North Carolina Early Home Visiting Landscape Analysis

Strengthening Systems to Support Families

August 2018

Katherine Bryant, MA, MSPH, Gerard Chung, MSW, Paul Lanier, PhD, MSW, and Sarah Verbiest, DrPH, MSW, MPH

UNC SCHOOL OF SOCIAL WORK Jordan Institute for Families

The North Carolina Early Home Visiting Landscape Analysis was supported by:

WINERFAMILY FOUNDATION

THE DUKE ENDOWMENT

JOHN REX ENDOWMENT

ChildTrust FOUNDATION

Acknowledgements

The Jordan Institute for Families team would like to thank the many individuals who provided their time, thoughts, and energy to this project. This was a collaborative effort and demonstrated the interest on the part of many stakeholders in advancing home visiting support for families in North Carolina. We appreciate all of the home visiting programs who completed the lengthy online survey, the key informants for making time in their busy schedules to talk with our team, our advisory group for their input and guidance, and Phil McDaniel of the Odum Institute at the University of North Carolina at Chapel Hill for providing technical assistance in the design of our maps. We also express our gratitude for the support provided by our three advisory groups:

Funder Advisory Group

- Easter Maynard – ChildTrust Foundation
- Cyndi Soter O'Neil – ChildTrust Foundation
- Kate Shirah - John Rex Endowment
- Phil Redmond – The Duke Endowment
- Liz Winer – Winer Family Foundation
- Jennifer Collman – Winer Family Foundation

External Advisory Group

- Deb Daro – Chapin Hall
- Bart Klika – Prevent Child Abuse America
- Lauren Supplee – Child Trends
- Miriam Westheimer – National Home Visiting Consortium

State Government Advisory Group (NC Division of Public Health)

- Chris Bryant
- Greer Cook
- Belinda Pettiford
- Tony Troop
- Marshall Tyson

Funders' Note:

The foundations supporting this landscape analysis are committed to improved well-being and healthy development for young children and families in North Carolina.

Through our work across the state, we have seen firsthand the need for an established early childhood system in North Carolina in order to make that vision a reality. Within this system, families would find a full suite of coordinated and comprehensive early childhood interventions to meet the range of challenges faced in these critical years. However, due to competing priorities, politics and funding issues, our state is only just beginning to create such a system.

This report focuses on a single component of that system – home visiting – as one of the best evidence-based strategies for ensuring the healthy development of North Carolina's children. Through extensive research, home visiting has proven to be a valuable investment for helping families grow to be strong, healthy, nurturing, and successful. The service is often a first entry point into the early childhood system for families that need the most support.

Home visiting services have been woven into our state landscape since 1991, funded by a range of federal, state and philanthropic support. North Carolina is fortunate to offer several nationally-recognized home visiting models in some communities, but most of the existing programs operate in funding and service silos and are not integrated into a larger early childhood system. This lack of coordination makes it difficult, if not impossible, to ensure that home visiting resources are equitably and sufficiently available throughout the state.

In 2016, a national study estimated that only **5,825** families with children under six years of age received evidence-based home visiting in North Carolina even though an estimated **572,800** families could have benefitted – a gap of 99%.

We can and must do better to meet the needs of North Carolina's children and families.

We believe this landscape analysis will serve as a launching point for a larger, coordinated investment in home visiting by public and private funders, policy makers and advocates as part of building a comprehensive system of care and support.

s/

ChildTrust Foundation

John Rex Endowment

Winer Family Foundation

The Duke Endowment

Executive Summary

All families need support to be stable, secure, and healthy. For many families, help is available from other family members, friends, and the community. Yet most families, especially those with newborns, can benefit from resources delivered through health care and human service systems. Home visiting programs offer additional support directly in the context of families' lives to improve the health and well-being of both children and parents. Along with many states, North Carolina is in the process of expanding the availability of home visiting services. This expansion is driven by research indicating that the positive benefits of home visiting outweigh the costs.

Expansion of home visiting service has occurred in specific geographic areas, with a patchwork of funding streams, leaving the current system fragmented, disconnected, and inefficient in meeting the needs of North Carolina families. Further, home visiting services are optimized when programs are part of coordinated system of family support services. The answers to many basic questions regarding home visiting in North Carolina have been largely unknown, including *How many families receive home visiting? What program models are operating and where? How large is the home visiting workforce in our state? Where are the largest areas of unmet need? What are the facilitators and barriers to statewide implementation?*

The purpose of this landscape study is to fill this gap in knowledge. With better information about the state of home visiting in North Carolina, policymakers and leaders are in a better position to make informed strategic decisions. This study used three evaluation methods: (1) literature review, (2) statewide survey, and (3) key informant interviews. The survey response was strong. The study sample represents over 70,000 home visits statewide in 2017, with over 5,300 families served, and a workforce of over 400 home visitors and supervisors. The methods and results are detailed in this report.

Based on the findings, a primary recommendation is to establish a statewide home visiting leadership structure. This leadership structure is required to further define goals for and carry out the remaining recommendations. Recommendations include the following:

1. Identify and implement a sustainable statewide leadership structure that is responsive to local communities.
2. Develop a statewide home visiting strategic vision and action plan that is completely integrated with a comprehensive system of care.
3. Identify new funding streams to support an integrated family support system anchored by early home visiting.
4. Build and support a well-trained, well-resourced workforce by developing a shared educational platform, providing continuing education, creating regional learning collaboratives, and providing skill-building opportunities for core competencies.
5. Report annually on a set of common indicators across all programs to provide information about the families served, outcomes achieved, and return on investment.
6. Assess community capacity, fit, need, and usability in the selection of models.
7. Improve coordination among programs and with other services, including medical homes and social services to comprehensively address family needs.

These recommendations are achievable and this landscape study provides a strong foundation of knowledge for the path forward. Next steps should include both "bottom-up" and "top-down" approaches. Although leadership structures are needed, the next efforts must include the voices of families, home visitors, and local program leaders to understand implementation "on the ground."

Background

Home visiting is an evidence-based strategy to promote maternal and child health. The health of families is essential to societal well-being. The prenatal, infancy and early childhood periods are a very important time for supporting healthy families. Mounting research from rigorous studies has supported a clear conclusion: Building a strong, early foundation of health is the best investment in improving outcomes throughout the life course. North Carolina has historically been a national leader in implementing strong early childhood systems and recent expansion of funding for home visiting provides an opportunity for our state to continue this investment and leadership.

The US Department of Health and Human Services Health Resources and Services Administration (HRSA) defines home visiting as programs that people voluntarily participate in to improve the health of their families and provide better opportunities for their children.[1] Numerous evidence-based home visiting programs exist and their services are delivered by a variety of professionals. The focus of home visiting activities includes providing prenatal and preventive care, increasing parents' awareness of appropriate child development, and teaching positive parenting strategies. The common feature shared by all programs is the supportive relationship formed between the home visitor and the family.

Despite the increased awareness of the benefits to health, family, and education outcomes, as well as cost savings that result from broad expansion (i.e., scale-up) of home visiting programs, the potential public health impact has not been fully realized in either the United States or in North Carolina. Barriers to the successful uptake of these programs have included challenges posed by the fragmented prenatal and early childhood systems, disparate funding streams, challenges with model implementation, and a poor system for matching families with programs. Given the growing interest in and support for home visiting, it is possible that a tipping point is within reach. A universally available comprehensive continuum of early childhood family services is possible. A better understanding of home visiting in North Carolina and the services provided to families is critical not only for future policy planning but also for identifying strategies to maximize home visiting efficiency and effectiveness.

