and collaboration among child-serving systems and services by establishing planning councils; (2) promote the use of culturally relevant, evidence-based programs and practices by child-serving organizations; (3) offer training and education to ensure that families, providers, and other adults caring for young children have the knowledge and skills to promote healthy child development; (4) engage families, the faith community, business leaders, cultural organizations, and other local leaders in planning, implementing, and evaluating Project LAUNCH activities; (5) collect data and evaluate the effectiveness of services; and (6) raise public awareness about the importance of healthy development of young children and the community’s role in promoting it.

The project includes five prevention and promotion strategies: developmental assessments, integration of behavioral health care into primary care, home visiting programs, mental health consultation and family and parent strengthening. The services provided through NC LAUNCH require model fidelity and the development of an integrated local system for the care of young children. Best practices identified in Guilford County will be disseminated and sustainability strategies will be developed through a State Advisory Council.

North Carolina LAUNCH will provide services in all domains with attention to model fidelity, and will also promote the development of an integrated local system of care for early childhood. The project in North Carolina will implement a classic **public health “pyramid” approach**, with limited population-based support for all moving to more intensive services as family need increases. Intensive home visiting services, found toward the tip of the “pyramid” are supported by broad-based initiatives that affect the entire community. A community of strong families creates a culture in which positive parenting is the norm and families that need more intensive services are supported.

Child Fatality Task Force

The North Carolina Child Fatality Task Force is a state-mandated legislative study commission consisting of state legislators, state and local government, medical professionals, community leaders and others. By statute, the Task Force is staffed out of the Division of Public Health, and the Executive Director will be a critical member of the Early Childhood Leadership Team. The Task Force has been instrumental in improving the infrastructure that supports the perinatal health system, child welfare restructuring, and a number of policies to improve child safety, such as booster seat and helmet laws. The Task Force uses a committee structure to develop recommendations that are taken to the full Task Force, which in turn, makes recommendations to the General Assembly and Governor.

Since two-thirds of all children who die do so before their first birthday, preventing poor birth outcomes and reducing infant mortality is a key component of Task Force work. The Perinatal Health Committee (PHC) develops strategy recommendations for improving birth outcomes and reducing infant death. While some of the changes promoted by the Perinatal Health Committee have required legislation, a far more common approach is to work closely with leaders at Division of Public Health and others in the community to assure strong and effective strategies that work synergistically to improve birth outcomes and life trajectories.

Accomplishments include distribution of medications to reduce recurring pre-term births, the NC Folic Acid Campaign, the NC Birth Defect Monitoring Program and “Back to Sleep” campaigns to reduce SIDS. Currently, Perinatal Health is looking at ways to improve birth outcomes and protect and rebuild the perinatal health infrastructure in North Carolina. A recent focus of the work has been interconception care for women to promote healthy second births. The Committee leadership is also working with key stakeholders (such as experts in breastfeeding, PURPLE Crying, smoking cessation, and safe sleep) around ways to more effectively and efficiently deliver messages to new parents in hospitals.

Nurse Family Partnership and Healthy Families America (as implemented in Durham and Yancey-Mitchell counties) both target the same prenatal population. Established Child Fatality

Prevention Teams currently work in each county, bringing together professionals across systems in the community to review child deaths and recommend system improvements. These teams include family members, law enforcement, medical professionals, educators, representatives from local Health Department and Department of Social Services, and other community members. Their existing collaborative work can serve to anchor the home visiting programs within their communities.

Maltreatment Prevention and Family Strengthening

Child maltreatment is a preventable public health issue as it is biologically and epidemiologically associated with a broad range of health problems throughout the lifespan, and child maltreatment prevention is now a priority in the NC Division of Public Health. The Division is the lead state public agency for the prevention of child maltreatment and The Executive Director of the Child Maltreatment Prevention Leadership Team (CMPLT) has been building state-level leadership capacity to lead child maltreatment prevention efforts. The Alliance for Evidence-Based Family Strengthening Programs (The Alliance) is a key strategy in that effort.

While the members of the Alliance individually fund a range of diverse programs and services across NC, the Alliance is now collaboratively supporting three evidence-based programs (EBP) with the goal of statewide replication. These programs are: the Nurse Family Partnership (NFP), the Incredible Years (IY), and the Strengthening Families Program (SFP).

The Division of Public Health also houses the Evidence-Based Family Strengthening Programs Program Coordinator, but it is unfilled and frozen due to state hiring prohibitions. The Executive Director of the Child Maltreatment Prevention Leadership Team (CMPLT) has, in the interim, taken the lead on parenting programs.

Care Coordination for Children (CC4C): An At-Risk Population Management Program for Children Birth to 5 Years of Age

Care Coordination for Children (CC4C) is a new program, begun March 1, 2011, that transitions Child Service Coordination, a targeted case management program, into an at-risk population management model in partnership with Community Care of North Carolina (CCNC). CC4C staff serve children from birth to 5 years of age, who meet the following priority risk factors: (1) children with special health care needs/CSHCN (Title V definition); (2) children exposed to toxic stress in early childhood including, but not limited to extreme poverty in conjunction with continuous family chaos, recurrent physical or emotional abuse, chronic neglect, severe and enduring maternal depression, persistent parental substance abuse or repeated exposure to violence in the community or within the family; (3) children in the foster care system; and (4) children who are high cost / high users of services. Referrals originate from the medical home, community organization, or family. CCNC-identified Medicaid claims trigger referrals based on high cost utilization.

CC4C services are being provided based on patient-need and according to risk stratification guidelines. A comprehensive health assessment and the **Life Skills Progression**© (to gauge the capacity of a family to meet the needs of the child) assists the care manager in identifying the child's needs, plan of care and frequency of contacts required to effectively meet desired outcomes. Contacts occur in multiple settings including the medical home, hospital, community,

child's home, and by phone. All documentation for CC4C services will eventually be completed online in the **CCNC Case Management Information System (CMIS)**. LSP can also be used by Nurse Family Partnership and Healthy Families America as they work with families. This shared documentation can benefit both programs.

Each Medical Home serving children birth to 5 years of age will have a specific CC4C Care Manager(s) assigned to work with their clients. This stable relationship supports effective and complete communication between the Medical Home and CC4C Care Manager.

The main goals of the program are to improve health outcomes and reduce costs for enrolled children. These goals will be monitored based on the following CC4C outcome measures: (1) increase in NICU graduates who have their first medical home visit within one month of discharge; (2-3) reduce rate of hospital admissions/ readmissions; (4) reduce rate of emergency department visits; (5) increase percent of comprehensive assessments completed; (6) increase number of infants less than one year of age referred to Early Intervention; (7) increase percent of CSHCN and foster children enrolled in a medical home; and (9) increase the Life Skills Progression assessments on children receiving CC4C care coordination (initial, every 6 months & upon deferral).

As North Carolina transitions from CSC to CC4C, the following timetable is planned: (1) March-April – transition of CSC clients to CC4C by reassessing client needs and updating care plans; for new clients the completion of referral forms, assessments and care plans is required; (2) by May, evidence-based protocols and care plans will be developed and training offered; CC4C care managers will become linked to medical homes; (3) by June, CC4C care managers will begin reviewing Medicaid claims data to identify high cost/high users of services. In the meantime, reports to monitor CC4C Performance Metrics will be developed and CMIS will be programmed to serve as an electronic medical record for CC4C.

Much of the **data collection** for CC4C may also benefit the home visiting program. CMIS, a case management system used by CC4C and Medicaid, can be used to securely transmit personal health information between appropriate health care providers covered by the necessary HIPPA agreements. Records from a child's entire health care team are visible, enabling better coordination and understanding between providers. While we expect most of the children receiving home visiting will also be receiving Medicaid, CMIS is also capable of documenting case management for those ineligible for Medicaid who may be uninsured or covered by other third-party payers.

Child Care Health Consultation

North Carolina has been a leader in developing systems for providing child care health consultation for many years. The NC Division of Public Health supports a State Child Care Nurse Consultant position to provide leadership in planning, developing and implementing the Healthy Child Care North Carolina State Plan for child care health consultation. In collaboration with the North Carolina Child Care Health and Safety Resource Center, the Child Care Nurse Consultant ensures that training provided for Child Care Health Consultants throughout the state is consistent with the NC Board of Nursing recommendations and the NC Nurse Practice Act and

the Division of Child Development’s licensing requirements and sanitation rules required by the North Carolina Department of Environmental Health and Natural Resources. The State Consultant also provides technical assistance and support for local child care health consultants in all areas of health and safety.

The role of local county child care health consultants varies somewhat dependent upon the location of the program. However, most consultants are: (1) providing training in health, safety and nutrition for child care providers, parents and children; (2) providing resources and referrals for health services for children, parents and providers, and ensuring that children who attend child care have a medical home; (3) reviewing child care facility policies, procedures and health records; (4) assisting child care providers and parents with managing the care of children with special health care needs; (5) providing on site assessments of health and safety practices for child care programs; and (6) providing technical assistance, recommendations and resources for improving health and safety in out of home care.

Forming healthy attachments with caregivers in high-quality child care settings can improve child outcomes from social emotional development to school readiness. Strong child care providers can model positive behaviors for both parents and children. Access to high-quality child care also enables families to seek employment and earn more for their families, with the assurance that their children are thriving. Home visitors can encourage families to seek child care subsidies and connect with high-quality child care experiences. Child care providers can also serve as a source of referrals to home visiting programs.

Center on the Social and Emotional Foundations for Early Learning’s (CSEFEL) Pyramid Model for Supporting Social Emotional Competence in Infants and Young Children

CSEFEL offers training and materials that promote social and emotional health, and prevent or address children’s challenging behaviors.

NC Division of Child Development (DCD) and other state agencies are working with the CSEFEL team

- To promote children’s healthy social and emotional development
- To prevent children from learning challenging behaviors
- To intervene or step in when children continue to have challenging behaviors

CSEFEL’s pyramid model describes the kinds of support children need to develop healthy social and emotional skills. The success of the pyramid model depends on early childhood teachers. They are most effective when they use strategies and techniques that work well with children. All other levels of the pyramid rest on this solid foundation.

CSEFEL is embedded into work of two statewide initiatives: Healthy Social Behaviors Initiative & Infant and Toddler Initiative. Efforts have been made to embed CSEFEL into community college early childhood curriculum. Training has been provided to licensing consultants. DPI/OEL (Preschool Disabilities & Head Start Collaboration Office) supports implementation of CSEFEL Pyramid Model in 9 LEAs and 3 Head Start grantees at this time. 46 people are trained as coaches and 132 as train-the-trainers. Currently there are 3 demonstration sites in the state, one of which has reached fidelity to the CSEFEL Pyramid Model. One of the demonstration sites

is in Asheville, Buncombe County, and could potentially work together with the home visiting program with children in child care.

Project Connect – Communities Supporting Young Families

Project Connect is a new initiative funded by the Office of Adolescent Health with the Pregnancy Assistance Fund. The program will support pregnant and/or parenting women ages 13- 24 years with health maintenance, parenting skills and parental self-sufficiency.

The goals of *Project Connect* are: (1) to support community strategies to create effective systems of care 2) to incorporate evidence-based practices, strategies and models and (3) to improve the health of pregnant and parenting women by providing comprehensive support services that are easy to access and meet their needs. The Women’s Health Branch in the NC Division of Public Health will provide trainings for health care providers and coordinate a social marketing campaign related to the six identified maternal health best practice areas in the 5 project counties.

Each community involved will establish a Community Advisory Council that will guide their project in implementing an action plan, integrate six identified maternal health best practices, implement or expand an evidence-based home visitation program and create an integrated system of care in their communities.

Pregnancy Care Management

The North Carolina Division of Public Health, in partnership with the North Carolina Division of Medical Assistance and Community Care of North Carolina (CCNC), is developing a Pregnancy Medical Home project, which is inclusive of Pregnancy Care Management (PCM) services. The goal of the Pregnancy Medical Home (PMH) model is to improve the quality of maternity care, improve birth outcomes, and provide continuity of care. The model involves engaging obstetrical providers as Pregnancy Medical Homes and local health departments as providers of Pregnancy Care Management services.

The overall model seeks to improve birth outcomes, which will be measured by NICU length of stay, infant medical care costs in the first year of life, gestational age at delivery, rates of low birth weight and very low birth weight, and the primary cesarean section rate. Specific measures will determine to what extent the PCM services are achieving project goals, including: the percent of completed risk screenings entered into the electronic database system; the number of women with priority risk factors who receive a pregnancy assessment; the number of women who worked with a care manager who received a postpartum referral for ongoing Medicaid eligibility determination; the number of women who keep appointments for 17P injection; and the number of women who complete a postpartum clinical visit.

All patients identified as having priority risk factors are referred for an assessment by a pregnancy care manager. Priority risk factors include: A history of preterm birth, a history of low birth weight, multiple gestation, fetal complications, chronic conditions which may complicate pregnancy, unsafe living environment (homelessness, inadequate housing, violence or abuse), substance use, tobacco use, missing two or more prenatal appointments without rescheduling, and inappropriate hospital utilization.

PCM services are provided by a nurse, social worker, or human services professional, and are based on patient need and risk status. Contacts are determined by the patient's individual needs and plan of care, in order to effectively meet desired outcomes. Contacts may occur in multiple settings including the health care provider office, community, or patient's home, as well as by phone.

All PMH providers are required to complete a pregnancy risk screening, at the initial prenatal visit, to identify these and other risk factors. Non-PMH prenatal care providers can also refer their patients for PCM services. Additionally, referrals for PCM can be made by partner entities that provide services to pregnant Medicaid recipients. Some local health departments also allocate specific funding to provide PCM services to women who are ineligible for Medicaid.

The extensive screenings required by PCM can also benefit the home visiting program through access to the shared documentation in the CMIS program. Since this program also shares many eligible for the home visiting program, caseworkers can assess their clients to understand which program would best suit their needs. Collaboration and strong leadership at the state level can reduce inefficiency or duplication of efforts at the local level and create a spirit of cooperation between PCM caseworkers, home visitors and nurses.

Healthy Beginnings

Healthy Beginnings is North Carolina's minority infant mortality reduction program aimed at improving birth outcomes in communities of color across the state. Health Departments and Community Based Organizations are eligible for funding. Healthy Beginnings sites are expected to implement strategies that positively affect minority birth outcomes. Priority areas of service include: breastfeeding; smoking reduction and elimination; healthy weight and exercise; safe sleep; folic acid consumption; well child visits; reproductive life planning; and positive male involvement when applicable. Sites are also required to provide outreach, education, support services and care coordination.

Sites are funded for three years, subject to funding availability. Currently there are 12 Healthy Beginnings sites across the state each serving 40 minority women annually. Healthy Beginnings sites exist in three of the counties targeted by the MIECHV funding: Buncombe, Northampton and Hertford counties. Home visiting programs working in collaboration with Healthy Beginnings can share referrals between both programs, and contribute to community support of an early childhood system.

Baby Love Plus

The North Carolina Baby Love Plus (BLP) Program is funded through the Healthy Start Eliminating Disparities Program of the Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). The program's purpose is to reduce infant mortality and morbidity in fourteen counties by enhancing the effectiveness of existing MCH activities and introducing new interventions that complement existing strategies in order to create a comprehensive package of perinatal health services that address the needs of women of childbearing age, especially among African American and American Indian populations. BLP services seek to reduce racial disparity for key perinatal health indicators such as: early entry into and adequacy of prenatal care, proportion of eligible pregnant and interconceptional women

enrolled in case management services, smoking during pregnancy, healthy spacing between pregnancies, healthy newborns and toddlers, reduced preterm delivery, low birth weight, and infant death rates.

Through contracts with fourteen local health departments, districts, and community-based organizations, pregnant and parenting families receive outreach, case management, interconceptional health care services and health education and training. In addition, regional consortiums (advisory boards) are place to increase community and agency coordination and collaboration to build programs that reflect the needs and values of each community. Current priorities include:

1. participation in Health Resources and Administration (HRSA) required interconceptional care learning collaborative and Plan, Do, Study, Act (PDSA) change projects with the goal of increasing client retention in care coordination services during the two year interconceptional period,
2. expanding the number of partnerships with faith-based organizations that implement health and wellness efforts in local communities; and
3. implementing ongoing training activities with Family Care Coordination staff with the goal of increasing client retention in interconceptional care services.

Several of the current Baby Love Plus counties are among those selected to receive funding for home visiting programs through MIECHV, including Northampton, Halifax, Hertford and Edgecombe counties. These programs can work together closely, serving overlapping populations, to improve outcomes for families in some of the neediest areas of North Carolina.

NC Partnership for Children

Smart Start's state organization, The North Carolina Partnership for Children, Inc., and its local partnerships are independent, nonprofit organizations. During the height of the recession in 2009 and 2010, more than 800 parents, business leaders, elected officials, health care providers, early childhood professionals and others representing every county in the state came together and agreed that ensuring access to high-quality early care and education programs needed to be a top priority for the state. This is a goal that the NC Partnership has worked to attain. There are 77 local agencies covering the 100 counties in NC and the local Smart Start advisory boards include representatives from the vast majority of early childhood partners including families. These local boards are a focus in many counties for community planning and implementation.

Community Care of NC and Care Coordination:

Viable mechanisms for statewide replication of evidence-based practices include the work of Community Care of North Carolina, a nationally recognized network of primary health care providers with a track record of piloting and then implementing statewide quality improvement and cost-containment strategies in primary care. All the initiatives discussed share common goals.

Community Care of NC (CCNC) was developed to bring health providers together in networks to assess and meet patient needs, and develop the health infrastructure at the community level. Providers (physicians, specialists, health departments, hospitals and others) receive a per member

per month (pmpm) incentive to improve care for Medicaid clients and the network receives a pmpm to provide care management for preventive services and to identify high risk patients before they become high cost.

The program is sponsored by the Office of the Secretary, the Division of Medical Assistance and the N.C. Foundation for Advanced Health Programs, Inc. Program direction, administration and technical assistance is provided by the Office of Rural Health and Community Care. A distinguishing feature of the Community Care of North Carolina program is the emphasis on population-based health management and quality improvement initiatives.

CCNC is a nationally-recognized, physician-driven, primary care case management Medicaid Program that has implemented many quality projects including, asthma, diabetes, ABCD (Assuring Better Child Health and Development), Mental Health Integration, Congestive Heart Failure, Chronic Care, and ABD (Aged, Blind, and Disabled). CCNC has a twelve-year history of success piloting new initiatives in one (or a few) networks, and then replicating statewide. All networks now have a psychiatrist consultant and behavioral health coordinator on staff. CCNC manages the CMIS data system statewide that has patient information, care management notes, and claims information for Medicaid enrolled individuals and the uninsured. The Informatics Center contains all quality data (by network and practice, data about patients with chronic/complex needs (claims for pharmacy, ED use, hospitalizations, mental health services, visits to Primary Care Provider, and allied health services), and a provider portal for use at the point of care.

This system wide network of providers in NC has been nationally recognized as an effective model for medical home and, because of its success in improving outcomes and saving Medicaid dollars, it has become the hub for many additional activities that contribute to the medical home operation at the State and local levels. .

The CCNC networks are also responsible for the delivery of targeted case management services to improve quality of care while containing costs. Case managers play a central role in helping the CCNC networks achieve this goal. They are primarily responsible for helping to identify patients with high risk conditions or needs, assisting the providers in disease management education and/or follow-up, helping patients coordinate their care or access needed services, and collecting data on process and outcome measures. Typically, CCNC case managers have caseloads of approximately 2,500 patients, which translates into an active caseload of about 150-200 enrollees who need continual management. The majority of enrollees can be taught to manage their own diseases and generally only require initial patient education and/or a six-month or twelve-month follow-up. The services provided and regularity of contact by the case manager depends on the intensity of the patient's need.

Case coordination services for children birth to five years of age and for pregnant women have been provided statewide for many years through health department coordinators supported by State and Federal revenue. In the Medicaid State Plan, these services were classified as targeted case management and precluded client education and direct services for clients. The services focused on assessing needs and providing appropriate linkages to services, follow-through and

monitoring and were reimbursed through a fee for service model.

Based on the national and state success of the CCNC network and recognizing the need for a less “silo-based” and more integrated approach to supporting the environment of early childhood, including maternity care, NC has recently reorganized the CCNC and health department systems of case management and care coordination to operate as a single unit that will develop pregnancy homes for women early in their pregnancies and coordinate and expand care management for children. This creates a strong and coordinated State and local network for delivery of early childhood services. The Home Visiting Program will add even more strength to this model. The three care management programs are offered through the local health departments in NC in partnership with the DPH, DMA and CCNC and include Pregnancy Medical Home Initiative, PCM (Pregnancy Care Management, formerly MCC); and CC4C (Care Coordination for Children, formerly CSC). The CCNC/health department care manager staff already have strong collaborative relationships with primary care. Generally CC4C will serve the 0-5 populations (children with chronic medical, developmental, and/or psychosocial concerns), but child and family function will be assessed and intensity of involvement will be based on the functional assessment. There is also added emphasis on infants and children experiencing toxic stress and children in foster care.

In summary, the plan provides for:

- Population Stratification (Case Identification)
 - The application of a common series of measures to the enrolled population to describe the distribution and severity of illness, and the index of resource utilization; assigning members to "targeted groups/risk buckets" for purposes of program assignment.
- Member Assignment
 - The assignment of members falling within certain risk strata to case management, disease management and other preventive health programs.
- Member Care Coordination
 - The provision of structured interventions to targeted groups in order to ameliorate bio-psycho-social risk factors and provide ongoing monitoring of the effectiveness of the care coordination effort.

Case Management Information System (CMIS)

The CCNC Program Office in Raleigh provides each network access to a secure, web-based case management information system (CMIS) for the management of its enrollees. The system includes modules for:

- Reporting (both individual and population level)
- Houses claims data and other clinical, patient-centric data
- Case Assignment
- Work Load Balancing
- Mailing Labels for member mass mailings
- Patient Assessment and Care Planning
- Case Manager Task List Management

- Secure Messaging

The system can be used by all individuals that are either employed by, or are business associates of the CCNC Community Care Network, provided that each user is engaged in the process of patient care coordination only.

<http://www.communitycarenc.com/>

A list of communities in the State that were identified as being at risk in the State’s initial needs assessment but are not being selected for implementation of the State Home Visiting Program due to limitations on available FY 2010 funding.

Communities that applied in the RFA process but were not selected for funding:

Alamance County Health Department
 Anson County Health Department
 Beaufort/Hyde Partnership for Children
 Burke County Early Head Start
 Cherokee Graham Swain Smart Start
 Franklin-Vance County
 Greene County
 Lee County
 Martin County
 Mecklenburg Care Ring
 Richmond County Health Department
 Robeson County Health Department
 Rutherford Polk McDowell Health Department
 Scotland Head Start
 Smart Start of Davidson County
 Washington County Head Start

Counties that were not categorically eligible for funding:

Cleveland	Johnston
Bertie	Chatham
Sampson	Tyrrell
Caldwell	Durham
Pitt	Haywood
Rutherford	Iredell
Harnett	Surry
Lincoln	Hoke
Gaston	Rowan
Jackson	Pamlico
Pasquotank	Franklin
Wayne	Mecklenburg
Person	Guilford

Brunswick	Alleghany
Caswell	Wilkes
Madison	Yadkin
Forsyth	New Hanover
Clay	Craven
Cumberland	Gates
Hertford	Stokes
Burke	Pender
Chowan	Perquimans
Granville	Henderson
Onslow	Hyde
Catawba	Moore
Jones	Dare
Davidson	Cabarrus
Alexander	Transylvania

Section 2--Describe strategies for integrating the program with other programs and systems in the State that are related to maternal and child health and early childhood health, development and well-being. The Updated State Plan should include a logic model for the proposed State Home Visiting Program as a whole. The logic model should identify inputs, outputs and short-term and long-term outcomes
<http://toolkit.childwelfare.gov/toolkit/>

North Carolina Home Visiting Program Goals and Objectives

Research demonstrates that children’s healthy development is essential to school readiness, academic success, and overall well-being. Developmental delays and conditions are common in early childhood, affecting at least 10% of children. Early developmental delays are markers for later developmental conditions such as autism, intellectual disability, hearing or vision impairment, cerebral palsy, speech and language disorders, and learning disabilities. Risk factors such as family poverty, parents’ mental illness, and child neglect and abuse increase the likelihood of developmental delays. Services that support young children’s healthy development can reduce the prevalence of developmental and behavioral disorders that have high costs and long-term consequences for health, education, child welfare, and juvenile justice systems.

Goal:

Coordinate an effective statewide planning and implementation system through a strong alliance with key partners in early childhood services at the State and local levels that ensures all children grow up in environments that are safe and supportive, and that maximally promote each child’s physical, emotional, cognitive and behavioral health

Objective 1

1. Utilize the Governor's Early Childhood Advisory Council (ECAC) and other partnerships to optimize strong and effective leadership, coordination and implementation of the NC Home Visiting Program at both the State and the local levels

Strategies:

- 1.1 Provide updates to the Governor's Senior Policy Advisor for Early Childhood at each phase of the planning, writing and submission of the Affordable Care Act Maternal, Infant, and Early Childhood Home Visiting Program. Key partners at the State and local levels will provide input to the ECAC’s Strategic Plan for Early Childhood being developed by the Council. Early childhood partners have deep content expertise in many of the issues that the ECAC will consider and that expertise can be used to ensure that the plan created by the ECAC builds on existing systems and allows for transformative next steps in building an effective early childhood system
- 1.2 Continue to utilize the Early Childhood Comprehensive Grant (ECCS) which resides in the Division of Public Health, Children and Youth Branch as a method to move the early childhood system improvement agenda

forward by: (1) working collaboratively with the Governor’s Senior Policy Advisor for Early Childhood to align the goals and resources of the ECCS grant with the goals and resources of North Carolina’s Early Childhood Advisory Council (ECAC); (2) facilitating progress toward a comprehensive early childhood plan for North Carolina; (3) advancing the young child mental health/social emotional agenda; (4) strengthening the commitment to using developmental science and implementation science to guide all early childhood system building efforts; and (5) continuing to support the goals of the early child care education system.

1.3 Meet with the NC Home Visiting Steering Committee at least quarterly to maintain involvement and commitment. Steering Committee members are listed in Attachment S. Key partners in this effort include many programs found in the Department of Health and Human Services (mental health, child development, social services, Head Start, public health, Medicaid, and rural health) working in conjunction with the Governor’s Office, universities, private sector providers, the National Implementation and Research Network, families/consumers, support groups and private not-for-profit agencies. At the end of this section, some of the current partnerships are outlined in more detail in Table 6, Section 1.

1.4 Continue to involve the Alliance for Strengthening Families to contribute to and support the NC Home Visiting Program. A public-private partnership of funders of early childhood initiatives, the Alliance For Evidence-Based Family Strengthening Programs, was established to coordinate planning and family focused interventions. The group is composed of the funders for the current eight Nurse Family Partnership programs in NC and funders of the evidence based parenting programs:

- The Duke Endowment,
- Kate B. Reynolds Foundation,
- Blue Cross Blue Shield,
- The Division of Public Health, Children and Youth Branch,
- The Division of Mental Health/DD/Substance Abuse Services,
- The Division of Social Services,
- Head Start,
- The Department of Juvenile Justice,
- The NC Partnership for Children,
- Duke University, and
- Prevent Child Abuse NC.

At least three members of the Alliance have been named as members of the Governor’s Early Childhood Advisory Council which assures a formal pathway of communication between the two groups.

1.5 In conjunction with early childhood experts recommend key policy change priorities and collective action steps

Objective 2

2. Educate communities, policy makers and families on the goals and objectives of the NC Home Visiting Program during the initial phase of planning utilizing a public health approach.

Strategies:

- 2.1 Create a continuum of training, education, & ongoing professional development.
- 2.2 Encourage and support local coalition sponsored advocacy activities.
- 2.3 Serve as a centralized source for exchange of information, technical assistance and resource coordination.
- 2.4 Present at least four educational sessions monthly to educate community members.
- 2.5 Increase the supply of qualified professionals.
- 2.6 Involve families in education and training to increase family awareness of and utilization of available services and supports.

Objective 3

- 3 Implement a strong support network to assist local community service providers with implementation of evidence based home visiting models adhering to fidelity requirements

Strategies

- 3.1 Through the HV funding expand and sustain state and community public-private entities to consistently guide early childhood initiatives and provide resources, technical assistance, and accountability.
- 3.2 Promote a high quality workforce providing services for young children and families.
- 3.3 Identify and create opportunities for advocacy and coordination/action at the regional, national and local levels.
- 3.4 Promote effective and efficient funding strategies and policies.
- 3.5 Increase provider awareness of how to work best with local home visiting services and parent education programs.
- 3.6 Taking best practice methods from Triple P, adopt uniform messages across agencies, disciplines, and organizations.
- 3.7 Assure that State budget and policies reflect & support key system goals.

Objective 4

4. Increase the capacity of local partnerships working to coordinate, improve, and expand delivery of early childhood programs and services.

Strategies

- 4.1 Contract with the National Implementation and Research Network (NIRN) to provide implementation guidance and capacity building strategies for sustainability at the sites chosen to implement the HV programs. Through working with NIRN, State and local participants will increase their capacity to coordinate, improve, and expand delivery of early childhood programs and services.
- 4.2 Increase access for all families to quality information and supportive services.
- 4.3 Create local leadership coalitions at the community level.
- 4.4 Create learning communities to share best practices and resources.
- 4.5 Increase early intervention, perinatal depression, and substance abuse treatment services.
- 4.6 Promote healthy behaviors among all pregnant women and young children to facilitate information-sharing & referrals across disciplines & systems.
- 4.7 Increase diverse parent representation on local and state-level coalitions and planning.
- 4.8 Explore policy changes to expand Medicaid eligibility for children and pregnant women.

Objective 5

5. Improve coordination of services for at-risk communities.

Strategies

- 5.1 Increase access for all families to quality information and supportive services
- 5.2 Promote collaborative strategies for the most effective governance and leadership among agencies and organizations. Establish working group of senior leaders of relevant agencies and organizations
- 5.3 Align and integrate service deliveries across agencies and organizations
- 5.4 Educate parents about high quality early care and education as a support for school readiness
- 5.5 Increase use of strategies to promote and sustain parental and family involvement
- 5.6 Increase number of eligible families enrolled in evidence based home visitation programs
- 5.7 Increase number of families providing a safe home environment

Objective 6

6. Ensure accountability with program standards and measurement mechanisms to track identified outcome indicators.

Strategies

- 6.1 Work with National Offices of NFP and Healthy Families America and software developers to create/support a data system that effectively tracks and measures child outcomes identified by the grantor.
- 6.2 Support local strategic plans to meet identified needs aligned with State and Federal priorities.
- 6.3 Assure that HV programs are utilizing appropriate assessment instruments and outcome indicators to measure progress of the implementation sites.
- 6.4 Increase the quality of parenting support programs.
- 6.5 Increase data linkages and information sharing among all partners and agencies.

Logic Model

Program Name: North Carolina's Home Visiting Program

Program Vision: All children will grow up in environments that are safe and supportive, and that promote each child's physical, emotional, cognitive and behavioral health.

Population Served: Providers serving low income pregnant at risk women and their young children through the evidence based Nurse Family Partnership and Healthy Families America home visiting programs.

Population Needs to be Addressed by Services: Funding; Hiring and retention guidelines; Education on model requirements; Education on model implementation; Capacity building with local early childhood systems; Increased knowledge of effective systems building techniques; Increased public awareness education and communication activities about the programs at both the local and State levels.

Outputs: Provide assistance with environmental scan and data gathering; Execute and administer contracts with grantees pursuant to State policy; Contract for services through the National Implementation and Research Network (NIRN) for implementation and capacity building training; Facilitate training with National home visiting models; Assist with ongoing information on sustainability opportunities; Assure linkages between local plans and the State Plan; Assist local agencies with workforce development; Provide consultative nursing and programmatic support to the agencies and supervisors supporting Nurse Family Partnership and Healthy Families America; Work with NIRN to create trained State implementation teams; Assist with adherence to model fidelity training through ongoing monitoring of activities and prompt feedback; Coordinate regular meetings with co implementers of the models; and Support public awareness education.

Assumptions: Implementation of evidence based home visiting programs for mothers and children at high risk have resulted in improved outcomes for populations similar to those being served in North Carolina.

Long Term Outcomes: 1. Improved pregnancy outcomes; 2. Improved early childhood growth and development; 3. Self-sufficient, healthy and strong families; 4. Reduction of abuse and neglect; Social/emotional problems in children decreased; 5. Improved literacy; 6. Improved academic performance;

Inputs: Support from maternal and early child health programs, State leaders, State Program Director, State Nurse Consultant, Data Specialist, Federal funding, local contracting agencies, local staff, local early childhood programs, National NFP and HFA offices, Training in model curricula and model requirements

Outcomes	Indicators	Measurement
<ol style="list-style-type: none"> 1. Public and private agencies (schools, child development centers, faith-based groups, health departments, etc.) understand and demonstrate services that strengthen families. 2. Increase evidence based HV practices 3. Parental social and child rearing skills increase 4. Parents increase appropriate pregnancy spacing and employment 	<ul style="list-style-type: none"> ▪ Public and private agencies develop meaningful partnerships with parents. ▪ Public and private agencies provide or refer parents and children appropriately to available support services. . ▪ Home Visiting will integrate with other early childhood programs at the local level so that referrals, communication, triage and planning is improved. ▪ Families graduating from the home visiting programs will demonstrate improvements in the physical, emotional, cognitive and behavioral health areas. 	<ul style="list-style-type: none"> ▪ Data collection using Federal requirements, benchmarks and indicators

Section 3: Selection of Proposed Home Visiting Model(s) and Explanation of How the Model(s) Meets the Needs of Targeted Community(ies)

(a) Selection of Approved Evidence-Based Home Visitation Models

Our *State Needs Assessment*, completed in September 2010, cataloged and described a variety of home visiting models and programs implemented in North Carolina including four (4) which meet the criteria for evidence based. These models are: Early Head Start Home Based Option, Healthy Families America, Nurse Family Partnership and Parents As Teachers.

In preparation for completion of the final state plan for the Maternal, Infant, and Early Childhood Home Visiting program (MIECHVP), the NC Division of Public Health, in tandem with our stakeholder advisory committee, used our *State Needs Assessment* to identify the highest-risk communities based on thirteen (13) indicators, as described in Section 1. We then examined to what degree existing home visitation programs are successfully addressing community needs based on the risk indicators and the State's goals for prevention. This process included reviewing the literature for measurable outcomes and applicability to targeted high risk communities. We also assessed the level of national or state support currently available from the model developers or purveyors and what is needed for expansion.

Once the evidence-based criteria guidance was issued by HRSA and ACF through the Home Visiting Evidence of Effectiveness (HomVEE) study, we reviewed the findings on the seven (7) home visitation models which met the evidentiary standards outlined in HomVEE. We looked at favorable outcomes (primary and secondary) in each domain as well as the outcome relevance to the required benchmarks, and the sustained effects for each of the seven (7) evidence-based models. Attention was given to the unfavorable or ambiguous outcomes. Favorable impacts are defined as “a statistically significant impact on an outcome measure in a direction that is beneficial for children and parents” and broken into two categories: primary and secondary. Primary outcomes are defined as those measured through direct observation, direct assessment, or administrative data; or self-reported data collected using standardized instruments. Secondary outcomes are those derived from self-reported data, excluding self-reports based on standardized (normed) instruments. Unfavorable or ambiguous impacts are defined as “a statistically significant impact on an outcome measure in a direction that may indicate potential harm to children and/or parents. This impact could statistically be positive or negative, and is determined “unfavorable or ambiguous” based on the end result. While some outcomes are clearly unfavorable, for other outcomes it is not as clear which direction is desirable. For example, an increase in children's behavior problems is clearly unfavorable, while an increase in number of days mothers are hospitalized is more ambiguous. This may be viewed as an unfavorable impact because it indicates that mothers have more health problems, but it could also indicate that mothers have increased access to needed health care due to their participation in a home visiting program”. As with favorable impacts, the unfavorable/ ambiguous impacts are broken into two categories: primary and secondary. (Citation # 2 Section 3)

The table below summarizes the favorable outcomes (primary and secondary), by model and domain.