Prior to the publication of this report, understanding about the home visiting landscape in North Carolina was largely limited to single evaluations of individual models and program reports to funders. As evidenced by the variance in the number of reported families served across studies, consistently monitoring and tracking service provision in North Carolina has been a challenge. The only population-level study of home visiting service use in the state, based on a 2012 nationally-representative survey, reported that approximately 85,703 families received any home visiting services for children between ages 0 to 3 years, which equates to about 17% of North Carolina's 0-3 child population.[2] Later in 2016, the National Home Visiting Resource Center published an information sheet about evidence-based home visiting models in North Carolina.[3] This work estimated that 5,825 families with 6,379 children were served in 2016.[4] The report estimated that 723,800 North Carolina children could benefit from

[1] US Department of Health and Human Services; Health Resources and Services Administration; Home Visiting https://mchb.hrsa.gov/maternal-child-health-initiatives/home visiting-overview

[2] Lanier, P., Maguire-Jack, K., & Welch, H. (2015). A nationally representative study of early childhood home visiting service use in the United States. *Maternal and Child Health Journal*, *19*(10), 2147-2158. https://link.springer.com/article/10.1007/s10995-015-1727-9

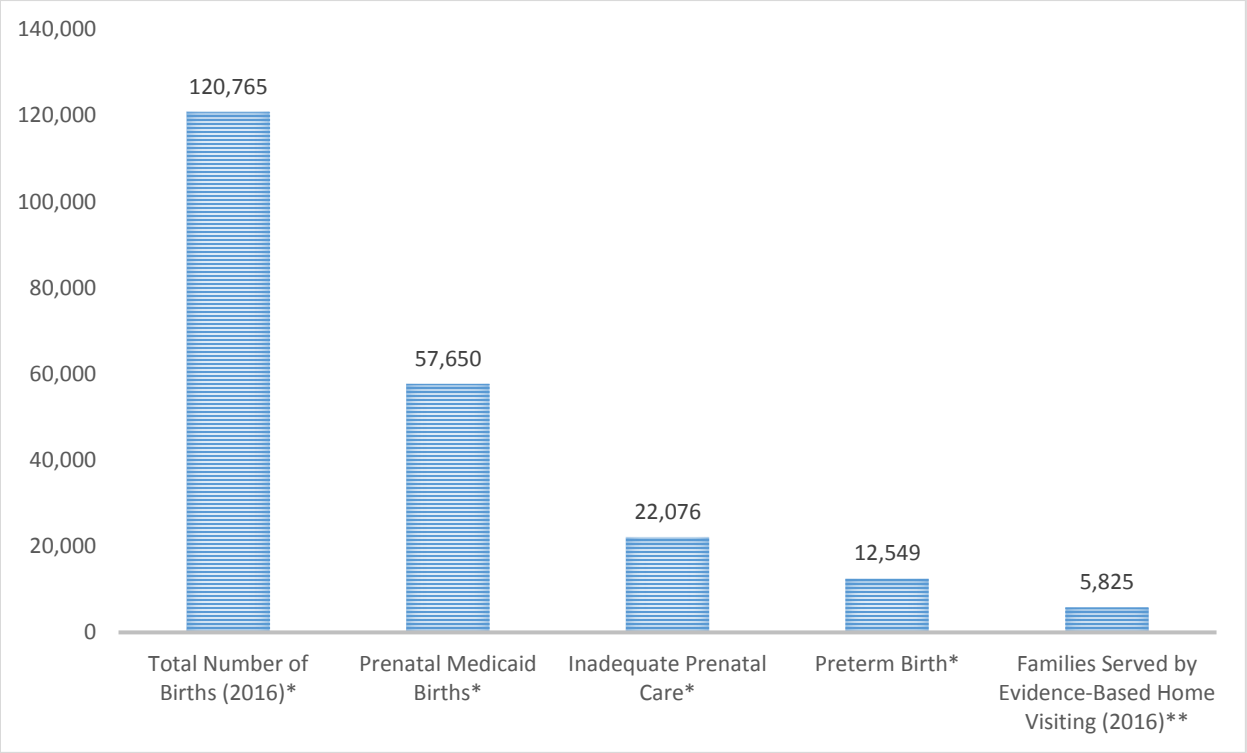
[3] National Home Visiting Resource Center. State Profile – North Carolina: Families Served Through Evidence-Based Home Visiting in 2016. https://www.nhvrc.org/wp-content/uploads/DS-NC-Profile.pdf

[4] National Home Visiting Resource Center. State Profile – North Carolina: Families Served Through Evidence-Based Home Visiting in 2016. https://www.nhvrc.org/wp-content/uploads/DS-NC-Profile.pdf

home visiting, indicating less than 1% of children under age 6 received evidence-based home visiting. Of those served, 89% of children were covered by public insurance, 71% spoke English, and 46% were white, 26% black, and 20% were multiracial. Of the children served by these programs, 40% were 1-2 years and 40% were 3-5 years old. Among the parents/caregivers, 37% did not have a high school diploma.

In 2016, North Carolina[5] recorded more than 120,000 births, indicating a potentially large difference between need for home visiting services and the availability of these services. The National Resource Center estimated 723,800 children in 572,800 families in North Carolina could benefit from home visiting services. Bridging this gap between families who need services and the services available is challenging without in-depth knowledge about the when, where, what, who, and how many of home visiting services in North Carolina. The findings of this North Carolina Landscape Study of Early Home Visiting provide an in-depth analysis of the field of early home visiting in its current form in North Carolina, with the larger goal of informing the expansion of services for children and families.

Figure 1. Number of Families who Could Benefit from Home Visiting in North Carolina



*Data retrieved from NC State Center for Health Statistics (https://schs.dph.ncdhhs.gov/schs/births/matched/2016/all.html)
**From 2016 NHVRC report: Models implemented in North Carolina included Attachment and Biobehavioral Catch-Up, Child First, Early Head Start, Healthy Families America, Home Instruction for Parents of Preschool Youngsters, Nurse-Family Partnership, Parents as Teachers, and SafeCare.

The challenges that North Carolina faces in delivering home visiting and family support services are mirrored across the country, creating an opportunity for North Carolina to model system transformation. The Heising-Simons Foundation, a leading funder of early home visiting policy research,

[5] NC Basic Automated Birth Yearbook http://www.schs.state.nc.us/schs/births/babybook/2016/northcarolina.pdf

recently convened a national think tank group with the goal of "*Building a Collective Vision for the Home Visiting Field*."[6] Given the increasing recognition of home visiting as part of a larger early childhood service network, the national group adopted four principles of network leadership: (1) mission, not organization; (2) node, not hub; (3) humility, not brand; and 4) trust, not control.[7] These principles informed the design, implementation, and dissemination of this landscape study.

Research Methods

The methodology, planning, and execution of the data collection and analysis for this assessment was a highly collaborative process. Three groups provided input in the study design and supported implementation. The ***Funder Advisory Group*** met monthly to support recruitment of study respondents and inform the overall applied value of the study. The ***External Advisory Group*** reviewed the methodology and the survey items to ensure the measurement strategy reflected best practice in home visiting research. The ***State Government Advisory Group*** reviewed the study methods and supported data collection from state-funded home visiting programs. All of the advisory groups had an opportunity to review and provide feedback on report drafts.

This study used three primary methods of data collection: literature review, statewide survey, and key informant interviews. The sections that follow provide a detailed description of the design, methodology, and analysis for each of these three methods. Appendix 1 provides a detailed inventory of the current home visiting programs we identified through our methodology. Appendix 2 provides the description of the evidence-based home visiting models provided from the Home Visiting Evidence of Effectiveness review. We recommend readers who unfamiliar with the different program models and continuum of available services review these resources to gain a better understanding of the available services.[8]

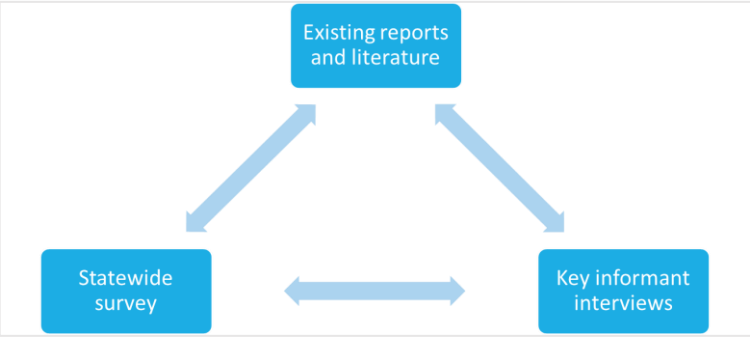


Figure 2. NC Early Home Visiting Landscape Analysis Research Methods

Literature Review

A literature search for reports and documents was conducted from February 2018 to May 2018. The search was limited to documents reported or published from 2012 to 2017 except for peer-reviewed empirical studies from journal or evaluation studies. Our review included peer-reviewed articles, white papers, published annual reports, and funder reports. The search focused on evidence-based as well as non-evidence-based home visiting programs that operated in the state of North Carolina, regardless of funding source. To be included in the review, a program had to meet the following inclusion criteria:

- delivery of more than one home visit is an essential program component;
- serves children and families at some point from pregnancy through age 5 years of the child; and
- focus on prevention and early intervention (e.g., not exclusively a treatment model).

[6] http://www.johnsonfdn.org/content/building-collective-vision-home visiting-field
[7] Wei-Skillern, J., Ehrlichman, D., & Sawyer (2015). The most impactful leaders you've never heard of. *Stanford Social Innovation Review.* https://ssir.org/articles/entry/the_most_impactful_leaders_youve_never_heard_of
[8] https://homvee.acf.hhs.gov/

This search identified a variety of documents, ranging from annual reports of organizations; peer-reviewed articles from academic journals; and evaluation reports from national program offices, state departments, and research centers. A summary of the search strategy and the terms used is provided in Appendix 3.