	Early Head Start Home Based Option	Healthy Families America	Nurse Family Partnership	Parents As Teachers
Maternal Health	No	No	Yes 3 Primary 17 Secondary	No
Child Health	No	Yes 1 Primary 3 Secondary	Yes 4 Primary 2 Secondary	No
Child Development & School Readiness	Yes 1 Primary 3 Secondary	Yes 7 Primary	Yes 4 Primary 14 Primary- Sub population 2 Secondary	Yes 2 Primary
Reduced Child Maltreatment	No	Yes 12 Secondary	Yes 6 Primary	Not Measured
Positive Parenting	Yes 3 Primary 5 Secondary	Yes 1 Primary 2 Secondary	Yes 4 Primary 1 Secondary	Yes 3 Primary
Family Economic Self Sufficiency	Yes 16 Secondary	Yes 2 Secondary	Yes 2 Primary 15 Secondary	No
Juvenile Delinquency, Family Violence, and Crime	Not measured	Yes 1 Secondary	Yes 4 Secondary	Not Measured
Service Linkages & Referrals	Not Measured	Yes 1 Secondary	No	Not Measured
Totals	28 4 Primary 24 Secondary	30 10 Primary 20 Secondary	64 23 Primary 41 Secondary	5 5 Primary

Green = Primary Outcomes Yellow = Secondary Outcomes

As one of our goals for this funding opportunity is to strengthen our state’s continuum of evidenced based home visitation programs that meets the level and intensity of the needs of high risk families, in this third and final phase of the application process we elected to focus our initial allocation to expand or enhance Early Head Start Home Based Option, Healthy Families America, Nurse Family Partnership and Parents As Teachers based on several rationales. First, while there was variance in the level, design and rigor of studies used to determine their effectiveness, as well as variations in desired outcomes, in order to address the unmet needs in our highest risk communities, it was concluded that we must use this funding opportunity to allow local communities to develop a continuum of EBHV models as no one program model can meet the diverse needs of our at-risk communities. Secondly, because of the significant

investments already made in the aforementioned home visitation programs at the State and local levels it behooves us, as a State, to build upon and enhance models already in operation as opposed to adding additional models. Finally, the State wants to focus resources to provide the required level of scaffolding to support communities with quality implementation and model adherence.

Based on recommendations from our stakeholders, North Carolina elected to use a competitive process (RFA) for the selection of the at-risk communities to provide evidence-based home visiting services and consequently the actual models that will be implemented. In their applications, communities proposed which of the aforementioned model or models would meet the unique needs of their community based on their assessment of need. North Carolina requested and received written approval from the model developers and/or purveyors of Early Head Start Home Based Option, Healthy Families America, Nurse Family Partnership and Parents As Teachers (Please see Attachment K). While this process will be fully described in Section 4, a brief summary is included to provide the reader context on the model selection process.

The competitive process was two-pronged. First, interested communities provided a written response to a Request for Applications (RFA). Twenty-five applications were received representing thirty-one (31) counties or sub-geographical areas within a county.

Community	Model Selected
Scotland	EHS
Bladen	EHS
Robeson	EHS
Greene	EHS
Martin	EHS
Craven (sub)	EHS
Hoke (sub)	PAT
Cherokee, Graham and Swain	PAT
Washington	PAT
Lee	PAT
Montgomery	PAT
Anson	PAT
Vance	PAT
Beaufort	PAT
City of Durham (Sub)	HFA and PAT
Burke	HFA
Richmond	HFA
Mitchell and Yancey	HFA
Mecklenburg (Sub)	HFA and NFP
Alamance	NFP
Buncombe (Sub)	NFP
Gaston (Sub)	NFP
Edgecombe, Halifax, Hertford, and Northampton	NFP
McDowell	NFP

Robeson and Columbus	NFP
----------------------	-----

From the review process, eight (8) applications were selected for the second level of assessment; an onsite readiness to implement visit. These eight applications represented eleven (11) counties or sub-geographic areas which met criteria for “at-risk”. The communities/models which received an onsite assessment were:

- Healthy Families America: Mitchell-Yancey;
- *Healthy Families America-Parents As Teachers* (integrated program)- City of Durham;
- Nurse Family Partnership: Buncombe, Gaston, Edgecombe- Halifax-Hertford-Northampton, and Robeson-Columbus; and
- Parents As Teachers: Anson and Cherokee-Graham-Swain.

These readiness assessment visits were conducted by staff from DPH and the National Implementation Research Network (NIRN) located at the University of North Carolina’s Frank Porter Graham Child Development Institute. From this second level evaluation, the following communities were selected for funding under the MIECHVP:

At-Risk Community	Model Selected by the Community Based on Needs Assessment
Buncombe County Zip Codes 28715, 28748, 28803 and 28806	Nurse Family Partnership –Expansion
East Durham County (a 120-block contiguous area east of downtown Durham)	Healthy Families America- Parents As Teachers – Expansion
Gaston County 38 Census Tracts	Nurse Family Partnership –Start Up
Northeast Collaborative: Edgecombe, Halifax, Hertford and Northampton Counties	Nurse Family Partnership – Start Up
Mitchell and Yancey Counties	Healthy Families America – Start Up

Based on the selection process outlined above, North Carolina will implement *Healthy Families America*, an integrated *Healthy Families America and Parents As Teachers* program, and *Nurse Family Partnership* to meet the identified needs in for our first cohort of targeted at-risk communities Healthy Families America. These programs meet the evidence-based criteria and are included in Appendix B of the Affordable Care Act Maternal, Infant, and Early Childhood Home Visiting Program Supplemental Information Request for the Submission of the Updated State Plan for a State Home Visiting Program.

Discussion of Selected Models

As our State’s competitive process selected three (3) of the four (4) proposed models, we will limit our discussion in this section to Healthy Families America, Parents as Teachers, and Nurse Family Partnership.

Fit with Selected At-Risk Communities: Healthy Families America will be newly implemented in two (2) at-risk communities: Mitchell and Yancey. While specific data is provided in Section 1 of this document, a general discussion of the community’s risk factors will be provided to demonstrate the appropriateness of the model selected.

Toe River Health District (Mitchell and Yancey Counties)

Mitchell and Yancey Counties are two of the three counties which make up the Toe River Health District. Located in the rural mountains of Western North Carolina these counties are isolated, with underdeveloped roadways, an underdeveloped public transportation system, limited economic development, low per capita income, high poverty and growing unemployment rates. Mitchell County is designated as one of forty (40) of the state's 100 counties, as severely economically depressed "Tier One" counties by the NC Department of Commerce. Economic indicators used to determine "Tier One" status included unemployment, per capita income, and population growth. Yancey is one of the forty "Tier Two" counties. Socio-economic problems, such as low literacy rates, high school drop-out rates, unemployment, under-employment, and reliance of public assistance programs are prevalent trends associated with Tier One and Two communities. (Citation NC Smart Growth Alliance

http://www.change.org/north_carolina_smart_growth_alliance)

As one would expect, Mitchell County leads Yancey County in most indicators associated with poor outcomes for families and children with a few unexplained differences. These include:

- A slightly higher Medicaid eligible rate for ages 0-20 (Mitchell 45.6 vs. Yancey 47.6);
- A higher percentage of children living in poverty (Mitchell 21.6% vs. Yancey 24.4%);
- A higher percentage of children receiving Food Assistance (Mitchell 19.2% vs. Yancey 23.3%); and
- A significantly higher substantiated child maltreatment rate (Mitchell 39.82 vs. Yancey 88.24)

Model Selection: While these communities considered all four of the State's selected models: Head Start Home Based Option, Healthy Families America, Nurse Family Partnership and Parents As Teacher, Healthy Families America and the Nurse Family Partnership were found to have the best match with meeting community needs. While NFP met more of the desired outcomes of the community than HFA, it was concluded that HFA would be a "better fit" for these rural communities at this time. Examples of "goodness of fit" for HFA vs. NFP include:

- ▶ HFA allows local programs the flexibility to design services specifically to meet the unique needs of families and the rural community;
- ▶ Low number of first-time low income births would be prohibitive for implementation of an eight or four nurse NFP team (although a small- two nurse team or expansion from Buncombe County were not explored);
- ▶ Clients may enter the program prenatally, but also up to the 3rd month of life of the target child and does not have to be a first time live birth to the targeted woman; and
- ▶ The HFA Program goals of:
 - To systematically reach out to parents and to offer resources and support;
 - To cultivate the growth of nurturing, responsive, parent-child relationships;
 - To promote healthy childhood growth and development; and
 - To build the foundations for strong family functioning.
- ▶ Research shows favorable outcomes in: child health, child development and school readiness, reductions in child maltreatment, positive parenting practices, family economic self-sufficiency, linkages and referrals.

Readiness to Implement: The readiness assessment onsite visit to Mitchell and Yancey Counties on May 24, 2011 revealed a strong understanding of the model selected, commitment to the critical elements, and community collaboration on this project. Implementation of this project will be shared between the Toe River Health District and the Mitchell-Yancey Partnership for Children. While these communities have little prior experience in the implementation of an evidence-based model, they do have experience with engagement of the target population through a variety of health and family support programs. It was assessed through the onsite visit; the project has “core implementation drivers” in place for successful implementation. However, it is understood that this site will need additional supports in implementation which will be addressed through consultation and TA from DPH and NIRN. Additionally, the project has contract with a NC based Healthy Families America National Peer Reviewer to provide model specific consultation and technical assistance expertise.

Healthy Families AND Parents as Teachers- An Integrated Model

Fit with Selected At-Risk Communities: An integrated Healthy Families America and Parents As Teachers program will be expanded in the City of Durham. While specific data is provided in Section 1 of this document, a general discussion of the community’s risk factors will be provided to demonstrate the appropriateness of the models selected.

East Durham (1.2 square miles within the City limits of Durham)

Durham is a mid-size city of 262,715 in a metropolitan area of 1.5 million, known as the Research Triangle. Tobacco and textiles shaped Durham’s early economic base. However, modern Durham, known as the "City of Medicine," is characterized today by its diversity that includes innovative businesses, higher education, cultural opportunities as well as extreme poverty, local gang activity, and crime rates. Durham is a true dichotomy.

The Healthy Families East Durham will operate in the East Durham Children’s Initiative (EDCI) which is well-established East Durham neighborhood and consists of a 120-block contiguous area (1.2 square miles) east of downtown Durham. The EDCI population of 7,888 includes 2,491 households, with approximately 2,500 children ages 0–18 and another 700 youth ages 18-24. There are approximately 200 births in the EDCI neighborhood each year. The neighborhood is 70% African American, 20% Hispanic, and 10% other ethnic groups. Neighborhood geocoding done by the Children’s Environmental Health Initiative (CEHI) at Duke University identified key indicators of distress (e.g., poverty, crime), as well as resources (e.g., early childhood and after-school programs) in the EDCI neighborhood, documenting that it possesses fewer resources and more risk factors — several times higher than in any other neighborhood within Durham, which in turn exceeds state and national levels for similar indicators.

The EDCI neighborhood’s deep need and distress are evident when looking at the level of crime, teen pregnancy, poverty, school dropout rates, family violence, maternal health, and lack of school readiness. Other risk factors include high rates of unemployment, child maltreatment, substance abuse, and maternal smoking. This is the most impoverished and crime-ridden section of the city, which leads Durham County leaders to focus on the goals of saturating this community with evidence-based programs and building a pipeline of services that, begins at birth and ends when the child goes to college.

Selection of Model(s): For the past two (2) years, a workgroup composed of representatives from most of the early childhood programs in Durham, has been planning the early childhood initiative for the EDCI neighborhood. Facilitated by Durham's Partnership for Children, early childhood professionals and community representatives meet regularly to develop a screening and intervention approach for this high risk area. The suggested service plan pinpointed intensive home visiting as one of the primary recommended intervention strategies in the EDCI neighborhood, while recognizing that current capacity to serve this population is quite limited. In all of Durham, there are currently six (6) home visitors (Family Support Workers). While other models were considered, particularly Nurse Family Partnership, the community as a whole, concluded that expanding their current Healthy Families Durham program would be most beneficial for a number of reasons. First, Healthy Families is a well-established and respected program in the community and has been operating in Durham for 15 years. Second, while the current target population for Healthy Families Durham is first-time, low-income mothers, the needs of the EDCI require an expanded target population to include all pregnant women. The Healthy Families model allows flexibility with the target population to include more than first time mothers.

For years, Durham has been known as a community that supports the values of cultural diversity and cultural sensitivity. The Healthy Families model dovetails with this community value, emphasizing that home visitors should observe cultural differences and use them as a springboard for inquiry and understanding (Citation @@@Prevent Child Abuse, 2000). Successful Healthy Families programs must provide culturally competent services in order to meet the credentialing requirements. In addition, the Healthy Families East Durham expansion will serve both English-speaking and Spanish-speaking families, further increasing the diversity of the client base.

This project will expand an integrated Healthy Families/Parents as Teachers model into the EDCI neighborhood and will add three (3) additional Family Support Workers to saturate this highest risk area. This expansion fits with the goals and priorities of EDCI. The emerging EDCI continuum of services is designed to address the psychosocial needs of families and spans the breadth of family life and children's lives from pre-birth through adulthood. EDCI strives to build upon existing evidence-based services and ensure their comprehensive coordination to avoid fragmentation and duplication of efforts and resources. EDCI is committed to identifying gaps and addressing unmet needs through interventions with the strongest evidence base available and rigorous evaluation to assure that effective programs are sustained and expanded. The Healthy Families America national model is designed to deal with the risk factors of family violence, poverty, risk of child abuse, stress, teenage pregnancy, and self-sufficiency. The Parents As Teachers model, on the other hand, is designed to enhance knowledge of child development, improve parent/child interaction, and increase school readiness. Neither model is enough to meet the needs of the high-risk families in the EDCI neighborhood. However, the Healthy Families structure of implementation combined with the psycho-education of the Parents as Teachers curriculum creates a program that deals with both the psychosocial risk factors found in this community and the need to focus on child development and school readiness. The national Healthy Families America model involves the identification of families at risk for family violence and poor child outcomes because of economic, psychosocial, or mental health issues and the provision of psycho-education by home visits during the child's first 3 years of

life. Recruitment occurs between the last trimester of pregnancy and the child's third month of life. Early initiation of services allows home visitors to help shape the quality of early parent-child interactions and encourage positive attachment relationships (Prevent Child Abuse, 2000). Healthy Families programs focus on families with risk factors, based on the assumption that certain risk factors (young age of parent, substance abuse, domestic violence, mental health problems, history of trauma) indicate a higher possibility of child abuse/neglect and poor child outcomes. Services focus on supporting the parent as well as supporting child development and parent-child interaction. Through the use of a Family Support Plan, parents' strengths and needs are delineated, and goals are set to meet these needs through education and referrals to community resources. Parents are also regularly assessed for risk factors such as substance abuse, domestic violence, and depression, and interventions are provided for identified areas of risk. Through the process of families setting their own goals for improving their lives and through systematic risk screening, the Healthy Families model would address the risk factors in the EDCI neighborhood such as teen pregnancy, dropping out of high school, poverty, family violence, and disconnected youth. A recent randomized controlled study of *Healthy Families New York* showed reductions in family violence with a 75% reduction in the average number of acts of serious physical abuse. The use of non-violent parenting strategies showed a significant increase (Rodriguez et al. 2010, *Child Abuse and Neglect*, 32-711-723). *Healthy Families Alaska* and *Healthy Families New York* have both shown success with some families in reducing parental stress and depression (Howard et al. 2009, *Future of Children*, 19-119-146). The Parents as Teachers (PAT) model, now fully integrated into the Healthy Families Durham program, nationally provides home visits (at least monthly) to provide information and support to parents so that their children develop optimally during the first years of their lives. The model is designed to enhance child development and school readiness by providing parent education. Staff members receive a week-long training on child development, how to use the curriculum, and the core components of the model. Every PAT program includes home visits, group meetings, screening for developmental delay, and referrals to community resources. The curriculum (sometimes referred to as the "Born to Learn" curriculum) is based on the principle that "parents are their children's first teachers" and is traditionally offered to families from all socio-economic levels. The curriculum is provided with two different literacy levels, in both Spanish and English, and every lesson includes a parent/child interaction activity. Numerous research studies show improved school readiness among children who participated in the PAT home visiting program. One of the most relevant findings was that the school readiness scores of children in high poverty schools who participated in PAT were equivalent to those of children at low poverty schools. The authors concluded that PAT "is highly effective in helping impoverished parents prepare their children to enter school" (Pfannenstiel, J, Seitz, V, & Zigler, E. 2002, *Promoting School Readiness. NHTSA Dialog: A research-to-practice journal for the early intervention field*, 6, 71-86).

- ▶ HFA allows local programs the flexibility to design services specifically to meet the unique needs of families in the community setting;
- ▶ HFA addresses the high need family issues;
- ▶ Clients may enter the program prenatally, but also up to the 3rd month of life of the target child and does not have to be a first time live birth to the targeted woman;
- ▶ PAT demonstrates school readiness findings;
- ▶ The HFA Program goals:
 - To systematically reach out to parents and to offer resources and support;

- To cultivate the growth of nurturing, responsive, parent-child relationships;
- To promote healthy childhood growth and development; and
- To build the foundations for strong family functioning; and
- ▶ HFA Research shows favorable outcomes in: child health, child development and school readiness, reductions in child maltreatment, positive parenting practices, family economic self-sufficiency, linkages and referrals.
- ▶ Please see Attachments P and T for HomVEE findings and model purveyor findings.

Readiness to Implement: *Healthy Families East Durham* is an expansion of a home visiting program in Durham designed to support pregnant women and parents of young children with the goals of preventing family violence, increasing self-sufficiency, and enhancing school readiness. *Healthy Families Durham* is a credentialed Healthy Families America program. All Family Support Workers are also trained and certified to provide the PAT curriculum, *Born to Learn*. The Healthy Families model, as currently implemented in Durham, differs from the national model in several ways: (1) the Family Support Workers are professionals versus paraprofessionals; (2) there is a specific curriculum used in the home visiting intervention (Parents as Teachers); (3) there are intervention modules established for families with domestic violence, substance abuse, and maternal depression; and (4) the Durham program is integrated into the Center for Child and Family Health (CCFH), which provides auxiliary services such as trauma treatment and psychiatric care for parents and children, when the need is indicated. In addition to 15 years of successful implementation of the Healthy Families model, CCFH has extensive experience in the implementation of evidence-based programs with model fidelity including, *Parent Child Interaction Therapy*, *Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)*, *Child Parent Psychotherapy*, *Attachment and Biobehavioral Catchup (ABC)*, and the Home Based Option of Early Head Start.

Nurse Family Partnership

Overview: Nurse-Family Partnership (NFP) is an evidence-based home visitation program which targets first-time, low-income mothers who enter the program voluntarily before the 28th week of pregnancy. Developed by Dr. David Olds, this program's target population fit the ACA Maternal, Infant and Early Childhood Home Visiting Program's requirements for high-risk populations: first-time mothers and their children in high poverty communities. (NFP Citation # 1)

Thirty years of clinical research and experience in high quality replication has shown NFP improves maternal and birth outcomes, young child health and family self-sufficiency. Three (3) separate, randomized controlled trials with three (3) different populations (Elmira, NY, Memphis, TN, and Denver, CO.) demonstrate that NFP can achieve its three major goals:

- To improve pregnancy outcomes by helping women improve their prenatal health;
- To improve the child's subsequent health and development by helping parents provide competent care to their babies; and
- To improve families' economic self-sufficiency by helping parents develop a vision for their futures and make appropriate decisions about planning future pregnancies, finishing their educations, and finding work. (citation NFP 2)

Fit with Selected At-Risk Communities

The Nurse Family Partnership will be newly implemented in five (5) at-risk communities (Edgecombe, Gaston, Halifax, Hertford, and Northampton) and expanded in targeted high risk areas in Buncombe County. While specific data is provided in Section 1 of this document, a general discussion of each community's risk factors will be provided to demonstrate the appropriateness of the model selected.

Northeast Collaborative (Edgecombe, Halifax, Hertford, and Northampton)

Community risk factors: The four counties represented in Northeast Nurse-Family Partnership Collaborative are rural, economically depressed, and lack resources available in other regions of the state and across the country. This is evidenced by the continued designation of these counties, four out of thirteen of the state's 100 counties, as severely economically depressed "Tier One" counties by the NC Department of Commerce. Economic indicators used to determine "Tier One" status included unemployment, per capita income, and population growth. In addition to limited economic opportunity, high unemployment, and poor health status, especially for women and children, are major characteristics of this agricultural and manufacturing area. The non-white population, including Latinos, specifically in Edgecombe and Hertford Counties is now a growing majority. Unemployment rates in the project area are high in comparison to the state as a whole and both Edgecombe and Halifax were among the 25 worst counties in NC for unemployment. It is important to note that unemployment has hit all areas of North Carolina; however these counties have been affected to a much greater degree as they already had a higher rate of unemployment before the economic downturn. Related to unemployment is educational attainment. Edgecombe, Halifax and Hertford are ranked in the worst 13 counties in the state for school dropout or high school graduation, with Halifax ranked as the worst in the state

The picture of women and children for these communities does not improve when one considers the traditional factors that are used to judge the overall wellbeing of a community. These factors include infant mortality, low birth weight, teenage pregnancy and educational attainment of children, and the women's educational levels at the time of giving birth. The four counties have significantly greater incidence rates for pregnancy than the rest of the state; Edgecombe County is more than double the state average. This trend holds true of young minority women in these counties but again at a much higher level.

In response to these needs, Action for Children North Carolina, through its initiative *Communities for a Better Tomorrow*, began a multi-county collaborative in 2009. *Communities for a Better Tomorrow's* goal is to enhance community partnerships, and provide advocacy and technical assistance to ensure the desired results of all community stakeholders and as a vehicle to enhance the local efforts to keep troubled youth out of, or prevent their further involvement in, the juvenile justice system. As an initial step, service providers, court counselors, judges, faith community representatives, law enforcement officers, business leaders and child and family advocates were brought together to complete a results-based planning process, which included assessing needs in the community. The concerns over the lack of transportation options, the complexity of the family environment and dynamics, and overwhelming poverty that many of these young mothers are experiencing led the group to identify the need for an intensive home visiting program that would provide the comprehensive support needed to change the trajectory

of the community's youth. In response to that need, two community meetings were held in December of 2009 and January of 2010 to discuss the potential of implementing the evidence-based Nurse Family Partnership (NFP) program in the four counties.

Selection of Model: NFP was selected as the intensive home visiting program model for Edgecombe, Halifax, Hertford, and Northampton Counties based on the following:

- NFP has been found effective in rural communities (citation – PA study)
- NFP has been found effective for target populations (low income African-American, Caucasian, and Hispanic women/teens) (Citation- 3 trials)
- Demonstrated positive outcomes on community risk factors including:
 - ▶ Improved Pregnancy Outcomes including:
 - 35% fewer cases of pregnancy-induced hypertension
 - 79% reduction in preterm delivery among women who smoke cigarettes
 - ▶ Greater intervals between first and subsequent pregnancies, including:
 - A 28-month greater interval between the pregnancies of the first and second child (among low-income, unmarried group)
 - 31-percent fewer closely spaced pregnancies (less than six months)
 - 3-percent reduction in subsequent pregnancies by child age two
 - ▶ Improved child health and development:
 - 48% reduction in state-verified reports of child abuse and neglect by child age 15
 - 39% fewer healthcare encounters for injuries or ingestions in the first two years of life among children born to mothers with low psychological resources
 - 56% reduction in emergency room visits for accidents and poisonings in the second year of the child's life
 - 67% reduction in behavioral and emotional problems at child age 6
 - 67% reduction in 12-year-old children's use of cigarettes, alcohol, or marijuana
 - 28% reduction in 12-year olds' mental health problems (depression and anxiety)
 - ▶ Increase in school readiness
 - 50% reduction in language delays at child age 21 months
 - 67% reduction in behavioral and intellectual problems at age six
 - 26% improvement in math and reading achievement test scores at grades one through three among children born to mothers with low psychological resources
 - 5 point increase in language scores on a test with a mean of 100 and standard deviation of 15 among 4-year-old children born to mothers with low psychological resources
 - 3 point increase in 12-year-old children's reading and math achievement test scores on a test with a mean of 100 and standard deviation of 15 among those born to mothers with low psychological resources
 - 6 percentile increase in group-based reading and math achievement test scores in grades 1-6 among children born to mothers with low psychological resources

- ▶ Decreased involvement in the Criminal Justice System
 - Child
 - 59% reduction in child arrests at age 15
 - 90% reduction in adjudication as persons in need of supervision (PINS) for incorrigible behavior
 - 33% fewer arrests among female children at age 19
 - 80% fewer convictions among female children at age 19 26
 - 73% increase in age at 1st arrest among female children at age 19 26
 - 82% fewer current arrests among female children at age 19 26
 - 89% fewer current convictions among female children at age 19 26
 - Maternal
 - 61% fewer arrests of mothers by child age 15 20
 - 72% fewer convictions of mothers by child age 15 20
- ▶ Increased economic self-sufficiency:
 - 83% increase in labor force participation by the mother by the child's fourth birthday
 - 20% reduction in months on welfare among mothers who were poor and unmarried at registration
 - 46% increase in father's presence in the household by child age 4
- ▶ Please see Attachments P and T for HomVEE findings and model purveyor findings.

Readiness to Implement: Since January 2010, various constituents, policy makers and heads of human service agencies have continued to meet and collectively plan to ready the community for implementation of NFP. The Northampton County Health Department was selected as the implementing agency and submitted the *NFP Implementation Plan* to the Nurse Family Partnership's National Service Office (NSO) on May 13, 2011. The Northeast NFP Collaborative was provided provisional approval to implement pending dedicated funding on May 26, 2011 by the NSO.

A readiness assessment onsite visit was completed by DPH and NIRN on May 25, 2011 revealed a well prepared implementing agency and community collaboration on this project. While these communities have little prior experience in the implementation of an evidence-based model, they do have experience with engagement of the target population through a variety of health and family support programs. It was assessed through the onsite visit; the project has "core implementation drivers" in place for successful implementation. However, it is understood that this site will need additional supports in implementation which will be addressed through the National Service Office of NFP as well as through consultation and TA from DPH and NIRN.

Gaston County – 38 Census Tracts

Community Risk Factors: Gaston County is in the Southern Piedmont of North Carolina. Located just west of Mecklenburg County, it is a growing bedroom community for the City of Charlotte and has substantial urban and suburban communities. While designated as an urban county, there are significant areas in the county which remain largely rural. While the demographic makeup of the county is largely white, there is a growing minority population. Once one of the nation's largest textile manufacturing counties, the demise of the textile industry

in Gaston County resulted in pockets of high poverty and unemployment rates which are most acutely felt by Gaston's African American and Latino citizens. Influences of poverty can also impede healthy child development by contributing to: family violence; insufficient nurturing and parenting; drug, alcohol, and tobacco abuse; crime; teen parents quitting school; and, the children of teen parents becoming teen parents. Gaston County consistently exceeds the State averages in: infant mortality, teen pregnancies, late entry to or no prenatal care, Medicaid births, mothers who smoke during pregnancy, and births to single mothers. Therefore, NFP will be implemented in the portion of Gaston County with the highest incidence of risk factors that contribute to poor birth and child development outcomes, as described in Section 1. These include: household poverty, minority residents, violent crimes, Medicaid births, babies born at low birth weight, and teen birth rates.

In April 2010, Prevent Child Abuse NC issued the *North Carolina Nurse-Family Partnership Sustainability and Expansion Resource Manual*. In this report, ten (10) county level risk factors were examined that supports the need for NFP. These were: first time Medicaid births, teen births, infant mortality, low birth weight, late or no prenatal care, mother smoked, mother's education level, reports of abuse and neglect, child poverty and unemployment. County leaders, including the Local Health Department reviewed this report and per this analysis (based on the above referenced 10 risk factors), found:

- Gaston County was the second highest "single county service area with high needs" for the Nurse-Family Partnership (NFP) in NC;
- Gaston County ranked 16th of the 22 highest-risk counties in NC; and
- Gaston County had 600 first-time births.

In July 2010, Gaston County began working with Prevent Child Abuse NC to determine the fit of NFP in their community and their level of readiness for implementing NFP.

Selection of Model: In selecting NFP, Gaston intends to help first-time, low income mothers have healthy births, return to school, achieve financial self-sufficiency through meaningful employment, and raise healthy, capable, secure, and academically capable children. Specifically, NFP was selected based on the following:

- NFP has been found effective in both urban and rural communities (citation – PA study)
- NFP has been found effective for the target populations (low income African-American, Caucasian, and Hispanic women/teens) (Citation- 3 trials)
- Demonstrated positive outcomes for community specific needs including:
 - ▶ Improved Pregnancy Outcomes including:
 - 35% fewer cases of pregnancy-induced hypertension
 - 79% reduction in preterm delivery among women who smoke cigarettes
 - ▶ Greater intervals between first and subsequent pregnancies, including:
 - A 28-month greater interval between the pregnancies of the first and second child (among low-income, unmarried group)
 - 31-percent fewer closely spaced pregnancies (less than six months)
 - 3-percent reduction in subsequent pregnancies by child age two
 - ▶ Improved child health and development:
 - Reduction in criminal activity
 - 59-percent reduction in child arrests at age 15

- 90-percent reduction in adjudication as persons in need of supervision (PINS) for incorrigible behavior
- Reduction in injuries
 - 39-percent fewer injuries among children
 - 48-percent reduction in child abuse and neglect
 - 56-percent reduction in emergency room visits for accidents and poisonings
- ▶ Increase in school readiness
 - 50-percent reduction in language delays at child age 21 months
 - 67-percent reduction in behavioral and intellectual problems at age six
 - 26-percent improvement in math and reading achievement test scores at grades one through three (among low-resource group)
- ▶ Increased economic self-sufficiency:
 - 83-percent increase in labor force participation by the mother by the child's fourth birthday
 - 20-percent reduction in months on welfare
 - 46-percent increase in father's presence in the household
- ▶ Please see Attachments P and T for HomVEE findings and model purveyor findings.

Readiness to Implement: The Gaston County Department of Health (GCDH) is the implementing agency and has completed 9-months of planning. In spring 2011, GCDH submitted an *NFP Implementation Plan* to the NFP National Service Office, which was provisionally approved on April XX, 2011 to implement the model. The provisional approval was issued as secure funding was not available at the time of the application. A readiness assessment onsite visit was completed by DPH and NIRN on May 24, 2011 revealed a well prepared implementing agency and community collaboration for this project. The implementing agency has prior experience with the implementation of evidence-based programs. It was assessed through the onsite visit; the project has “core implementation drivers” in place for successful implementation. Implementation support will be provided through the National Service Office of NFP as well as through consultation and TA from DPH and NIRN.

Buncombe County Zip Codes 28715, 28748, 28803 and 28806

Community Risk Factors: Buncombe County is the only county Western North Carolina that is considered urban. Asheville, the county seat, is the largest city in Western North Carolina, has a thriving tourism industry thus contributing to Buncombe’s overall lower unemployment and poverty rates. However, Buncombe has pockets of great need and far greater numbers of persons live in extreme poverty (at or below 50% of the federal poverty level) in Buncombe County than in Tier 1 counties. (Citation-U.S. Census Bureau, 2006-2008 American Community Survey 3-Year Estimates, B17002. Ratio of Income to Poverty Level in the Past 12 Months.). The targeted zip codes have high rates for: low birth weights, crime, school dropout, poor school performance (3rd grade testing), high Medicaid births, and teen pregnancies. While child maltreatment rates could not be broken down by zip code, 43% of the cases substantiated were from the targeted sub-population geographic area.

Selection of the Model: Buncombe County is expanding their current Nurse Family Partnership program from four (4) to five (5) nurse home visitors. The Buncombe County Department

(BCDH) of Health is the implementing agency and has implemented NFP since October 2009. Part of the North Carolina NFP Initiative (which will be discussed in the following section), this community has taken a distinctive approach in their selection, adoption, and funding of NFP. This community began to explore the possibility of implementing NFP in May 2007. In researching best practices for child abuse and neglect issues, staff with the Department of Social Services (DSS) and BCDH visited Allegheny County, Pennsylvania, in July of 2007, where the NFP had been implemented since 2002 within an integrated human services system. At the same time BCDSS and BCDH leadership were noting the strengths of the program, a community collaborative tasked with reducing infant mortality was beginning to review a Health and Human Services grant for NFP. On the heels of a very successful *Shaken Baby Campaign*, the Infant Mortality Task Force, made up of hospital, social services, health department, Smart Start, and multiple other community partners began to research the NFP as well. Task force staff talked with the NFP Regional Developer who mentioned the North Carolina Alliance for Evidence Based Family Strengthening Programs (described in the following section) was planning to fund sites in NC. In June 2007, the decision was made to begin to work towards implementation of the NFP in Buncombe County.

In early 2008, Buncombe County held a series of meetings with key stakeholders to ensure proper support existed within the community and determine who would be the most appropriate agency to implement the NFP program. The stakeholders in these meetings consisted of BCDH, DSS, Smart Start, Mission Hospitals, Mountain Area Health Education Women's Center and numerous community agencies. BCDH was identified as the most appropriate agency to implement NFP due to skills at implementing evidenced based practices, supporting nurse practice, billing Medicaid and access to the target population of first time low income mothers. In May 2008, the BCDH submitted the *NFP Implementation Plan* to the National Service Office (NSO) as well as a request for funding to the NC Alliance for Evidence Based Family Strengthening Programs (Alliance). While approved by the NSO to implement and selected by funding from the Alliance, changes in key county-level leadership caused the community to self-select out of this process.

In 2009, new leadership within the community again revisited the need for NFP. They began to explore how they could implement the project without funding from the Alliance. They were able to obtain county level support to reclassify four current nurse positions and half time data support from their existing resources supported by BCDHs local budget. However, they did not have a master's prepared nurse currently employed that could be repositioned to serve as a supervisor or the needed startup funds (training, travel to support training, NSO fees). While working with the National Service Office in resubmitting their updated *NFP Implementation Plan*, the Buncombe County Health Director sought funding from the Division of Public Health to fill the gaps in local funding. DPH and the three foundations that are currently funding other NFP sites across the State, through the Alliance, believed the approach Buncombe County was taking in their attempt to implement NFP with the use of local government funding, could serve as an example to other local communities and should therefore be supported. The three foundations agreed to fund startup costs and DPH agreed to provide funding for the NFP nurse supervisor position.

The Buncombe County received funding in July 2009 and implementation began in October 2009. The NFP supervisor (nurse mid-wife with her master's in nursing) was hired in September of 2009. BCDH transferred four (4) home visiting bachelors prepared registered nurses from the Community Health Nursing Program to NFP to begin to enroll first time low income mothers and their babies into the new program. BCDH has aligned itself with key partners willing to refer and support NFP. During the first year of implementation they achieved a full caseload of 100 first time low income moms within the first 9 months. Buncombe County provides 60% of the funding for their current NFP project through local funds (57%) and Medicaid revenues (3%). This is noteworthy as the other NC NFP sites receive 100% funding through the Alliance for implementation and may serve as an example for sustainability beyond the grant funding period for all sites funded through the MIECHVP.

Readiness to Implement: The Buncombe NFP program is at full capacity and has had to turn away 78 eligible clients this fiscal year. This demonstrates the need to expand NFP by one (1) nurse home visitor to meet the needs of the targeted sub geographical area. BCDH has met all of the implementation guidelines set by NSO to assure model fidelity and have been approved to expand. In addition, University of Colorado Prevention Research Center for Child and Family Health has chosen our site as one of three in the nation to implement the second feasibility wave of a research based curriculum known as Dyadic Assessment of Naturalistic Caregiver-child Experiences (DANCE).

A readiness assessment onsite visit was completed by DPH and NIRN on May 23, 2011 revealed a well prepared implementing agency and community collaboration for this project. While these communities have little prior experience in the implementation of an evidence-based model, they do have experience with engagement of the target population through a variety of health and family support programs. It was assessed through the onsite visit; the project has "core implementation drivers" in place for successful expansion. Implementation support for this expansion will be provided through the National Service Office of NFP as well as through consultation and TA from DPH and NIRN.

North Carolina's Experience with Implementing Selected Models

This is North Carolina's second experience with the implementation of evidence-based, intensive home visitation programs. In 1997 the General Assembly appropriated \$825,000 to the Division of Public Health (DPH) for administration, evaluation and funding support for thirteen (13) home visitation projects in operation. An advisory committee was established as well as a position within DPH and an evaluation contract. In 1998, DJJDP provided \$600,000 to support additional projects. Other funding sources included Smart Start, and various locally obtained grants. The home visiting models implemented were: Healthy Families America, Nurse Family Partnership and Linkages.

Unfortunately, by the end of FY 2002 financial resources available to support intensive home visiting activities had been significantly reduced. Specifically: DJJDP lost all discretionary grant funds, reducing Intensive Home Visiting funding by \$600,000; Smart Start funding of Intensive Home Visiting projects was reduced; State appropriations to DPH dropped by 28% from

\$825,000 to \$600,000; and the UNC contract for formal evaluation of the initiative was terminated as required by the General Assembly.

The Division was able to secure Children's Trust Fund grant funding, which was distributed in March 2002. As the level of funding was uncertain for much of SFY 02 as well as continuing funding (SFY 03 and beyond), funded sites were surveyed in July 2002 to determine the potential impact on program services if SFY 03 if funding was delayed, reduced or eliminated entirely. Of the projects funded by DPH for intensive home visiting, the majority reported they would be able to sustain the projects. Only four reported that they would be unable to operate without state funds. On July 1, 2002, funding for intensive home visiting was eliminated by the General Assembly. Most projects that anticipated being able to survive FY 03 without state funding reported that they were overly optimistic, and that continued implementation would be dependent on the level of state support. Unfortunately, only one program survived; the NFP site in Guilford County, which just celebrated its 10th year of operation in November 2010. We have and will use lessons learned from this funding situation to build more support for home visiting programs in our future efforts.

While a number of communities continued some level of home visiting programs through various funding streams and grants (local funding, Local Partnership for Children grants, DSS grants (CB-CAP and IV-B 2), etc.), the availability of home visitation was intermittent across the state and county specific. Efforts to increase evidence based intensive home visitation at the state level was resurrected after a 2005, NC Institute of Medicine (NCIOM) Task Force on Child Maltreatment Prevention. The NCIOM Task Force on Child Maltreatment Prevention was charged with developing a statewide strategic plan to prevent child abuse and neglect as in the past, most of the attention and state resources have focused on investigating cases of abuse and neglect and providing child welfare services. While child protective services are important, the goal of this task force was to develop a vision for preventing child maltreatment from occurring in the first place. To this end, the Task Force developed a statewide plan to prevent child maltreatment, *New Directions for North Carolina*, which was released in November 2005. (available at <http://www.nciom.org/task-forces-and-projects/?task-force-on-child-abuse-prevention>).

New Directions for North Carolina included 37 recommendations to enhance the capacity of North Carolina's state and community-based agencies to strengthen families and prevent child maltreatment. The recommendations provide a vision for prevention activities across the State, with a focus on developing collaborative and coordinated efforts to improve prevention services. Many of the 37 recommendations focused on increasing the replication of evidence-based programs, including evidence-based home visitation programs to strengthen families and prevent child maltreatment, as well as the need to increasingly shift public and private funding, resources and support to proven programs. These recommendations mirror federal and state level policy trends which are increasingly focused on the use of research-based programs to promote effective practice and enhance accountability.

As a result of the IOM Task Force, the Alliance for Evidence-Based Family Strengthening Programs (here after referenced as the "Alliance") was formed. This is a collaborative effort of state-level agencies and private foundations that fund family support and child maltreatment

prevention programs in NC with the goal of supporting the successful replication and implementation of evidence-based prevention programs to strengthen families, including intensive home visitation. The *Alliance* membership currently includes: NC Division of Public Health, NC Division of Social Services; NC Office of School Readiness (administrative home for the NC Head Start State Collaboration Office located in the Department of Public Instruction); NC Partnership for Children (Smart Start); The Duke Endowment; The Blue Cross-Blue Shield Foundation of NC; NC Division of Mental Health, Developmental Disabilities, and Substance Abuse Services; Kate B. Reynolds Charitable Trust; The NC Governor's Crime Commission; and the NC Department of Juvenile Justice and Delinquency Prevention. To achieve the best possible outcomes for children and families, *Alliance* members are committed to working collaboratively to fund evidence-based programs and to develop and fund the necessary scaffolding for successful implementation for a select number of evidence-based programs at the state level. This will allow community-based agencies to access the training, consultation, and evaluative supports they need with minimal cost and increased efficiency. Over the past four (4) years the *Alliance* has researched all the home visitation models currently operating in NC over a 6-month period, to determine the level of evidence of each program model in meeting desired outcomes. From that research, the Alliance collectively concluded that Nurse Family Partnership (NFP) model had the strongest research demonstrating positive outcomes in prevention of child maltreatment, improved child and maternal health, delayed second pregnancies, increased school readiness, decreased juvenile delinquency, and increased family economic self-sufficiency and selected NFP as the home visitation model the Alliance would cooperatively fund and support. Members of the Alliance, independently, continued to support and fund various other home visitation models at varying levels.

In 2008, the Alliance identified and secured braided funding to support six to eight new NFP sites for a period of seven (7) years. Over 21 million dollars in funding was committed for the seven (7) year period. Funding was initially committed by The Duke Endowment, the Kate B. Reynolds Charitable Trust, and Division of Public Health with the North Carolina Partnership supporting local programs with either child care subsidies to NFP participants or contributing a small portion of funding to local sites. In 2009, the Blue Cross, Blue Shield Foundation of NC joined the efforts.

Since 2007, North Carolina has worked in tandem with the National Service Office (NSO) to plan for an NFP expansion in NC and for implementation of NFP in Buncombe, Cleveland, McDowell, Mecklenburg, Pitt, Polk, Robeson, Rutherford, and Wake counties. With this public-private partnership to expand NFP, lessons learned from the State's earlier experiences with intensive home visitation have shaped our strategies and approach to current efforts. As a group, the Alliance continually conducts quality assurance assessments on implementation efforts to guide future expansion of NFP across the state. The group has catalogued "lessons learned" from the NC NFP expansion which will help inform technical assistance and consultation to new sites to avoid some of the "startup" or implementation problems experienced with current programs and funders. In addition to the funders, the NSO and other agencies assisting with planning and implementation of NFP and current NFP sites have been surveyed on various aspects of the process to determine where changes are recommended and to identify areas that need strengthening. The NC Division of Public Health is currently developing state level infrastructure to support NFP, which will be outlined in the following section.

North Carolina has experience in the implementation of both the Healthy Families America and Parents As Teachers models. As our State Needs Assessment described, these models are been implemented across the State at varying levels. Since the completion of the Needs Assessment, HFA has expanded by one (1) new site in Nash County. Four (4) of the PAT programs have been expanded. Both programs were expanded by NC Project Connect. An on-going randomized controlled trial of Healthy Families in Durham County (funded by the Duke Endowment) and other continuous quality improvement efforts, which will be described below, are just a few of the many preexisting capacities and strengths in the state.

The Task Force on Child Maltreatment Prevention, referenced above, also recommended the development of an intensive model of home visiting to serve high-risk families in North Carolina. This recommendation included three (3) criteria: first, the model would function as part of a continuum of prenatal and early childhood programs; second, identification and establishment of mechanisms for program evaluation must be established; and third, a system for quality assurance and long-term funding should be supported. (IOM citation) With these recommendations in mind, the Healthy Families Workgroup was created in 2007 to lead this effort. This workgroup represented a spectrum of professionals involved with early intervention and otherwise invested in the well-being of families and children including service providers and research scientists from across the state. The workgroup proposed a new model which would build upon the current strengths of the Healthy Families America and Parents as Teachers programs in NC. It proposed enhancements to better address two adverse outcomes: child maltreatment and school readiness. Using current research, the workgroup issued a report, *A PLAN FOR HEALTHY FAMILIES NORTH CAROLINA* which proposed well-defined program protocols, a training program and curriculum in order to better equip agencies and home-visitors across the state to prevent child maltreatment and promote school readiness. In addition, plans for evaluation, and the needed infrastructure for training and technical assistance were addressed. As a result of this work, The Duke Endowment funded the development of training curricula to better support home visitors in the areas of domestic violence, substance abuse, and maternal depression which HFA sites currently use for staff development. Also, the Healthy Families East Durham project has operationalized this plan in their integrated HFA-PAT project which will be funded through the MIECHVP.

Additionally, through a grant to Prevent Child Abuse NC from the Pew Center on the States, a workgroup was convened in August 2010, to make recommendations on improving the impact and quality of Parents as Teachers in North Carolina by collaboratively developing a set of evidence-based implementation standards and recommendations, as well as an action plan to be adopted by key stakeholders. Convened by the North Carolina Partnership for Children (the largest state level investor in PAT), the workgroup consisted of a broad spectrum of professionals involved with early intervention and otherwise invested in the well-being of families and children including service providers, state level agencies, and research scientists from across the state. Recommendations were made in February 2011.

North Carolina’s Plan for Ensuring Implementation of Selected Models with Fidelity and Anticipated Challenges in Maintaining Quality and Fidelity, and Plan to Address Anticipated Challenges

Selecting and funding evidence-based programs can help achieve better outcomes for children and families. However, even the best evidence-based program will not yield good outcomes if it is not implemented well. The following text discusses how we will achieve optimal outcomes for North Carolina. In particular, we will address program fidelity, the core drivers for successful implementation, anticipated challenges in maintaining quality and fidelity and a plan to address state challenges.

The effectiveness of any evidence-based home visitation program lies in the quality and type of relationships the home visitors develop with families, and the home visitor’s ability to deliver the intervention with fidelity to the *specific* model tested in research settings. This requires two distinct but inter-related competencies that every funded MIECHVP team and implementing agency must have:

- Program model implementation that conforms to the key or critical elements of the models tested in the research trials; which varies by models; and
- Practice competency (for the home visitors with families) meaning the combination of attitudes, skills and knowledge required to build effective relationships with diverse target populations.

High quality implementation is critical to the success of the home visiting programs. A usual or typical description of ensuring model fidelity includes ensuring the home visitors have been trained in the selected model’s required training. The National Implementation and Research Network (NIRN) describes this typical approach to program implementation as the “spray and pray” approach. Under this approach program home visitors are “sprayed” with information and training on the program and then funders “pray” that providers implement it well. By using this approach, service providers are on their own to institute and maintain practice changes, often assuming that some of a good program is almost as good as the full program.

Considerable research indicates that the opposite is true. Merely providing the required model training does not produce either changes in practitioner behavior or benefits to our target populations. Furthermore, the full program, as it was designed and researched, is required to produce positive outcomes for program recipients. Without ongoing support, monitoring and reinforcement to help home visitors and their administration solidify their skills and knowledge; they will not be successful in either implementing a program well or in maintaining changes in practice. Research on implementation of evidence-based programs shows that fidelity to core program elements is critical to success. (NIRN) Additionally, change in an implementing organization’s underlying infrastructure is often required to prevent practitioners from drifting back to old practices. (NIRN)

Through this funding opportunity, it is critical to enhance the state infrastructure to support the funded programs for ensuring adherence to key or critical elements to ensure fidelity to each model through support to the sites at both the home visitor and administrative levels. While Prevent Child Abuse America (the purveyor for HFA) and Parents As Teachers recommends

state level support, it does not require it for states with multiple sites. However, NFP-NSO does require states with multiple implementing sites to begin to build the necessary state-level administration to support funded sites. This involves five categories of work that will be ongoing and often simultaneous. The DPH and Alliance partners have begun this work in partnership with the NFP National Service Office. Developing a solid state infrastructure would require five (5) functions which will be shared between DPH and Alliance partners as follows:

1. Nursing Practice Support for NFP home-visiting nurses and nurse supervisors: DPH will provide this function through hiring a NFP State Nurse Consultant via this grant;
2. Program Implementation Support including dissemination of information and tools, building state community capacity for sharing advice and support, reconciling state policies with essential NFP elements and more: The private foundations will contract with a non-profit agency; university or other non-governmental agency to provide the primary lead for this function with coordination with DPH.
3. Generating and Using Data to Inform Performance Improvement: DPH will provide this function via a new evaluator position and the NFP State Nurse Consultant;
4. Advocacy and Political Support: The private foundations will contract with a non-profit agency; university or other non-governmental agency to provide the primary lead for this function; and
5. Fiscal Oversight, Budget Management, and Contracts Administration: DPH will provide this function via the Home Visitation Program Manager and Business Associate.

The NSO will ensure that NC provides the above reference drivers for quality implementation. We will receive consultation and TA from the NSO to help us build a quality infrastructure to support NFP. Should we have challenges, the NSO will help us address and resolve these challenges. Additionally, training will be accessed as required through the NSO.

HFA or PAT does not require state-level infrastructure, however, our stakeholders have requested that this be built into programming for home visiting. DPH has received guidance from HRSA that this initial allocation of funding must be used for program implementation, rather than for the needed infrastructure to support quality implementation. Therefore, the one HFA site and one integrated HFA-PAT site will receive the following supports to ensure adherence to model fidelity:

- DPH has contracted with the National Implementation Research Network (NIRN) to support all program models.
- Work will be done with these programs to ensure core program elements are implemented.
- One challenge to delivering a program with fidelity typically is limited financial resources (NIRN). Therefore, through this grant we will ensure appropriate fiscal resources needed to ensure quality implementation. We have identified areas in need of change in the proposed budgets and will modify them as indicated to support quality implementation. Examples include:
 - Adding .50 FTE to several NFP grants to support full-time data support;
 - Adding additional training funds for HFA sites; and
 - Adding funds to support national office consultations.

- Another challenge to delivering a program with fidelity includes human resources and staff selection. Through this grant we will assist with identifying the appropriate human resources needed and with staff selection, including
 - Increasing budgets if proposed staff salaries are not adequate to attract qualified staff.
 - The regional NSO nurse providing consultation/TA and participating in the interview process for NFP sites.
 - Coordination with HFA to obtain adequate support to hire qualified staff. NSO staff will participate in the interview process.
- Support through NIRN to ensure “core drivers” for successful implementation.
- Pre-service and in-service trainings will be supported and required as prescribed.
- Finally, there are two areas which will be addressed below and in the following section are: ongoing consultation and coaching and program evaluation technical assistance. For HFA and PAT, these elements are not yet developed at a state level.

Challenges for the HFA and HFA-PAT site include, the lack of a formalized consultation/TA and evaluation system with technical assistance. North Carolina would like to build this system, similar to the NFP administrative system. Coaching is broader than traditional supervision. It is a supportive, strengths-based strategy to help practitioners enhance their skills, improve their practice and solidify their ability to deliver a specific evidence-based model. Coaching includes skill modeling, shadowing (observing service provision), reflective supervision, collaborative discussion and immediate feedback. Other strategies for coaching include site visits and telephone consultation from the program developers. New staff members implementing an evidence-based model need coaching to ensure model fidelity and high-quality services. Moreover, evidence suggests that all staff implementing evidence-based home visitation models benefit from ongoing coaching. (NIRN). It will be critical that the National Office actively support these models, and through funding obtain service support from their national offices.

An additional challenge will be program evaluation technical assistance. Evaluation drives the quality of implementation. Evaluations of model fidelity, consumer and staff satisfaction, and child/family outcomes are critical components of an agency evaluation system when delivering evidence-based programs. We will need to contract with the National Offices to obtain proficiency in this area.

The final area of need is in technical assistance for quality assurance. Although collecting data is important, what one does with the data is also critical. Agencies implementing HFA and PAT will benefit from using program evaluation information to improve the quality of program delivery and outcomes for children and families. Agencies can enhance services through the establishment of feedback loops in which data are used by staff members and agency leadership to ensure high-quality programs. Again, we will need to contract with the national service organizations to obtain proficiency in this area.

Section 4: Implementation of the State Plan

A description of the process for engaging the at-risk community(ies) around the proposed State Home Visiting Plan, including identifying the organizations, institutions or other groups and individuals consulted;

- A collaborative process for engaging the at-risk communities was implemented prior to the release of NC's RFA. The first step in the process was to engage Division of Public Health's key partners in this initiative, Division of Social Services, Division of Mental Health/Developmental Disabilities/Substance Abuse Services, Head Start, and the Governor's Senior Policy Advisor for Early Childhood. This group discussed and agreed to guiding principles and began distributing information to their local partners through their broad list serves.
- Following the meeting with key partners, a large and representative group was reconvened as the Steering Committee. Decision points in the grant were discussed with the larger group and consensus was reached on the process to move forward with the Request for Applications.
- Data were collected and analyzed by State staff to identify communities at highest risk. Multi-county groups were assisted with compiling appropriate and pertinent data to determine their ranking.
- A notice to alert communities to the home visiting funding opportunity, along with the SIR, was distributed broadly to local communities on March 31, 2011. The notice described the process for application, eligibility criteria, desired outcomes, information on the four models selected for possible implementation by North Carolina and contact information of State staff for additional technical assistance, data support and consultation.
- Simultaneously, a contract was being processed at the State level to engage the National Implementation Research Network to support development of implementation teams at the State and local levels. This contractual arrangement was created to help assure local programs were provided with the tools to succeed from initiation of the programs.
- The National Offices for the four evidence based programs supported for implementation in NC were contacted and information gleaned from these expert sources was made available to potential applicants.
- A bidder's conference was held via webinar on April 13, 2011 and the Q and A document was distributed on April 20, 2011. The webinar was archived for continued viewing.
- State staff received and responded to numerous calls for technical assistance, data interpretation, clarification of issues, and discussion of models and interpretation of fidelity from across the State.
- The Request for Applications was distributed on April 6, 2011 and applications were due May 13, 2011.

A description of the State's approach to development of policy and to setting standards for the State Home Visiting Program

In recent years in North Carolina, stakeholders have followed the emerging science to understand that early childhood is the time when brains are most pliable and when carefully planned, carefully evaluated interventions, reproduced with attention to model fidelity, can most significantly transform lives and provide children the resilience they need to enter school healthy and ready to succeed. These early childhood interventions are grounded in prevention, a core public health value. Organizing efforts to build an effective system that integrates services and supports from early prenatal care through early childhood is a challenge that North Carolina has embraced. For these and many other reasons, the time is right in North Carolina to further expand the collaborative, evidence based, systems oriented, public health based initiative in support of the early childhood environment envisioned by the State Home Visiting Program.

The State's initial steps to assure strong support in policy and standard development was to assure that the Governor's Office, DHHS Office of the Secretary, Division of Public Health leadership and key partners had information on the importance of evidence based services, model fidelity, early childhood systems development accompanied by supporting data on proven outcomes. This effort began many years ago and laid the groundwork for strong interest in the home visiting program. The Governor's Senior Policy Advisor for Early Childhood who is facilitating development of the Governor's Early Childhood Advisory Council (ECAC) was successfully approached about using the Council as an advisory group to the NC Home Visiting Program. This arrangement will assure current knowledge of evidence based home visiting is available to all ECAC council members, that this effort will be included in early childhood system discussions, and that political and Early Childhood leaders will remain involved in the program's development and implementation.

Because the State is experienced with evidence based early childhood programs, there is a strong appreciation for the importance of model fidelity and is committed to endorsing the National Models guidance on appropriate implementation. Each community grantee chosen to participate in the NC Home Visiting Program also agreed to meet the minimum policy and standards required by the model they chose, e.g. NFP or Healthy Family America. NC Home Visiting sites will receive technical assistance, consultation, program guidance and monitoring on a regular basis to help assure successful outcomes.

A plan for working with the national model developer(s) and a description of the technical assistance and support to be provided through the national model(s). If there is more than one home visiting model selected, a separate plan must be provided for each model;

A. Nurse-Family Partnership Model

Home visiting can only be an effective tool to improve the health, development and well-being of children and families in need if States implement home visiting program models as designed and tested. Without attention to the quality of program implementation in community settings, program outcomes are likely to fall short of the positive outcomes achieved in rigorous scientific testing. For these reasons, the primary goal of the National Service Office is to ensure that the NFP program model is implemented as it was designed and tested or with “fidelity to the model.” Ensuring fidelity to the model includes a broad range of standardized and customized technical assistance and quality assurance guidance that the National Service Office has developed and refined over a decade through its experience in implementing its program model in diverse communities nationally with a broad range of public and private entities. The National Service Office provides the following summary to illustrate the components of technical assistance that it believes are necessary to successfully implement the federal Home Visiting Program, illustrated with examples from our practice with Nurse-Family Partnership. The NSO provides:

- Orientation for potential public and private sector partners well before they choose to finance the program;
- Education covering the core components of the NFP program, including the 18 model elements of the program and the nature of the randomized controlled trials and the outcomes achieved;
- Education regarding the infrastructure requirements necessary to successfully implement the program model, including engagement with community residents, activists, organizers, leaders, businesses and health and social services providers; hiring and training of staff, supervisors and administrators; development of adequate referral systems; and requirements of data collection, among others;
- Education regarding the overall planning needed for the program both in the community and within the agency that will ultimately hire a nursing team to implement the program.
- Engagement of community residents and leaders, advocacy organizations, and businesses, philanthropic, health, educational and social services entities and providers to educate them about our program, assist them in conducting feasibility testing to determine whether the program will meet local needs, and assist in determining how to implement the program in relationship to the other services and support resources available in the communities prior to implementation.
- Establishment of an effective relationship and partnership with community leaders and stakeholders and development of a unique understanding of the needs, capacity and desires of the communities before the program is implemented.
- Assistance to states and/or communities in selecting a local agency to host the program.
- Detailed guidance on vetting entities to ensure that they are suitable hosts

- Assistance to agency in developing an implementation plan using a template to guide plan development. The template assists those who will be responsible for program quality and sustainability to address key issues in advance of program start-up at both the community level (service system integration, building a referral network) and within the agency (hiring staff, planning space, using a quality assurance system).
- A start-up guide and intensive consultation to the nursing supervisor and/or administrator responsible for hiring staff and getting the program off the ground and serving families.
- Provide States and entities implementing the program model with clear job descriptions, recruitment and interviewing resources and guidance to assist new supervisors and administrators to attract capable candidates to nursing roles in the program.
- The NSO strongly encourages programs to recruit and hire racially and culturally diverse nursing staff and supervisors from the communities they serve. To that end, the National Service Office works with national and regional nursing organizations, universities and community leaders to make bilingual and racially and culturally diverse nurses and nurses with diverse academic and employment experiences aware of opportunities within the Nurse-Family Partnership to support local recruitment efforts.
- Written competency statements for both the role of home visitor and supervisor. Since no one person has all competencies, this also serves as a guide for the development of a strong team of nurse home visitors with complementary natural talents and abilities.
- A (required) multi-step orientation and education process for new home visitors and an additional training and consultation process for supervisors.
- A series of topical education and discussion guides for supervisors to use in conducting team meetings focused on reinforcing key aspects of NFP nursing practice; and an annual ongoing education program for nursing team supervisors is required. In the Partners in Parenting Education (PIPE) self study workbook (a parenting curriculum that is fully integrated with the NFP home visit guidelines) and during the nurses' face-to-face education experience, the NSO provides a session on adapting PIPE for various clients, including high and low literacy and various cognitive developmental levels.
- Training to focus on providing services that value cultural diversity, cultural competency training specific to the NFP model, which entails cultural and ethnic awareness, encouraging nurses to be fluent in the languages spoken by the families they serve, and making sure that materials are culturally and socially relevant to the families served.
- Training on the decades of testing the program underwent to ensure its effectiveness in culturally and geographically diverse populations and communities.
- A set of detailed and resource-rich home visit guidelines for each phase of the program (pregnancy, infancy and toddlerhood) that make it easier for novice NFP nurses to translate the program's theory and principles into practice with diverse families. The home visit guidelines are revised periodically to make

sure they are consistent with best practice in preventive nursing care for pregnant women and young children.

- A web-based program quality information system that sets out clear performance thresholds for each element of the NFP model. This gives each nurse and supervisor clear targets for quality assurance as they strive to implement the program well. This system can produce on-demand reports locally and at the level of a state or city where multiple teams operate. These reports are used by each implementing agency, the State Office and the NFP nurse consultants to steadily improve the degree to which each implementing agency and nursing team is conducting the program with fidelity to the model.
- An approach to achieving high quality planning guidance, guidance on recruitment and hiring, education in the nursing practice of NFP for home visitors and their supervisors, and an initial and ongoing partnership and coaching for administrators, supervisors and nurse home visitors from expert nurse consultants and other advisors. This area will be supported jointly by the NSO and the State program in home visiting.
- A system for online data collection and reporting through which agencies collect core data elements and receive updates on their work and progress in the following areas:

NFP requires a contract between each local implementing agency and the national office that specifies a commitment to implement the program with fidelity to the model and specifies the commitments of both the local agency and the National Service Office to supporting program implementation. Renewal of the contract can and generally does involve a review of program performance with the option to renew based on the commitment of the agency to pursue and achieve good outcomes”. (Based on the NFP NSO Summary of Services August 2010 ©Copyright 2010 Nurse-Family Partnership. All rights reserved).

B. Healthy Families America Model

The HFA national office staff will provide training and technical assistance to help communities implement the HFA model including:

- Core Training which is required for all direct service staff and their supervisors/program managers within six months of hire. Core training instructs staff in their specific roles.
- Assessment Core Training which is an in-depth, formalized training designed for staff whose primary role is to conduct initial assessments or home visitors, who want to advance their communication skills.
- Home Visitor Core Training which is an in-depth, formalized training intended for home visitors of a Healthy Families America program.
- Advanced Supervisor Training consists of three intensive days of in-person training, covering topics that include but are not limited to: the three types of supervision, quality management techniques, crisis management, case management and reflective practice.

- Wraparound training that complements core training and covers the additional training topics necessary to support home visitation staff in their duties.
- Great Beginnings Start Before Birth is a home visitor curriculum that supplies service providers with strategies for supporting families during the prenatal period.
- Customized additional training is additional training on a variety of topics to further advance knowledge and skills. HFA national staff are available to deliver customized one, two or three day advanced trainings that are focused on specialized content areas and based upon need.
- On-site technical assistance that provides individually tailored support during a variety of phases (i.e. program planning, implementation, and evaluation).

Site Self-Assessments

After programs are granted provisional status, they will complete a Self-Assessment; the first step of a two-part process to become an accredited HFA site or multi-system.

Peer Review Site Visit

Once the Self-Assessment has been completed and submitted, a team of at least two external, trained peer reviewers will conduct a site visit. The purpose of this visit is to provide a comprehensive and objective review and validate a program's self-assessment and adherence to the critical elements.

Based on their findings, the peer review team prepares a Site Visit Report which is sent first to PCA America and then to the applicant program. The program has 45 days to respond to the report in writing. This response is then discussed by the HFA Advisory Panel and a decision is made.

Depending on the outcome of the Self-Assessment, the peer reviewer site visit, the program response and the deliberations of the Panel, the evidence will be used to determine whether to grant accreditation or a delay is necessary. Two types of accreditation may be granted: a four-year individual site accreditation or a four-year multi-site accreditation.

Technical Assistance

Quality Assurance staff at the national level are available to provide the following technical assistance to programs as they complete the accreditation process:

- Provide a complete overview of the process from preparation of the Self-Assessment through the accreditation decision;
- Answer any questions about the completion of the self-study, standards interpretation, and/or the process;
- Assist with program implementation and/or policies and procedures development; Provide guidance with site visit preparation;

- Connect programs with local experts; and
- Handle the logistics of the site visit.

Fees

To defray costs associated with the provision of technical assistance to HFA sites, affiliated sites will pay an annual affiliation fee. Additionally, HFA program sites are responsible for the costs associated with the HFA Peer Review Team to perform an on-site review.

A timeline for obtaining the curriculum or other materials needed

We anticipate a quick timeframe for obtaining curricula and materials for both the NFP and HFA programs. North Carolina is already working with the NFP National Office quite closely and can help local sites, if needed, to readily obtain these resources.

North Carolina also has strong HFA models already operating in the State. We will link the new sites to existing sites for mentoring and assistance in obtaining materials. Resources should be obtained easily and promptly.

A description of how and what types of initial and ongoing training and professional development activities will be provided by the State or the implementing local agencies, or obtained from the national model developer:

National Office's training is outlined in the response to number three in this section of the grant. The State will provide local sites with assistance in:

- Workforce development;
- Staff recruitment and retention;
- Additional preparation for entry into NFP nurse home visitor positions;
- Basic orientation to public health, community health, home-based nursing practice, and/or maternal child health nursing;
- Training in evidence based models, systems work, implementation science, evaluation methodologies and analysis, motivational interviewing
- Early childhood systems development
- Data entry and analysis/review;
- Quality assurance/ continuous quality improvement;
- Program assessment techniques;
- Support of model fidelity; and
- Other training identified to meet local needs.

A plan for recruiting, hiring, and retaining appropriate staff for all positions;

The North Carolina Division of Public Health uses the Merit-Based Recruitment and Selection Plan to fill positions subject to the State Personnel Act  (GS-126).

Consideration is given to applicants who possess an equivalent combination of related training and work experience commensurate with the minimum job requirements. Only applicants who meet the minimum training and experience requirements will be referred for consideration. The DHHS will provide equal employment opportunity to all applicants without regard to race, religion, color, creed, national origin, sex, age, disability, or political affiliation/influence. All selection decisions are based solely on job-related criteria and comply with all federal and state employment laws, regulations and policies, and will be consistently applied to promote fairness, diversity and integrity.

It is the commitment of the department to recruit qualified applicants and to promote the recruitment of minorities, women, individuals with disabilities, and others who may be under-represented demographically through the use of sound HR practices and principles.

Preferential treatment will not be given to any private organization or individual based on political affiliation or influence.

The hiring manager and HR determine the appropriate option when posting vacant positions (internal to the department, internal to state government, or external to state government). In recruiting for nursing positions we post vacancies on the NC State Nursing list serve, at the major medical centers and universities with nursing degree programs and through the State Personnel list serve. If the position is for a NFP nurse, we also post on the national NFP list serve. For other related positions such as social work, administrators, etc. we recruit from the State list serve, and the centers of higher learning including: East Carolina University, Central University, University of North Carolina (UNC) at Greensboro, UNC at Wilmington, UNC at Chapel Hill, State University, Western Carolina, Appalachian State University and UNC at Charlotte.

The State has hired the Program Director who has an MSW and MSPH. Her first day is June 9, 2011. Initial interviews for the nursing position were held and the position was reposted. A second round of interviews with new and promising applicants is being scheduled. Similarly the first round of interviews has been held for the Business Coordinator position. We are considering reposting for that position as well. A data manager position is being established. DPH Personnel has approved the position level and it has been forwarded to Office of State Personnel for final approval. We are projecting that all of these positions will be filled by August or September. The positions will have strong program and supervisory support within the Children and Youth Branch as well as strong program support from the Section, Division, Department and Governor's level. The extensive work being done in North Carolina to build a workable early childhood system will offer staff a team environment with strong collaborative partners.

Buncombe's plan for Recruiting, Hiring and Retaining Staff

All four nurses were hired from the Community Health Nursing Program and have excellent skills in prenatal, postpartum and home visiting programs. Buncombe NFP has not lost any staff since implementation began. This has been seen as a strength by the NSO. The new nurse will be hired based on strong home visiting, prenatal and pediatric skills. There are strong internal candidates with Community Health Nursing experience.

- Well-trained, competent staff—Buncombe County is widely known to offer competitive compensation as well as one of the most outstanding benefits packages in the region, if not the state. The county offers top-rate health insurance at very low cost, participation in the Local Government Employees Retirement System, NC 401(K) with 8% county match, 11 paid holidays, sick leave, annual leave, personal time off (PTO), longevity pay, wellness programs and a low cost employee health clinic among other benefits. Reflective supervision has been shown to provide staff with great clinical support that has fostered competency as well as aided retention due to job satisfaction.
- High quality supervision—One-to-one weekly supervision, case conferences, team meetings and field supervision are all provided by the NFP Supervisor to assure optimal supervision. Reflective supervision has been well received and is being looked at as an agency competency. Having a certified nurse midwife in this role has assured strong clinical supervision. And having an adjunct UNC faculty member has also brought strong teaching skills and sound program management.

One-to-one Supervision

These are meetings between a nurse and supervisor in one-to-one weekly, one hour sessions for the purpose of reflecting on a nurse's work. This includes caseload management and quality assurance. Supervisors use the principles of reflection as outlined in NFP supervisor training. Supervisors who carry a caseload will make arrangements for clinical supervision with reflection from a qualified person other than the nurse home visitors he/she supervises.

Case Conferences

These are team meetings dedicated to joint review of cases and CIS reports. The team uses reflection for the purposes of solution-finding, problem-solving and professional growth. Experts from other disciplines are invited to participate when appropriate. Case conferences reinforce the reflective process. Case conferences are to be held twice a month for 1 ½ to 2 hours per case conference.

Team Meetings

These are administrative meetings. The time is used to discuss program implementation issues and for team building. Team meetings are held twice a month for at least an hour. Team meetings and case conferences alternate weekly so there is one meeting of the team every week.

Field Supervision

This is a joint home visit conducted by the nurse supervisor and nurse home visitor. The supervisor should accompany each nurse to at least one client visit every four months. Additional visits may be made at the nurse's request or when the supervisor has concerns. The minimum time required for field supervision is 2 – 3 hours per nurse every four months. Some supervisors prefer to spend a full day with each nurse. This enables the supervisor to comprehensively observe the nurse's typical day, including home visits, time and case management skills, and charting. After any joint home visit, a Visit Implementation Scale is completed and discussed.

- Strong Organizational Capacity – BCDH has proven we are a successful implementation agency and will continue to support the NFP Program through sound program and fiscal management, strong leadership, community partnerships and innovation in service delivery.

Gaston's Plan for Recruitment, Hiring and Retention

Recruiting

GCHD will post job announcements for all NFP positions on job websites operated by: (1) the NFP National Service Organization; (2) Gaston County Government; (3) the NC Public Health Association; (4) the NC Nurses Association; (5) the UNC-Chapel Hill, School of Public Health; (6) the 13 NC colleges and universities that offer BSN degrees and the nine universities that offer BSN and MSN degrees, including four historically black colleges and universities - four of the 13 schools are within a one-hour drive of GCHD; (7) the seven colleges and universities in SC that offer BSN degrees – including one historically black university – and one university that offers BSN and MSN degrees; and, (8) the NC Hospital Association. Our plan is to hire, orient, and train the NFP Supervisor and once she is trained and for her to take lead responsibility to recruit four Nurse Home Visitors.

Hiring

Our goal is to hire nurses with strong academic backgrounds, at least three years experience in maternal, child health, or mental health nursing and, the ability to communicate and build trusting relationships with low-income women. We will recruit an NFP Supervisor with a master's degree in nursing and the Nurse Home Visitors must have bachelor's degrees in nursing with at least three years of successful experience in maternal, child health or mental health nursing. We are also looking to hire nurses who have strong cultural and linguistic competencies.

An NFP consultant, the GCHD Medical Director, Personal Health Services Administrator, Maternity Supervisor, and two maternity nurses will review NFP Supervisor applications and select the most qualified candidates. This team will interview these candidates using questions from the NFP designed to probe candidate's attitudes, abilities to solve challenging situations, and use critical thinking; we will also administer a computer use and data skills assessment. The interviewers will rate each candidate and the Personal Health Services Administrator

will check references for the five highest-rated candidates to determine their organizational and leadership skills. We will interview the three highest ranked candidates and will extend a job offer based on interviewers' final rankings.

The NFP Supervisor, GCHD Medical Director, Personal Health Services Administrator, Maternity Supervisor, and a maternity nurse will hire the Nurse Home Visitors. They will review applications and select the 10-12 most qualified individuals. We will show candidates the NFP video and will require verbal and written answers to NFP-recommended questions. As recommended by NFP, we will look for applicants who have strong:

Communication skills, showing the candidate is: respectful of individuals and diversity, nonjudgmental, a good listener, tolerant, understanding, compassionate, encouraging, and hopeful.

Personal Qualities, showing the candidate is: sincere, warm, empathetic, self-aware, and committed; a self-directed learner, independent, and flexible; is reflective, and has integrity and critical thinking skills.

Professional Abilities, showing the candidate can: apply nursing processes and clinical expertise; maintain therapeutic boundaries; build therapeutic relationships; understand difference between "deficit based" and "strength-based" models; engage in mutual goal setting; use problem-solving techniques and negotiation skills based on motivational interviewing and behavior change theory; advocate and teach; work autonomously and as a team player; take initiative; work collaboratively to find solutions; use organizational and time management skills; and, is committed to personal and professional growth.

The interviewers will rate each candidate and the NFP Supervisor will check references for the eight highest-rated candidates to evaluate their nursing and self-management skills. We will invite the six highest-ranked candidates for second interviews and will take candidates to neighborhoods where they would work. We will extend job offers based on the interview team's findings.

During final interviews NFP Supervisor and Nurse Home Visitors all candidates will assess their NFP-required nursing skills; during their first three months of employment, they will address these short-comings by working with proficient GCHD nurses and/or by attending continuing education programs offered by the State Health Department, the University of North Carolina, or an Area Health Education Center; this is consistent with GCHD policy which encourages and pays for professional development.

Orientation

The NFP Supervisor and Home Visit Nurses will complete GCHD New Employee Orientation, which will include shadowing nurses in our Maternity Clinics. Community orientation will feature a tour of the county, neighborhoods where NFP clients are likely to live, and visits to NFP partner agencies. Staff will also meet our NFP Community Advisory Board, and will shadow Nurse Home Visitors in

Cleveland County. Concurrently, we would reserve five half-days for them to complete their first unit of required NFP study; by combining orientation and study we seek to make both activities more meaningful. If needed, Nurse Home Visitors will work at home to complete required web-based education.

GCHD will also provide NFP staff with directories of local and state programs that address problems of pregnancy and early childhood, include eligibility criteria and contact information. GCHD nurses would also be available will help NFP staff make referrals.

NFP staff would also be responsible for successfully completing required NFP orientation within the first eight weeks of employment: 30 hours of online study and 3.75 days of training in Denver, CO at the NFP National Service Office; a six-hour online training is required with six months of core training.