Statewide Survey

Information about individual home visiting programs across the state was collected through an online Qualtrics software-based survey. The survey was developed through an iterative process with feedback from the study's three advisory groups. The survey was pilot tested with one home visiting site prior to statewide distribution. A print version of the survey is included in Appendix 4.

Recruitment and Response. Advisory group members and key informants assisted in creating an inventory list of home visiting programs. This list was used to develop personalized survey links unique to each site, which allowed respondents to complete portions of the survey, logout, and return later to enter additional information without data loss. In addition to the survey invitations sent to targeted respondents, an anonymous survey link was distributed widely through existing communication channels, including partner e-mail lists (e.g., Listservs). Advisory group members, including funders, reached out directly to the programs with which they were connected to request that they complete the assessment. The survey was open between April 1 and June 6, 2018. Given that the exact number and type of home visiting programs in North Carolina is unknown, it is possible that existing programs were not identified for study recruitment. Therefore, the exact response rate is unknown. However, among the six prominent models identified as *evidence-based models* by the federal Maternal Infant and Early Child Home Visiting Program (MIECHV), which include Child First, Early Head Start, Healthy Families America, Family Connects, Nurse Family Partnership, and Parents As Teachers, we received at least partial responses from 80 out of 86 sites (93% response).

Data Analysis. Univariate descriptive statistics were calculated for survey responses using SPSS software. Data were collected at the agency or site level. To make estimates representative of the families and home visitors statewide, the estimates for variables describing families or home visitors within a program were weighted by the number of home visitors employed at each site.

In addition to descriptive quantitative statistics, our analysis used two systems science methods to visually depict home visiting services and systems. First, geographic information systems (GIS) methods were used to describe the location of home visiting services across the state using ArcGIS software. This mapping was accomplished by geocoding the location of the agency main office. Survey respondents submitted information regarding the number of families served in each ZIP code across the state. Although an imperfect proxy for neighborhood, ZIP postal code level data was collected based on assumptions that as addresses are needed to conduct home visits, agencies would be able to aggregate the number of families served by this small-area geography. To identify the number of children aged 0-3

years (a common eligibility group for home visiting), 2016 American Community Survey 5-year estimates from the U.S. Census were applied. Using these two data points, a bivariate choropleth map (i.e., a map that indicates average values across an area using different colors or symbols) was created to visually identify potential areas of home visiting saturation and unmet need for services.

The second method adopted from systems science was systems mapping. We developed two graphic systems maps for this study using Kumu software and network information from respondents. The survey asked respondents to identify the other agencies in their local area that they consider to be collaborative partners. Systems mapping within a given system, as defined by a county area, makes it possible to visually describe the connections between home visiting agencies and other service providers in their area. Then, the local systems maps can be compared to identify high- and low-coordinated systems. We provide one example in this report and additional graphs will be added to the online data supplement. We also examined the system of leadership in areas related to home visiting at the state level. We identified connections of state leaders across prominent groups, initiatives, and task forces relevant to the field of home visiting. The purpose of this analysis was to explore whether the lack of coordination reported in qualitative key interviews was reflective of broader trends in leadership and connectivity.

Key Informant Interviews

To triangulate survey data and results from the literature, the research team conducted qualitative interviews with key informants (i.e., stakeholders and state leaders). The purpose of these interviews was to make meaning of the information collected in the first two phases of the study and explore shared understanding of the current home visiting landscape. Questions posed to participants focused primarily on policy and practice strategies to improve the field of home visiting in North Carolina.

Qualitative methods. Key informant interviewing is an in-depth qualitative method used to gather information from individuals with first-hand knowledge of details regarding a specific policy or practice system. The participants selected for key informant interviews were considered experts who were highly informed about current policies and procedures in the home visiting field. Further, key informant interviews were used to gather diverse perspectives regarding experiences of those who interact with different components of the policy system. To support the likelihood that interviewees would provide candid responses, their specific responses and names will remain confidential and the results represent aggregate responses based on themes that emerge from data collected from the overall sample.

Sampling and Analysis Strategy. A modified purposive/snowball sampling strategy was applied for interviews. Conversations with advisory group members led to the identification of key leaders and stakeholders with clear connections and perspectives on home visiting in North Carolina. These key leaders and stakeholders were interviewed to provide a more complete understanding. Detailed notes were taken during the interviews, many interviews were audio recorded, and key comments were recorded verbatim as possible. Interview data were analyzed using thematic coding based on grounded theory methodology. Two members of the team conducted interviews, then themes were developed using a concept mapping process. After interviewing an initial group of 10 individuals, the research team determined that full data saturation on several key areas had not been reached. Therefore, an additional eight interviews were conducted, yielding a total sample of 18 key informant interviews, which resulted in theme repetition. The interviews were approximately an hour in length and conducted largely by telephone.

Results

Literature Review

Although we conducted a thorough review of the literature, an analysis of reports, publications, and other materials can provide only a limited view of the landscape of home visiting in North Carolina. A key finding from the literature review was that public reporting about home visiting programs, processes, and/or outcome evaluations have been inconsistent, uncommon, and not always of high quality. Only limited examples are available of rigorous research and evaluation conducted with and for home visiting programs in the state. The sections that follow describe the type of information gleaned and shared publically about these programs.

Reports. Agencies across the state publish annual reports on their organization's website. Because some organizations are collaborations among counties, reports from these organizations might include information from several counties. For the 2012–2017 period, at least one annual report was found for the following seven programs: Nurse Family Partnership (NFP), Healthy Families America (HFA), Early Head Start (EHS), Parents as Teachers (PAT), Home Instruction for Parents of Preschool Youngsters (HIPPY), Child First (CF) and Care Coordination for Children (CC4C). Organizations have different reporting formats, content, and reporting time frames (e.g., 2012 annual report; 2012-2013 annual report). Some reports do not differentiate between the home-based services from the center-based services. Some research centers (state based or out of state) published evaluation reports for models in North Carolina.

Peer-reviewed studies. For four programs we found academic journal articles reporting on empirical studies that used North Carolina samples. Most of these papers reported results of evaluation studies. Research quality varied across studies, ranging from studies that used a single-group design, to quasi-experimental designs with comparison groups, to randomized controlled trials. Slightly more than half of these studies were published during the 2012-2017 period, with the remaining studies completed before 2012. No studies were found for the programs not considered "evidence-based." Among the evidence-based programs, slightly more than half had at least one peer-review study or a study conducted by a research center.

Target population and number of visits. Various indicators were used to report on the number of participants served by the home visiting programs. Some organizations reported on the number of families that participated in the program, some on the number of parent-child dyads, some on the number of parents, and some on the number of children. Because several of the organizations included more than one county, the reported number of participants might be for several counties or a single county. Based on these reports, the number of families served by the different evaluation sites per year (2012 to 2017) ranged from 132 families to 244 families. The number of parent-child dyads per year was 46 (reported by one organization). The number of parents who participated ranged from 14 to 45 per year. The number of children who participated ranged from 60 to 991. Not all organizations report the number of home visits provided. Based on the available information, the average number of home visits completed each year per program ranged from 1,493 to 1,600 visits. Similarly, not all organizations reported the number of families served. Based on the information organizations reported and our calculations, the programs provided about 11 home visits per family.

Program expenses and funding. Only a few of the reports included information on program costs and expenditures. Based on this limited pool of information, program expenses per year for evaluation sites ranged from $253,658 to $379,467, which we calculated to be about $2,200 to $2,619 per family each year. This information is based on published evaluation studies, the costs to fully implement a program are higher. In the next section of this report, we also provide information regarding program expenses collected from the survey of existing programs. For a national comparison, Mathematica produced a 2014 report on the costs of evidence-based home visiting in 13 states.[9] This report found an average operating cost of about $580,000 per year per program and an average cost per family of $6,583. Most programs have multiple streams of funding that include resources from agencies such as Smart Start, state and/or county governments, foundations, and national program offices.

Staff training. Some of the organizations described the program manuals used in their programs but other organizations did not clearly describe the preparation they required home visitors to have or whether they provided training for home visitors. All of the evidence-based home visiting models have stringent training requirements that were likely not documented fully in evaluation reports. The survey results in the next section provide more information about the level of training and supervision provided to home visitors.

Outcomes. The outcomes reported varied within and across programs. In addition, the indicators used to measure key performance across counties varied within the same program, leaving it uncertain if these local programs are in line with the national program's key indicators. Few organizations indicated an expected time lapse before achieving their program targets (e.g., "caregivers participating *over a year* will demonstrate improved parenting quality") whereas most did not indicate an expected length of services. Some, but not all, organizations reported the "dosage" of the interventions in terms of number of home visits (e.g., "caregivers participating in at least 28 home visits will demonstrate positive growth in parenting quality"). Most organizations did not report attrition of participants from the program. Only one organization differentiated between families with greater needs and families with lower needs, specifying different outcomes for the two groups of families. Most organizations reported their outcomes by indicating the percentage of participants who achieved a target (e.g., 90% of families achieved a certain goal). However, the program descriptions were unclear if these achievements were expected or targeted. Only a few organizations identified their *expected* percentage versus their *actual* percentage achieved.

In summary, existing evaluation studies and program reports are currently inadequate to provide a thorough overview of the existing landscape of home visiting programs delivered in North Carolina. Improving the capacity to conduct regular evaluations and establishing common reporting metrics would allow for the potential to aggregate information across models and sites in the future. Given the limitations of current evaluation reports, the next section provides information from a statewide survey

[9] http://www.mathematica-mpr.com/~/media/publications/PDFs/earlychildhood/EBHV_costs.pdf

of home visiting programs. Although there are also limitations to this approach, the survey is a starting point to provide comprehensive information about the statewide home visiting landscape.

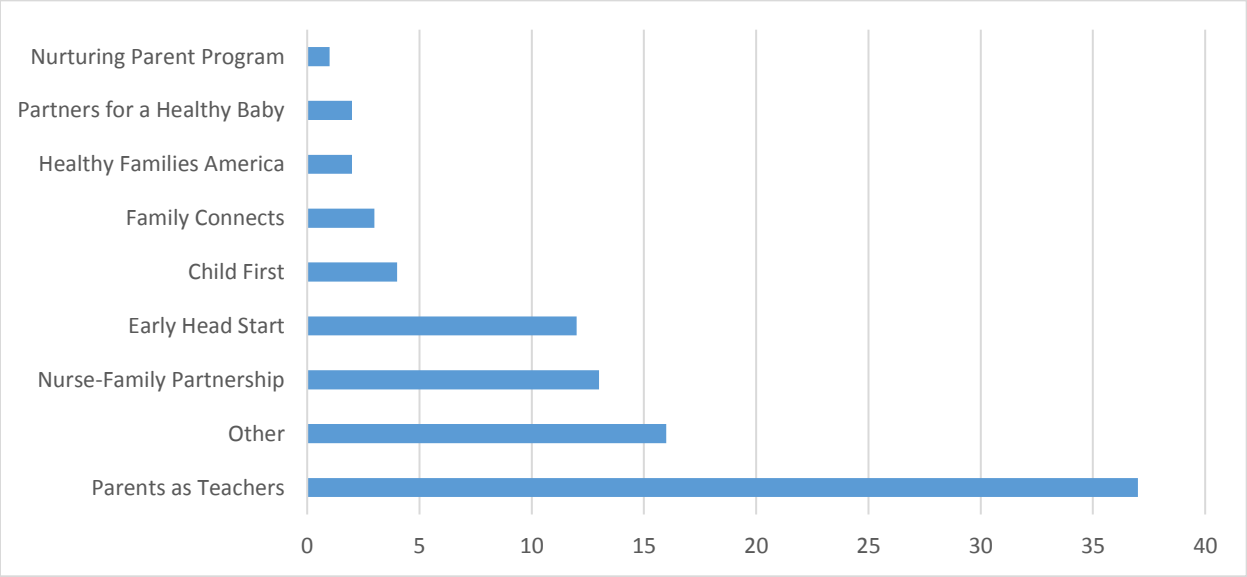
Statewide Survey

Detailed survey response tables can be found in Appendix 5. Collection of survey data was closed on June 1, 2018. Although returned surveys varied by the extent of completeness of responses, 93 organizations responded to the survey. In total, the survey respondents reported 73,088 home visits in calendar year 2017 serving 5,300 families across the state. However, these estimates represent only those programs who responded to the survey, which were primarily delivering intensive "evidence-based" models. The actual total number of families receiving any home visiting services is likely much higher. Of note, the figure from the survey results is similar to the NHVRC estimate that 5,825 families received home visiting from evidence-based home visiting in 2017.[10]

The majority of respondents were private non-profit organizations, followed by governmental agencies. The responding organizations provided home visiting services in 78 of 100 North Carolina counties (based on *n* = 88 survey responses). Because the survey was designed to be a representative sample of home visiting in North Carolina, some results are weighted to reflect the variation in agency size in the sample. Weights were created based on the number of home visitors employed at the respondent agency (range 1-20). Key results are described below.

As shown in Figure 2, survey respondents most frequently reported implementing the PAT program, followed by NFP. About three-fourths of programs (73%) reported being accredited or certified by a

Figure 3. Survey Respondent Home Visiting Program Models (N=90)



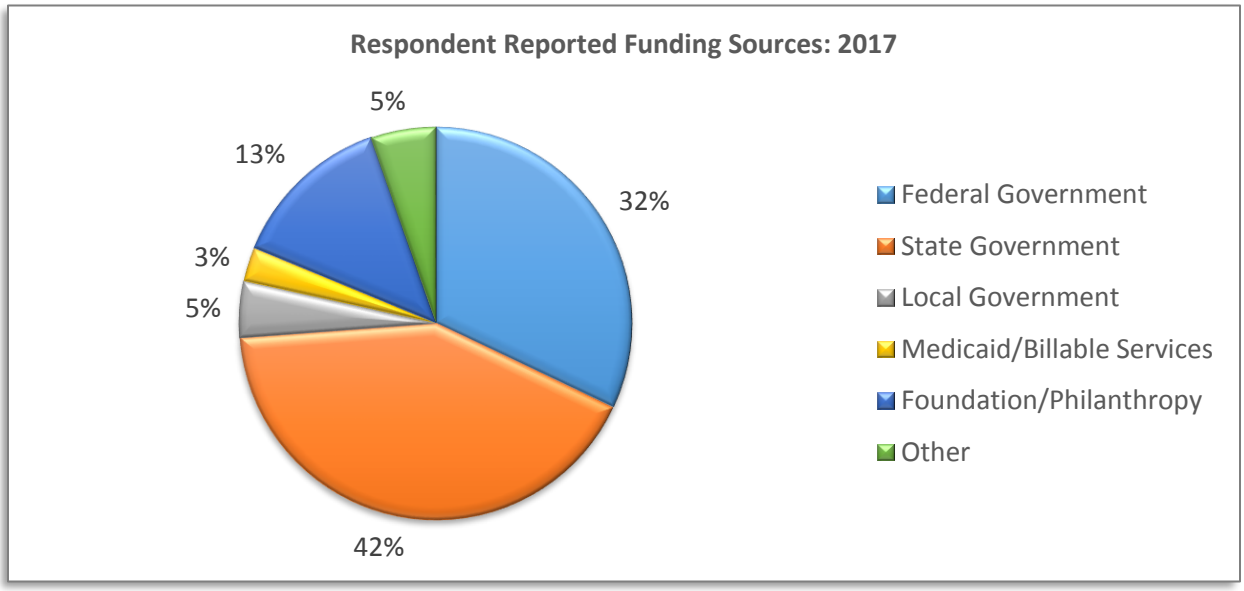
[10] National Home Visiting Resource Center. State Profile – North Carolina: Families Served Through Evidence-Based Home Visiting in 2016. https://www.nhvrc.org/wp-content/uploads/DS-NC-Profile.pdf

national organization. The longest established program in the state was first accredited in 1991 and the most recent was in 2018.

Figure 3 displays the reported percentage of program funding by source. State government provided almost half of funding, and federal government sources provided more than a fourth of program funds. The remainder of funds came from other sources, including local government, Medicaid/billable services, and foundation or philanthropic support. More than 35 different foundation/philanthropic organizations were listed as funders of home visiting programs across the state.

We attempted to identify the specific funding amounts for home visiting services across these funding streams. The NC Partnership for Children uses Smart Start funding to support home visiting through the local partnership network. In fiscal year 2016-2017, $7.3 million was allocated for intensive home visiting (e.g., Parents as Teachers) and $600,000 was allocated for short-term home visiting for newborn health services (e.g., Family Connects).[11] In fiscal year 2017, $3.2 million was allocated to North Carolina from the federal MIECHV formula grant.[12] This funding supported two models (HFA and NFP) delivered in 13 counties.[13] Other small sources of government funding for home visiting include the Maternal and Child Health block grant, the Temporary Assistance to Needy Families block grant, Medicaid reimbursement, and NC General Assembly allocations. Exact amounts allocated for home visiting specifically from these sources is unknown. The total detailed amount of funding from philanthropic and other local sources is unknown and was beyond the scope of this report. Future efforts should be made to better understand the home visiting funding landscape.