In addition to Nurse Home Visitor training, our NFP Supervisor will be required to complete four supervisory trainings within six months of employment. All courses conducted in Denver, CO are offered monthly.

Retaining Staff

Our formula for retaining NFP staff is to recruit highly qualified and motivated individuals, assign them challenging and satisfying work, provide resources to enhance their growth and development, provide strong supervision, provide strong support from other GCHD programs, pay a fair wage, and acknowledge their personal and programmatic successes.

Our expected program advocacy by the Community Advisory Board will also provide credibility, visibility, and appreciation for NFP, which will advance the pride the team would feel about their work.

Supervision

GCHD will assign the NFP Supervisor exclusively to NFP, limiting her other responsibilities to weekly Supervisor meetings (3 hours) where she will establish working relationships with our seven clinical supervisors. We also expect she will need two to three hours a week for administrative duties – reviewing timesheets, approving travel and purchases, monitoring budgets, and completing staff evaluations – leaving no less than 34 hours, for NFP activities, including team meetings and reflective supervision.

With program data and field observations, the NFP Supervisor will help Nurse Home Visitors enhance their skills and accelerate their personal and professional development. By creating a safe setting for the team to learn from program data and each other, the NFP Supervisor will build esprit de corps and advance program implementation. When individuals or the team need guidance beyond what the NFP Supervisor can provide, we will request the assistance of an NFP consultant.

GCHD will provide flexible schedules so staff can attend three annual workshops and conferences, take vacations, and use sick days. NFP staff will be authorized to reschedule patient appointments and give their clients the phone number of the NFP Supervisor so, when they are out of town, clients can call for assistance. The NFP Supervisor will also be available to fill in by making home visits.

Families to be Served and Recruiting Participants

GCHD is committed to building and sustaining a caseload of 100 families, with 25 assigned to each of four Nurse Home Visitors. Each will be assigned clients within a limited geographic area that will minimize their need to travel extended distances between appointments.

While the vast majority of women who enter NFP will be GCHD patients, we want to be sure there are

ample portals of entry for eligible women to join the program. To set the stage for health, medical, and

human services professionals to refer and support women in the program we would:

- (1) Present NFP to all staff who work in GCHD's three Maternity Clinics and Child Health Clinic.
- (2) Present NFP to the Obstetricians and OB Triage staff at Gaston Memorial Hospital and will describe how they can refer patients to NFP the Pregnancy Medical Home Program;
- (3) Present NFP to clergy, school nurses and guidance counselors, DSS social workers, police officers and deputy sheriffs, staff at youth-serving nonprofits, and crisis assistance organizations so they can encourage clients to enroll in NFP;
- (4) Present NFP to social, civic, and religious groups, especially in areas with high poverty rates;
- (5) Build community awareness of NFP through earned coverage in our county's two daily and three weekly newspapers, through regional newspapers and radio stations that serve African American and Latino populations, and through our government access channel.

As previously described, GCHD will identify NFP-eligible women who receive prenatal care at GCHD and private medical practices. We will also determine if they have special needs, listed here in priority order: (1) teen mothers, (2) mental health problems; (3) have abused alcohol; (4) have abused illicit and prescription drugs; (5) use tobacco products; (6) witnesses / victim of domestic abuse; and (7) chronic illnesses. Our NFP will enroll women irrespective of their racial, ethnic, and immigration status.

NFP staff will call and meet women who meet these criteria and invite them to enroll in NFP, offering meetings at maternity visits, in their homes, and in the community based on each woman's preference.

With the managers of the Pregnancy Medical Home (CHP), Care Coordination Program for Children (CHP), Healthy Beginnings (GCHD), the Adolescent

Pregnancy Prevention Program (GCHD), and Parents As Teachers (Cooperative Extension), the NFP Supervisor will decide, based on each woman's needs, which program to extend to these women. We will notify all referring parties of our decisions and when women are ineligible for NFP, we will help them enroll in these other programs. This system will assure pregnant and low-income women receive high quality and appropriate services, and NFP maintains good relationships with our referring parties and program partners.

Minimize Attrition Rates

The key to keeping women in our NFP will be to hire competent and compassionate Nurse Home Visitors who can establish and sustain trusting bonds with their clients. Because NFP can feel invasive to participants and their families, our Nurse Home Visitors will encourage the family and friends of clients to attend home visits and ask questions. Nurse Home Visitors will also encourage NFP mothers to call them if they have problems or difficulties, and the Nurse Home Visitors will respond by phone, at their next home visit, or at a specially arranged home visit.

Because the support of participant's medical providers is crucial to program success, we will submit reports to women's providers and ask them to compliment the women on their participation, and to forward information to the NFP Supervisor on problems articulated by these women. GCHD providers will expedite this process by entering comments on the EHR for Nurse Home Visitors to read.

When physicians and Advisory Board members report anecdotal comments from participants – Nurse Home Visitors will immediately call their clients to resolve problems and will note the outcome in the EHR or by filing a brief report to the client's private physician.

Concerns and complaints will be the topic of reflective supervision and NFP team meetings, as they provide crucial information for improving individual and group performance. When we receive recurring complaints about individual Nurse Home Visitors, the NFP Supervisor will provide those nurses with more intensive coaching and will observe their home visits. When clients dropout of the program, the NFP Supervisor will request a home visit to hear the presenting reasons and encourage mothers to return. The NFP Supervisor will have the prerogative to assign a new Nurse Home Visitor to clients who are dissatisfied.

By addressing client comments through reflective supervision, team meetings, and administrative action, the NFP Supervisor will build a foundation for solving staff-related problems and continually improving program implementation, which will minimize participant attrition.

Durham's Plan for Recruiting, Hiring and Retention

Healthy Families Durham exceeds the hiring requirements of both the Parents as Teachers model and the Healthy Families American model. All home visitors for *Healthy Families Durham* must have at least a bachelor's degree, with a master's degree preferred. There are written procedures for interviewing and hiring, overseen by the Human Resource Manager of CCFH; and active recruitment of bilingual home visitors is part of the hiring plan. Staff retention is a strength of *Healthy Families Durham*, as all current home visitors have been with the program at least three years. Staff retention is enhanced by adequate salaries, weekly staff meetings, weekly reflective supervision, on-call supervisors, staff retreats, and ongoing training.

To meet staffing patterns required by the national office of Healthy Families America, each Family Support Worker will initially serve **13** families (increasing to the standard caseload **15** by the end of year one), and one half-time supervisor will supervise 3 home visitors. This meets Healthy Families America requirements and far exceeds the staffing requirements of Parents as Teachers.

- **Identify a plan to ensure high quality clinical supervision and reflective practice for all home visitors and supervisors;**

In the reflective supervision model, the supervisor creates a safe and welcoming space for home visitors to discuss their work with families, their adherence to the curriculum, and their emotional response to the work. The goal of the supervisor is to create a trusting relationship, marked by mutual respect. Supervision must be provided on a regular basis and in a collaborative format and is required for all staff, regardless of experience level. During supervision sessions, home visitors provide an update on each client, process any emotional issues, and brainstorm solutions to problems for the family as well as the relationship between family and home visitor. The supervisor provides emotional support, practical suggestions, safety reminders, and quality assurance, thus balancing between an administrative and clinical role. Reflective supervision is linked to the concept of "parallel process," a belief that the ways in which a home visitor interacts with the supervisor will influence the way that the home visitor relates to families in the field and the way that parents relate to their children.

The Healthy Families framework requires reflective supervision, with full-time supervisors providing for no more than six home visitors. All 3 home visitors with the new *Healthy Families East Durham* expansion will receive weekly supervision and will have 24/7 on-call availability with their supervisor. Supervisors will provide direct observation of home visits at least twice a year with follow-up time for discussion and reflection. Both Healthy Families and Parents as Teachers initial training weeks require that supervisors attend an extra day of training, and *Healthy Families East Durham* proposes that the EDCI supervisor attend both of these supervision training days. In addition, the supervisor will receive weekly reflective supervision and guidance, thus enhancing the parallel process. By holding weekly staff meetings, scheduling times of fun/respice for staff, and making sure that the

home visitors have the correct tools to do their job, the supervisor will create a supportive work environment.

Toe River's Plan for Recruitment, Hiring and Retention

The Toe River Health District will contract with the Mitchell-Yancey Partnership for Children for the Program Manager role, offering supervision and mentoring to support the home visitors' efforts to meet HFA goals and objectives and for quality and quantity of work. A Masters prepared Social Worker; the program manager has the educational background needed to mentor HFA home visitors. She is trained and experienced in reflective supervision, which is a key component of HFA supervision. As the MYPFC staff responsible for monitoring all agency funded programs, the program coordinator has also had experience with Nurturing Families, a curriculum used by HFA and is acutely aware of barriers to model fidelity with use of this type of curriculum in a rural area. Program fidelity requires a full-time supervisor for 5 to 6 home visitors; MYPFC will assure the program manager has adequate time to achieve the ideal ratio of 1:5. The program coordinator will serve as the leadership team's key staff in implementation of the HFA program. FSW limited case loads of approximately 15 families will ensure parents will receive the time and attention needed to be successful.

A high level of quality supervision will be provided through collaboration between the program manager at the MYPFC and the local health department supervisors. Local health department supervisors will provide daily supervision for HFA home visitors. The local health department supervisors provide daily supervision that includes assurance the employee is on time for work and appointments, checking and approving time and travel records, mediating disputes between employees and serving as a sounding board and mentor for all staff for day-to-day issues. The offsite program supervisor provides direction and quality assurance in the content area.

TRHD will contract with the MYPFC program coordinator to serve as the supervisor and mentor of the home visitors for meeting HFA goals and objectives and for quality and quantity of work. With a Master's in Social Work, the program manager has the educational background needed to mentor HFA home visitors. She is trained and experienced in reflective supervision, which is a key component of HFA supervision.

Northampton's Plan for Recruitment, Hiring and Retention

A community collaborative approach will be used to fill open NFP nurse positions. All four Health Departments involved will invest resources in recruiting Bachelors and Masters level nurses. The plan will be to announce the jobs in stages, in order to be cost-effective. The state public health system, internet, including the NFP National Service Office statewide and local newspapers, area university websites, professional outlets (newsletters, website, journals and blogs) and of course the counties' websites will also be used to publicize these positions. To ensure the cultural and language competency of staff, specific recruitment strategies will be

developed and targeted to the minority institutions of higher learning. An added asset in the recruitment process is that the salary range for nurses employed by the Health Department is the highest in the community and thereby makes these positions more competitive.

In partnership with the Clinical Nurse Supervisor, the health director and the NFP Nurse supervisor, once hired, will look to ensure that the nurses hired understand the job and that their skills and passion match the requirements of the Home Visitor position. It is our intention that by assessing this match the incidence of turnover can be reduced. The availability of both initial and ongoing education is another tool by which to retain qualified staff. Another strategy to retain the nursing staff will be ongoing availability of reflective and quality supervision. Perhaps most importantly the knowledge that these nurses are making a measurable difference in the lives of their clients and that they are helping young women have healthier pregnancies and healthier babies will be the best retention strategy.

Plan to ensure high quality clinical supervision and reflective practice for Home Visitors and Supervisors.

The lead agency already provides supervisors with multiple opportunities for reflective practice. Management team members meet twice per month to discuss policy development, strategic planning, and exchange information. Upon implementation of this program, the NFP guidelines for clinical supervision will be followed. During this planning process, it was identified that the agency has the capacity for weekly reflective supervision sessions. During this time the supervisor will motivate and help address challenges the home visitor nurses are facing. Monthly one-on-one meetings will be designated for the supervisor and health director allowing time for assessment, facilitation of changes, implementation of proposed changes, and evaluation of results. Program reviews will be conducted on a regular basis to assess measurable progress towards set goals and evaluation of budgetary benchmarks.

If subcontracts will be used, a plan for recruitment of subcontractor organizations, and a plan for how the subcontractor(s) will recruit, hire, and retain staff of the subcontractor organization(s).

Subcontractors are not currently a part of the NC plan. If a change is made to the current plan, subcontractors will be held to the same requirements as contractors.

A plan to ensure high quality clinical supervision and reflective practice for all home visitors and supervisors;

NC's plan to ensure high quality clinical supervision and reflective practice for all home visitors and supervisors will begin with a capacity-building framework. NC seeks to expand internal capacity to meet community needs for implementation of EBHVPs in the early phases of this funding opportunity. NC proposes to fund the

following staff positions to support the initiative: State NFP Nurse Consultant, Home Visitation Program Director, Program Assistant, and Data Manager.

The **Program Director** is responsible for new site development and community planning to ensure that all local community grantees have the knowledge, skills, tools, and support needed to sustain the program, adhere to model fidelity and build strong teams. The Director is responsible for fiscal and program oversight, evaluation monitoring, budget management and contracts administration. A master's degree in public health, social work, nursing or a related degree is required and five years experience in human services, child health or child development services, adult education or child maltreatment prevention services. Strong presentation, community organization and/or facilitation skills and experience working with families and youth are a requirement. This position has been filled and the new Director (MSPH and MSW) will begin work on June 9, 2011.

The **NFP State Nurse Consultant** is responsible for clinical oversight to local NFP sites and policy and workforce development. This position ensures that all nurse-home visitors and their supervisors are prepared and supported in delivering NFP, with fidelity to the model, to diverse communities and families and helps local teams interpret client data for quality improvement. A master's degree in nursing or related area and five years of experience in public health nursing, including one year in a supervisory capacity is required for this position. Experience as a NFP Nurse Home Visitor or Supervisor is strongly preferred.

The range of duties for the **Business Services Coordinator** includes administrative and program support, budget management, program marketing, customer service, event planning, report writing, summarizing/reconciling information or financial data, record management, data review, and contract service monitoring and training for local staff. This position will be supervised by the Program director.

The **Home Visiting Data Manager** is responsible for performing collecting and complex statistical analyses of data from a wide variety of sources including but not limited to the State and National Home Visiting Benchmarks/Constructs, BRFSS, the National Early Childhood Home Visiting Survey, and CMIS data. This data will address all age groups, racial/ethnic groups, socioeconomic groups, geographic areas, and key environments in which families receiving MIECHHV services are provided. The position will be supervised by the NC MIECHV Program Director and work closely with the Best Practices Data Manager and staff in the Best Practices Unit, and will participate in the development and implementation of the NC Home Visiting State Plan for the improvement of maternal, infant and early childhood home visiting services.

Per guidance from the National Service Office (NSO) of NFP, NC has agreed to develop state-level administrative infrastructure to support existing NFP sites as well as for the development and support of future sites. There are five areas of administrative infrastructure required which are: nursing practice support; program

implementation support including dissemination of information and tools, convening/ collaboration support, start up, and changes in policies, programs, practices; generating and using data to inform performance improvement; fiscal oversight, budget management and contracts administration: advocacy-political support, including public communications. A North Carolina philanthropic organization and a co-funder of the NFP programs in the State, Kate B. Reynolds, is hiring a new position to work closely with State positions who will provide capacity building services in the local communities.

Through receipt of a Pew Center award and support from two private foundations for communications and public education, PCA will provide leadership for advocacy and political support. Funding is required for the DPH to assume administrative leadership in the areas of nurse practice support, program development and implementation, data interpretation, and fiscal oversight, including budget and contract management.

With two HV models chosen for replication and implementation State staff will work closely with the Kate B. Reynolds position, the PCA of NC office, the local implementing communities and the National Offices for NFP and Healthy Families America.

Each community grantee will assure through a contractual arrangement, monitoring, support, technical assistance and data analysis that programs are providing appropriate and constructive supervision and reflective supervision. If appropriate training in reflective supervision will be arranged for local sites. The Home Visiting Program Director and Nurse Consultant will ensure that clinical supervision standards are reviewed regularly with each community grantee.

The estimated number of families served:

Geographic Area	Model	Number Families To Be Served
Buncombe	NFP	25 families per cohort/one nurse
Durham	HFA/PAT curriculum	45 families per cohort
Northampton County HD	NFP	100 families per cohort/ four nurses
Gaston	NFP	100 families per cohort/ four nurses
Toe River District HD	HFA	26 families first year

Three of the five community grantees have chosen to implement Nurse Family Partnership programs (NFP). Per standards, a full-time nurse home visitor carries a caseload of no more than 25 active clients. We estimate that 225 new families could

be served through this model in the first year. One site, Buncombe is expanding their current program to add one additional nurse.

Two of the five community grantees have chosen to implement Healthy Families America programs (HFA). Program fidelity requires a full-time supervisor for five to six home visitors and family assessment workers (FSW) have limited case loads of approximately 15 families. We estimate that 71 new families could be served through this model in the first year.

The programs are projected to serve a total of 296 families in the first year.

A plan for identifying and recruiting participants;

This question is addressed in the response to number six above. In addition, each community grantee has agreed to identify and recruit participants based on the chosen model's criteria. Priority will be given to low-income eligible families and families in high risk communities as indicated in the statewide needs assessment. Even though not all sites indicated plans for a triage system, this possibility will be examined with each site for feasibility.

Programs would rely largely on referrals from other programs and family referrals. One program expects to develop and implement a comprehensive public awareness campaign during the first 6 months –year. The Pregnancy Medical Home program and the Pregnancy Care Management program are excellent sources for referrals of first time mothers prenatally. The county sites also plan to utilize referrals and outreach resources specific to their county to ensure families are aware of the services available through the home visiting models. For example, the Mitchell-Yancey Partnership for Children (MYPFC) has access to a database with contact information for over 1,000 local families with preschool-aged children.

A plan for minimizing the attrition rates for participants enrolled in the program;

NC's plan for minimizing the attrition rates for participants enrolled in the community HV programs emphasizes the provision of on-going support and structure needed by the community grantees and their staff. Recent research suggests that the biggest challenge to HV programs is attrition of clients and staff turnover has been identified as having a major impact on clients leaving the program. All community grantees are required to develop staff retention plans as well as incentives for client participation. They will be encouraged to look at their commitment to improving staff communication skills with reflection, open-ended questions, and affirmations in order to enhance the therapeutic relationship with their clients. The State Program Director will review with the community grantees their plans to provide hands on meaningful activities such as: social gatherings for HV parents and families, learning opportunities about local resources, ceremonies for the toddlers and their families, and other appropriate activities and incentives. Sites also have new care management

systems in place that are required to keep un-to-date resource information about the county and specialty services. This resource will be shared with the home visitation programs so that maximum support will be provided to participants.

An estimated timeline to reach maximum caseload in each location.

The sites have estimated the following timelines:

- Buncombe: “It takes about 6-9 months to have a full caseload (an additional 25 clients).”
- Durham: **Provide an estimated timeline to reach maximum caseload in each location;**
 - Month one: advertise, interview, and hire staff
 - Month two: orientation and training
 - Month three: begin enrolling clients, ongoing training
 - Month four: complete enrollment of first caseload of n=39 clients by the end of month four
 - Month seven: increase caseloads to 15 with n=45 by the end of year one
- Gaston: “Based on our adaptation of the NFP-provided formula, we expect 143 residents from designated census tracts will be eligible and willing to enroll in NFP every year. Because GCHD will provide prenatal care to the vast majority of these women and will be able to recruit them in our three Maternity Clinics, we expect to fill our approved caseload of 100 participants in nine months.
- Northampton: “Assuming a contract start date of September 29, 2011, client enrollment will begin in January 2012 and full caseloads will be reached by October 2012. This time-frame has been established based on the experiences of the current NC NFP projects which are implemented through a local health department. Once a funding award is made, the project will have to establish positions and recruit qualified staff. Once staff is hired, they will then need to complete online training modules before traveling to Denver for the first required training. In other NC Health Departments this process has taken up to six months
- Toe River: “HFA estimates that 10-15% of Home Visits will be attempted but not completed. During start-up, families are reluctant to participate in a new program. The HFA Leadership team estimates that it will take six to nine months to reach a full caseload in Mitchell and Yancey Counties

An operational plan for the coordination between the proposed home visiting program(s) and other existing programs and resources in those communities, especially regarding health, mental health, early childhood development, substance abuse, domestic violence prevention, child maltreatment prevention, child welfare, education, and other social and health services.

The sites has developed the following plans for coordination:

Buncombe

- **Interagency Management Team** - is a local consortium of agency health, mental health, juvenile justice, education and human services leaders that provides

oversight of targeted case management and care coordination. Both of these issues, if well coordinate, could help improve coordination between mental health and physical health services (major priority for *Innovative Approaches* for next year)

- **Buncombe County Children’s Collaborative** - Promotes public awareness, advocacy, and the collaboration of agencies, families, and the community to strengthen services by addressing gaps and barriers for at-risk children and their families. Help manage any coordination issues around targeted case management.
- **Provider Portal Initiative** - Health departments and local management entities (LME) now have access to Community Care of North Carolina (CCNC) Provider Portal that houses paid Medicaid claims information. Community Care of WNC has begun training around access to patient “snap shot” information. These one page “snap shots” provide information on primary care provider and all paid Medicaid claims information. When agencies get a referral on a client, they will be able to request a “snap shot” on that client from either the LME (for mental health providers) or the health department (for non-mental health providers)
- **Innovative Approaches** – A community-based and family-focused initiative to improve systems of care for children with special health care needs. With over 22 community organizations including Community Care of WNC (CCWNC), BCDH, DSS, both school systems, mental health providers, medical providers including all six pediatric practices, family support agencies and many more.
- **Pregnancy Care Management** – providing maternal care coordination for pregnant Medicaid recipients in collaboration with CCWNC who are determined to be at risk for poor birth outcome to improve birth outcomes. Pregnancy Medical Homes will be completing a pregnancy risk screening to identify these and other risk factors. PCM are the gate-keepers and refer all first time low income pregnant women to NFP.
- **Care Coordination for Children** – providing care coordination for Medicaid children 0-5 in collaboration with CCWNC for children with special health care needs. All pediatric offices have signed Memorandum of Agreements with CCWNC and staff from both agencies are visiting providers to develop plan to coordinate care. NFP will link with CC4C care coordinators to assist with children as they age out of the NFP program.
- **Children First** – Provide advocacy for children’s issues locally and are available to provide technical assistance in the area of building advocacy skills and agendas for area programs and agencies. Will be providing advocacy training for *Innovative Approaches* and NFP Supervisor will be invited to this training.
- **BCDH Leadership Action Planning Process** – Systems approach to planning for handling key health priorities of BCDH. Are creating system’s maps for each priority area. In addition, are outlining populations to target, leverage points, opportunities and resources available to best impact each area. With women’s health one of the key priorities, this will help shape the action planning process. This process will dovetail into the community health assessment action team’s women’s health priority. NFP will be one key strategy in addressing our key outcomes to improve women’s health.

- **Adolescent Immunization Quality Improvement Initiative** – BCDH has begun an adolescent immunization QI process to increase the adolescent vaccines provided to youth ages 11-18. NFP Supervisor serves on this team that is working with providers and parents to develop a campaign aimed at improving opportunities to vaccinate in the providers offices as well as providing a community media campaign to increase awareness.
- **Shaken Baby Campaign** – A community collaborative that DSS, Health and Mission lead in order to educate the public regarding head trauma in infants and to decrease instances in which this occurs (model 30% reduction Washington State)

Key Partners for this NFP Initiative

- A. Developing formal and informal program partnership or collaborations
- B. Building community awareness or political support for the effort
- C. Providing training, coaching, supervision, or other technical assistance to home visitors and other staff
- D. Program monitoring, evaluation, or quality improvement activities
- E. Other: Please describe

• Partner, Organization, Title	ACTIVITY	
	A B C	D E : Please describe
Cynthia Brown, MD, Reuter Outpatient Center, Mission Hospital, Child Medical Evaluation Program	ABC	Community Advisory Board Provides physician support/expertise
Sarah Monahan-Estes, MD Reuter Outpatient Center Mission Hospital, Child Medical Evaluation Program	ABC	Community Advisory Board, Chair Provides presentation MDs to promote NFP & referrals
Angie Pitman, DSS Program Administrator	ABC	Community Advisory Board, DSS Leadership, CPS Expertise
Tangie Ballard-Bowman, YWCA of Asheville, Mother Love Director	AB	Community Advisory Board & referrals
Jacque Penick, Mountain Area Child and Family, Executive Director	AB	Community Advisory Board, referrals
Amy Barry, Smart Start,	ABC	Community Advisory Board,

Program Manager		advocate on other committees, training around child care issues/subsidies
Belinda Grant, Mount Zion Community Development, Director	ABC	Adolescent Pregnancy Prevention—contracts with Buncombe County, referrals, coordinate pregnancy prevention with partners
Holly Jones, YWCA of Asheville, Executive Director & County Commissioner	ABC	County Commissioner and as YWCA Director provides program coordination with Mother Love
Allison Jordan, Children First, Executive Director	BC	Strong community advocacy around children’s issues, training on advocacy
Dan Frayne, MD, MAHEC Family Health Center, Assistant Clinical Director	ABC	Strong supporter, providers support to medical community, provides training on clinical issues
Blake Fagan, MD, MAHEC Family Health Center, Clinical Director	ABC	Strong supporter, providers support to medical community, provides training on clinical issues
Libby Gregg, MAHEC Family Health Center, Program Director	ABC	Strong supporter, providers support to medical community, provides training on clinical issues

Durham

The expanded *Healthy Families Durham* for the EDCI targeted neighborhood adds 3 Family Support Workers and a Supervisor who join an already established and strong staff. Their connection and support from the Center for Child and Family Health is assured, and their training from existing staff makes job entry much easier and quicker than if there was a new program created. The newly funded staff members also become a part of the entire East Durham Children’s Initiative, which recognizes that the early-childhood years are key to building a strong foundation for a child’s future educational success. EDCI is committed to beginning the “cradle to graduation” pipeline for families during these critically important first years. With *Durham Connects* and *Healthy Families Durham* working “hand-in-hand,” with EDCI, children can be identified, assessed, and referred to home visiting services that can extend family support for up to three years.

Leaders of *Durham Connects*, the newborn nursing program that will be the primary referring agency, have already agreed that the *Durham Connects* Advisory Board will merge with the Home Visiting Advisory Board. This makes sense because the two programs will be closely linked in the EDCI neighborhood, and the same community

members would serve on both boards. The following organizations will be represented: Durham County Health Department, the Center for Child and Family Health, Durham County Department of Social Services, Durham Center (mental health), Duke Family Care (addiction services), Durham Herald Sun (newspaper), Duke Hospital, Lincoln Community Health Center, Durham’s Partnership for Children, Duke Children’s Primary Care, Pregnancy Support Services, and Early Head Start.

The Program Director for the *Healthy Families East Durham* expansion, Jan Williams, LCSW, will participate in the Local Interagency Coordinating Council (LICC) in order to facilitate blending this program into the continuum of early childhood services. The LICC meets monthly to coordinate, plan, and expand the system of care in Durham for young children; and all agencies are represented that serve children 0-3 years .

In the table below, key partners for this initiative (non-direct service providers) are listed. For each partner listed, please note their organization and title and indicate which activities (A – E) best describe their work.

- A. Developing formal and informal program partnership or collaborations
- B. Building community awareness or political support for the effort
- C. Providing training, coaching, supervision, or other technical assistance to home visitors and other staff
- D. Program monitoring, evaluation, or quality improvement activities
- E. Other: Please describe

Partner, Organization, Title	ACTIVITY	
	A, B, C, D	E : Please describe
Ellen Reckhow, County Commissioner	A, B	E: Ongoing sustainability
Sue Guptill, Director of Nursing at Durham County Health Department	A, B, C	
Laura Benson, ED of Durham’s Partnership for Children	A, B, D	E: Ongoing sustainability, locating additional grants
Robert Murphy, ED of the Center for Child and Family Health	A, B, C, D	
Ken Dodge, ED of the Center for Child and Family Policy	A,B	

Partner, Organization, Title	ACTIVITY	
	A, B, C, D	E : Please describe
David Reese, ED of the EDCI	A, B	E: Ongoing sustainability
Angelica Oberleithner, Asst. Director of Durham's Partnership for Children	A, B	
Jeanine Sato, Coordinator of <i>Durham Connects</i>	A, B,	E: Media contacts
Karen O'Donnell, Director of Prevention, Center for Child and Family Health	C,D	
Robin Roberts, NC Parents as Teachers	C, D	
Pat Harris, Welcome Baby	A	
Barker French, Fundraiser EDCI		E: Ongoing sustainability
Helen Wright, Director of CC4C, Durham Co. Health Department	A	
Toby McCoy, Director of Duke Family Care (addiction care)	A	
Melissa Mishoe, Director of Early Head Start	A	
Sheryl Poinciano, Children's Development Services Agency	A	
Nancy Kent, Children's Services, Mental Health	A	
Jeannie Ownbey, Director of Healthy Families Catawba County	C	E: Consultation on training, quality assurance

The EDCI, and therefore, the *Healthy Families East Durham* expansion, has broad-based community support. Existing resources include, but are not limited to, the involvement from more than 30 Durham-based nonprofit organizations, Durham Public Schools, local businesses, local philanthropy and Duke University Health System. EDCI has the unanimous support of all of Durham's local elected officials including: the Durham Public School Board, the Durham County Board of Commissioners, and the Durham City Council. EDCI also benefits from a depth of expertise and strong in-kind support from NCCU, Duke University and Durham Technical Community College.

Gaston

GCHD's work to improve birth outcomes in Gaston County includes initiatives to achieve successful pregnancies, prevent teen pregnancies, and help new mothers raise healthy infants.

- The Healthy Beginnings Program helps high-risk and pregnant minority women improve their birth outcomes and infant care practices.
- The Centering Pregnancy Program integrates prenatal visits and group education for pregnant women and their partners or a family member.
- The CATO Program helps women quit tobacco use, typically cigarette smoking.
- Post-partum Newborn Home Visiting assesses the health of new mothers and their babies who are enrolled in Medicaid.
- Pregnancy Medical Home Program (CHP), which is replacing the Maternity Care Coordination Program, will help women achieve healthy birth outcomes and reduce risks to newborn health.
- Care Coordination Program for Children (CHP), which is replacing the Child Service Coordination Program, will help at-risk children receive needed health and medical resources.
- WIC, provides nutrition education and vouchers for nutritious foods to at-risk/low-income women during pregnancy, while breastfeeding and for their children up to age five.

To prevent pregnancy, GCHD conducts the:

- Parents Matter! Program, which prepares parents to share their values about sex with their sons and daughters when they are in 5th and 6th grades.
- Teen Outreach Program, which helps at-risk middle school students prevent teen pregnancy.
- Making Proud Choices Program, which encourages teens to be abstinent or to use condoms if they sexually active.
- Adolescent Pregnancy Prevention Program, which helps teens prevent second pregnancies and graduate from high school.
- Gaston Healthy Baby Program, which promotes abstinence, condom use, and healthy sexual behaviors among teens and young adults.
- Gaston Youth Connected, which is the \$5.8 million program being conducted by the Adolescent Pregnancy Prevention Campaign of North Carolina to build resources and expand infrastructure to prevent teen pregnancy in Gaston

County. Now in its first year, GYC is awarding funds to GCHD to build a teen-friendly area in the Maternity Clinic at our main facility.

Priorities: GCHD places great emphasis on issues of maternal and child health. Our Board of Health's highest priority is to reduce teen pregnancy; the document *Gaston County's Board of Health Priorities* (Appendix B) explains "One in four girls in Gaston County will get pregnant before her 20th birthday. Girls who are minorities are almost twice as likely to get pregnant."

GCHD spent \$3,994,321 in Fiscal Year 2010 to support its Maternity Clinics, Maternity Care Coordination, and teen pregnancy prevention programs. GCHD is one of two NC local health departments that provide low and high-risk maternity care, deliver the babies of our patients, and provide postpartum services; since 1992, we have provided these birthing services through staff obstetricians, midwives, nurse practitioners, and physician assistants. Our commitment to this programming reflects our intent to improve infant health in Gaston County.

Organizational Structures and Supports: GCHD manages Maternity Clinics at three different locations under the management of a Maternity Clinic Supervisor. The largest clinic is at Summit Place where we see 75% of our caseload and offer routine prenatal care and high-risk maternal care. This new facility is a half-mile from the Birth Place at Gaston Memorial Hospital.

The second largest clinic is at the main GCHD facility on Hudson Boulevard in the low-income southwest quadrant of Gastonia. This clinic provides routine maternity care to approximately 15% of our prenatal care clients. The third site is the Highland Health Center, which serves 10% of our maternity patients; this new facility opened in 2010 to serve Highland, Gaston County's largest minority neighborhood, which previously had no medical resources.

In 2010, GCHD delivered 42% or 1,129 babies born at Gaston Memorial Hospital. Because the mothers of these babies have low-incomes and receive Medicaid or are uninsured, we are in a strong position to recruit 100 women annually as required by NFP.

In addition, GCHD works closely with the Birth Place, the Neonatal Intensive Care Unit, and the Neonatology practice at Gaston Memorial Hospital. Our relationship with Caro Mont, whose two obstetric practices and 10 obstetricians serve Medicaid-enrolled patients, will also enable us to recruit women for NFP through the Pregnancy Medical Home Program.

Through GCHD's previously described pregnancy prevention and infant mortality reduction programs, it has built a trusting relationship with the Boys and Girls Club of Gaston County, the Gaston Family YMCA, the Alliance for Children and Youth, and our county's most influential institution: the faith community. With the endorsement of area clergy, we conduct Parents Matter! at local churches,

serve on the Gaston Faith Network, which promotes our teen pregnancy prevention programs, and meet with the Gaston County Clergy and Citizens Coalition, a program of Gaston Together.

GCHD also has a growing relationship with the Latino community. Bilingual GCHD staff and contactors conducted seven Parents Matter! programs for Spanish speakers last year and our Gaston HIV Outreach Program, which conducts HIV testing in the community, has helped dispel fears that GCHD reports undocumented persons to police and immigration authorities.

GCHD's long-standing relationship with the Gaston County Schools focuses primarily on immunizing students, resolving disease outbreaks, and taking referrals of sexually-active and pregnant teens from school social workers and nurses. The latter is critically important, as it reflects cooperation by a school system that does not teach comprehensive sex education.

Northampton

Each of the four counties has several components necessary to develop a coordinated early childhood system. The Local Partnership for Children in each county is responsible for developing a comprehensive community-based early childhood system with a goal of strengthening families and ensuring that young children are healthy and ready to succeed when they enter kindergarten. Also each Health Department has developed its own system to coordinate care for pregnant mothers and young children to ensure access to the appropriate services and supports. As described above, the four counties have participated in a cross-county collaborative process that has built a system of care for different populations and involved many, if not all, the parties necessary to build an early childhood system and in the preparatory work in order to submit the NFP implementation plan to the NSO.

Furthermore, once funding is confirmed, a Community Advisory Board, a model element of the NFP program, will be established that will act as the governance body for the proposed initiative.

Toe River

Health Director, Toe River Health District (TRHD) – As the grant applicant, employer and program manager Toe River Health District will be ultimately responsible for the success of the program. Recognizing this responsibility the director will be an active participant in the leadership team. TRHD will enter into contracts with other partners that have different areas of expertise and will be responsible for assuring that the terms of the contracts are met, terminating contracts if necessary and locating new resources to ensure desired outcomes.

Executive Director, Mitchell Yancey Partnership for Children (MYPFC) – MYPFC, as the technical experts for quality assurance in preschool programs has expertise and strength in different areas than the health district. Program supervision that assures model fidelity and quality assurance activities will be

contracted to the MYPFC. Activities will include assuring optimal orientation, training and continuing education for staff. Setting program goals and measuring progress and taking corrective action when appropriate. The director will participate actively in the leadership team, reporting progress to the group.

Program Coordinator, Mitchell Yancey Partnership for Children – The program coordinator will serve as the supervisor and mentor of the home visitors for meeting HFA goals and objectives and for quality and quantity of work. With a Master's in Social Work, the program manager has the educational background needed to mentor HFA home visitors. She is trained and experienced in reflective supervision which is a key component of HFA supervision. As the MYPFC staff responsible for monitoring all agency funded programs, the program coordinator has also had experience with Nurturing Families, a curriculum used by HFA and is acutely aware of barriers to model fidelity with use of this type of curriculum in a rural area. Program fidelity requires a full-time supervisor for 5 to 6 home visitors; MYPFC will assure the program coordinator has adequate time to achieve the ideal ratio of 1:5. The program coordinator will serve as the leadership team's key staff in implementation of the HFA program.

Supervisors, Mitchell and Yancey County Health Departments – HFA staff will be employed by the Toe River Health District and located in the Mitchell and Yancey County Health Departments. Access to clients and daily guidance by health department care managers will be optimal in the health department setting.

Supervision will be provided through collaboration between the program manager at the MY PFC and the local health department supervisors. The local health department supervisors will provide daily supervision for HFA home visitors. TRHD uses the model of shared supervision successfully with several other programs. As a district health department, supervisors in programs such as WIC, health promotion and laboratory are physically located in one of the county health departments so are not available on-site daily to their staff in other locations. The local health department supervisors provide daily supervision that includes assurance the employee is on time for work and appointments, checking and approving time and travel records, mediating disputes between employees and serving as a sounding board and mentor for all staff for day-to-day issues. The off site program supervisor provides direction and quality assurance in the content area.

The model requires regular communication between the local and off-site supervisors. For the HFA program the communication will be provided informally by telephone as needed and monthly at the leadership team meetings. The local health departments' supervisors are both registered nurses and both have experience in home visiting with pregnant women and with families with young children.

Executive Director, Graham Children’s Health Services – GCHS will provide staffing for the leadership team and independent evaluation services. One of the key components of successful partnerships is timely, effective meetings. GCHS has a proven track record in facilitating meetings for both their own board and committees, but also those of a local Healthy Carolinians Partnership’s steering committee, action teams and full-task force meetings. GCHS’s director will assure that leadership team members attend meetings, that members are prepared for the meetings, that an appropriated agenda is prepared and followed and that concise, working minutes are completed on a timely basis. Additionally, GCHS will assist the Mitchell and Yancey HFA program with evaluation.

Family Services Supervisors, Mitchell and Yancey Departments of Social Services - Many of the children served by the HFA program will be involved with the local department of social services. Membership in the leadership team will allow social services staff to have input on the direction of the program, to provide both informal and formal feedback to other leaders. The leadership team will keep these key players in the lives of at risk children informed and invested in the program and help ensure that appropriate program referrals occur.

Director, Barium Springs Home for Children – As a certified HFA provider in Morganton, BSHC will be an invaluable resource to the creation of a successful program in Mitchell and Yancey Counties. As a consultant to the program for the first year of operation, BSHC will actively participate in leadership team meetings, keeping the leadership educated on the components of a model program and troubleshooting problems quickly because of years of experience with HFA.

The system of family support and case management in Yancey and Mitchell Counties, as elsewhere is extensive and fragmented with some families receiving extensive services and some few or none. The leadership team of the MY HFA project will take responsibility for keeping all stakeholders informed of service and assuring that HFA home visitors have access to all appropriate referral sources.

The local health departments’ **Pregnancy Care Managers (PCM)** will be a crucial connection for the HFA home visitors. Proximity and ready access to the PCMs is the reason the health department was chosen as the lead agency for the project. All prenatal providers in the two counties are registered as **Pregnancy Medical Homes (PMH)** with North Carolina Division of Medical Assistance. As a PMH the providers are required to complete a pregnancy risk screening form on all of their pregnant patients who have Medicaid, and are encouraged to complete the screening on all pregnant patients. The risk screenings are delivered the PCM at the local health department for further assessment to determine level of risk and need for services. Approximately 80% of pregnant women in Mitchell and Yancey Counties qualify for Medicaid. This program provides the PCM access to nearly 100% of the at risk pregnant women in the county. The PCM and HFA home visitors will be in the same building and work together daily to assure the most appropriate prenatal referrals are made to the HFA program.

Similarly, the local health departments' **Care Coordination for Children (CC4C)** program receives referrals from county child health care providers for Medicaid children under age 6 and provides care management for children at various level of intervention based on risk assessment. Most of the children at risk for abuse and neglect will be captured by the CC4C program and the same benefits of proximity will exist as for the PCM program.

The care managers and HFA home visitors will act as a team to decide which families will be assigned to HFA. The plan is to assign the families at higher risk for abuse and neglect to the HFA program with the health department care manager providing support and less frequent meetings with the families than would be required without the HFA program. The team model will avoid duplication of services, reduce the number of different "workers" demanding time from the families and give families access to both nursing and social work services depending on need.

The Children's Advocacy Center of Yancey County (CACYC) provides a multidisciplinary team approach for the intervention of child maltreatment in Yancey County. The CACYC provides a child-friendly center where law enforcement and the Yancey County DSS can conduct forensic interviews of children who may have been harmed in some way. Additionally, the CACYC is in the final application process with the Governor's Crime Commission and will be able to provide Trauma-Focused Cognitive Behavioral Therapy to children and non-offending caregivers and case management. All of these services will be available for any of the HFA collaborating partners for referrals. Additionally, the CACYC will make referrals to HFA. As the CACYC is a child-friendly, accessible space, the HFA staff may use the facility, free of charge for meetings, family groups or other child-related events.

Intermountain Children's Services, Inc. **Head Start (ICS)** has been providing quality early childhood educational experiences in the rural mountains of Western North Carolina since 1983. ICS serves 218 children and families in six centers in the counties of Watauga, Avery, Mitchell and Yancey. ICS has established relationships with local agencies in the service area to provide comprehensive services, in a holistic approach, to children and families. The target population for HFA will complement the services already provided through Head Start; including center-based and home-based services. ICS has a NC Division of Child Development Licensed physical infrastructure to serve infants and toddlers in high quality, center-based settings in Mitchell and Yancey Counties. Additionally, HFA may use the Head Start Centers in the service area after 2:30 during the school year and in the summer.

In the table below, please list **key partners** for this initiative (non-direct service providers) For each partner listed, please note their organization and title and indicate which activities (A – E) best describe their work.

- A. Developing formal and informal program partnership or collaborations
- B. Building community awareness or political support for the effort
- C. Providing training, coaching, supervision, or other technical assistance to home visitors and other staff
- D. Program monitoring, evaluation, or quality improvement activities
- E. Other: Please describe

Partner, Organization, Title	ACTIVITY	
	A, B, C, D	E : Please describe
Robin Willis/ ICS – Head Start/ED	AB	ICS will assist the HFA Leadership Team by serving on the advisory committee, assistance with developing an assessment tool, provide referral resources and promote the program with Head Start families and stakeholders.
Mitchell and Yancey County Schools – Preschool Programs	AB	Assist with referrals for children 3+ to ensure school readiness.
Tonda Gosnell/CCWNC	AB	Assist the HFA staff to establish medical homes for children and families. Promote the program to families and community stakeholders.
Amy Sheele/GCHS/ED	ABD	Leadership for the HFA advisory committee, evaluation, promotion of the program with community leaders.
Greta Reath/Children’s Advocacy Center/ED	ABC	Promote the program to community leaders, provide child-friendly accessible location for meetings, provide intervention and therapeutic services for victims of maltreatment.
Colleen Hamish/RHA	ABC	Promotion of the program with consumers
Jennifer Simpson/M-YPFC/ED	ABCD	Staffing for the advisory committee and leadership, promote program to families in child care centers and through child care resource and referral services. Provide assistance with developmental, hearing and vision screenings.
Sheila Grindstaff, MCTA, Director, Lynn Austin,	A	Promote the program with MCTA and YCTA consumers.

YCTA, Director		
Samantha Phipps, Family Violence Coalition, ED Mitchell County Safe Place	AB	Assist the Leadership Team with garnering support for the program in the two communities.
Paula Holtsclaw, MCDSS, Director Alice Elkins, YCDSS, Directors	AB	Promote the program with DSS Boards, clients and staff.
Arthur Carder/Western Highlands/CEO	AB	Promotion of the program with Western Highlands mental health, substance abuse and DD service providers

Who has been involved in considering and assessing home visiting models?

Names	Title/role	Contact email
Greta Reath	Program Coordinator	m-ypfc.programs@storefronttech.us
Jennifer Simpson	Executive Director	m-ypfc@storefronttech.us
LaCosta Tipton	Supervisor	Lacosta.tipton@trhd.dst.nc.us
Suzette Renfro	Program Development Specialist, GCHS	srenfro@trhd.dst.nc.us
Lynda Kinnane	Health Director	lkinnane@trhd.dst.nc.us
Robin Willis	Executive Director	rwills@ccvn.com
Stacie McKinney	Supervisor	Stacie.mckinney@trhd.dst.nc.us
Tammy Woody	Child Care Program Manager	Tammy.woody@mitchellcounty.org
Amy Sheele	Executive Director/GCHSTR	gchs@trhd.dst.nc.us

The National Implementation Research Network (NIRN) will, through their contractual agreement with the Division of Public Health, work with key state-level and local level stakeholders to build implementation capacity. The NIRN will provide support to key Family Strengthening stakeholders and counties as they begin rolling out the Home Visitation Initiative in North Carolina. They will help to create readiness and mobilize key stakeholders by convening a series of forums to determine who, what, and how issues are decided, and also to provide an avenue for collaborative decision-making related to the development of the infrastructure for implementation of N.C.'s developing Family Strengthening system. NIRN will work with the Home Visitation Sites to develop their capacity to fully and effectively implement their evidence-based models so that the intended outcomes for children and their families are achieved.

A plan for obtaining or modifying data systems for ongoing continuous quality improvement (CQI)

North Carolina is developing a plan to modify an existing case management information system to collect data for on-going CQI. Staff have begun discussions with Matt Schubert of Efforts to Outcomes (ETO), which is part of the software company Social Solutions. ETO has been implemented by the Nurse Family Partnership for their case management documentation, data collection and data analysis. ETO is also in the process of developing and implementing data collection for Healthy Families America. Community Care of North Carolina's (CCNC) Case Management Information System (CMIS) is currently used by CCNC for all Medicaid and some non-Medicaid clients in CCNC network practices across the state. CMIS is a robust Internet-based data collection system that allows PHI to be securely transmitted between appropriate providers. Case management for children and pregnant women is being rolled out in CMIS. CCNC has expressed interest in developing a Public Health Module that would allow information from public health programs such as Baby Love Plus and Home Visiting to be shared through CMIS. The possible benefits to both CCNC providers and public health programs are great. However, all details of the proposed Public Health Module for CMIS have yet to be determined.

Ideally, North Carolina will begin data collection in ETO as soon as funded project activities begin (or continue data collection, for expansion sites). ETO is poised to go to scale quickly and efficiently within the state and provides an excellent, reliable web-based tool in which home visitors will document their cases. Training via webinars is already available, and additional training or technical assistance can be provided as-needed to ensure everyone working with the home visiting programs can use the data collection tools accurately. ETO is already in place with Nurse Family Partnership sites, and can be integrated with the Healthy Families America sites.

Eventually, North Carolina aims to work out a system by which data entered in ETO can be imported frequently (once or twice daily) and synchronized with the data in CMIS.

An explanation of the State's approach to monitoring, assessing, and supporting implementation with fidelity to the chosen model(s) and maintaining quality assurance.

NC has contracted with the National Implementation Research Network to provide general and targeted capacity building (through training and intensive technical assistance) to increase the knowledge base of key state and county Family Strengthening stakeholders related to the science and practice of implementation, systems transformation, and scale-up of evidence-based practices. .

NIRN will guide the development of a leadership and implementation team at the state level that will provide leadership in the planning and development of a

coordinated system of supports for the implementation of the evidence-based home visiting programs.

NIRN will also prepare, model, and coach “implementation specialists” in the five selected home visiting sites. These Leadership/Implementation Teams may be a current group that chooses to broaden its mandate, as indicated in many of the local applications. NIRN would provide guidance, and assist the team to develop their terms of reference for this work. The team will provide training and technical assistance to support the effective implementation of evidence-based home visitation. Training and intensive technical assistance will focus on developing local capacity to use the science and best practices related to implementation and scale-up. Through this process, county level stakeholders will have an opportunity to develop their capacity related to the utilization of science-based implementation to enhance the overall quality and model fidelity of their programs.

The local programs will be monitored pursuant to the State of N.C. contract monitoring policies. The Home Visiting Initiative staff will serve as contract administrators and be responsible for defining objectives, setting timelines, and monitoring the process and model fidelity throughout the terms of the contracts. The grantees will be monitored for compliance with performance requirements related to model fidelity and the achievement of expected outputs and outcomes. If problems are identified, corrective action plans with specific timelines and activities must be developed and monitored for implementation and compliance. Technical assistance and quality improvement support will be available to all local sites for fidelity and quality assurance. A data team at the State level will be monitoring for quality assurance on a monthly basis.

A discussion of anticipated challenges to maintaining quality and fidelity, and the proposed response to the issues identified

Anticipated challenges to maintaining quality and model fidelity include budget challenges, staff turnover, training and orientation, attrition and related issues.

Budget: Contracts will be completed and in place with local sites by September 29, 2011. The Business position will track budget expenditures and make sure they are submitted regularly so that sites will be reimbursed quickly.

Staff Turnover: With the economy challenges, NC is experiencing less staff turnover, especially at the local levels where position openings are limited. The State will work with each site to assure that supports for staff are implemented and maintained.

Training and orientation: A complete orientation at the local and State level will be provided to staff at the home visiting sites. The resources and information available through NIRN is interesting and motivates staff to use their available tools. National level training will be supported and attended by State staff as well as local.

Attrition has been addressed by each of the site plans and will be watched closely for problems. Technical assistance will be immediately available from the State staff and the National Offices.

Establishing new positions at the State level is often a lengthy process. The Director position is hired; the Nurse Consultant, Data Manager and Program Assistant positions are already in process so that hiring may occur prior to implementation in the local communities.

Designing and implementing an efficient and effective data collection system is a significant challenge in NC. Fortunately we have initiated conversations with the NFP national office, their software developer, the Duke Endowment, and Community Care of NC. We have preliminary plans for development and implementation, but this is rarely a quick process. Working with the National Office is beneficial since it is a certainty that information can be collected at that level while we develop a process at the State level.

There will be unforeseen circumstances that will present challenges in the future. The State staff is fortunate to have access to NIRN for assistance and strong support from partners both internally and external to government.

A list of collaborative public and private partners

The Home Visiting Initiative Steering Committee is made up of the following agencies:

- Appalachian Family Innovations (ASU)
- Community Care of North Carolina (CCNC)
- Center for Child and Family Health, Duke University
- N.C. Division of Child Development
- N.C. Division of Medical Assistance
- N.C. Division of Social Services
- Duke Endowment Foundation
- N.C. Early Intervention Branch
- Guilford County Child Development
- N.C. Head Start
- Healthy Families Durham
- Kate B. Reynolds Foundation
- Local Health Departments
- More at Four Program
- N.C. Division of Mental Health, Mental Health Section
- N.C. Division of Mental Health, Substance Abuse Section
- N.C. Association of Family Physicians
- N.C. Children and Youth Branch
- N.C. Parenting Education Network
- N.C. Parents as Teachers

N.C. Partnership for Children: Smart Start
N.C. Pediatric Society
N.C. Women's and Children's Health Section
National Implementation Research Network
Parent Representatives
Prevent Child Abuse N.C.
Office of the Governor of N.C.
N.C. Women's Health Branch
Early Hearing Detection and Intervention
N.C. Project Launch
N.C. Tribal Grantee Representatives

- Assurances that priority will be given to serve eligible participants who:
 - Have low incomes;
 - Are pregnant women who have not attained age 21;
 - Have a history of child abuse or neglect or have had interactions with child welfare services;
 - Have a history of substance abuse or need substance abuse treatment;
 - Are users of tobacco products in the home;
 - Have, or have children with, low student achievement;
 - Have children with developmental delays or disabilities;
 - Are in families that include individuals who are serving or have formerly served in the armed forces, including such families that have members of the armed forces who have had multiple deployments outside of the United States.

Assurance that the State home visiting program is designed to result in participant outcomes noted in the legislation

The State will support only evidence based programs that have been shown through research to produce the appropriate outcomes. The engaged key partners are planning at both the state and local levels and will be working with the selected models' national office(s) to solve data issues and other challenges that arise. The National Implementation Research Network is contracted to ensure implementation takes place appropriately and leads to the anticipated outputs and outcomes.

Assurance that individualized assessments will be conducted of participant families and that services will be provided in accordance with those individual assessments

Each grantee will complete individual assessments as required in the program models, provide the appropriate services, and participate in continued quality improvement and evaluation activities. Model fidelity is included in the contract language and will be addressed through technical assistance as well as monitoring activities.

Assurance that services will be provided on a voluntary basis

All services will be provided pursuant to model requirements and clients' voluntary agreement. This requirement will be included in the legal contract language for all grantees.

Assurance that the state will comply with the Maintenance of Effort Requirement

The State of N.C. will not reduce existing funding currently being used with evidence-based models for the purpose of funding the Home Visiting Initiative. No supplantation will be allowed in contracts with local grantees.

Assurances that priority will be given to serve eligible participants who:

- ***are users of tobacco products in the home***
- ***have, or have children with, low student achievement***
- ***have children with developmental delays or disabilities***
- ***are in families that include individuals who are serving or have formerly served in the armed forces, including such families that have members of the armed forces who have had multiple deployments outside of the United States***

Priority will be given to the participants listed in number 22. Evidence of this will be collected as part of the outcome data and benchmarks and requirements for these assurances will be in the contract language for each grantee. These areas will be reviewed through the monitoring and quality assurance processes at both the State and local levels.

Section 5: Plan for Meeting Legislatively-Mandated Benchmarks

Benchmark Plan Requirements

In their Updated State Plan, States must provide a plan for the collection of the benchmark data. It should include information about each construct (e.g., incidence of child injuries) and measure selection (e.g., visits to the emergency department) for each benchmark area, including data collection and analysis. The benchmark plan must include the following information for each benchmark area and its associated constructs:

Overarching Data Collection System for Early Childhood in NC

The Governor's Early Childhood Advisory Council has a long-term goal of connecting sources of data on young children from a variety of agencies and partners across the state, including education, health care, social services, law enforcement and justice and others. Some of these linkages have been successfully made for the purpose of individual projects, but they have not been sustained or expanded to support an integrated early childhood system.

North Carolina's vision for data is to create a sustainable and integrated system to collect data for all NC Early Childhood Home Visiting programs, including new federally funded EBHV projects. In the past, some data collection efforts have been limited by project funding. Our vision is to create a system that is integrated into the ongoing data collection mechanisms.

North Carolina is in the process of creating this data collection system. Some important principles guiding our development of this system include:

- Avoid duplicate entry.
- Carefully consider development of multiple interfaces for service providers.
- Provide access to data from early childhood programs including Pregnancy Case Management, Baby Love Plus, CC4C case management, Medicaid.
- Enable service providers to be able to document their services in the same system that we use to analyze data.
- Establish formal data sharing agreements or business agreements as necessary to secure private health information.
- Create flexible reports so that we can share data widely, especially with service providers and state and federal partners.

North Carolina has discussed our vision and guiding principles with Matt Schubert of Efforts to Outcomes (ETO), which is part of the software company Social Solutions. ETO has been implemented by the Nurse Family Partnership for their case management documentation, data collection and data analysis. ETO is also in the process of developing and implementing data collection for Healthy Families America. Community Care of North Carolina's (CCNC) Case Management Information System (CMIS) is currently used by CCNC for all Medicaid and some non-Medicaid clients in CCNC network practices across the state. CMIS is a robust Internet-based data collection system that allows PHI to be securely transmitted between appropriate providers. Case management for children and pregnant women is being rolled out in CMIS. CCNC has expressed interest in developing a Public Health Module that would allow

information from public health programs such as Baby Love Plus and Home Visiting to be shared through CMIS. The possible benefits to both CCNC providers and public health programs are great. However, all details of the proposed Public Health Module for CMIS have yet to be determined.

Ideally, North Carolina will begin data collection in ETO as soon as funded project activities begin (or continue data collection, for expansion sites). ETO is poised to go to scale quickly and efficiently within the state and provides an excellent, reliable web-based tool in which home visitors will document their cases. Training via webinars is already available, and additional training or technical assistance can be provided as-needed to ensure everyone working with the home visiting programs can use the data collection tools accurately. ETO is already in place with Nurse Family Partnership sites, and can be integrated with the Healthy Families America sites.

Eventually, North Carolina aims to work out a system by which data entered in ETO can be imported frequently (once or twice daily) and synchronized with the data in CMIS. This would provide a rich source of information from intensive home visiting services to a family's health care providers. Synchronizing home visiting data with health care data in CMIS would enable the results of standardized assessment tools, for example the Life Skills Progression © assessment tool, to be shared in a secure, appropriate way. Pending the outcome of discussions between the Division of Public Health, ETO and CCNC, we hope that ETO can provide technical assistance to CMIS programmers to create the necessary interface between ETO and the NC CMIS data system. ETO has described working with other states to create a similar interface for synchronizing data between a state system and their system. This synchronization would, in effect, create a single system to share data between many NC early childhood programs and home visiting. Home visitors would enter data into ETO. Client data, identified with patient information, could be transferred at regular intervals into the CMIS system. This would allow those working in CMIS (care managers and home visitors) to see across child's continuum of care (medical care, care management, home visiting) and they would only have to enter in one place—the place their model supports—and then pull it into one CMIS database to use across the early childhood system. In this way, the MIECHV funding will support the development of infrastructure that will sustain data collection for home visiting beyond the MIECHV funding cycle, and will improve data collection and sharing in all home visiting programs (including those not funded by MIECHV).

Data collection on all benchmarks:

Both Nurse Family Partnership and Healthy Families America programs provide excellent structure for data collection. By comparing the collected measures from each model, we have aimed to develop an overarching state structure for data collection without adding undue burden of additional data collection beyond what the evidence-based models require. Standard measures will be used for all constructs, since the implementation of these models in North Carolina will serve very similar populations. Measures are selected to be developmentally appropriate to the population served.

Data will be collected on all eligible families enrolled in home visiting programs. Data will be collected for all constructs under each benchmark area, and will be made readily available to

those carrying out the home visiting programs for decision-making, to improve services and to carry out CQI activities (as described in Section 7).

Data collected under each benchmark will be coordinated and aligned with other relevant State and local data collection efforts by linking data across the continuum of health care, and also with partners in social services and education.

Individual demographic and service-utilization data on participants will be collected upon enrollment into the programs, using standard tools common to Nurse Family Partnership and Healthy Families America. Gathering accurate data is the first and most important step in this process. We will collect it by: (1) interviewing mothers, using questions tested by NFP and HFA, respectively, to assure they are understood, as intended, by clients; (2) administering the Ages and Stages Questionnaire as appropriate and sharing results with others who care for the child; (3) administering the Edinburgh Depression Scale to parents in NFP or the Brief Symptom 18 tool to parents in HFA; (4) documenting participant reports; (5) documenting Nurse Home Visitor observations or HFA Home Visitor observations; (6) documenting direct assessments, measurements, and screenings; (7) securing State data on child injuries, abuse, neglect, and maltreatment; (8) securing local administrative data on crime and domestic violence; and, (9) documenting administrative data on formal agreements and with social service agencies.

Proposed measures:

- ***For each construct within each benchmark area (e.g. “general cognitive skills” within the Improvement in School Readiness and Achievement benchmark area), specify the measure (or measures) proposed. If use of administrative data is proposed, please also include a Memorandum of Understanding (MOU) from the agency with responsibility or oversight of those data.***
- ***Reliability/validity of measure proposed (demonstrating reliability/validity for the population with which the measure will be used).***

North Carolina proposes to show improvement in all benchmarks, as defined by the measures in the table below. Administrative data proposed to be used is primarily from the Department of Social Services, also under the Department of Health and Human Services in North Carolina. An agreement to share the data available in the CMIS system, including Medicaid data, is still being developed. The following table also describes standardized tools proposed to be used with their intended population, and documents the reliability/validity of the tools.

Benchmark Area	Constructs	Data to be Collected	Definition of Improvement	Data Source	Measure
Improved Maternal & Newborn Health	Prenatal Care	Maternal entry point & routine prenatal care.	Increases	Interview	% receiving recommended number of prenatal visits by trimester.
	Parental use of alcohol, tobacco or illicit drugs.	Use & reduction of use from intake to 36 weeks pregnancy & at one year post-partum.	Decreases	Interview	% decrease from intake to 36 weeks of pregnancy.
	Preconception care	Care received after the birth of the 1st child through conception of the 2nd child, while the woman is in the program.	Increases	Interview	% of clients who receive preconception care between birth of 1st child & conception of 2nd child.
	Inter-birth intervals	Maternal subsequent pregnancies while in the program.	Decreases	Interview	% subsequent pregnancies.
	Screening for maternal depressive symptoms.	Screening tool with client self-report.	Increases	Edinburgh Scale for NFP*; Brief Symptom Inventory 18 for HFA**	# clients screened increases over time.
	Breastfeeding	Length of time infant received breast milk.	Increases	Interview	% of clients breastfeeding initiation-24m postpartum
	Well-child visits	While child is in the program.	Increases	Interview	% of recommended well-child visits over time.
	Maternal & child health insurance status	Maternal & child health insurance status: Medicaid, SCHIP, private insurance.	Increases	Interview	% & # with insurance.
<p>* The Edinburgh Depression Scale “gives clinically meaningful results as a psychological screening tool. It is sensitive to change both during the course of pregnancy and after childbirth. A recent review of validation studies of the EPDS concluded that most studies reviewed showed high sensitivity for the EPDS, although uncertainty remained regarding the comparability between the sensitivity and specificity estimates of the different EPDS versions.” Eberhard-Gran M, Eskild A, Tambs K, Opjordsmoen S, Samuelsen SO: Review of validation studies of the Edinburgh Postnatal Depression Scale. <i>Acta Psychiatr Scand</i> 2001, 104:243-249. “Cox <i>et al</i> (1996) validated the scale for use with non-postnatal women and it has also been validated for use with the mothers and fathers of toddlers (Thorpe, 1993). The scale can be administered by computer with adequate acceptability and performance (Glaze & Cox, 1991).” http://www.rcpsych.ac.uk/files/samplechapter/81_1.pdf</p> <p>** The Brief Symptom Inventory 18 “gathers patient-reported data to help measure psychological distress and psychiatric disorders in medical and community populations.” “The validity of the BSI-18 as a measure of general distress was further supported by its correlations with theoretically relevant constructs. The BSI-18’s reliability was evidenced in its demonstration of high internal consistency.” <i>J Comm Psychol</i> 33: 139–155, 2005.</p>					

Benchmark Area	Constructs	Data to be Collected	Definition of Improvement	Data Source	Measure
Child Injuries, Child Abuse, Neglect, or Maltreatment & Reduction of Emergency Department (ED) Visits*	Visits for children to the ED from all causes.	Child visits to emergency care, urgent care, or hospital.	Decreases	Participant report and administrative data access	ED visits divided by # of children enrolled in the program.
	Visits of mothers to the ED from all causes.	Maternal visits to emergency care, urgent care or hospital.	Decreases	Participant report and administrative data access	ED visits divided by the # of mothers enrolled in the program.
	Reported substantiated maltreatment for children in the program.	Referral to CPS: Nurse Home Visitor awareness of referral to CPS including referral only, not whether the case was substantiated.	Decreases	Interview with comparisons to local & child welfare data	# of reported cases of maltreatment of children in the program divided by # of children in the program. Verification of maltreatment by welfare system.
	Info or training on prevention of child injuries such as safe sleeping, shaken baby syndrome, or traumatic brain injury.	Materials and training on injury prevention given to family.	Increases	Participant report	# of participants receiving info or training on injury prevention divided by total # of families participating in program.
	Incidence of child injuries requiring medical treatment.	Child injuries requiring medical treatment.	Decreases	Participant report with comparisons to local & state child welfare data	# and rate of child injuries requiring treatment divided by the total # of children participating in program. Data from child welfare system will be verified.
	Reported suspected maltreatment for children in the program	Referral to Child Protective Services (CPS): Nurse Home Visitor awareness of referral to CPS including referral only, not whether the case was substantiated.	Decreases	Participant report with comparisons to local & child welfare data	# of suspected cases of maltreatment of children in the program divided by the # of children in the program.

Benchmark Area	Constructs	Data to be Collected	Definition of Improvement	Data Source	Measure
	First-time victims of maltreatment for children in the program.	Referral to CPS: Nurse Home Visitor awareness of referral to CPS including referral only, not whether the case was substantiated.	Decreases	Interview with comparisons to local & child welfare data.	# of first-time victims divided by the # of children in the program. Data will be broken down for each construct by Age category (0-12 months, 13-36 months) & Maltreatment type (neglect, physical abuse, sexual abuse, emotional maltreatment, other). Verification of maltreatment by DSS system.
Improvements in School Readiness & Achievement	Parent support for children's learning & development	Parent knowledge through observation and documentation in the client record. Parent response to the ASQ at various times in infancy & toddlerhood. Screening tool utilizing parent-report.	Increases in the developmental progress of children between entry to the program & 1 year after enrollment.	Observation, parent-report, sample of child's work & ASQ score collected through parent report/nurse observation	Scale scores. Scores will be calculated for individual scales in the measures. The ASQ scale score is calculated as directed by the measure developer.
	Parent knowledge of child development & of their child's developmental progress.	Parent knowledge through observation and documentation in the client record* and the parent response to the ASQ at various times in infancy & toddlerhood.	Increases in the developmental progress of children between entry & one year after enrollment.	Observation, parent-report, sample of child's work & ASQ score collected through parent report/nurse observation	Scale scores. Scores will be calculated for individual scales in the measures. The ASQ scale score is calculated as directed by the measure developer. Rates of children at risk. *HFA also uses tools: HOME Inventory and AAPI (Adult Adolescent Parenting Inventory).
	Parent emotional well-being or parenting stress.	Data collected at Maternal Intake on Personal Beliefs.	Increases in the developmental progress of children between entry & one year after enrollment.	Interview & observation *HFA uses tool: Brief Symptom Inventory-18	Rates of children at risk.

Benchmark Area	Constructs	Data to be Collected	Definition of Improvement	Data Source	Measure
	Parenting behaviors & parent-child relationships (e.g. discipline strategies, play interactions).	Teaches & observes parenting behaviors. Parenting behaviors & parent-child relationship (e.g. discipline strategies & play interactions.) Observations are documented in the client chart, not recorded in the data system.*	Increases in the developmental progress of children between entry to the program & one year after enrollment.	Interview & observation	Rates of children at risk.
Improvements in School Readiness & Achievement	Child's communication, language & emergent literacy.	Early childhood development in communication, gross motor, fine motor, problem solving & personal social & early detection & referral for delays utilizing the ASQ at various times in infancy & toddlerhood.	Increases in the developmental progress of children between entry to the program & one year after enrollment.	Observation, direct assessment, parent-report. ASQ score collected through parent report and/or nurse observation	Scale scores. Scores will be calculated for individual scales in the measures. The ASQ scale score is calculated as directed by the measure developer. Rates of children at risk.
	Child's general cognitive skills.	Early childhood development in communication, gross motor, fine motor, problem solving & personal social & early detection & referral for delays utilizing the ASQ at various times in infancy & toddlerhood.	Increases in the developmental progress of children between entry to the program & one year after enrollment.	Observation, direct assessment, parent-report. ASQ score collected through parent report and/or nurse observation	Scale scores. Scores will be calculated for individual scales in the measures. The ASQ scale score is calculated as directed by the measure developer. Rates of children at risk.
	Child's positive approaches to learning including attention.	Early childhood development in communication, gross motor, fine motor, problem solving & personal social & early detection & referral for delays utilizing the ASQ at various times in infancy & toddlerhood.	Increases in the developmental progress of children between entry to the program & one year after enrollment.	Observation, direct assessment, parent-report. ASQ score collected through parent report and/or nurse observation	Scale scores. Scores will be calculated for individual scales in the measures. The ASQ scale score is calculated as directed by the measure developer. Rates of children at risk.

Benchmark Area	Constructs	Data to be Collected	Definition of Improvement	Data Source	Measure
	Child's social behavior, emotion regulation & emotional well-being.	Early childhood social-emotional development & early detection & referral for delays using the Ages & Stages Social-Emotional Questionnaire (ASQ-SE) Screening tool using parent-report during home visit at various times in infancy & childhood.	Increases in the developmental progress of children between entry to the program & one year after enrollment.	Observation, direct assessment, parent-report. ASQ-SE score collected through parent report and/or nurse observation.	Scale scores Scores will be calculated for individual scales in the measures. The ASQ-SE scale score is calculated as directed by the measure developer. Rates of children at risk.
	Child's physical health and development.	Weight, height, BMI collected. Head circumference collected on infants.	Increases over time in developmental progress of children between entry to the program and one year after enrollment.	Direct assessment by nurse.	Rates of children at risk of poor developmental progress.
<p>The Ages and Stages Questionnaire (ASQ) and Edinburgh Depression Scale have psychometric validity and reliability. The questions asked of clients to gather other data have been tested formatively to assure clarity of interpretation by the client and nurse home visitor, and connection to the constructs being assessed. Additional reliability and validity testing of particular data elements is ongoing and targeted to those items for which the risk is greatest for interpretive problems.</p> <p>“ASQ-3 has a new standardization with an unrivaled sample that closely mirrors the U.S. population in geography and ethnicity and includes children of all socioeconomic statuses. The sample includes 15,138 children whose parents completed 18,232 questionnaires. Reliability, validity, sensitivity, and specificity are all excellent: Reliability: Test-retest: .92, Inter-rater: .93, Validity: .82 to .88, Sensitivity: .86, Specificity: .85.” http://agesandstages.com/what-is-asq/faq/</p> <p>The Edinburgh Depression Scale “gives clinically meaningful results as a psychological screening tool. It is sensitive to change both during the course of pregnancy and after childbirth. A recent review of validation studies of the EPDS concluded that most studies reviewed showed high sensitivity for the EPDS, although uncertainty remained regarding the comparability between the sensitivity and specificity estimates of the different EPDS versions.” Eberhard-Gran M, Eskild A, Tambs K, Opjordsmoen S, Samuelsen SO: Review of validation studies of the Edinburgh Postnatal Depression Scale. <i>Acta Psychiatr Scand</i> 2001, 104:243-249. “Cox <i>et al</i> (1996) validated the scale for use with non-postnatal women and it has also been validated for use with the mothers and fathers of toddlers (Thorpe, 1993). The scale can be administered by computer with adequate acceptability and performance (Glaze & Cox, 1991).” http://www.rcpsych.ac.uk/files/samplechapter/81_1.pdf</p>					

Benchmark Area	Constructs	Data to be Collected	Definition of Improvement	Data Source	Measure
Crime or Domestic Violence <i>Crime or Domestic Violence will report on domestic violence benchmarks, but will also encourage programs to collect Crime data</i> * North Carolina will report on domestic violence benchmarks, but will also encourage programs to collect Crime data	Crime: Arrests and Convictions	NFP is working to integrate the collection of this data with other data that is currently collected in this benchmark area. HFA does not currently collect this data.	For family-level crime rates, improvement will be defined as rate decreases	Interviews validated using local administrative data	Aggregate rates for participants in the program, broken down by reason for the arrest/conviction. Verification of arrest/conviction will be completed by the states.
	Domestic Violence: Screening for domestic violence	Maternal self report of experience of intimate partner violence during pregnancy & after delivery.	Increases	Interview – HFA Monthly report	% of screening for domestic violence of program participants.
	Domestic Violence: Referrals for domestic violence services for families with identified need.	Families identified for the presence of domestic violence, # of referrals made to domestic violence services. For NFP, Data collected on Use of Govt & Community Services includes referrals to domestic violence services.	Increases	Interview	# referrals made divided by total # of participants in need of services.
	Domestic Violence Safety plan completed for families with identified need.	Families identified for the presence of domestic violence, # of families for which a safety plan was completed.	Increases in the # of safety plans developed compared to population in need of DV services.	Interview	# families with completed safety plan divided by # of participants in need of DV services. # of appropriate services identified in safety plans divided by total # of identified participants in need of DV services.
Family Economic Self-Sufficiency	Household income & benefits.	Complete listing of household income and benefits	Increase in total household income & benefits.	Interview, Public benefits & child support data verified in CMIS or with Social Services data	Amount of income and benefits from each contributing family member.

Benchmark Area	Constructs	Data to be Collected	Definition of Improvement	Data Source	Measure
	Employment of adult members of the household.	# of months of maternal employment for program participants who were 18 years of age or older at enrollment in the program.	Increase in the # of paid hrs worked or education plus unpaid hours devoted to care of an infant by all adults in participating households.	Interview	# of adult household members employed during the month. Average hrs per month worked by each household member.
	Health insurance status.	Health Insurance Status: Data collected at intake & four other time points through client graduation.	Increase in the # of household members who have health insurance.	Interview	% & # with insurance. Also measured under Benchmark 1, Construct viii.
	Education of adult members of the household.	Maternal enrollment in education programs & attainment of educational degree or certificate.	Increase in the educational attainment of adults in participating households, defined by the completion academic, training, and certification programs.	Interview	Rates of educational benchmarks achieved by each household member. # of adult household members participating in educational activities since the previous survey. Hours per month spent by each adult household member in educational programs.
Coordination & Referrals for Other Comm. Resources & Supports	# of families identified for necessary services.	Families identified with need for additional services.	Increase in the proportion of families screened for needs.	Direct measurement by home visitor	# of families with identified need for referral divided by the total # of participating families.