Figure 4. Home Visiting Funding Source (n=76, weighted)



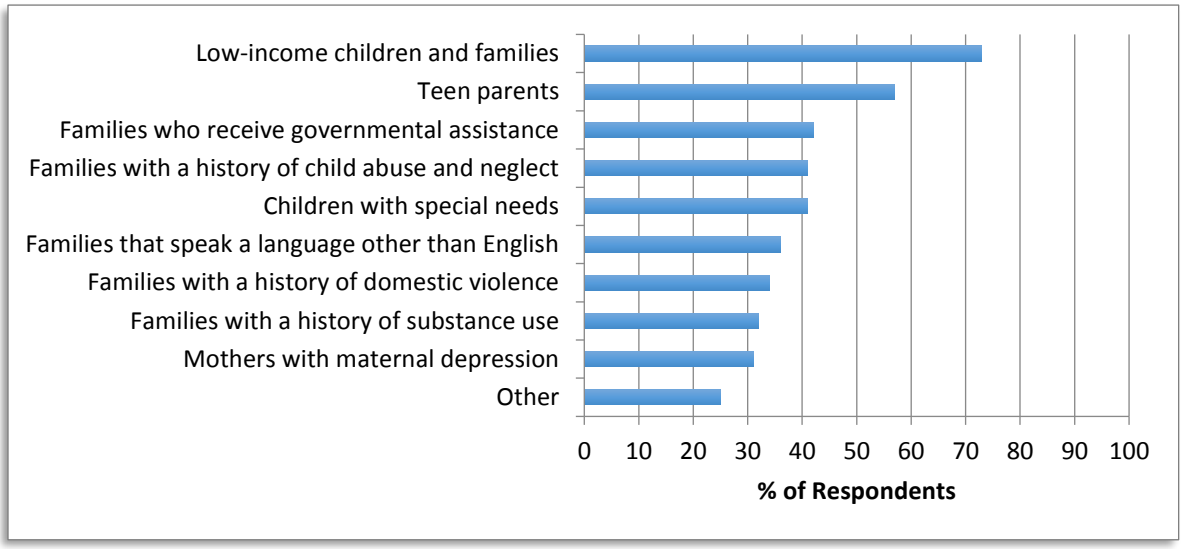
In all, 62 organizations reported their cost of services; best estimates of the per-family costs ranged from $200 to $11,556, yielding an average per family cost of $3,519. These cost differences most likely represent differences across models related to salaries for home visitors with different qualifications.

[11] Personal communication, Kim McCombs-Thornton, NCPC, June 28, 2018
[12] https://mchb.hrsa.gov/maternal-child-health-initiatives/home-visiting/fy17-home-visiting-awards
[13] https://mchb.hrsa.gov/sites/default/files/mchb/MaternalChildHealthInitiatives/HomeVisiting/pdf/nc.pdf

The 2014 Mathematica cost study reported similar variation between models.[14] In that study, average per family cost for PAT was $2,372 and for the NFP program the average cost was $8,003 (in 2012 dollars). The Family Connects model, which was not reviewed in the Mathematica report, is estimated to cost approximately $700 per eligible birth.[15] Factors affecting per family cost include geographic location, organizational factors, number of families served, and intensity of services. Home visitors with professional degrees typically have a higher salary than paraprofessional home visitors. Survey responses further indicated that staffing patterns and required training vary somewhat by model, but overall, the review findings indicate a professionally trained and supported workforce. It is important to note that our results do reflect that PAT is the most common home visiting model implemented in the state. We present all findings in aggregate, but comparison between models would likely show significant variation. Some specific findings are described below:

- On average, a home visiting agency was staffed by 4 full-time home visitors, 1 part-time home visitor, and 1 supervisor.
- Most programs (60%) require home visitors to have a 4-year degree. In most cases, respondents indicated that their program required a minimum level of experience (75%) and individual certification/ accreditation (66%)
- Starting salaries for home visitors are most often in the $30,000-40,000 range, with higher salaries for models staffed by nurses or other professionals.
- On average, monthly supervision of home visitors totals 4 hours of individual supervision and 3 hours of group supervision, with an average of 3 direct observations by supervisors per month.
- Almost all programs provide ongoing training and professional development through their local organization (94%) or through a national model (98%).

Figure 5. Home Visiting Program Target Service Populations (n=81, unweighted)



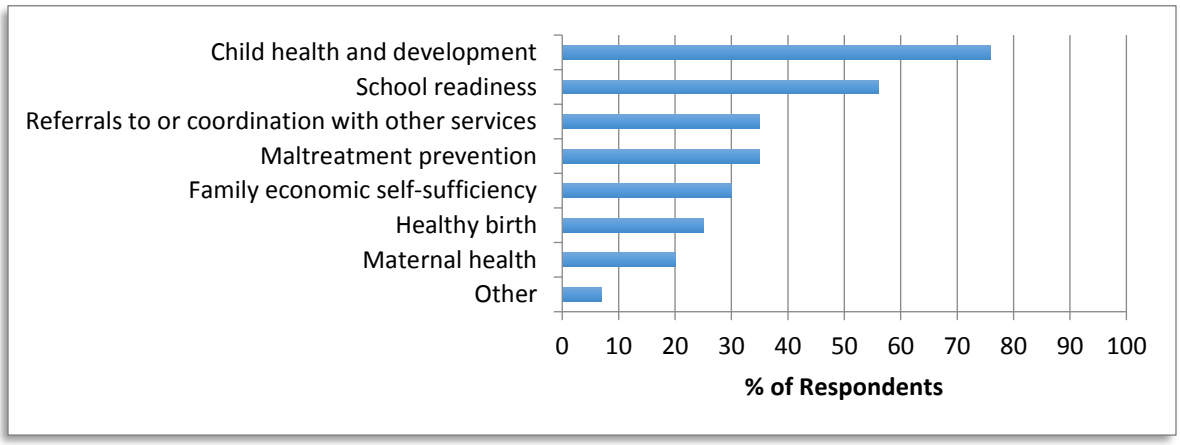
When asked to indicate the target population for services (Figure 4), respondents most frequently identified "low-income children and families," followed by "teen parents." When asked to report the target outcome for home visiting programs, the most common response was "child health and development," followed by "school readiness." Notably, the least common target population was

[14] http://www.mathematica-mpr.com/~/media/publications/PDFs/earlychildhood/EBHV_costs.pdf
[15] https://www.durhamconnects.org/familyconnects/

"mothers with maternal depression" and the least common program goal was focused on maternal health and maternal depression. This finding likely reflects the greater availability in the state of home visiting programs that focus on school readiness (i.e., PAT and EHS) relative to programs that focus on maternal and child health (i.e., the NFP, Child First, Family Connects).

One important note, several public programs deliver home visiting or home-based maternal and child health services that do not use an evidence-based program model like those identified in this survey. These services include the federal Healthy Start program (NC Baby Love Plus), the Healthy Beginnings Program (Minority Infant Mortality Reduction) program, and the Adolescent Parenting Program coordinated by the Women's Health Branch in the NC Division of Public Health. Although these programs were not well-represented in the study survey, these programs were identified during interviews with program directors as providing home visiting services to pregnant and new mothers across the state. NC Baby Love Plus and Healthy Beginnings programs conduct outreach to high-need families and offer both case management and health education services. These programs serve counties with the highest rates of infant mortality in the state. The Adolescent Parenting Program (APP) is implemented with at least one full-time coordinator with a caseload of 15-25 pregnant or parenting teens; home visiting is one part of the program. Counties currently providing APP programs, along with program contact information, are available here. Likewise, Community Care of North Carolina Pregnancy Medical Home Program, inclusive of Pregnancy Care Managers employed primarily through local health departments, provide care management services to pregnant and newly postpartum women with high-risk conditions who have Medicaid. Services are delivered face to face in the clinic, community, or home setting. Although home-based service delivery is happening in some counties, this approach is not universal and was difficult to quantify for this study. As efforts to coordinate programs serving pregnant and new families take place it will be important to include leadership from these services as well. Informal information sharing also takes place, particularly around training opportunities, but other likely areas for collaboration also exist. Further, the North Carolina Early Intervention Branch delivers the statewide NC Infant Toddler Program as part of federally-funded Part C services of the Individuals with Disabilities Education Act (IDEA). The services provided to families of children with special health care needs through this program are a critical piece of the continuum of home-based family support services.

Figure 6: Home Visiting Program Target Outcome(s), N=81, Unweighted



Respondents were asked to report on the demographic characteristics of families they serve as well as their respective home visiting staff. Statewide, 30% of families served by home visiting were non-

Hispanic White, 36% were non-Hispanic Black, and 27% were Hispanic/Latinx. Regarding the home visiting workforce serving these families, 46% of home visitors in the state were non-Hispanic White, 31% non-Hispanic Black, and 20% Hispanic/Latinx. Therefore, it is likely that families often do not receive home visits from someone with a similar race/ethnic background. Further, 24% of families served speak Spanish in the home, and 28% of home visitors are able to speak Spanish during home visits. This is a positive indication that Spanish-speaking families are likely receiving services in Spanish. Another important demographic indicator is the finding that the vast majority (90%) of families served by home visiting are eligible for Medicaid benefits. Given that less than 5% of current home visiting financing comes from Medicaid, this source or other billable services may represent not only a missed opportunity for a sustainable funding source but also an opportunity to connect cost savings of home visiting with later Medicaid spending.

Regarding Medicaid funding for home visiting, a recent NC General Assembly report outlined a plan for the NCDHHS to implement a pilot program to provide coverage for evidence-based home visits through Medicaid and NC Health Choice (the NC Children's Health Insurance Program [CHIP]).[16] The pilot is currently in development and will begin in Cleveland and Johnston counties this year. More information regarding the pilots is forthcoming and will represent an important opportunity to better understand the potential costs and benefits of home visiting to health system.[17]

Several survey items asked about organization-level measures. About a third (37%) of programs reported participating in a *centralized intake system.* However, this term was not defined, so respondents' likely varied in their interpretation and understanding of what such a system entails. To our knowledge, the only robust centralized intake system operating in the state is the Wake Connections program delivered by Wake County Smart Start.[18]

Further, at the time of the survey, 72% of programs reported they had a waitlist for services. Although one program reported 110 families on their waitlist, an average of 26 families were waitlisted. Long waitlists and the lack of participation in centralized intake are likely indicators of a need for better service coordination, integration, and program capacity.

One goal for this study was to provide a detailed picture of the home visiting service landscape across North Carolina at a small geographic level. Although prior reports had aggregated available services at the county level, currently three counties (Durham, Forsyth, Guilford) have only one universal program (Family Connects) that serves all new families with at least one home visit. To capture variation in service access within counties, the study survey collected families' information at the ZIP code level. This approach was based on the assumption that because home visiting requires collecting family addresses, the programs would be able to readily aggregate services by ZIP code. To assess unmet need, the number of families served by any program was compared with the number of children ages 0-3 years living in a given ZIP code as reported in the U.S. Census 2016 American Community Survey 5-year estimate. For programs that did not report this information, the research team filled in missing values using information from existing reports and other public data.

[16] https://www.ncleg.net/documentsites/committees/BCCI-6660/Reports%20to%20the%20LOC/Reports%20Received%20in%202018/SL%202017-57%20Sec%2011H.14%20Home%20Visits%20for%20Pregnant%20Women%201.24.18.pdf
[17] https://www.ncleg.net/documentsites/committees/BCCI-6660/Meetings%20by%20Interim/2017-2018%20Interim/March%2013,%202018/Item%206%20JLOC-MedNCHC_HomeVisits_20180313_PM.pdf
[18] https://wakeconnections.org/

As recorded in the U.S. Census, North Carolina has 829 ZIP codes. Overall, survey respondents reported serving families in 489 (59%) ZIP codes in the state. The ZIP code-level data were geocoded and mapped using ArcGIS software to provide an indication of areas in the state where families appear to be underserved (relative to other areas of the state). It is again important to note that universal home visiting is provided via Family Connects in Forsyth, Guilford, and Durham Counties. However, the Family Connects model is a short-term program (1-3 visits) and relies on referrals to other intensive home visiting programs in the community. Therefore, we did not include Family Connects in these GIS maps. Information from Family Connects is included in all other analyses.

Figures 6, 7, and 8 are best viewed together. We also recommend the reader use the online data supplement to inspect these maps further and "drill down" on their local geographic area or region of interest. Figure 6 displays the total population of young children (0-3 years) living in North Carolina by ZIP code. This is simply to display where young children are located in the state. For an indicator of "need", this assumes that all children would potentially benefit from home visiting. Figure 7 displays the total number of families who received home visiting from any program in 2017. These data are primarily from self-report survey with some missing data filled in from available program reports. Figure 8 combines these two variables (number of young children, number of families served by home visiting) to explore possible areas of met and unmet need.

We recommend readers interpret Figure 8 by examining the 4 corners of the legend and associated areas of the map. Perhaps the first observation to make is the number of areas shaded white (bottom-left of the legend). These are areas of the state with few children and also few families served by home visiting. Next, on the upper-right corner of the legend, the dark blue indicates areas with a high number of children and also a high number of families served. Next, the top-left or dark pink shaded areas are those areas with high numbers of children and low number of home visiting services. These pink and purple areas would indicate higher unmet need relative to other areas of the state. Last, the bottom-right portion of the map, or those shaded in teal and light blue, represent areas with greater penetration of services in lower population areas.

Taken together, we interpret these findings to first indicate a lack of a clear pattern in access to home visiting services. Although there are some trends, there are also exceptions. For example, rural areas of the state tended to have greater unmet need (pink areas of the map). However, there are rural areas that tend to have better access (light blue and teal areas). Similarly, urban areas of the state tend to have the greatest met need (darkest areas of the map). However, it appears that services are inconsistent across a given urban metro area, and, there are several rural areas that have high service levels.

Notwithstanding the significant variation in access across the state, these data indicate a general trend of an urban-rural difference in access to home visiting. There are several reasons why home visiting services might have greater population penetration in urban areas of the state relative to rural areas. Implementation of evidence-based programs in rural areas might be more challenging due to less availability of a trained work force, fewer philanthropic funding opportunities, and the logistical challenges of delivering a home-based program over wide geographical area or in isolated areas. For planners and policymakers, it may be worth considering areas of the state where no home visiting programs are currently available. For these regions, implementing home visiting programs would likely require support for pre-implementation activities such as infrastructure development and planning support.