Benchmark Area	Constructs	Data to be Collected	Definition of Improvement	Data Source	Measure
Coordination & Referrals for Other Community Resources & Supports	# of families that required services & received a referral to available community resources.	Maternal referrals to additional services.	Increase in the proportion of families who receive appropriate referral.	Direct measurement	# of referrals divided by the # of participating families.
	MOUs or other formal agreements with other social service agencies in the community.	Presence of a Community Advisory Council (CAB) whose objectives include development & maintenance of referral sources & linkages for program participants based on staff assessment of participant needs & preferences. CAB developed prior to implementation & annually for NFP. Community Advisory Council also in place with HFA.	Increase in the # of formal agreements with other social service agencies that engage in regular communication with the home visiting provider.	Direct measurement and agency administrative data	Total # of social service agencies with MOU or other regular communication from baseline when program started to specified time of measurement.
	Information sharing	Community referral sources & documentation of team meetings that include community agencies.*	Increase in the # of formal agreements with other social service agencies that engage in regular communication with the home visiting provider.	Direct measurement and agency administrative data	Total # of social service agencies with MOU or other regular communication from baseline when program started to specified time of measurement..
	Number of completed referrals	Maternal referrals to additional services collected.	Increase in the % of families with referrals for which receipt of services can be confirmed.	Direct measurement & agency administrative data	Proportion of referral of participating families with identified needs whose receipt of service is verified divided by the total # of participating families with indetified needs.
If statewide data system develops as described above, shared administrative data available through the CMIS system for clients will be a valuable data source for verifying completion of referrals, as well as medical care.					

Proposed Data Collection and Analysis Plan

The source of the measure proposed and justification for why it is the most appropriate method of measurement for the construct;

Measures were chosen based on the existing data collection in place in the NFP and HFA programs. Data collection is an integral part of an evidence-based practice, and North Carolina aims to support the programs in maintaining model fidelity. Thus, we have chosen to align our data measures with the measures that the programs collect. Because the NFP and HFA projects in North Carolina will be serving a very similar population, the measurements are appropriate to the population being served by both programs.

The population to be assessed by each measure (e.g., parent or child) and the appropriateness of that measure, in terms of such factors as age of children, and in terms of specific population groups such as dual-language-learner children, children with disabilities, etc.;

Mothers during pregnancy and in the two years postpartum, and children through the age of two will be assessed individually, and their families will be assessed as a unit. Dual language learners, children with special health care needs, parents with limited English proficiency or low literacy will be assessed with the appropriate supports. Supports could include tools used in translation, working with nurses and home visitors who speak their language, communicating through an interpreter or other accommodations.

The plan for sampling, if proposed, that includes the sample selection procedures and data to ensure the sampling approach will be representative and produce stable estimates;

North Carolina does not plan to use sampling. Data will be collected on all program participants.

A plan for a data collection schedule including how often the measure will be collected and analyzed (the minimum is specified under each benchmark area in Appendix D, but we encourage programs to consider more frequent data collection for CQI purposes);

Ongoing data collection will take place as a function of program activities. Periodic reports will be generated as needed to meet program needs for data for CQI and decision-making purposes, to report program achievements, and to facilitate local partnerships. Reports will be distributed at the state level to inform all partners of the progress of each home visiting program. Federal reporting requirements will be met, including collecting a baseline measurement at program enrollment and another measurement at one year post-program enrollment.

A plan for ensuring the quality of data collection and analysis. The plan should include minimum qualifications or training requirements for administrators of measures, qualifications of personnel responsible for data management at the State and program level, qualifications of personnel responsible for data analysis at the State and program level, and the time estimated for the data collection-related activities by personnel categories;

State of North Carolina

The Home Visiting Program Director will directly supervise data collection and implement a plan to insure the quality of data collection and analysis.

At the state level, the Home Visiting Data Manager will be hired to serve as the primary administrator of measures, responsible for overseeing data collection and analysis. This person is required to have: Extensive knowledge of data management, statistical methods, and the SAS programming language is required. This includes knowledge and experience in program evaluation, data set linkage techniques, and analytical statistical methods; considerable knowledge of state and federal laws and regulations pertaining to the collection, transfer, and storage of confidential data; and the ability to communicate clearly and concisely in verbal and written forms with health professionals and the general public. He or she must have a Masters degree in public health, epidemiology, statistics or related field and two years of consultative experience in human services data management/analysis; or graduation from a four year college or university and four years of consultative experience in a human services data management/analysis. Data-related activities will occupy 100% of the data manager's time.

Durham

Healthy Families Durham collects detailed demographic and outcome data, as required by funders. Each month, home visitors complete a monthly report that contains information about how many visits were conducted each month and the content of those visits, along with a checklist that shows that program requirements were completed (assessments, Ages and Stages Questionnaire, reviewing immunization records, Health Questionnaires, etc). All information is entered into the database, including specific scores on evaluation instruments such as the HOME Inventory and the Adult Adolescent Parenting Inventory.

Job Description: Data Manager

Essential Job Functions:

1. Collaborate with the program manager and data entry staff to test input of new information or generated reports.
2. Document and supervise data entry activities for the program.
3. Create new parts of the database as needed to collect and analyze benchmark data.
4. Create new reports to maintain quality and fidelity of program.

Minimum Requirements:

Master's degree and experience in maintaining/creating databases.

There are several steps that to ensure the quality of data collection and analyses. Supervisors utilize a database report to track when the FSW is due to assess clients. The information that is collected is reviewed within the context of weekly supervision before being routed to administrative staff for data entry. Quarterly, the program manager reviews data collected to ensure that the program is meeting the goals set forth in logic models, with any discrepancies noted and addressed at the appropriate level. Correction could occur with the FSW at supervision, in the weekly staff meeting, with the data entry process or database design. Analysis of the collected information is a collaborative effort between the program manager and the data manager to help ensure that the correct analyses are being conducted in order to effectively evaluate the program.

With regard to collecting data, every employee goes through extensive training that includes training on assessment measures by their supervisor. These measures are reviewed annually with all staff to discuss administration and interpretation as the results can influence the ongoing

service delivery plan for the family or highlight a safety concern that the Family Support Worker needs to address. Some other measures require more extensive training, and CCFH has four child psychologists versed in a variety of measures who provide training and ongoing staff support.

The person in charge of data management, Leslie Shaw, has a background in systems analysis and software development in addition to holding a master's degree in agency counseling. Ms. Shaw has been employed by CCFH since 2005 when she was hired to manage data for two research projects and participate on a team that included a psychologist and data manager from CCFP; she now manages two other databases and has implemented a center-wide reporting system on client services. One of those additional databases was developed to support reporting on a project carried out with Duke Community Health and El Centro Hispano in Durham, North Carolina. She is accustomed to working collaboratively with other agencies to meet evaluation requirements on projects. Ms. Shaw also writes reports for other project funders and analyzes data in SAS for research projects. As needed, additional support is available from the psychologists Dr. Karen O'Donnell and Dr. Robert Murphy.

Gaston

The NFP National Service office will aggregate data for each of our NFP clients, for the clients of each Nurse Home Visitor, and for the full program. These reports will be sent directly to our NFP Supervisor. We also have the latitude to request special reports if we have unique questions.

We will also have access to our raw, or disaggregated, program data which we can use to develop our own customized reports. This will enable GCHD to measure program results by any variables in the NFP dataset, including: family location, mothers' age, race, primary spoken language, and age of children. Our Health Data Analyst will work with this data to prepare reports and maps for testing hypotheses, tracking trends, anticipating program growth.

As NFP data administrator, we will require our NFP Supervisor to have a master's degree in nursing and experience in gathering, tabulating, and analyzing data; by completing NFP training we will further prepare her to gather, submit, analyze, and apply NFP data. The NFP Supervisor will be supported by our Health Data Analyst.

Our NFP program would have access to an administrative assistant, to enter program data, while the NFP module is being developed for our EHR / PMS; we expect this to be completed by June 2012. This individual would enter data from the Client Encounter Form on the password-protected ETO on the NFP National Service Office website. This individual, a current GCHD employee, will be trained to use this system through an online tutorial and by the NFP Supervisor; she has more than three years of data entry experience and has worked with web-based databases. We estimate this will require five hours a month.

Once the NFP module for the EHR is operating, we will discontinue the entry of this data by hand, as we will use our EHR / PMS to submit the data directly through the Internet.

Brad Biggers, GCHD Health Data Analyst will also analyze NFP data. He has an MPH in International Health with more than six graduate courses in data gathering, statistical analysis, and program evaluation. He uses ESRI Geographic Information System software to map health data for developing and evaluating programs. He is also fully competent in the Microsoft Office Suite, including Excel and the Access Database. This summer, he will complete an online course, from Pitt County Community College, on managing workflow, setting data requirements, and training staff to use electronic health records. We estimate he will devote five hours a month to analyzing and mapping NFP data.

We will also request help to analyze our program results from Gail Ricks, MS, BSN, Southeast Region Nurse Consultant; Veronica Creech, MSW, MPA, NFP Regional Manager of Program Development; and Alicia Drew, MSN, RN, Program Quality Support Consultant. Every quarter, they will review tabulated GCHD data, identify performance issues, and will explain findings to our NFP Nurse Supervisor, so she can work with individual Nurse Home Visitors and our NFP team to improve their efficiency and effectiveness. We estimate this will require four hours a month.

Buncombe

The NFP administrative assistant has been trained by NSO *Efforts to Outcomes* through modules and a workbook that explains reports individually. She has over 20 years experience with BCDH and brings great knowledge of local resources to her job. She has also done webinars on ETO and received guidance on how to best utilize the reports. She and the supervisor have access to all reports. She enters all of the NFP nurses' data which takes about 20 hours per week. She runs reports to trend a QI challenge as indicated by the supervisor. If asked to run special reports, it is about 1 hour per day. The nurses run their own caseload reports as well as the supervisor. The supervisor is responsible for analysis. She has a master's in nursing and is a certified nurse mid-wife whose qualifications allow her to analyze the reports and develop a plan to utilize that information to make informed decisions. The supervisors sends 10-15 hours per week on looking at reports, trends, measurable improvements, drivers and outlines interventions based on the reports. NFP has received excellent audit reports from NFP NSO Program Developer.

Northeast (Northampton, Halifax, Hertford, Edgecombe)

It will be the responsibility of the Nurse Home Visitor and the NFP supervisor that data is collected according to the NSO guidelines. The data entry position at the NNFPC will be entering that data under the supervision of the NFP Supervisor. This individual will have a high school diploma and 1-2 years of progressively responsible related experience, or any equivalent combination of training and experience that provides the required knowledge, skills and abilities.

Implementing agency, regional, state and national data analysis is coordinated by the NFP Program Quality Department. Data quality and data security is monitored by the NFP Program Quality and Information Technology staffs through a formal process. Training on the reporting system is provided to nurse home visitors, data assistants and administrators through on-line manuals, webinars and in-person nursing education. Technical assistance is continuously

available through NFP IT and Program Quality. NFP meets HIPAA requirements related to sharing private health information. This site, if funded will be able to obtain their data in “real time”.

The data collection system of the NSO- NFP will provide basic analysis of the data. For example, it will provide the % of mother who stopped smoking, received prenatal care, etc. This level of analysis is completed at the national level of NFP and includes MA and Ph.D. level staff. However, state-level comparisons are beyond this programs capacity.

Toe River (Yancey, Mitchell)

A comprehensive data management system will be installed. Staff input data on all participants including demographic information and outcome information.

- All program staff will have appropriate college degrees
- All program staff will receive training per HFA requirements.
- Estimated time for data collection related activities is 20% for all personnel involved.
- Program staff may use multiple methods of data collection to obtain information, such as: formal assessment instruments, structured staff assessments, chart reviews, and qualitative data.
- Program staff will utilize the Program Information Management System (PIMS) to enter and manage data.
- The QA team will work directly with the program staff to ensure accurate and reliable data collection through database oversight, data entry training, and open communication. The QA team will share the home visiting programs’ reports to guide improvements in the program implementation and demonstrate fidelity.
- Regular meetings will be used to address identified critical elements to reinforce the implementation of the models with fidelity. The QA team will review fidelity reports and identify strengths and weaknesses and share results with the implementing agency. Program managers and supervisors will use data to ensure and enhance quality service delivery and fidelity.
- Program staff will receive training in the evaluation process to identify any disruption to program fidelity caused by the evaluation process.
- All program staff will adhere to HIPAA policies to protect the privacy of the clients served. Participants will be informed that their information will be entered into an electronic record-keeping system.
- The Healthy Families America Program data will be aligned with local health department statistics; including, low birth weight, pre-term birth, infant mortality, tobacco use during pregnancy, establishment of a medical home and immunization rates.

Barriers to data collection; include, staff commitment to daily data entry, and potential software problems. Training and review of program reports will be used as instruments to improve staff commitment to data entry. HFA provides technical assistance for software related issues.

○

A plan for the identification of scale scores, ratios, or other metrics most appropriate to the measurement proposed;

Scores, percentages, counts and rates appropriate to the measures have been selected and included in the table above.

A plan for analyzing the data at the local and at the State level. This should include how data will be aggregated and disaggregated to understand the progress made within different communities and for different groups of children and families;

Aggregate groupings according to program needs will be created by request. Some common aggregate groupings used to consider health disparities include race, gender, age, disability status and income. By filtering our reports based on sub-groups within the populations served, it will be possible to further target our efforts to achieve the best possible outcomes.

Based on the known demographics information of the targeted populations, we will serve primarily two groups of minority clients, African-American families and Hispanic/Latina families. It is also anticipated that adolescent mothers could be analyzed separately from older mothers as needed. As collected data is evaluated, analyses will be conducted to compare outcomes based on ethnicity and age group though with the relatively low client count, nonparametric and qualitative methods may provide more insight on differences than quantitative analysis on outcomes.

Plans for gathering and analyzing demographic and service-utilization data on the children and families served in order to better understand the progress children and families are making. This may include data on the degree of participation in services, the child's age in months, the child's race and ethnicity, the child's home language, the child's sex, the parent's education or employment, and other relevant information about the child and family;

The NC Early Childhood Home Visiting will gather and analyze service and demographic data of enrolled families in order to assess both process and outcome measures. This disaggregated data will be analyzed at least every 6 months and brought to program leadership and the CQI team. This data will be critical for program leadership in determining program modifications and resource allocations.

A plan for using benchmark data for CQI at the local program level, community level, and State level; and

North Carolina's Early Childhood Home Visiting CQI plan consists of two parts, the first part illustrates our state-level CQI effort and the second part is a discussion of CQI processes for our funded community sites. For these two parts, the collection and analysis of benchmark and construct data through a state data collection system is critical to our CQI process. A thorough discussion of how we will use benchmark data for CQI is included in Section 7.

A plan for data safety and monitoring including privacy of data, administration procedures that do not place individuals at risk of harm (e.g., questions related to domestic violence and

child maltreatment reporting), and compliance with applicable regulations related to IRB/human subject protections, HIPAA, and FERPA. The plan must include training for all relevant staff on these topics.

The NC Department of Health and Human Services has a secure computer network that assures HIPAA compliance through encryption, user passwords, and HIPAA compliance monitoring. Further, the Division of Public Health has specific staff, a HIPAA compliance officer that assures staff is trained and records are maintained as indicated to assure HIPAA compliance. All personnel receive required training data safety, HIPAA, and confidentiality. Programmatic safeguards include locked file cabinets and locking briefcases to keep information secure while out in the community. Signed confidentiality agreements are in place for all staff.

All community home visiting programs will follow all national model program standards for assuring the security of program data it maintains. For example, the Nurse Family Partnership data portal enables programs to enter data, retrieve reports, and manage data only if they have a significant program role, successfully complete NFP training, and are approved by NFP. This system uses VeriSign 128-bit Security Encryption to prevent entry by unauthorized persons.

Any anticipated barriers or challenges in the benchmark reporting process (including the data collection and analysis plan) and possible strategies for addressing these challenges.

There are three known barriers to collection of benchmarks around Child Injuries, Child Abuse, Neglect, or Maltreatment & Reduction of Emergency Department (ED) Visits. The first barrier is related to child maltreatment data and emergency room visits. The collection of this information will rely on the legal guardian of the child signing a release to provide our agency access to those administrative data. This release will need to be signed annually to ensure ongoing access to that data. Sensitivity to client concerns about privacy and confidentiality will be addressed on an as-needed basis.

The second barrier is related to client engagement in services. Being able to collect assessment data at least twice a year will require ongoing engagement with a family. Healthy Families America guidelines include extensive outreach practices that can reduce program dropout, but it is inevitable that some clients will decline services prior to program completion. Family Support Workers are notified thirty days in advance of the deadline for assessments for each client. They are aware of the importance of collecting assessment information and will often make extra effort to connect with difficult to engage clients; the additional notice to conduct the assessment has shown to be effective in the past in increasing completion rates. A similar method of notification and assessment is used with Nurse Family Partnership.

The third barrier refers to completeness of administrative data on child maltreatment reports and emergency room visits. As many data points as possible will be collected from clients to enhance matching between client and the administrative information. For child maltreatment reports, it will be helpful when possible to collect both the mother and child's social security numbers. If the client chooses not to provide that information, we will rely on matching as many other data points as possible and comparing the results to self-report information. In order to match emergency room visits, ideally we will have both the child's Medicaid number and date of birth.

When the child's Medicaid number has not been provided, we will rely on matching as many other data points as possible and comparing the results to self-reports.

Section 6: Plan for Administration of State Home Visiting Program

The Updated State Plan must include a description of the statewide administrative structure in place to support the State Home Visiting Program. States must also present a plan that indicates how the State Home Visiting Plan will be managed and administered at the State and local levels. In providing this description, please identify the following:

The lead agency for the Program

State of North Carolina

The lead agency, as appointed by Governor Beverly Perdue, is the NC Department of Health and Human Services (DHHS). The NC Home Visiting Program is administered within the Division of Public Health.

DHHS contains many of the public agencies whose participation will be necessary in the development and implementation of a comprehensive plan including public health, mental health, social services, Medicaid, child welfare, vocational rehabilitation, substance abuse, and child development programs.

The project is housed in the Women's and Children's Health Section (WCHS)/Children and Youth Branch (CYB)/Health and Wellness Unit (HWU) of the Division of Public Health. The mission of WCHS is *to assure, promote and protect the health and development of families with emphasis on women, infants, children and youth*. WCHS programs place a major emphasis on the provision of preventive health services beginning in the preconception period and extending throughout childhood.

Buncombe County (Zip Codes 28715, 28748, 28803, and 28806)

Buncombe County Department of Health (BCDH) was identified as the best lead agency based on community input that looked at leadership, internal structure and ability to collaborate. Strategically, BCDH will continue to seek advice and support from community partners around program management, funding, advisory board participation and coordination of services with other community programs.

Durham County (Northeast Central Durham Zone)

The lead agency for the program is Child and Parent Support Services, dba the Center for Child & Family Health.

Gaston County (38 Census Tracks)

The Gaston County Health Department will be responsible for implementing NFP in Gaston County. We would conduct NFP under the auspices of our Personal Health Services Division, which manages our Maternity, Family Planning, Child Health, Immunizations, Adult Health (STI), and Tuberculosis Clinics, and our CLIA-approved laboratory. NFP would have its own program supervisor, who would be dedicated exclusively to this program.

Yancey and Mitchell Counties (Toe River District Health Department)

As the grant applicant, employer and program manager, Toe River Health District will be ultimately responsible for the success of the program. TRHD will enter into contracts with other partners that have different areas of expertise and will be responsible for assuring that the terms of the contracts are met, terminating contracts if necessary and locating new resources to ensure desired outcomes.

North Hampton, Hertford, Edgecombe and Halifax Counties)

The lead agency for the Northeastern NFP Collaborative will be the Northampton County Health Department.

A list of collaborative partners in the private and public sector

State of North Carolina

HOME VISITING KEY STAKEHOLDERS

Name	Agency
Kevin Ryan, MD, MPH, Chief	Women’s and Children’s Health Section NC Division of Public Health Director, State Title V Agency
Sherry Bradsher, Director	NC Division of Social Services (agency for Title II of CAPTA)
Khari Garvin, Director	NC Head Start Collaborative Office
Steven Jordan, Director	NC Division of Mental Health/Developmental Disabilities/Substance Abuse Services
Anne Bryan, Senior Policy Advisor on Early Childhood	NC Early Childhood Advisory Council Office of the Governor
Robin Britt, Chair	NC Early Childhood Advisory Council Office of the Governor
Deb Cassidy, Director	NC Division of Child Development
Stephanie Fanjul, President	NC Partnership for Children

HOME VISITING STEERING COMMITTEE

Name	Agency
Jeannie Ownbey	Appalachian Family Innovations (ASU)
Chris Collins	CCNC
Karen Appleyard	Center for Child and Family Health, Duke University
Deb Cassidy, Director	Division of Child Development
Karen Ferguson	Division of Child Development
Tara Larson, Section Chief	Division of Medical Assistance
Candice Britt	DSS
Phillip H. Redmond	The Duke Endowment
Rhett Mabry	The Duke Endowment
Deborah Carroll	Infant-Toddler Program IDEA, Part C
Robin Britt, Director	Guilford Child Development
Robin Britt, Chair	Governor's Early Childhood Advisory Council
Khari Garvin, Executive Director	NC Head Start Office
Jan Williams	Healthy Families Durham
Allen Smart	Kate B Reynolds Charitable Trust
Danny Staley, Health Director	Appalachian District Health Department
Susan Robinson	MH/DD/SAS – Mental Health Services
Starleen Scott Robbins	MH/DD/SAS – Substance Abuse Services
Melissa Godwin	MH/DD/SAS – Substance Abuse Services
Greg Griggs, Executive Director	NC Association of Family Physicians
Michael Sanderson, Unit Manager	Best Practices Unit NC Children and Youth Branch
Elizabeth Mizelle	Best Practices Unit NC Children and Youth Branch
Deborah Nelson, ECCS Grant Administrator	NC Children and Youth Branch
Marshall Tyson, PI Unit Manager	Health and Wellness Unit, NC Children and Youth Branch, DPH
Carol Tant, Branch Head	NC Children and Youth Branch, DPH
Karen Debord, Executive Director	NC Parenting Education Network
Robin Roberts, State PAT Consultant	NC Parents as Teachers
Stephanie Fanjul, Executive	NC Partnership for Children -Smart Start

Director	
Emmy Marshall	NC Partnership for Children -Smart Start
Donna White, Director of Programs	NC Partnership for Children -Smart Start
Steve Shore	NC Pediatric Society
Sarah McCracken	NC Women's and Children's Health Section
Catherine Joyner, Executive Director	Child Maltreatment Prevention Task Force NC Women's and Children's Health Section
Kelly Johnson	Parent Representative
Shantice Cofield	Parent Representative
Rosie Allen, Executive Director	Prevent Child Abuse NC
Sorien Schmidt	Prevent Child Abuse NC
Anne Sayers	Prevent Child Abuse NC
Anne Bryan, Senior Policy Advisor on Early Childhood	Office of the Governor Early Childhood Advisory Council
Joe Holliday, Branch Head	Women's Health Branch Division of Public Health
Missy Brayboy	<u>Office on Indian Affairs</u> <u>NC Department of Administration</u>
Kathleen Watts, Program Manager	Early Hearing Detection and Intervention Program
Mary Piteo, Program Manager	NC Project LAUNCH (Linking Actions for Unmet Needs in Children's Health)
Dr. Ann Bullock	Eastern Band of the Cherokee
Jeff Bachar	Eastern Band of the Cherokee

Buncombe

Partner, Organization, Title	ACTIVITY	
	A B C D	E : Please describe
Cynthia Brown, MD, Reuter Outpatient Center, Mission Hospital, Child Medical Evaluation Program	ABC	Community Advisory Board Provides physician support/expertise
Sarah Monahan-Estes, MD Reuter Outpatient Center Mission	ABC	Community Advisory Board, Chair Provides presentation MDs to promote

Hospital, Child Medical Evaluation Program		NFP & referrals
Angie Pitman, DSS Program Administrator	ABC	Community Advisory Board, DSS Leadership, CPS Expertise
Tangie Ballard-Bowman, YWCA of Asheville, Mother Love Director	AB	Community Advisory Board & referrals
Jacque Penick, Mountain Area Child and Family, Executive Director	AB	Community Advisory Board, referrals
Amy Barry, Smart Start, Program Manager	ABC	Community Advisory Board, advocate on other committees, training around child care issues/subsidies
Belinda Grant, Mount Zion Community Development, Director	ABC	Adolescent Pregnancy Prevention—contracts with Buncombe County, referrals, coordinate pregnancy prevention with partners
Holly Jones, YWCA of Asheville, Executive Director & County Commissioner	ABC	County Commissioner and as YWCA Director provides program coordination with Mother Love
Allison Jordan, Children First, Executive Director	BC	Strong community advocacy around children's issues, training on advocacy
Dan Frayne, MD, MAHEC Family Health Center, Assistant Clinical Director	ABC	Strong supporter, provides support to medical community, provides training on clinical issues
Blake Fagan, MD, MAHEC Family Health Center, Clinical Director	ABC	Strong supporter, provides support to medical community, provides training on clinical issues
Libby Gregg, MAHEC Family Health Center, Program Director	ABC	Strong supporter, provides support to medical community, provides training on clinical issues

Durham

Partner, Organization, Title	ACTIVITY	
	A, B, C, D	E : Please describe
Ellen Reckhow, County Commissioner	A, B	E: Ongoing sustainability
Sue Guphill, Director of Nursing at Durham County Health Department	A, B, C	
Laura Benson, ED of	A, B, D	E: Ongoing sustainability, locating

Partner, Organization, Title	ACTIVITY	
	A, B, C, D	E : Please describe
Durham's Partnership for Children		additional grants
Robert Murphy, ED of the Center for Child and Family Health	A, B, C, D	
Ken Dodge, ED of the Center for Child and Family Policy	A,B	
David Reese, ED of the EDCI	A, B	E: Ongoing sustainability
Angelica Oberleithner, Asst. Director of Durham's Partnership for Children	A, B	
Jeanine Sato, Coordinator of <i>Durham Connects</i>	A, B,	E: Media contacts
Karen O'Donnell, Director of Prevention, Center for Child and Family Health	C,D	
Robin Roberts, NC Parents as Teachers	C, D	
Pat Harris, Welcome Baby	A	
Barker French, Fundraiser EDCI		E: Ongoing sustainability
Helen Wright, Director of CC4C, Durham Co. Health Department	A	
Toby McCoy, Director of Duke Family Care (addiction care)	A	
Melissa Mishoe, Director of Early Head Start	A	
Sheryl Poinciano, Children's Development Services Agency	A	
Nancy Kent, Children's Services, Mental Health	A	
Jeannie Ownbey, Director of Healthy Families Catawba County	C	E: Consultation on training, quality assurance

Yancey-Mitchell

Partner, Organization, Title	ACTIVITY	
	A, B, C, D	E : Please describe
Robin Willis/ ICS – Head Start/ED	AB	ICS will assist the HFA Leadership Team by serving on the advisory committee, assistance with developing an assessment tool, provide referral resources and promote the program with Head Start families and stakeholders.
Mitchell and Yancey County Schools – Preschool Programs	AB	Assist with referrals for children 3+ to ensure school readiness.
Tonda Gosnell/CCWNC	AB	Assist the HFA staff to establish medical homes for children and families. Promote the program to families and community stakeholders.
Amy Sheele/GCHS/ED	ABD	Leadership for the HFA advisory committee, evaluation, promotion of the program with community leaders.
Greta Reath/Children’s Advocacy Center/ED	ABC	Promote the program to community leaders, provide child-friendly accessible location for meetings, provide intervention and therapeutic services for victims of maltreatment.
Colleen Hamish/RHA	ABC	Promotion of the program with consumers
Jennifer Simpson/M-YPFC/ED	ABCD	Staffing for the advisory committee and leadership, promote program to families in child care centers and through child care resource and referral services. Provide assistance with developmental, hearing and vision screenings.
Sheila Grindstaff, MCTA, Director, Lynn Austin, YCTA, Director	A	Promote the program with MCTA and YCTA consumers.
Samantha Phipps, Family Violence Coalition, ED Mitchell County Safe Place	AB	Assist the Leadership Team with garnering support for the program in the two communities.
Paula Holtsclaw, MCDSS, Director Alice Elkins, YCDSS, Directors	AB	Promote the program with DSS Boards, clients and staff.

Gaston

Table 9. Key Partners for the Gaston County NFP		
Partner, Organization, Title	ACTIVITY	
	A, B, C, D	E: Please Describe
Adolescent Pregnancy Prevention Campaign of North Carolina	B	
CaroMont Health	B	
Gaston County Department of social Services	B, C	
Gaston County ACCESS	A	
Gaston Together	B	
Alliance for Children	B	
Partnership for Children	A, B	
Bethlehem Church	A, B	
Gaston College	A	
Pediatrics Medical Group	A, B,	
Gaston County Sheriff	C	
Gaston Regional Chamber	A, B	
Community Health Partners	A, C, D	
Gaston County Police	B, C	
The Shelter of Gaston County	A, B, C	
Pathways	A	
Chief District Court Judge Ralph C. Gingles, Jr.	B	
Gastonia Housing Authority	A, B, C	
Gaston Family Health Services	A,	
Gaston County Schools	B,	
<p>Key A – developing formal and informal program partnership or collaborations B – Building community awareness or political support for the effort C – Providing training, coaching, supervision, or other technical assistance to home visitors or other staff D – Program monitoring, evaluation, or quality improvement activities E – Other: Please describe</p>		

Northampton

Partner, Organization, Title	ACTIVITY	
	A, B, C, D	E : Please describe
Amy Joseph, Labor and Delivery Manager; Halifax Regional Med Center	A, B, E	E: Labor and Delivery
Sallie Surface, Executive Director Choanoke Area Development Association	A, B, D, E	E: Early Head Start Head Start Referrals Parents as Teachers Housing Committed to be participate in the CAB
Henrietta Zalkind Executive Director Down East Partnership for Children	A, B, C, D, E	E: Quality child care Consumer Education Referrals
Magda Baligh, Executive Director Smart Start Halifax County	A, B, C, D	Committed to be participate in the CAB
Cynthia Brown, Executive Director Smart Start Northampton, Hertford	A, B, C, D	Committed to be participate in the CAB
Arlene Moore Executive Director Smart Start Hertford	A, B, C, D	
Karen Lachapelle, Health Director Edgecombe County Health Department	B	Committed to be participate in the CAB
Terrell Davis, Health Director Halifax County Health Department	B	Committed to be participate in the CAB
Diane McLawhorn, Health Director Hertford County Health Department	B	Committed to be participate in the CAB
Karen Salacki Director The Beacon Center	B	Committed to be participate in the CAB

Jennifer Short, Liaison of Judicial System, Department of Juvenile Justice (Halifax)	B	Committed to be participate in the CAB
Veronica Creech Regional Program Developer NFP National Service Office	B, C, D	
Sharon Sprinkle Nurse Consultant NFP National Service Office	B, C, D	
NC DPH NFP State Nurse Consultant (TBH)	A, C, D	
NC NFP Team	A, B, D	

An overall management plan for the program at the State and local levels that describes who will be responsible for ensuring the successful implementation of the State Home Visiting Program;

State of North Carolina

The Division of Public Health will be responsible at the State level for implementing the NC Home Visiting Program. The Program is administratively housed in the Health and Wellness Unit in the Children and Youth Branch. In addition to the HC Home Visiting Program, the Health and Wellness Unit also houses the Early Childhood Comprehensive Systems grant, the NC Linking Actions for Unmet Needs in Children’s Health (LAUNCH), the Child Care State Nurse Consultant and the Executive Director of the NC Child Fatality Task Force. The NC Home Visiting Program will have its own Program Director, who will be dedicated exclusively to this program. Marshall Tyson, Health and Wellness Unit Manager, will directly supervise the NC Home Visiting Program Director.

Mr. Tyson will provide daily supervision and weekly individual supervisory sessions; the NC Home Visiting Program Director will also serve on the Early Childhood Leadership Team with other Division of Public Health staff to assure strong collaboration among other early childhood programs.

Daily program management will revolve around strict adherence to ACA Maternal, Infant and Early Childhood Home Visiting Program requirements as established by the Health Resources and Services Administration, the NC Home Visiting State Plan, and policies and procedures established by the NC Division of Public Health. These would be covered during routine New Employee Orientation. In total, these policies would address: HIPAA, confidentiality, establishing a regular schedule for reflective supervision session, review of program requirements, review of Branch and Division policies and procedures, manual and electronic record-keeping, and mandatory reporting.

The NC Home Visiting (NVHV) Program Director will have access to a State car, be assigned a cell phone, and provided a laptop computer, office phone and dedicated office space. In as much as possible, additional NCHV staff, NFP State Nurse Consultant, Program Assistant, and the Data Manager will be co-located to assure effective communication.

The Program Director and the NFP State Nurse Consultant will complete the NFP-required training in Denver, CO and online, Division of Public Health Orientation and orientation to the Children and Youth Branch. During this period, NCHV staff will also attend one-on-one orientation meetings with many key staff in the Division of Public Health.

Once adequately trained and ready for work, the NCHV Director will set up a schedule for regular office hours, and will schedule visits to all the funded sites. As their schedules change, NCHV staff will inform the supervisor of these changes by note, email, or phone.

The NCHV Director will meet individually with NCHV staff to use reflective supervision to discuss performance and to help identify and resolve job related issues they encounter. At weekly team meetings, the full NVHC staff will discuss management issues, situations they have encountered, their concerns, and plans for improving the program.

The National Implementation Research Network has been contracted to provide technical assistance to the Division of Public Health regarding implementation of the NCHV Program. The National Implementation Research Network (NIRN) was formed to promote the science and practice of implementation, organization change, and system transformation related to the full and effective use of evidence-based programs and innovations in human services. The NIRN works with organizations, states, and government entities to enhance program consistency, quality, and outcomes through the application of the science and practice of implementation.

People learn best by understanding the broad frameworks and then applying them to a clearly defined area of work, with coaching and support from NIRN. In the course of these activities, the project goals are achieved and, more importantly, the general lessons of implementation are learned, applied, and generalized. The Home Visitation Initiative will provide an opportunity in which the NIRN can support the State in its development of an infrastructure for implementation and a systems approach to Family Strengthening. The NIRN will work with key state-level stakeholders (e.g. Head Start, NCPC, The Duke Endowment, and The Alliance), as well as key stakeholders at the county level to build implementation capacity. The NIRN will provide support to key Family Strengthening stakeholders and counties as they begin rolling out the Home Visitation Initiative in North Carolina. The implementation of the Home Visitation Initiative will require collaboration across service sectors at the state and county levels. For implementation to be done well across service sectors, all parties involved in the implementation process must have clarity around their roles and responsibilities. The NIRN will help to create readiness and mobilize key state and county stakeholders by convening a series of forums

to determine who, what, and how issues are decided, and also to provide an avenue for collaborative decision-making related to the development of the infrastructure for implementation of North Carolina's developing Family Strengthening system. In addition, as counties are selected and designated as Home Visitation Sites, the NIRN will work with these counties to develop their capacity to fully and effectively implement their evidence-based home visitation models so that the intended outcomes for children and their families are achieved.

The Governor's Early Childhood Advisory Council has agreed to be the advisory council for the NCHV Program. The Governor has called upon the North Carolina ECAC to lead the state in creating and sustaining a shared vision for young children and a comprehensive, integrated system of high quality early care and education, family strengthening, and health services that support ready children, families, and communities. The NC ECAC has established the following major goals for its initial efforts.

1. **Develop an integrated, comprehensive 3-year strategic plan** for high-quality health, family strengthening, and early care and education services that support ready children, families, and communities.
2. **Strengthen awareness and commitment** among families, business, and policymakers to ensure that all young children in North Carolina are healthy, learning, and thriving.
3. **Strengthen the quality of programs** and expand opportunities for young children and their families to participate in high-quality programs.
4. **Strengthen coordination and collaboration** across service sectors to promote high-quality, efficient services for young children and their families.
5. **Support the implementation of an integrated data system** that meets the individual and collective needs and capacities of state-funded programs serving young children birth to age five.

The Governor's charge and the ECAC goals are wholly consistent with NCHV Program goals, specifically: 1) share accountability for outcomes for young children and their families in a formal state-level partnership; 2) reduce system level barriers to improving outcomes; and 3) act collectively to create early childhood policies and programs designed to increase the percent of children in North Carolina with access to health insurance and a medical home, high quality early care and education settings, effective family support and parenting education services, and adults who can promote social emotional development.

Buncombe

Buncombe County Department of Health (BCDH) was identified as the best lead agency based on community input that looked at leadership, internal structure and ability to collaborate. Strategically, BCDH will continue to seek advice and support from community partners around program management, funding, advisory board participation and coordination of services with other community programs.

- Strong leadership at the County and Department level have assured NFP continues to be seen as an essential public health service that should remain under the public health umbrella. The Nurse Family Partnership is a part of the Community Health Division that includes the Women, Infant & Children (WIC) Program, Pregnancy Care Management and Care Coordination for Children Program, School Health, *Innovative Approaches* Initiative, and Health Promotion. The Community Health Division Program Managers meet individually with the Division Head on a weekly basis. In addition, the managers meet with the Division Head as a group monthly. The Program Managers are part of the Leadership Team that meets every two weeks that also includes managers from Clinical Services, Environmental Health, Disease Control, and Support Services. These meetings provide leadership development as well as program coordination and support.

The Division Head meets weekly with the Health Director to discuss program issues, local efforts and State updates that impact Community Health Programs. The Division Head takes program updates to the Interagency Management Team monthly to update the community on programs to assure coordination of care. The Division Head meets monthly with the Community Care of WNC to discuss care coordination and integration of services with CCWNC. In addition, the CH Division Head is a member of the Smart Start Board of Directors, provides leadership for the Innovative Approaches Steering Committee and Coordinator and serves on many community task forces and action teams.

Starting in July, the Health Promotion Program will be reorganized to provide health education support for key Community Health Assessment priorities. Since women's health is a priority issue, a health educator will be dedicated to this issue. The health educator will analyze key data for the community on key women's health issues, will form an action team (that includes NFP, WIC, School Health and PCM/CC4C managers or staff as well as key community members) and facilitate the Strategic Action Team to develop an action plan to address women's health issues locally. This will pull members from the NFP Community Advisory Board, Mission Hospital's Women's Health Program, the Infant Mortality Task Force, Teen Pregnancy Prevention Program staff, Asheville Buncombe Institute of Health Disparities and many others to work on improving outcomes affecting women's' health.

Two Human Service Planner/Evaluators (HSPE's) support the work of BCDH programs and provide assistance in identification of quality measures, data collection, analysis and presentation. By assisting with data analysis, tracking and monitoring, the HSPE offers expertise in linking the data reports to fiscal and evaluation needs of the programs. This additional level of support strengthens has been one reason the NFP in Buncombe has been able to reach model fidelity, easily track data requirements and build capacity in our staff to evaluate program effectiveness. The Community Health Division Head meets with the HSPE weekly to discuss program data, fiscal issues and evaluation results. Any assistance with drilling down specific

data points or gathering of additional information needed to make leadership decisions is supported by the HSPE in coordination with Program Managers.

Addition agency support includes a strong information technology department that provides lap top computers for each nurse as well as needed technical support to assure nurses have easy wireless access to the County's network, even when out of the office. Each home visiting nurse is given a cell phone, lap top, portable printer, day planner, multiple sizes of sphygmomanometers, infant and adult stethoscopes, and infant and adult scales for use in their daily activities. In addition, they are provided with continuing education reimbursement and time off to attend workshops and seminars relevant to their professional development. Additional supports consist of educational materials for clients, office space, secretarial support, monthly individual supervision and monthly staff meetings.

Durham

The expansion of *Healthy Families East Durham* will be supervised by Jan Williams, LCSW, who has directed the *Healthy Families Durham* program for the last twelve years. Dr. Robert Murphy and Dr. Karen O'Donnell, both child psychologists with strong monitoring and evaluation backgrounds, will oversee the evaluation, quality assurance, and quality improvement process. As indicated in the proposed budget, there will be adequate personnel for database creation and management. The referral process at *Durham Connects* will be overseen by Jeannine Sato, Coordinator. David Reese, Executive Director of EDCI, will be responsible for community public relations, publicity, and linking other providers in the targeted neighborhood to *Healthy Families East Durham* to ensure that all eligible families are referred.

Yancey-Mitchell

As the grant applicant, employer and program manager, Toe River Health District will be ultimately responsible for the success of the program. TRHD will enter into contracts with other partners that have different areas of expertise and will be responsible for assuring that the terms of the contracts are met, terminating contracts if necessary and locating new resources to ensure desired outcomes.

The Toe River Health District (including both Yancey and Mitchell County Health Departments), Yancey County Child Advocacy Center, Mitchell-Yancey Partnership for Children, and Barium Springs Home for Children will work in a mutual collaboration to provide supervision to the Healthy Families America Program. Each individual program will bring their expertise in assuring that the HFA program is successful.

Health Director, Toe River Health District (TRHD) – As the grant applicant, employer and program manager Toe River Health District will be ultimately responsible for the success of the program. TRHD will enter into contracts with other partners that have different areas of expertise and will be responsible for assuring that the terms of the contracts, terminating contracts if necessary and locating new resources to ensure desired outcomes.

Mitchell Yancey Partnership for Children (MYPFC) – the local Smart Start agency, serves as the technical experts for quality assurance in preschool programs and has expertise and strength in areas different from the health district. The TRHD will contract with M-YPCF for program supervision to assure model fidelity and quality assurance activities. The program coordinator will serve as the supervisor and mentor of the home visitors for meeting HFA goals and objectives and for quality and quantity of work. Program fidelity requires a full-time supervisor for 5 to 6 home visitors; MYPFC will assure the program coordinator has adequate time to achieve the ideal ratio of 1:5.

Supervisors, Mitchell and Yancey County Health Departments – HFA staff will be employed by the Toe River Health District and located in the Mitchell and Yancey County Health Departments. Access to clients and daily guidance by health department care managers will be optimal in the health department setting. The local health department supervisors will provide daily supervision for HFA home visitors.

Executive Director, Graham Children’s Health Services – GCHS will provide staffing for the leadership team and independent evaluation services. GCHS has a proven record of accomplishment in facilitating meetings for their own board and committees, and also those of a local Healthy Carolinians Partnership’s steering committee, action teams and full-task force meetings. Additionally, GCHS will assist the Mitchell and Yancey HFA program with evaluation.

Director, Barium Springs Home for Children – As a certified HFA provider in Morganton, BSHC will be an invaluable resource to the creation of a successful program in Mitchell and Yancey Counties. As a consultant to the program for the first year of operation, BSHC will actively participate in leadership team meetings, keeping the leadership educated on the components of a model program and troubleshooting problems quickly because of years of experience with HFA.

Gaston

Recognizing that NFP requires additional personnel and material resources beyond the program budget, GCHD will provide the following supports as in-kind donations.

Personnel Support: Each of the following individuals will provide support and guidance to NFP staff but will not work directly with program enrollees.

Dr. Velma Taormina, a Board Certified Obstetrician and GCHD Medical Director, is our NFP program champion. She has worked at GCHD since 2004 and will provide clinical advice to the NFP Supervisor and Nurse Home Visitors. She has had an active role in developing our NFP program.

Cynthia Stitt, interim Personal Health Services Administrator, will manage the NFP Supervisor, meeting with her for weekly supervision. Ms. Stitt is a former obstetric nurse, has worked in the GCHD Maternity Clinic, holds a master's degree in health administration, and is personally active in working with minority teens.

Brad Biggers, MPH, Health Data Analyst, is proficient in data management and statistical analyses. Since joining GCHD in 2008 he has mastered mapping with Geographic Information Systems and will complete training to manage EHR/PMS services this summer.

Additional resources would include access to the GCHD Public Information Officer, our Business Services staff who order equipment and supplies, and the advice and guidance of clinical staff who specialize in maternity and pediatric care.

Material Support: GCHD will make in-kind contributions: of an office, with a door, for the NFP Supervisor, so she can employ reflective supervision with Nurse Home Visitors; modular offices for Nurse Home Visitors; access to meeting rooms; EHR/PMS services; support from our County Information Technology Department; and, facility security, heating, cooling, and maintenance.

The Gaston County Health Department will be responsible for implementing NFP in Gaston County. We would conduct NFP under the auspices of our Personal Health Services Division, which manages our Maternity, Family Planning, Child Health, Immunizations, Adult Health (STI), and Tuberculosis Clinics, and our CLIA-approved laboratory. NFP would have its own program supervisor, who would be dedicated exclusively to this program.

Velma Taormina, MD, our Medical Director and an Obstetrician will serve as program champion, providing clinical guidance for program success. Health Director, Christopher Dobbins, MPH, would provide guidance for managing political and community-related issues, and Cynthia Stitt, interim Personal Health Services Administrator, will directly supervise the NFP Supervisor.

Ms. Stitt will provide her with daily supervision and weekly individual supervisory sessions; the NFP Supervisor will also attend weekly PHS Supervisors Meetings to integrate NFP with other department programs, secure guidance, and share NFP lessons with her peers.

Daily program management would revolve around strict adherence to current GCHD policies and those to be written for NFP. The former would be covered during routine New Employee Orientation, and the NFP Supervisor would develop the latter. In total,

these policies would address: HIPAA, confidentiality, scheduling, supervising field staff, safety planning for home visits, securing client consent, assessing the health of pregnant women, assessing the health of infants and children, making referrals, communicating with primary care providers, manual and electronic record-keeping, and mandatory reporting.

GCHD's flexible-scheduling policy is based on our belief that patient need dictates when our community nurses deliver care. For example, our Tuberculosis Nurse will begin work before 8 AM to observe medical therapy with challenging patients. Our Newborn Postpartum Nurse and our Communicable Disease Nurse also flex schedules to serve patients in their homes.

GCHD actively implements safety policies and trainings to support staff that makes home visits, which includes reserving a phone line in our office for emergency calls. To help NFP staff understand these policies, which we formally review annually, we will have them accompany our field nurses on home visits. The City of Gastonia Police Department also trains our staff on organizing safe home visits and handling unsafe situations; we have good working relationships with the nine other police forces in the County, who understand the nature of our work should we call for help.

All NFP staff will be issued cell phones for use during home visits. They will also follow GCHD procedures which require home visiting staff to tell their supervisors where they are going, when they expect to return, and to notify them – by phone or face-to-face – when they complete visits.

Once the NFP Supervisor and Nurse Home Visitors complete NFP-required training in Denver, CO and online, GCHD New Employee Orientation, shadowing NFP staff in Cleveland County, and orientation to Gaston County and home visiting, they will begin working with clients. During this period, NFP staff will also conduct meetings to orient their GCHD co-workers and community physicians to NFP.

Once adequately trained and ready for work, each Nurse Home Visitor would set a weekly schedule for office, community, and home visits and share it with the NFP Supervisor. As their schedules change, Nurse Home Visitors will inform the supervisor of these changes by note, email, or phone.

Northampton

The Northampton County Health Department will serve as the lead agency and assume total responsibility for ensuring the successful implementation of the program. Sue G. Gay, RN, Health Director for the Northampton County Health Department will have ultimate responsibility for the program. Ms. Gay has over 25 years experience in Public Health including working as Lead Nurse in the Child Health and Maternity Programs and as Director of Nursing from 1989-2003. The NFP Supervisor will report

directly to the Health Director as well as the Clinical Nursing Supervisor and supervise the four home visitors and the administrative staff. Northampton County Health Department will house the NFP Supervisor, the administrative staff and one of the four home visitors. Each of the other three home visitors will be located in the other three Health Departments. Support will be provided to the staff and the program by lead staff from the respective health departments. In Northampton, additional support will be provided by the Clinical Nursing Supervisor, Judith Northcott, and the Maternity Lead Nurse, Denise Helms. See the organizational chart in Appendix A for a graphic depiction of these lines of authority.

If the State is supporting more than one home visiting model within a community, a plan for coordination of referrals, assessment, and intake processes across the different models (e.g., a detailed plan for centralized intake, as appropriate);

While the NCHV Program currently is only funding one home visiting model per community, there may be a number of other family strengthening programs in existence within the communities that may be funded with a combination of public and/or private funding. Following is a list of possible programs:

- Pregnancy Care Management—Care Management services are provided for pregnant Medicaid recipients who are determined to be at risk for poor birth outcomes.
- Care Coordination for Children-- CC4C care management services are provided for Medicaid and non-Medicaid children birth to 5 years of age who are determined to be high-risk. Children identified as having priority risk factors will be assessed by a CC4C care manager. Priority risk factors include children:
 - With special health care needs, having or at increased risk for chronic physical, behavioral or emotional conditions and also requiring health and related services of a type and amount beyond that required by children generally; or
 - Exposed to toxic stress in early childhood including, but not limited to extreme poverty in conjunction with continuous family chaos, recurrent physical or emotional abuse, chronic neglect, severe and enduring maternal depression, persistent parental substance abuse, or repeated exposure to violence in the community or within the family; or
 - Who are in the foster care system; or
 - Who are high cost/high users of Medicaid reimbursed services.
- Adolescent Parenting Program--Supporting adolescent parents to get an education, acquire job skills, improve parenting abilities and prevent future pregnancies helps them become self-sufficient and better able to support themselves and their families. It also establishes a strong, stable foundation upon which the baby will be raised. By investing in teen parents today, the Adolescent Parenting Program

(APP) protects the future of two generations – the young parents themselves and their babies.

The goals of APP are as follows.

1. Increase the self sufficiency outcomes for APP participants by:
 - a. Increasing the delay of a subsequent pregnancy;
 - b. Increasing graduation from high school with diploma or completion of GED and;
 - c. Increasing successful transition to adulthood including enrollment in post-secondary education, vocational training, or employment at a livable wage, and living in safe and stable housing after graduation from APP.
 2. Improve developmental outcomes for the children of APP participants by:
 - a. Increasing healthy births;
 - b. Increasing incidence of appropriate discipline, of nurturing behavior, and of children who are well cared for and;
 - c. Increasing age-appropriate physical, emotional, cognitive, and social development, including readiness for school success.
- **Strengthening Families--** The *Strengthening Families Programs (SFP)* are comprehensive curricula targeting children ages 3 to 16 years old and their parents. **SFP** consists of parenting, children’s life skills, and family skills training courses taught together. **SFP** has been found to significantly reduce problem behaviors, delinquency, and alcohol and drug abuse in children and to improve social competencies, resilience, and school performance. **SFP** builds on protective factors by improving family relationships, parenting skills, and improving the youth’s social and life skills. Child maltreatment also decreases as parents strengthen bonds with their children and learn more effective parenting skills.
 - **Incredible Years--** *The Incredible Years (IY)* series is a set of comprehensive curricula targeting children age 0 to 12 years old and their parents. A teacher curriculum is also available. While the Incredible Years offers many different programs, the curricula selected for this funding award are **BASIC Preschool Parent (ages 3-6) and the School Age Parent (ages 6-12) Training Programs**. **IY** is designed to promote emotional and social competence; and to prevent, reduce, and treat behavior and emotional problems in young children.
 - **Healthy Families America--** HFA is designed for parents facing challenges such as single parenthood, low income, childhood history of substance abuse, mental health issues, and/or domestic violence. Individual programs select the specific characteristics of the target population they plan to serve. HFA requires that families be enrolled prenatally or within the first three months after a child’s birth. Once enrolled, HFA programs provide services to families until the child enters kindergarten. HFA aims to (1) reduce child maltreatment; (2) increase utilization of prenatal care; (3) improve parent-child interactions and school readiness; (4) ensure healthy child development; (5) promote positive parenting; (6) promote family self-sufficiency and decrease dependency on welfare and other social

services; (7) increase access to primary care medical services; and (8) increase immunization rates.

- Early Head Start/Home-Based Option Early Head Start-Home Visiting targets low-income pregnant women and families with children birth to age 3 years. To be eligible for Early Head Start-Home Visiting, most families must be at or below the federal poverty level. However, Early Head Start-Home Visiting programs must make at least 10 percent of their enrollment opportunities available to children with disabilities who are eligible for Part C services under the Individuals with Disabilities Education Act in their state. Each individual Early Head Start-Home Visiting project is allowed to create specific program eligibility criteria. Early Head Start-Home Visiting aims to (1) promote healthy prenatal outcomes for pregnant women, (2) enhance the development of very young children, and (3) promote healthy family functioning.
- Nurse-Family Partnership-- NFP is designed for first-time, low-income mothers and their children. NFP requires a client to be enrolled in the program early in her pregnancy and to receive a first home visit no later than the end of the woman's 28th week of pregnancy. Services are available until the child is 2 years old. NFP is designed to (1) improve prenatal health and outcomes, (2) improve child health and development, and (3) improve families' economic self-sufficiency and/or maternal life course development.
- Parents as Teachers-- PATNC does not have eligibility requirements for participants. Individual programs select the specific characteristics of the target population they plan to serve. PAT Born to Learn programs can serve children and their families from pregnancy through kindergarten entry. The PAT Born to Learn model aims to (1) increase parent knowledge of early childhood development and improve parenting practices, (2) provide early detection of developmental delays and health issues, (3) prevent child abuse and neglect, and (4) increase children's school readiness and school success.

Each of the projects funded through the NC Home Visiting Program are required to have a central referral, intake, and triage process to assure that families are directed to the most appropriate family strengthening services based on the strengths and needs of the family and services available in the community. Details of the local referral, intake and triage processes for each of the funded sites can be found in Appendices F-J.

In addition, funded sites are encouraged to work with all early childhood service agencies in the community to develop an early childhood system of care for families and young children. This system of care should provide seamless transitions between early childhood service agencies and programs.

Identification of other related State or local evaluation efforts of home visiting programs that are separate from the evaluations of promising approaches;

State of North Carolina

The Alliance for Evidence-Based Family Strengthening Programs (The Alliance) is a collaborative network of public and private funders who support the replication of specific evidence-based programs for children and families across NC. Alliance members are committed to funding programs that have strong track records of producing results for children, families, and communities, and to funding the needed infrastructure for quality implementation of those programs. While the members of the Alliance individually fund a range of diverse programs and services across NC, the Alliance is now collaboratively supporting three evidence-based programs (EBP) with the goal of statewide replication. These programs are: the Nurse Family Partnership (NFP), the Incredible Years (IY), and the Strengthening Families Program (SFP).

The Division of Public Health houses the Evidence-Based Family Strengthening Programs Program Coordinator, but it is unfilled and frozen due to state hiring prohibitions. The Executive Director of the Child Maltreatment Prevention Leadership Team (CMPLT) has, in the interim, taken the lead on parenting programs.

Buncombe

The NSO and University of Colorado Prevention Research Center for Child and Family Health has chosen Buncombe NFP as one of 3 research sites in the nation to implement the second feasibility wave of a research based curriculum known as Dyadic Assessment of Naturalistic Caregiver-child Experiences (DANCE). Buncombe was selected as a site due to the strength of the program and capacity of the Supervisor and nurses to implement a rigorous research design.

In addition, there is an Adolescent Immunization Quality Improvement initiative currently underway at BCDH that is looking at increasing the adolescent vaccines provided to youth ages 11-18. NFP Supervisor serves on this team that is working with providers and parents to develop a campaign aimed at improving opportunities to vaccinate in the providers offices as well as providing a community media campaign to increase awareness.

Durham

In 2002, the Duke Endowment funded the Durham Family Initiative (DFI; P. I. Kenneth Dodge, Ph.D.). DFI involves a number of family, neighborhood, and policy level interventions aimed at facilitating the healthy development of children and families, thereby reducing child maltreatment. The evaluation of the effectiveness of the *Healthy Families Durham* is one component of that initiative designed to develop effective strategies for reducing maltreatment that can be disseminated to other counties in North

Carolina, if successful. The specific aim of the evaluation is to test the existing *Healthy Families Durham* model for effects on child and family functioning, positive family support for the child, knowledge of child development and needs, and the prevention of child abuse and neglect.

The study is progressing as planned. A total of 428 pregnant women were referred to the program, and 343 (6 of which were withdrawn after consent, so current accrual=337) consented to be randomized. Participants were randomized by English speaking and Spanish speaking groups. All of the birth assessment, year 1 and year 2 assessments have been completed. The final evaluation, when the participating child is 3 years will be completed in the first quarter of 2012. The data will be evaluated to determine whether the home visiting program is associated with less child maltreatment and whether the child and child/parent relationship is improved by the program.

To date, the information gathered in the *Healthy Families Durham* evaluation is preliminary but quite promising; and these data are consistent with the Healthy Families New York study reported above. Pregnant women were successfully recruited at Lincoln Community Health Center during their first prenatal visit; any with one or more risk factor were eligible to be randomized to a treatment group or community standard of care. Healthy Families Durham services began in the 7th month of pregnancy for the treatment groups, using weekly visits and the Parents and Teachers curriculum. The 1st evaluation assessment occurred at infant age 4.8 to 7.8 months. The comparison of families randomized to treatment versus community standard of care indicated that those receiving the home visiting program were less depressed (Behavioral Symptoms Inventory 18 [BSI-18], $p<0.05$), less anxious (BSI, $p<0.05$), more knowledgeable about infant development (Knowledge of Infant Development Inventory (KIDI), $p<0.01$), and were more likely to report positive parenting practices ($p<0.01$). Those receiving home visiting were also more likely to be receiving Medicaid ($p<0.05$), possibly documenting the case management aspects of the service.

Gaston

Parents As Teachers, the only current home visiting program in Gaston County, uses the curriculum-specific evaluation, “Born to Learn Parent Knowledge”, which asks 32 questions and is administered at the beginning and end of the first year of program implementation. The questions address: demographics of program participants; characteristics of participating families; and, program impact, including the number of visits delivered, group meetings, and screenings received and referrals made. The Cooperative Extension also administers a questionnaire from the North Carolina Partnership for Children, the program funder, to count referrals made for participants and their acquired knowledge and skills.

Northampton

The Parents as Teachers program has an evaluation component mandated by the funder and the sponsoring organization. Locally, Smart Start requires data collection for all

funded programs that is consistent with their Performance Based Incentive System. PBIS is a comprehensive collection of 24 population-level indicators that track health conditions for young children. Additionally, specific programmatic tools were required for outcome evaluation and quality improvement.

Although both the Early Head Start and the Head Start programs have no home visiting component, they both have strong evaluation requirements.

Yancey-Mitchell

None to report.

Job descriptions for key positions, including resumes; and

Job Descriptions of key positions are in Attachment U.

The ***Program Director*** is responsible for new site development and community planning to ensure that all local communities who plan to implement EBHVP have the knowledge, skills, tools, and support needed to sustain the program and build strong teams. The Director is responsible for fiscal and program oversight, evaluation monitoring, budget management and contracts administration. A master's degree in public health, social work, nursing or a related degree is required and five years experience in human services, child health or child development services, adult education or child maltreatment prevention services. Strong presentation, community organization and/or facilitation skills and experience working with families and youth are a requirement.

The ***NFP State Nurse Consultant*** is responsible for clinical oversight to local NFP sites and policy and workforce development. This position ensures that all nurse-home visitors and their supervisors are prepared and supported in delivering NFP, with fidelity to the model, to diverse communities and families and helps local teams interpret client data for quality improvement. A master's degree in nursing or related area and five years of experience in public health nursing, including one year in a supervisory capacity is required for this position. Experience as a NFP Nurse Home Visitor or Supervisor is strongly preferred.

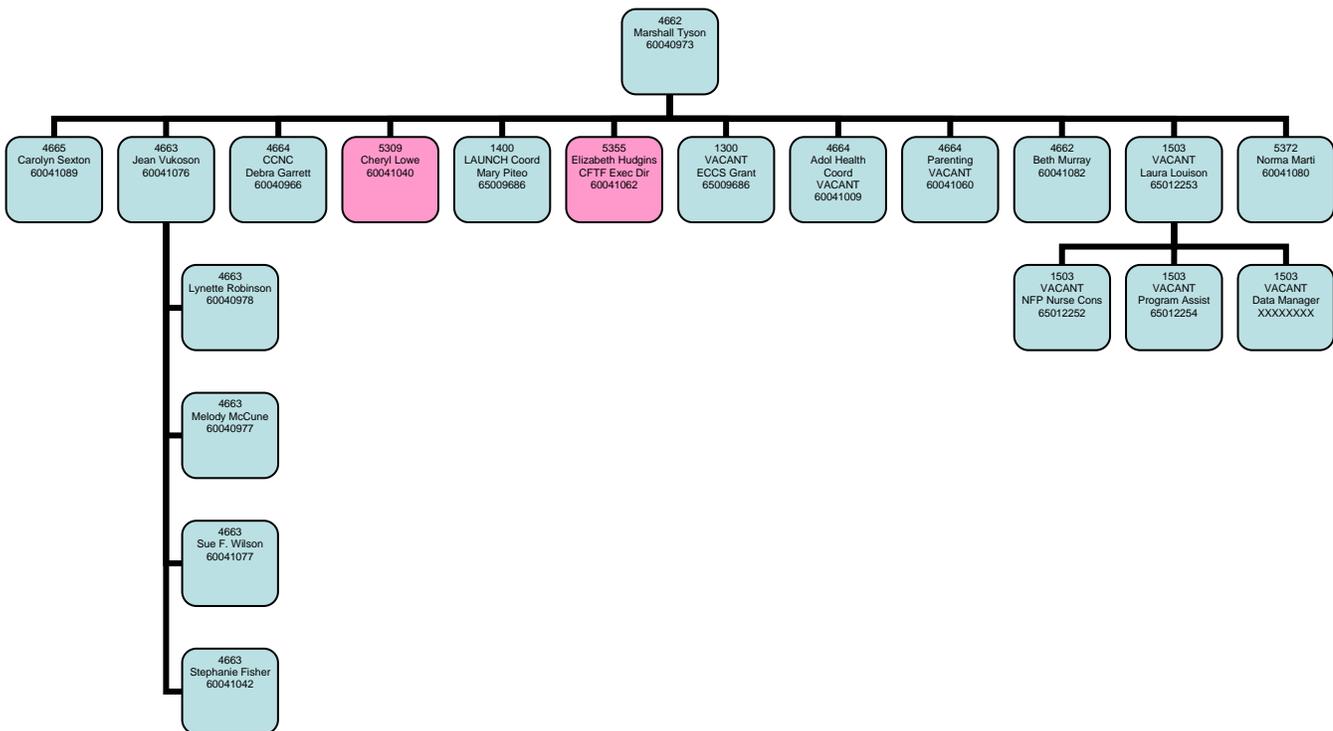
The range of duties for the ***Home Visiting Program Assistant*** includes administrative and program support, budget management, program marketing, customer service, event planning report writing, summarizing/reconciling information or financial data, record management, data review, and contract service monitoring and training for local staff. This position will be supervised by the Program director.

The ***Home Visiting Data Manager*** is responsible for performing collecting and complex statistical analyses of data from a wide variety of sources including but not limited to the State and National Home Visiting Benchmarks/Constructs, BRFSS, the National Early Childhood Home Visiting Survey, and CMIS data. This data will address all age groups,

racial/ethnic groups, socioeconomic groups, geographic areas, and key environments in which families receiving MIECHV services are provided. The position will be supervised by the NC MIECHV Program Director and work closely with the Best Practices Data Manager and staff in the Best Practices Unit, and will participate in the development and implementation of the NC Home Visiting State Plan for the improvement of maternal, infant and early childhood home visiting services.

An organization chart.

State of North Carolina



Organization charts for the five locally funded projects can be viewed in Attachments F-J.

The Updated State Plan must also include a detailed description of how the proposed State Home Visiting Program will meet the legislative requirements, including:

- ***Well-trained, competent staff;***
- ***High quality supervision;***
- ***Strong organizational capacity to implement activities involved;***
- ***Referral and service networks available to support the home visiting program and the families it serves in at-risk communities; and***
- ***Monitoring of fidelity of program implementation to ensure services are delivered pursuant to a specified model.***

State of North Carolina

As lead agency for the NC Home Visiting Program, the Division of Public Health will work to meet legislative requirements for the NC Home Visiting Program by placing highest priority on conducting home visiting models with fidelity, delivering high-quality services, and assuring we achieve Federal program expectations.

To achieve these ends, the Division of Public Health will: hire qualified staff; require them to complete program training as scheduled; provide the NCHV Program Director with offices for reflective practice and team meetings; recruit additional NCHV staff; maintain strong relationships with program partners; collect and submit required data to the Federal Project Officer; and, assure the NCHV Program Directors meets program standards.

The NCHV Program Director position has been filled, effective June 9, 2011. This position required a Master's degree in public health or a health related field, experience in program management at the state level, and preference for home visiting experience. (See resume for Laura Louison in Attachment R)

We will assertively recruit additional staff (NFP State Nurse Consultant, Program Assistant, and Data Manager) through the state personnel system, colleges, universities, and professional organizations in our state. By requiring NVHV staff to complete program training as scheduled we will establish a competent staff. And, by requiring staff to participate in reflective supervision we will enhance their competencies.

With a capable and enthusiastic NCHV Program Director, the Division of Public Health will assure she completes NFP and Healthy Families America training. The Health and

Wellness Unit Supervisor will provide the NCHV Program Director with guidance at weekly meetings. She will also benefit from weekly meetings with other manage staff.

The Division of Public Health has the organizational capacity to properly implement the NC Home Visiting Program. We have long-standing and effective relationships with the organizations on the NC Home Visiting Steering Committee and the Governor’s Early Childhood Advisory Council, as well as all key stakeholders. To supplement an effective implementation of evidence-based home visiting models, the Division of Public Health has contracted with the National Implementation Research Network to assure an effective infrastructure at both the State and community levels.

These resources are matched by the Division’s management of a committed and skilled staff that provide financial and technical assistance resources to multiple programs in multiple settings. In addition the NC Home Visiting State Plan includes assess to the Best Practices Unit, the State Center for Health Statistics, a pediatric medical consultant, and a Public Information Officer

We will strengthen these resources by developing a central data collection system, partnering with the Community Cares of North Carolina, building on their Care Management Information System. This will simplify the NCHV Program’s ability to gather benchmark and construct data on the evidence-based models that North Carolina is implementing through the NCHV Program.

Buncombe

- How will NFP Meet the Legislative Requirements, including:
 - Well-trained, competent staff—Buncombe County is widely known to offer competitive compensation as well as one of the most outstanding benefits packages in the region, if not the state. The county offers top-rate health insurance at very low cost, participation in the Local Government Employees Retirement System, NC 401(K) with 8% county match, 11 paid holidays, sick leave, annual leave, personal time off (PTO), longevity pay, wellness programs and a low cost employee health clinic among other benefits. Reflective supervision has been shown to provide staff with great clinical support that has fostered competency as well as aided retention due to job satisfaction.
 - High quality supervision—One-to-one weekly supervision, case conferences, team meetings and field supervision are all provided by the NFP Supervisor to assure optimal supervision. Reflective supervision has been well received and is being looked at as an agency competency. Having a certified nurse mid-wife in this role has assured strong clinical supervision. And having an adjunct UNC faculty member has also brought strong teaching skills and sound program management.

One-to-one Supervision

These are meetings between a nurse and supervisor in one-to-one weekly, one hour sessions for the purpose of reflecting on a nurse's work. This includes caseload management and quality assurance. Supervisors use the principles of reflection as outlined in NFP supervisor training. Supervisors who carry a caseload will make arrangements for clinical supervision with reflection from a qualified person other than the nurse home visitors he/she supervises.

Case Conferences

These are team meetings dedicated to joint review of cases and CIS reports. The team uses reflection for the purposes of solution-finding, problem-solving and professional growth. Experts from other disciplines are invited to participate when appropriate. Case conferences reinforce the reflective process. Case conferences are to be held twice a month for 1 ½ to 2 hours per case conference.

Team Meetings

These are administrative meetings. The time is used to discuss program implementation issues and for team building. Team meetings are held twice a month for at least an hour. Team meetings and case conferences alternate weekly so there is one meeting of the team every week.

Field Supervision

This is a joint home visit conducted by the nurse supervisor and nurse home visitor. The supervisor should accompany each nurse to at least one client visit every four months. Additional visits may be made at the nurse's request or when the supervisor has concerns. The minimum time required for field supervision is 2 – 3 hours per nurse every four months. Some supervisors prefer to spend a full day with each nurse. This enables the supervisor to comprehensively observe the nurse's typical day, including home visits, time and case management skills, and charting. After any joint home visit, a Visit Implementation Scale is completed and discussed.

- Strong Organizational Capacity – BCDH has proven we are a successful implementation agency and will continue to support the NFP Program through sound program and fiscal management, strong leadership, community partnerships and innovation in service delivery.

Durham

Healthy Families Durham requires that home visitors have a master's degree or a bachelor's degree in a related field and experience in home visiting. Supervisors must have a master's degree and five years of experience. The interview process consists of at least two interviews, obtaining three references, and having the candidate go out on a home visit. Every new employee also undergoes a thorough police background check.

With two weeks of required training for Healthy Families America, one week of required training with Parents As Teachers, and the required wraparound training, staff will be

well trained. The wraparound training recommended by Healthy Families American consists of eight on-line modules, covering topics such as child abuse, developmental delay, substance abuse, and domestic violence. Home visitors will be required to pass the quiz at the end of each module. Weekly supervision, weekly staff meetings, and ongoing training events, offer the opportunity for home visitors' professional growth. Once home visiting begins, a strong quality assurance process is in place that includes supervisors shadowing home visits, regular chart checks, periodic case reviews, and random quality assurance phone calls to clients.

Supervisors in the *Healthy Families Durham program* have significant experience with home visiting and working with high-risk families, and all supervisors also have their own weekly supervision to assist with problems that arise and to provide emotional support. Through a weekly didactic series, The Center for Child and Family Health offers ongoing training in issues of trauma, domestic violence, substance abuse, child abuse, and mental health.

The implementation agency, The Center for Child & Family Health (CCFH), is the state's leading child trauma agency, providing evidence based treatment to our community's most vulnerable children and families. CCFH professionals are among the few in our community who care for children and families affected by traumatic events, including child abuse, sexual assault, domestic and community violence, medical illness, natural disaster, and combat deployment and loss. In 2007-2008, CCFH provided direct service to 2,850 North Carolina (NC) children and family members from 45+ counties with varied rural and urban, racial and ethnic populations. Thousands more benefited from improved access to and quality of care through training of 2,500+ professionals. CCFH has been part of the National Child Traumatic Stress Network (NCTSN) for more than 6 years. The *Healthy Families Durham program* has been part of CCFH for the last twelve years.

Gaston

As lead agency for this NFP program, GCHD will work to meet legislative requirements for the NC Home Visiting Program by placing highest priority on conducting NFP with fidelity, delivering high-quality services, and assuring we achieve State and Federal program expectations.

To achieve these ends, GCHD will: hire qualified staff; require them to complete program training as scheduled; provide the NFP Supervisor with offices for reflective practice and team meetings; recruit eligible women for NFP; maintain strong relationships with program partners; collect and submit required data to the NFP National Service Office; and, assure the NFP Supervisor meets program standards.

We will assertively recruit staff through the NFP National Service Office, colleges, universities, and professional organizations in our state. By requiring NFP staff to

complete program training as scheduled we will establish a competent staff. And, by requiring staff to participate in reflective supervision we will enhance their competencies.

As stated by NFP Supervisors in nearby counties, the program's reputation should draw a sufficient number of applications for us to hire a qualified staff. Recruiting should also be strengthened by our location in a metropolitan area with two universities that offer bachelor's and master's degrees in nursing.

With a capable and enthusiastic NFP Supervisor, GCHD will assure she completes NFP training. Our Personal Health Services Administrator will provide the NFP Supervisor with guidance at weekly meetings. She will also benefit from weekly meetings of our Personal Health Services Supervisors, where she will receive critical advice and guidance on clinical care, community resources, community expectations, county and department policies, and working with program partners. The success of these activities will be measured through NFP evaluations and improved through NFP consultations.

GCHD has the organizational capacity to properly conduct NFP. Our targeted census tracts have a population of 164,692 residents, which is sufficient to recruit 100 participants; we have a healthy working relationship with the sole hospital in our community; and, we collaborate closely with our county's only federally-qualified community health center, and our consolidated school district. We have long-standing and effective relationships with the organizations on the proposed NFP Community Advisory Board.

These resources are matched by GCHD's management of a committed and skilled staff that delivered 42% of county births (2010), is implementing an innovative primary care model in with our community health center, offers the resources of a Health Data Analyst and a Public Information Officer, and has four community outreach programs to prevent teen pregnancy. In the area of maternal health, we also benefit from our partnership with the Adolescent Pregnancy Prevention Campaign of North Carolina, which is implementing a \$5.8 million teen pregnancy prevention program in Gaston County.

We will strengthen these resources by implementing an EHR / PMS in January 2012. This will simplify GCHD's gathering of eligibility data in clinics, sharing this information with NFP staffs, and simplifying the process of informing clinicians about NFP patients. Should our NFP program require the help of an administrative assistant to enter data while we implement the EHR/PCMA, we will provide that staff.

Our 100,000 square foot facility has adequate space to provide the NFP Supervisor with a private office and Nurse Home Visitors with offices. Our building is open on weekdays, with a deputy sheriff onsite from 6:30 AM to 9:00PM.

We also strengthened by advocates who serve in the State's General Assembly: Rep. William Current is a

dentist and former chair of our Board of Health; Sen. James Forrester, MD, MPH is our former Medical Director; and Rep. John Torbett is a former County Commissioner. Each is a strong supporter of GCHD.

Mitchell-Yancey

In designing a program that will support the achievement of the legislative requirements outlined in the RFA proposal, the MY HFA program will establish minimum educational levels for the FSW and FAW positions. Establishing a professional level for these positions at the Social Work II and Public Health Nurse II levels indicate the competency level expected. The required educational levels, intensive on-going and mandatory trainings, reflective supervision, support from the leadership level and use of a team approach are all components designed to work together to support staff competency.