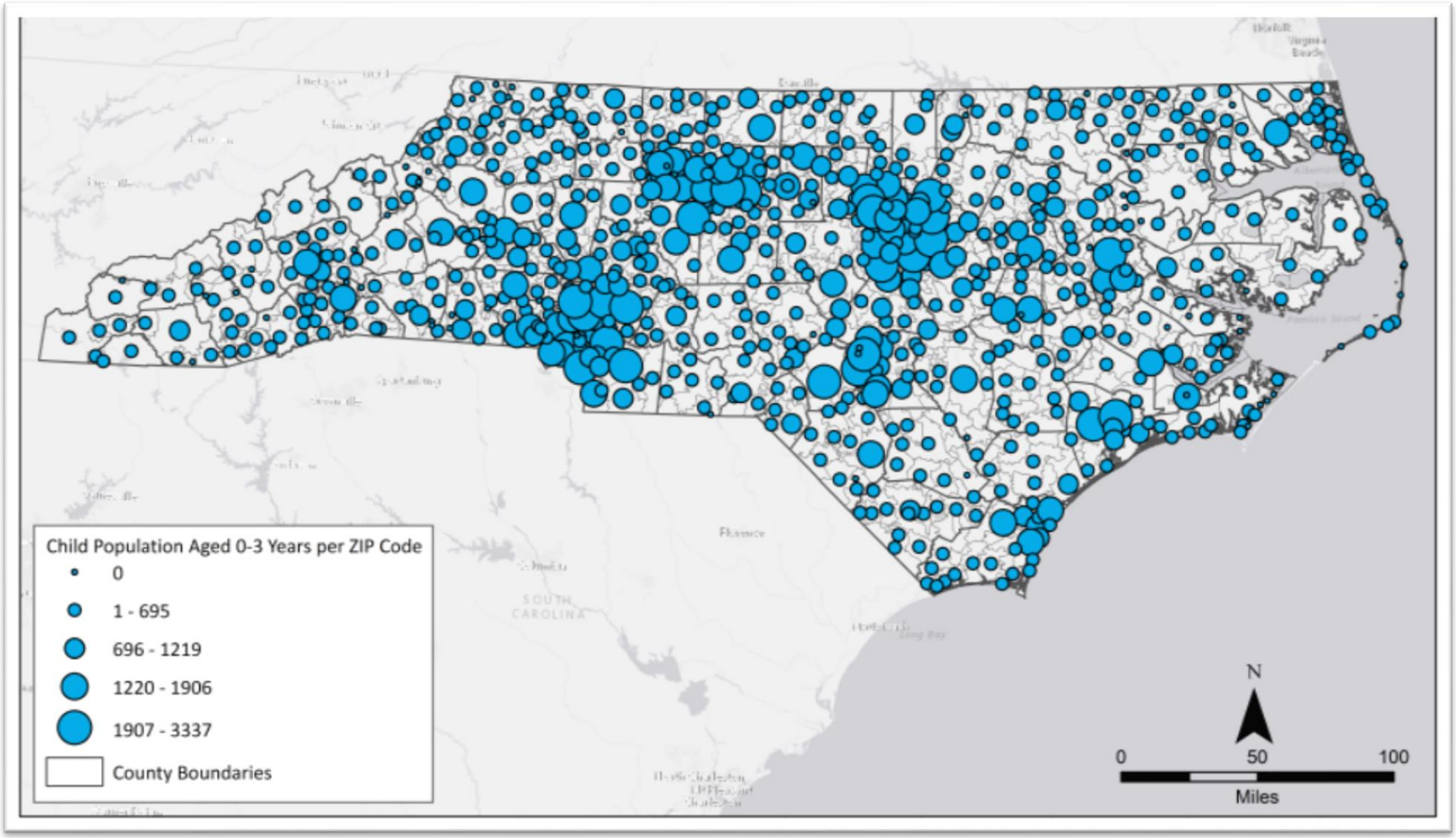


Figure 7. Map of the Early Child (0-3) Population in North Carolina

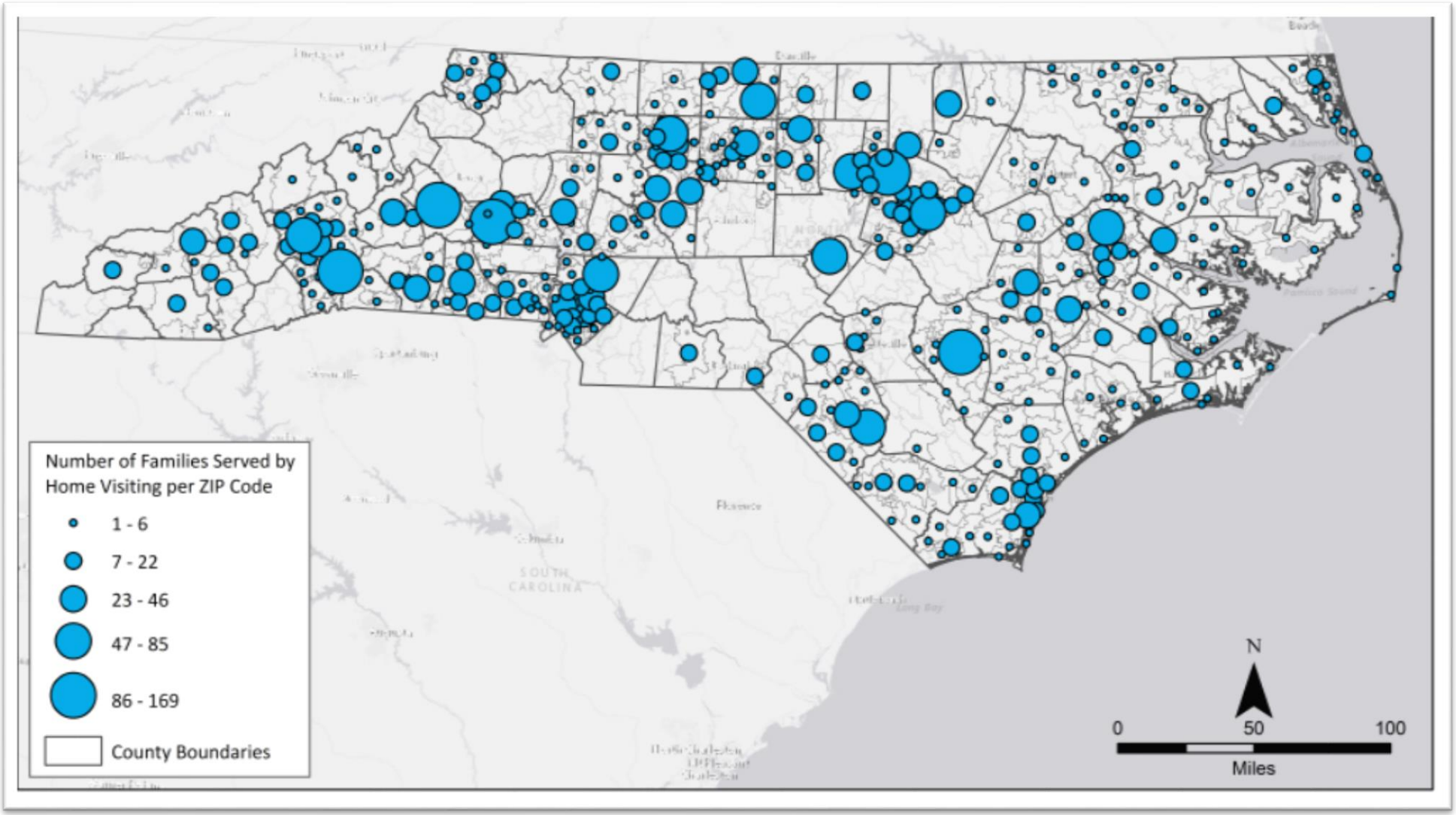


Figure 8. Map of Home Visiting Service Population in North Carolina

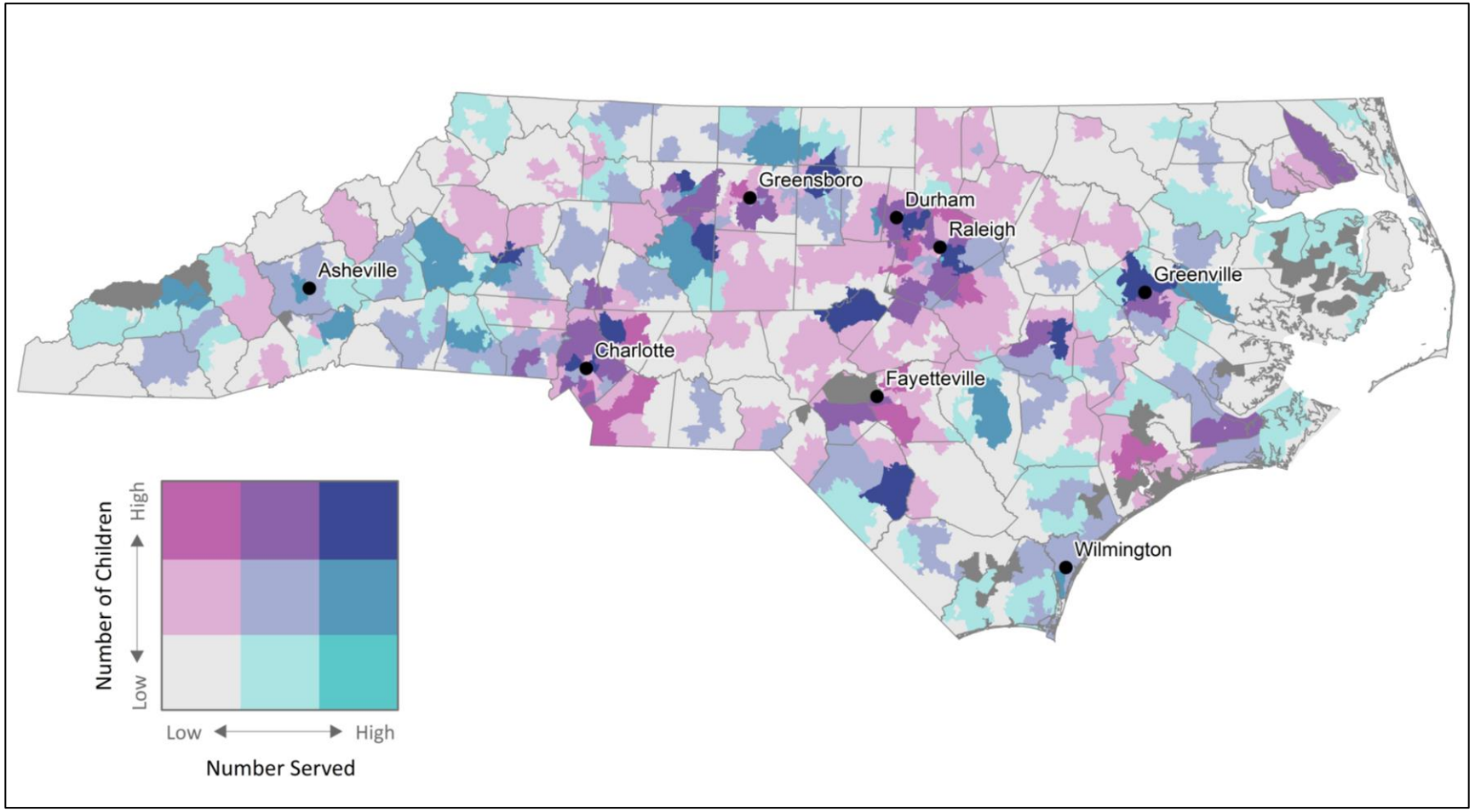


Figure 9. Map of Trends in Unmet Need for Home Visiting Services. Colors in the figure depict relationship between size of the child population in each ZIP code and the number of children in that area served by home visiting.