A high level of quality supervision will be provided through collaboration between the program manager at the MYPFC and the local health department supervisors. Local health department supervisors will provide daily supervision for HFA home visitors. The local health department supervisors provide daily supervision that includes assurance the employee is on time for work and appointments, checking and approving time and travel records, mediating disputes between employees and serving as a sounding board and mentor for all staff for day-to-day issues. The offsite program supervisor provides direction and quality assurance in the content area.

TRHD will contract with the MYPFC program coordinator to serve as the supervisor and mentor of the home visitors for meeting HFA goals and objectives and for quality and quantity of work. With a Master's in Social Work, the program manager has the educational background needed to mentor HFA home visitors. She is trained and experienced in reflective supervision, which is a key component of HFA supervision.

TRHD certainly has exhibited the strong organizational capacity to implement the MY HFA program at the model level required by legislative mandate. The organization has been successful in reaching families in need and securing participation through years of providing BabyLove, Maternity Care Coordination, Child Services Coordination and Maternal Outreach programs for pregnant women and young children. Additional services include offering prenatal classes, the Centering Pregnancy Program and a long standing and successful breastfeeding support program with peer counselors and infant feeding classes. Parenting support programs have been designed to support young mothers participating in CSC and WIC programs who were struggling with parenting issues. The Yancey County Health Department has received two Child Health Best Practice awards from the NC Children & Youth branch for community partnerships to improve the basic environment for children and for Mothering Matters preschool groups.

Northampton

The Northeastern Nurse Family Partnership Collaborative will meet the legislative requirements through the implementation of the NFP program with fidelity. Per an independent review of home visitation evidence of effectiveness (HomVEE), MATHEMATICA Policy Research, Inc. found that NFP by far meets more of the legislative requirements for effectiveness than any other model selected by North Carolina for possible implementationⁱ The Nurse-Family Partnership program meets these requirements in the following manner:

- **Well-trained, competent staff:** As per the requirements for a NFP Nurse Home Visitor established through the NC Office of State Personnel (OSP), this project's Nurse Home Visitors will all be BSN The Nurse Home Visitors will all be registered nurses; licensed by the State Board of Nursing and meet the requirement of the state Nurse Practice Act. The NFP program has found that BSN registered nurses have an educational background that supports the effective delivery of the program. In addition to the core knowledge nurses bring to the job, the Nurse-Family Partnership National Service Office provides additional competency based core education to all nurses in the program. "The education model is based on: the theories that support the model; visit structure; tools for building self-efficacy; promoting behavior change and goal setting and attainment; and methods to encourage parents to become emotionally available and responsive parents."ⁱⁱ
- **High quality supervision:** The NFP Nurse Supervisor will be a master's prepared as established through the classification of this position with the NC Office of State Personnel. "NFP Supervisors provide supervision through the use of reflective practice with each staff member, conduct joint home visits, and facilitate team meetings and case conferences. NFP supervision is designed to promote skill development and provide deeper knowledge of the NFP model. The NFP Supervisor provides a supportive and safe framework for practice reflection, building community relationships, discussing complex cases, and provides resources for professional development and quality improvement."ⁱⁱⁱ The Nurse Supervisor receives training from the NSO and will receive ongoing support and technical assistance from the state level Nurse Consultant.
- **Strong organizational capacity to implement activities involved:** As stated earlier, the Northeastern NFP Collaborative has completed the self-assessment process that is required prior to submitting an implementation plan to the NFP National Service Office in order to implement NFP. This process has multiple purposes including determining feasibility and organizational capacity to fulfill the requirements of implementing the program with model fidelity. It involves an examination of several factors that include a plan for sound financing of the program; organizational experience in managing comparable programs/services; and a commitment to using data and an ongoing quality improvement process.

The Northeastern NFP Collaborative has gone through the exploration and pre-implementation phases prior to "adoption" of the NFP model. This includes almost a two year period where service providers, community planning groups, members of the target population, related organizations, and the Regional Program developer for NFP in NC met and identified the need for NFP, assessed the fit of NFP and community needs and

prepared/educated the local health departments, community groups, etc. about NFP. Through this process, one community, Bertie, withdrew from the process, as they were not yet ready to adopt this intervention. This demonstrates a thorough understanding of what is needed and “healthy pre-implementation and adoption phase of readiness”.

This was followed by the stage defined by National Implementation Research Network (NIRN) as the “installation stage of implementation”. Examples of activities to prepare for implementation of NFP with model fidelity include the following examples. The four local communities and health departments arrived at consensus for Northampton County Health Department to be the “lead agency” and the other health departments to house a NFP nurse and provide adequate referrals. Historically, crossing county lines for service deliver has been difficult. The project then began ensuring that qualified staff (BSN home visitors and MSN nurse supervisor) could be recruited and hired in this area of the state as well as assurance that all elements of NFP could be implemented with fidelity. While funding was not currently available, the project sought to ready itself for any possible funding opportunities.

The project then began the “initial implementation” phase, as defined by NIRN. Implementing NFP in a time of budget reductions, changes in Medicaid billing for established programs, etc. were all considered and addressed before going forward. The lead agency, Northampton County Health Department, as well as the supporting health departments had to consider and agree that internal influences and external factors would not prohibit the success of NFP for this project. Each local Health Director has agreed to insulate the NFP project while current staff in other programs goes through the change process necessary to fully integrate an EBP such as NFP. Through the “lessons learned” from the other NC NFP sites, each health director recognizes the complexity of integrating NFP into the current maternal and child health service continuum. These Directors will ensure NFP is nurtured while existing staff and programs (EBPs) are fully educated and given time to for the change process (i.e. to understand how and why an evidence-based program is implemented). Each Director is fully aware of anticipated challenges within their staff such as the fear of change, investment in current programming (i.e. “status quo”), and the complexity associated with implementing a new evidence-based program. While it would be ideal that each of the four (4) local health departments have gone through this transformation process before an award is made, it is unrealistic given the time-frame of this RFA. However, the administrations of these health departments have gone through this transformation process and can therefore “protect” the NFP project to ensure successful implementation, while they bring the rest of their agency along in the change process. It is understand that coaching and TA will be available to these communities in this process, if our application is selected. These counties have now reached the NIRN stage of “full operation.” Funding is required to implement NFP and change the community norms that EBPs such as NFP becomes “business as usual”.

How the State or community(ies) will comply with any model-specific prerequisites for implementation, including those discussed in the implementation profiles available on the HomVEE website (<http://www.acf.hhs.gov/programs/opre/homvee>)

During the Request for Application process, applicants that submitted an application and advanced to the second level of review via a site visit were quizzed about the prerequisites for implementing their proposed evidence-based home visiting model to ascertain their understanding and ability to comply with the model requirements. Topical areas included, but were not limited to:

- Understanding of the proposed model,
- Fit of the model to the target population,
- Understanding of the outcomes and fit with the community needs assessment,
- Understanding of the program model components,
- Understanding of how the model is to be delivered—intensity and length,
- Requirements for staff and supervisor training,
- Understanding of model program materials, assessment tools, and fidelity standards, and
- Understanding and estimation of costs necessary to support the proposed model.

Pending final approval, the five sites proposed for funding will each receive a contract that will include specific language regarding implementation of the proposed model based on prerequisites, implementation requirements, complying with model fidelity, and reporting requirements. In addition, NC Home Visiting Program staff will be monitoring adherence to contract deliverables per the Division of Public Health Subrecipient Monitoring Plan. Any project that falls below minimal expectation will be reported to the model developer and will be put under a corrective action plan to be brought back into compliance. Program staff, with the assistance of the model developer/purveyor, will be available to assist the local program in maintaining fidelity to the model.

Any strategies for making modifications needed to bolster the State administrative structure in order to establish a home visiting program as a successful component of a comprehensive, integrated early childhood system; and

DPH will implement a two-pronged approach to sustain and expand EBHV programs in NC: it will both expand the state's existing EBHV infrastructure and implement new EBHV initiatives in communities where children are at greatest risk for poor outcomes. The National Implementation Research Network has been contracted to provide technical assistance at both the State and local level to develop a solid infrastructure that will support implementation of evidence-based home visiting programs. DPH will expand the

state-level infrastructure needed to effectively support EBHV programs by hiring a project director, State NFP nurse consultant, program assistant and data manager.

Any collaborations established with other State early childhood initiatives as identified earlier in this document.

The proposed project builds on an existing public-private initiative to increase EBHV programs across the state; it will also link this project with various state-level early childhood initiatives housed within DPH such as the Early Childhood Comprehensive Systems (ECCS) initiative, Project LAUNCH, and the Child Maltreatment Leadership Initiative. To develop an integrated infrastructure across home visiting programs, DPH will collaborate with other organizations to develop a state-wide home visitation referral triage system that aims to match families with appropriate level of services.

This level of collaboration is evident by the membership on the Home Visiting Steering Committee, referenced earlier in this section. In addition, the Early Childhood Comprehensive Systems (ECCS) grant is co-located in the same administrative unit to facilitate collaboration. The ECCS grant has provided support for the beginning of the Governor's Early Childhood Advisory Council, made up of public and private early childhood agencies and organizations, and foundations that support early childhood initiatives in North Carolina. The Governor's Early Childhood Advisory Council has been named the advisory council for this grant.

Section 7: Plan for Continuous Quality Improvement

Through the collection and regular use of data, our state early childhood home visiting program and our local sites can identify and correct problems quickly to improve performance as well as document changes and improvements. The use of Continuous Quality Improvement (CQI) methods in the MIECHV Program will result in effective program implementation and improved participant outcomes.

North Carolina's Early Childhood Home Visiting program CQI plan is designed to meet client needs by:

- Providing a means for community-based programs to benchmark their processes and outcomes and thus document results in the absence of comparison groups;
- Informing the improvements that may be required in the implementation of the evidence based home visiting models in the unique community settings, to be responsive to local contextual realities while adhering to model fidelity;
- Developing and incorporate new knowledge and practices in a data-driven manner;
- Inform state and local administrators about training and technical assistance needs;
- Helping monitor fidelity of program implementation;
- Strengthening referral networks to support families;
- Providing rapid information on a small scale about how change occurs;
- Identifying key components of effective interventions; and
- Empowering home visitors and program administrators to seek information about their own practices through the provision of regular reports which summarize performance on a variety of indicators associated with their processes and outcomes.¹

North Carolina's Early Childhood Home Visiting CQI plan consists of two parts, the first part illustrates our state-level CQI effort and the second part is a discussion of CQI processes for our funded sites. For these two parts, the collection and analysis of benchmark and construct data through a state data collection system is critical to our CQI process. A thorough discussion of our proposed statewide integrated data collection system is discussed in Section 5.

Part One: STATE LEVEL CQI

I. Framework

The NC Early Childhood Home Visiting CQI Team is responsible for the coordination, planning, design, and implementation of the CQI plan. The CQI team is under the direction of the NC Early Childhood Home Visiting Program Director. Quarterly, or more frequently, monitoring of the improvement plan will be implemented.

The state CQI team will consist of individuals and agency representatives from the following:

- NC Early Childhood Home Visiting (Program Director, Data Manager, etc.)
- NC State Center for Health Statistics

- NC Head Start
- NC Division of Child Development
- NC Division of Mental Health
- NC Division of Social Services
- One or more representatives from community home visiting programs

II. Data Collection

The CQI process will be data-driven through the analysis of home visiting benchmarks, constructs and performance measures. Process and other measures (e.g. staff selection and training or other model fidelity measures) will be selected as deemed necessary and appropriate by the CQI team. Data points will be compared to desired outcomes. State and community home visiting program managers will lead their respective CQI team in the collection of data from the home visiting database and client surveys. Data will be analyzed at least quarterly at CQI leadership meetings and continuously at all other state and community meetings. Refer to Section 5 for a complete discussion of North Carolina’s proposed home visiting data collection system, benchmarks, constructs, and performance measures.

III. CQI Process

Once problems have been identified, the CQI team will utilize Model for Improvement and Lean process tools to achieve the desired outcome. The team should include those who work closely with the areas of concerns. Where appropriate, collaboration between different agencies should be promoted as staff members may be closely working together.

Step 1 - Identify a need/issue/problem and develop a problem statement.

Step 2 - Define the current situation - break down problem into component parts.

Step 3 - Analyze the problem - identify the root causes of the problem and use charts and diagrams as needed.

Step 4 - Develop an action plan - outline ways to correct the root causes of the problem, specific actions to be taken, identify who, what, when and where.

Step 5 - Look at the results - confirm that the problem and its root causes have decreased, identify if the target has been met and display results in graphic format before and after the change.

IV. Use and Communication of Quality Information to Make Improvements

Reports, with findings based on improvement efforts, will be issued following CQI meetings to personnel throughout the agency. These reports will be systematically reviewed and discussed and will provide information useful for improving programs and practice. Data-driven information will be analyzed and utilized during all regular meetings at all levels of the program; from management to implementation team.

V. Support

Support and follow-through on activities related to the CQI plan are keys to its success. The NC Early Childhood Home Visiting CQI Team is responsible for the following duties:

- Provide technical assistance and training to the community evidence-based early childhood home visiting sites.
- Serve as the CQI Coordinator for the NC Early Childhood Home Visiting program.
- Collect CQI Quarterly Assessments from CQI Coordinators in order to produce an Annual CQI Assessment.
- Assure that benchmark data is being reviewed in the CQI process to improve outcome levels.
- Interact with the MIECHV CQI effort on the quality improvement programs around the nation.
- Keep the community evidence-based early childhood home visiting sites abreast of CQI efforts.

To help assure the success of our CQI plan, we have built relationships with two existing organizations in the state, the North Carolina Center for Public Health Quality (NC CPHQ) and the National Implementation Research Network (NIRN). These organizations are experts in the field of quality improvement and will be utilized to provide on-going technical assistance and training to this CQI effort.

The North Carolina Center for Public Health Quality (NC CPHQ) collaborates with state and local partners to provide training in quality improvement (QI) methods and tools and develops, leads, and supports strategic QI initiatives for the Division of Public Health and local public health agencies in North Carolina. NC CPHQ aims to create an infrastructure to foster and support CQI and learning among all public health professionals in North Carolina.

In addition, NIRN will work directly with state and local agencies to build capacity to use and embed continuous quality improvement processes into the standard ways of work to support quality implementation of effective strategies.

Part Two: COMMUNITY LEVEL CQI:

The NC Early Childhood Home Visiting program will assure local CQI processes through state contracting that includes required subrecipient monitoring. All local sites receiving state funds to support evidence based home visiting will be required to develop, maintain, and implement a CQI process. The sites will be required to demonstrate evidence of a functioning and effective CQI process through the submission of quarterly reports and subrecipient monitoring audits.

NC CPHQ has developed the QI 101 program, an interactive learning experience designed to help agencies improve the quality of the services they provide to their communities. Participants use the Model for Improvement and Lean principles and tools to improve a specific area within their local agency, while receiving individualized coaching from experienced program faculty. In addition, the NC CPHQ has a QI Advisor program that provides additional instruction in QI methods and tools, for QI leaders within all NC local public health agencies as well as at the DPH. These QI advisors, which include the WCH Nurse Consultants and local public health agency staff, will be invaluable to support the CQI process in the community sites.

Local sites will receive training and or technical assistance to establish and operate a CQI team from sources including NC-CPHQ, NIRN, Nurse-Family Partnership, and Healthy Families America. Below is a brief description of the CQI strategies outlined by each of the state funded evidence-based home visiting sites.

Buncombe County:

Buncombe County Health Department's (BCHD) approach to quality assurance includes agency mandates for chart review, regular participation by program managers in QI activities on the agency level to make improvements and build capacity, program monitoring of data and staff performance evaluations. One example of effective quality improvement within NFP came when the Supervisor noticed the high number of women being served that had a mental health diagnosis. She contracted with a perinatal psychologist and infant mental health specialist to work with the NFP team on certain case studies related to clients that have multiple mental health diagnoses that are low income. The Team meets with the mental health specialist once a month and they provide feedback as to how best provide support and care for this at-risk group. Through this relationship, we have been able to get some of our clients referred into counseling more quickly than if we did not have this initial relationship established.

Another example of local quality assurance can be seen in the research project. The NSO and University of Colorado Prevention Research Center for Child and Family Health has chosen our site as one of 3 in the nation to implement the second feasibility wave of a research based curriculum known as Dyadic Assessment of Naturalistic Caregiver-child Experiences (DANCE). This research project is looking at the quality of developmental screening to improve outcomes.

*Buncombe NFP has assured that each required NFP element is met and continues to monitor for continued fidelity. The NFP Supervisor looks at the client elements, visit elements, staffing elements, the intervention elements and the clinical supervision elements. The **client elements** include: voluntarily participation, first-time mother, low-income criteria at intake, is enrolled in the program early in her pregnancy and receives her first home visit by no later than the end of week 28 of pregnancy. The **visit elements** include: client is visited one-to-one, one nurse home visitor to one first-time mother or family, the client is visited in her home, the client is visited throughout her pregnancy and the first two years of her child's life in accordance with the current Nurse-Family Partnership guidelines. The **staffing elements** include: nurse home visitors and nurse supervisors are registered professional nurses with a minimum of a baccalaureate degree in nursing, and nurse home visitors and nurse supervisors complete core educational sessions required NSO and deliver the intervention with fidelity to the Nurse-Family Partnership model. The **application of the intervention elements** include: nurse home visitors, using professional knowledge, judgment, and skill, apply the Nurse-Family Partnership visit guidelines, individualizing them to the strengths and challenges of each family and apportioning time across defined program domains. Nurse home visitors apply the theoretical framework that underpins the program, emphasizing self-efficacy, human ecology, and attachment theories, through current clinical methods. A full-time nurse home visitor carries a caseload of no more than 25 active clients. The **reflection and***

*clinical supervision element includes: A full-time nurse supervisor provides supervision to no more than eight individual nurse home visitors. Nurse supervisors provide nurse home visitors clinical supervision with reflection, demonstrate integration of the theories, and facilitate professional development essential to the nurse home visitor role through specific supervisory activities including one-to-one clinical supervision, case conferences, team meetings, and field supervision. The **program monitoring data elements** include: Nurse home visitors and nurse supervisors collect data as specified by the Nurse-Family Partnership National Service Office and use Nurse-Family Partnership reports to guide their practice, assess and guide program implementation, inform clinical supervision, enhance program quality, and demonstrate program fidelity. The **agency elements** include: BCDH is a successful provider of prevention services to low-income families. BCDH convenes a long-term community advisory board that meets at least quarterly to promote a community support system to the program and to promote program quality and sustainability. BCDH provides adequate support and structure to support nurse home visitors and nurse supervisors to implement the program and to assure that data are accurately entered into the database in a timely manner.*

Durham County:

The proposed Healthy Families East Durham expansion will implement the following quality assurance plan to follow Healthy Families America standards. To ensure completeness of information, each Family Support Worker will have chart reviews three times a year by the peer review team. This review will include all forms, releases, home visiting records, curriculum sheets, and assessments. The Family Support Worker will receive in writing an analysis of the chart review. One copy of this will also be filed, and the Family Support Workers will correct all errors at that time. A copy of the analysis will be routed to administrative staff so that corrections will be entered into the database as well.

Three different activities are used to evaluate the quality of services delivered by each Family Support Worker, and each activity is conducted twice a year. The first activity is the random selection of two clients from each caseload for a quality assessment phone call. The second activity is the shadowing of home visitors by their supervisor with either attendance at a home visit or reviewing an audio tape of the session. For these observations, supervisors will monitor the home visitor in the following areas: engagement, current child status, referrals to community resources, delivery of the Parents as Teachers curriculum, and use of problem solving techniques. The third activity is a case review that occurs during supervision between the home visitor and the clinical supervisor. This will include a review of home visiting records, client mental health issues, level of participation, attachment issues, child development, goal planning, and planned interventions by the home visitor. Fidelity will also be monitored through monthly reports completed by the home visitors that document the number and length of home visits, the content of the visits, and the number of referrals made.

The Parents as Teachers program has recently implemented more rigorous program standards that must be met by 2014. At this time, the existing Healthy Families Durham program already meets these standards. Home visitors have at least a bachelor's degree, services are provided for at least two years duration and for twelve month out of the year, and each family has a family-centered goal plan. Families receive at least twelve visits a

year, and home visitors do not provide more than sixty visits per month. Monthly parenting groups are held, developmental screenings (using the Ages and Stages Questionnaire) are conducted at least annually, and families are regularly connected to community resources. Family Support Workers recertify annually with the national office of Parents as Teachers and complete the required amount of professional development training. At this time, Healthy Families Durham meets the fidelity standards for Parents as Teachers.

Gaston County:

Gaston County Health Department (GCHD) will assure the quality of NFP and Parents As Teachers (PAT) by placing the PAT manager on the NFP Community Advisory Council and the Home Visiting Committee. These activities will assure the programs avoid conflicts, support each other's initiatives, and promote our mutual success.

For its part, GCHD is committed to continually improving the quality of its NFP by using program data to evaluate: client referral and enrollment processes, client health status, Nurse Home Visitor efficiency and effectiveness, and overall program strengths and shortcomings. We will enhance these activities with reflective supervision so Nurse Home Visitors continually work to improve our program outcomes.

To assure we meet the spirit and letter of NFP standards, GCHD will establish an environment where NFP staff will work diligently and energetically to conduct the program with fidelity, not fear retribution for making mistakes, continually review individual and collective job performance of Nurse Home Visitors, and identify our staff's strengths and use them to teach skills to other team members.

GCHD will constantly assess our NFP Program to measure its fidelity to program process and content; program outcomes; where individuals and the program need to make improvements; where staff are doing outstanding work and where they need help to improve performance; when our partner organizations make successful referrals and when we have problems making referrals; how we respond to unexpected issues; when staff have difficulty following NFP and county policies and procedures; and, when staff need continuing education to build and refresh their maternity and pediatric knowledge and skills.

Maintaining model fidelity will be our highest priority. Our staff understands the outstanding results secured by NFP can be replicated only if we explicitly follow program guidelines. To this end, GCHD will require all NFP staff to complete online and classroom trainings, as scheduled; the NFP Supervisor will use reflective supervision at weekly meetings with individual Nurse Home Visitors to resolve challenges and difficulties they are facing; and, the NFP Supervisor will seek the advice of an NFP consultant when she encounters difficulties.

When our team of Nurse Home Visitors experience same or similar problems, the NFP Supervisor will address the issues at NFP team meetings. Again, if the problems do not resolve, she will seek the advice of an NFP consultant to resolve problems quickly and permanently.

Northeast Partnership (4 counties):

One of the 18 model elements of the Nurse-Family Partnership is the collection of data and the use of the reports generated from this data to guide practice, assess and guide program implementation, inform supervision, enhance program quality and demonstrate fidelity. Through the process of completing the implementation plan to submit to the National Service Office to become a NFP site, NNFPC has committed to implementing the program with fidelity following all the required policies and procedures. This includes:

- *Ensuring that the model elements are implemented in a manner that is consistent with the design.*
- *Recruitment, retention and ongoing training of qualified staff.*
- *Maintaining the integrity of the staff to client and staff to supervisor ratios.*
- *The collection of valid and complete data by the agencies about all aspect of their clients and services rendered. This data will provide NNFPC key information to help manage and evaluate the program's implementation and results.*
- *Timely and consistent review of data and engaging in 'Plan Do Study Act' (PDSA) processes to address any areas in need of improvement.*

Furthermore, according the NSO, quality is monitored at every phase of the implementation of NFP including:

- *Pre-implementation phase: Implementation Plan Review*
- *First-year of program: Annual Plan, Year One Implementation Report, Fidelity Report*
- *Year 2 and beyond: Annual Plan, Maternal Outcomes, Child Health & Development Outcomes, Fidelity Report, Client Survey, and NFP Nursing Practice Assessment.*

NNFPC will also utilize the Community Advisory Board to monitor model fidelity by requiring a regular reports either as an agenda item or to be included in the regular report of the NFP Nurse supervisor. These reports would include and not be limited to: financial status report, strengths and challenges, summary of operations of NFP and concerns for individual counties and need for corrective action and/or recommended changes.

Toe River (2 counties):

Under the direction of Healthy Families America (HFA) national office, the Toe River Health District, in collaboration with partner organizations will oversee the project and implement the home visiting program in Mitchell and Yancey Counties. Successful completion of the program is a process that takes between 3 and 5 years.

The overall approach to home visiting quality assurance is based on the requirements of the HFA critical elements. Healthy Families America ensures fidelity through the Quality Assurance process of credentialing. Each critical element consists of a series of best practice standards that define the HFA model. Credentialing is granted by the HFA Credentialing Panel following completion of an extensive self-assessment, site peer visit, and satisfactory remediation of any standard rated out of adherence.

HFA and local demographics will determine the characteristics of the target population and program eligibility. Target population includes parents facing challenges such as single parenthood, low income, childhood history of substance abuse, maternal age less than 19, mental health issues, and/or domestic violence.

Families are enrolled prenatally or within the first three months after a child's birth. Once enrolled, services can be provided to families until the child enters kindergarten.

Assuring Model Fidelity

The provider will work to maintain fidelity of Healthy Families America by following protocol. TRHD ensures model fidelity through the following activities:

- a. Training will be provided to all home visitors and supervisors about the Critical Elements. Training can be provided to the entire staff or individual staff as needed.*
- b. Regular supervision, with appropriate documentation of supervision, is required. Supervision will occur weekly and will provide opportunities for the supervisor to monitor fidelity.*
- c. All Healthy Families client data will be reviewed on a determined schedule. Outcomes of quality assurance will be reviewed by the Program Manager.*
- d. Policies and procedures will be in place for the Healthy Families Program and writing policies and procedures will be a priority in the initiation of the program. Policies and procedures provide written guidance for ensuring program fidelity. All staff will be required to review policies and procedures annually.*
- e. Performance Evaluations provide another level of ensuring program fidelity. All staff will receive annual performance evaluations that describe in detail the tasks specifically required for their job. Performance Evaluations reflect the quality expectations of the program.*

Section 8: Technical Assistance Needs

While evidence-based home visitation programs are effective early childhood intervention strategies, to have the greatest effects possible for vulnerable families, the systems in which they operate must be integrated, and conducive to the service delivery system (# 1 Section 8).

Technical assistance is needed or anticipated in the following areas:

- strategies to build a sound state and local infrastructures which support quality replication of evidence-based home visitation programs,
- development of innovative delivery strategies to implement the selected model in rural communities with model fidelity,
- adaptation strategies for implementation of evidence-based home visitation models with special populations,
- development and delivery of effective messaging and marketing to build political support; and
- integration of model-specific management information systems into a state-level data base used by DPH administrators and policymakers.

NC is currently receiving technical assistance from the National Implementation Research Network (NIRN) to build a sound state and local infrastructures as well as development of a service delivery system necessary to implement and sustain Evidence-based home visitation programs that adhere to the fidelity of their models and also meet the unique needs of NC communities. NIRN is also providing technical assistance to NC to create a model for capacity building in low capacity/ high need communities to implement evidence-based programs. The National Service Office of NFP as well as Prevent Child Abuse America (purveyor of HFA) will work with us to develop innovative delivery strategies to implement NFP and HFA in the six (6) rural communities with model fidelity.

NFP will be implemented in communities which are homes to two (2) of NC's state recognized tribes; the Haliwa-Saponi Indian Tribe and Meherrin Indian Tribe. We will need to work with the Commission of Indian Affairs and tribal leaders to inform if any adaptation strategies may be needed and work in tandem with The National Service Office of NFP to develop adaptation strategies, if needed.

As sustainability of a continuum of effective, evidence-based home visitation programs is a goal, NC will need assistance in the development and delivery of effective messaging and marketing required to build public support.

NC will need technical assistance (TA) on strategies to build a sound state and local infrastructures as well as development of a service delivery system necessary to implement and sustain EBHVPs that adhere to the fidelity of their models and also meet the unique needs of NC communities. We will require TA to develop a model for capacity building in low capacity/ high need communities to implement EBHVPs as well as to develop innovative delivery strategies to implement EBHVPs in rural communities with model fidelity. Additionally, we will need TA, as well as the consent of program developer(s) to develop adaptation strategies for implementation of EBHVPs with special populations- specifically the military and Native Americans. NC has a significant presence of various branches of the armed forces with six military installations, and

has the eighth largest Native American population in the United States. There are eight tribes that are recognized by the State; however, only the Eastern Band of Cherokees is federally recognized.

We recognize the importance of establishing rigorous evaluation standards which must be part of our implementation. It is unclear if the federal government will set up a cross-site evaluation for all grantees or if individual states will be responsible for their own evaluation methodology. Therefore, NC has technical assistance needs around evaluation and developing more policy-relevant data.

The NC needs assessment indicated that multiple evidence-based models of home visitation should be implemented. We will request technical assistance to integrate the various model-specific management information systems into a tool that can be used by DPH administrators and policymakers to better assess the combined coverage and level of effort achieved across all of the models being implemented.

Finally, a challenge for NC will be to develop an effective marketing strategy for the expansion and sustainability of a full continuum of home visitation programs which meets the level and intensity of the individual family's needs. We have participated in a six month Frame Works Institute Study Circle and understand the need for our messaging to be systems change oriented. Continued TA in the development and delivery of effective messaging to build political support would be helpful to assure an ongoing state investment in building a continuum of evidence-based home visitation programs in NC. We are always ready to improve our planning, implementation; messaging and evaluation strategies so TA in any or all of the areas mentioned above would be welcome.

Identification, selection, and availability of funding for evidence-based or empirically validated home visitation programs (EBHVPs) are only the first steps in effective service delivery. In order for local communities to obtain similar results to those published by the developer of a program, attention must be given to supervising the implementation quality of the program. This is even more important with models which have various levels of flexibility in model elements meant to address community gaps. It is important to assure that the program is delivered with the highest degree of fidelity possible. The gap that exists between evidence-based interventions and actual implementation may be a significant hindrance to effective outcomes. Barriers to the implementation and incorporation of evidence-based practices into existing service delivery systems include: access to training and technical assistance (TA); the cost of program implementation; staffing issues; and compromised program fidelity when programmatic changes are made because of high start-up and implementation costs.

In NC, many communities have not yet developed the capacity to implement EBHVPs with model fidelity and will require strong support in their replication efforts. While NC funders have been shifting funding sources to support evidence-based programs, additional work is required to develop the necessary state-level infrastructure to facilitate and support the work needed at the community level which will increase capacity and ensure adherence to model fidelity. This will only be accomplished through the provision of ongoing consultation and technical assistance to community practitioners implementing EBHVPs at the level and intensity required to achieve model fidelity. North Carolina will use the capacity-building framework for the development

and implementation of our final plan. North Carolina began building internal capacity to meet community needs for implementation of EBHVPs in the early phases of this funding opportunity.

With regard to the various home visitation programs in NC, with the exception of the Nurse Family Partnership, no models or programs have the level of support to local implementing agencies required for model adherence. Despite the unprecedented level of consultation and technical assistance available to the NC NFP sites, in early implementation, each site had their own struggles to implement the model with fidelity. For other models with inadequate or no national or state level infrastructure to help support implementation with model fidelity, there is no question as to the variances to the models. The National Implementation Research Network (NIRN) states, "... the more clearly the core components of an intervention program or practice are known and defined, the more readily the program or practice can be implemented successfully." They also point out that once the core components of an evidence-based model are identified, several core implementation components are necessary for successful implementation and replication. These components are: staff selection; pre-service and in-service training; ongoing consultation and coaching, staff and program evaluation; facilitative administrative support; and systems interventions. Clearly with any model or models NC plans to replicate via this funding will need the infrastructure referenced above.

DPH is contracting with NIRN to assist in building a quality infrastructure which has the capacity to support our home visitation continuum both at the state and local levels. Therefore, NC must address the following areas, all of which are necessary, for successful implementation and replication of EBHVPs:

- **Definition of the NC Home Visitation Program:** Initially, program staff at all levels will participate in a professionally facilitated process that will clearly define the core elements of the model or models (selected in our final plan) while allowing for the flexibility necessary to meet unique local needs. This process will be repeated at least annually to ensure consensus on model refinements.
- **Comprehensive pre-service and in-service training for practitioners:** NC plans to build the capacity to deliver pre-service training for all newly hired practitioners that includes all role-specific content required by the model, if not available through the national convener. Models will not be selected until our final plan. However, once the final plan is determined, for each model selected we will need to develop pre-service and in-service training requirements.
- **Implementation of supervision best practice:** A best practice for supervision of each model in our final plan will be defined during the planning process. North Carolina will develop supervisor training and will provide on-site and/or group consultation and technical assistance to supervisors, by model type, to support the implementation of the model's best practice across all member programs.
- **Professional and program evaluation:** NC will develop and implement a comprehensive evaluation protocol to ensure consistent professional and program evaluation across all model types.

- Credentialing: Of the models chosen, 100% will receive national accreditation. NC will provide both technical and financial support to ensure that member programs can maintain or achieve credentialing.
- Information management: The state will have a variety of recordkeeping and data collection needs and will need to develop a management information system which could possibly link to national model data bases (if available). Through an evaluation contract, NC will assess options currently in use by different models and will develop and implement a common management information system that will meet both state-level reporting needs and individual model needs (if more than one model is selected in our final plan).
- Consultation and technical assistance: DPH will need to develop and/or contract for consultation and technical assistance to address the specific needs and challenges for each model selected in our final plan. This will include: implementation, staff selection, participant selection, engaging and retaining program participants, and adherence to model fidelity. The technical assistance needs will be met by the current contract with the National Implementation Research Network.

References Section 8

1. Innocenti, M. (2002). Evaluating programs in real time: Interpreting puzzle pieces. *Topics in Early Childhood Special Education*, 22 (2), 86-90.

Section 9: Reporting Requirements

The NC Division of Public Health, Children and Youth Branch will provide an annual report to federal officials including the Secretary of the Department of Health and Human Services in accordance with all legislative requirements, including required dates and formatting specifications. The report will specifically address the following six reporting areas:

A. State Home Visiting Program Goals and Objectives

- Progress made under each goal and objective during the reporting period, including any barriers to progress that have been encountered and strategies/steps taken to overcome them;
- Any revisions to goals and objectives identified in the Updated State Plan; and
- A brief summary regarding the State's efforts to contribute to a comprehensive high-quality early childhood system, using the logic model provided in the Updated State Plan. Any updates or changes to logic model will be noted.

B. Implementation of Home Visiting Program in Targeted At-risk Communities

Four at-risk communities have been targeted for the implementation of evidence based home visiting programs. These community sites are required, through contracts with the state, to submit mid-year and year end reports. Through these site specific reports and through the development of a state aggregated implementation report, the State will have the qualitative and quantitative data necessary to address the following updates:

- An update on the State's progress for engaging the at-risk communities around the proposed State Home Visiting Plan;
- Update on work-to-date with national model developers and a description of the technical assistance and support provided to-date through the national models;
- Based on the timeline provided in Updated State Plan, an update on securing curriculum and other materials needed for the home visiting program;
- Update on training and professional development activities obtained from the national model developer, or provided by the State or the implementing local agencies;
- Update on staff recruitment, hiring, and retention for all positions including subcontracts with the at-risk communities;
- Update on participant recruitment and retention efforts;
- Status of home visiting program caseload within each at-risk community;
- Update on the coordination between home visiting programs and other existing programs and resources in those communities; and
- A discussion of anticipated challenges to maintaining quality and fidelity of each home visiting program, and the proposed response to the issues identified.

C. Progress Toward Meeting Legislatively Mandated Benchmarks

The NC Division of Public Health, Children and Youth Branch, will provide an update on data collection efforts for each of the six benchmark areas, including an update on data collected on all constructs within each benchmark area including definitions of what constitutes improvement, sources of data for each measure utilized, challenges encountered during data collection efforts, and steps taken to overcome them. Our specific plan on collecting benchmark data is detailed in Section 5.

D. Home Visiting Program's CQI Efforts

The NC Division of Public Health, Children and Youth Branch, will provide an update on efforts regarding planning and implementing CQI for the home visiting program as described in Section 7. Copies of CQI reports developed addressing opportunities, changes implemented, data collected, and results obtained will be provided as report attachments.

E. Administration of State Home Visiting Program

In this section of the annual report, the NC Division of Public Health, Children and Youth Branch, will provide the following updates, if applicable:

- Updated organization chart;
- Updates regarding changes to key personnel;
- Updates on State efforts to meet the following legislative requirements, including a discussion of any challenges encountered and steps taken to overcome any identified challenges:
 - Training efforts to ensure well-trained, competent staff
 - Steps taken to ensure high quality supervision
 - Steps taken to ensure referral and services networks to support the home visiting program and the families it serves in at-risk communities and
- Updates on new policy(ies) created by the State to support home visiting programs.

F. Technical Assistance Needs

For this final section of the required annual report, the State will discuss any updates on technical assistance needs anticipated for implementing the home visiting program or for developing a statewide early childhood system.