The study survey also collected information on the organizations' collaborations and referrals partners. Respondents were asked to nominate up to 10 other agencies or organizations they collaborate with, or who they "work with as a partner" in their community. Additionally, organizations were asked to report the top 10 sources of referrals into their program as well as the top referrals source they make from their program. A sample of findings is available in Appendix 9. Overall, findings indicate a great deal of variation exists in the extent of collaboration and coordination with other community agencies. These data are now available to develop local and regional social network graphs to identify strongly connected local networks and areas that might benefit from additional efforts to improve service integration. For example, Appendix 9 contains two network graphs from two similar sized counties. In the first county, each of the home visiting programs is connected to all of the other programs through a central hub provided by the local Partnership for Children. In the second county, some connections exist between two of the home visiting programs, but a third program is disconnected from the network. This graph might indicate an opportunity exists to engage the local Partnership as a convener for home visiting programs in their county, or it might indicate the need for relationship building.

Key Informant Interviews

Key informants were asked to share their knowledge and understanding of the history of home visiting in North Carolina, highlighting both past successes and challenges that might be relevant moving forward. Similarly, key informants were asked about their perspective on the current state of home visiting in North Carolina. Finally, the informants were asked to offer their vision and ideas for the future of home visiting in the state. The responses provided were carefully considered and thoughtful, creating a larger picture of North Carolina's current status as well as identifying areas where there is potential to grow and excel. Overall, key informants characterized home visiting of the past as "siloed and competitive," home visiting at present as "openness and discussion" and the future as "working and advocating together."

Qualitative interview responses were organized into several categories, including:

a) vision and planning
b) leadership
c) coordination
d) continuum of Services
e) data and evaluation
f) home visitor training
g) financing
h) unique populations and service needs
i) implementation of evidence-based practices
j) social determinants of health and health in general
k) intake and referral systems
l) model fit and fidelity
m) communication

Concept mapping methods were applied to organize the qualitative data into several larger themes using the information from the various categories linked within those themes. The main themes centered on the following: (1) the value and importance of strategic planning and leadership; (2) building a continuum of services for families; (3) coordinating services across programs or agencies is critical to creating a functioning system for families; and (4) evaluating home visiting programs is crucial to ensuring the programs are achieving positive outcomes. Each theme is described in detail below.

Theme 1: Home Visiting Needs a Statewide Strategic Plan and Cross-System Leadership

Many key informants described the necessity of developing a shared statewide vision for a family support system that includes home visiting, and which is supported by a comprehensive plan and

leadership. These key informants expressed an interest in exploring the possibility of having a large, encompassing vision for the collective work with families in North Carolina, sharing goals that identify interdependent indicators of success toward achieving the vision; such indicators might include goals such as safety, physical and mental wellness, school readiness, Grade 3 reading, and benchmarks of healthy development. Home visiting has a unique role in helping to achieve those goals. Similarly, home visiting should be incorporated into a network of support for communities and families based on their needs and resources. One key informant noted that currently, "We are still thinking models, not systems."

"If what NC wants to commit to is a system of support that meets the needs of families in communities, there is a need for strong, model-agnostic leadership positioned in an agency that isn't constrained by their ability to advocate/activate politically or to work with funders and model developers. It also needs to have the capacity to support an implementation environment that can focus on doing the work well. It is important to be open to innovation and flexibility."

Leadership was considered paramount for supporting the strategic plan and coordinating the multitude of funders, models, agencies and stakeholders who are invested in this work. Historically, there have been some challenges in bringing groups together. Respondent comments underscored the critically important task of bringing public and private partners together to build trust and to work together to achieve shared goals. Different organizations contribute something unique to the work; for example, funders can offer opportunities for innovation, quick action and program flexibility, and resources for work that is difficult for governments to fund. Likewise, governmental agencies can leverage significant state and federal resources and have substantial lines of influence across education, health, and social services. Child advocacy agencies play pivotal roles in advancing policy and change as well as lifting up the consumer voice, whereas nonprofit agencies can provide training and service delivery. Clinicians and medical homes provide health services and care that enhances healthy development. Working together, these different groups can form a strong partnership on behalf of families.

Key informants made a variety of suggestions regarding what type of organization or coalition should (or could) serve as a backbone agency/ group. Their responses underscored the necessity of leadership (whether an agency, person, or group) being neutral, model agnostic, well networked, trusted, and capable of holding partners accountable for working toward a shared agenda. As one informant noted, "There is a need for statewide governance or coordination of home visiting programs, although the tension between centralized governance and local control must be balanced."

Key informants considered funding for home visiting services as very confusing and complicated. Several informants described improved coordination of resource allocation as one way to avoid duplication of

"Creating the language around the return on the investment is key. When a funding board sees a high price tag in front of them and doesn't also see the high return and translational value to our community, state, society, [and] this family, it undermines our ability to provide the means that are needed to build out the level of service that communities may need. Better clarity and more concise language on the benefits of investing would be helpful. We need resources that anyone might use to articulate their support for home visiting models and work. The communications tools should be plain language and also framed like a business pitch."

services and ensure that community need and family "fit" were held as central tenets for investment. Understanding the financial landscape is important because, as one informant noted, "If we don't understand the factors that contribute to how our resources are competing with each other, we won't be able to make tangible shifts." The significant interest of the philanthropic community in investing in children and families paired with MIECHV (federal Maternal Infant and Early Child Home Visiting) resources and North Carolina General Assembly support has created a variety of new service opportunities for families. However, to amplify the potential for serving families, long-term outside expertise is needed to study and consider additional financing approaches such as social impact bonds, pay for success, hospital conversion foundations, corporate foundations, and Medicaid investment.

The need for better communication was raised by several informants. This need includes not only improved communication among partners but also better communication with families to help them understand the benefits of home visiting. As one informant noted, "Parenting is hard and not always intuitive!" In addition, a need exists for educating policymakers and the public about the importance of family support services. Given the complexity of the home visiting landscape and the lack of a central referral system, families, communities, and service providers may not be clear as to what services are available to whom or how services can be accessed. Further, some of the services that family need may not be home visiting. Developing and implementing a statewide strategic plan offers a new opportunity to use resources wisely, enhance communication, and better serve families in North Carolina.

<u>Theme 2: Building a Continuum of Family Support Services</u>

Comments across key informants suggested that North Carolina home visiting services should be part of a continuum of family support services. Each community should ideally have an array of service options matched to the needs of families in that community. One expert described this match of services and needs as follows: "While home visiting is a strategy, or location, for service delivery, the focus should be on family support."

Support should be a "just right" amount for families and tailored to their unique circumstances and challenge. A key informant whose work focuses on connecting families with services noted that the income thresholds set by many programs posed substantial challenges for families whose income was above the cutoff but who did not have the resources to pay privately for the services they and their children needed. As a possible solution or "window of opportunity," a number of informants mentioned programs that offer a universal postpartum "touch" for all new parents. Providing all new mothers with a home visit would not only help to ensure that all mothers were aware of and connected with services, but also could go a long way in dismantling negative perceptions about home visiting and the people who need these services.

"There is a place in the continuum for every model. They don't need to compete – there are enough families. Families need to be placed in programs that meet their needs. There is a lot of community variation and a lot of rural/urban differences so there is a need for different models and services to meet these diverse needs."

"When families are engaged and have support systems their child neglect rate drops and they do better in school. A community that is supportive of families can improve outcomes – there is increasing research on the importance of social connections."

Several experts suggested the idea that services should reflect the life course of parenting and child development (see Appendix 7 for services matrix). Although many families need extra support only during a child's infancy, some families find that they also need help when their child is 3 years old — a time when home visiting may be less available. Similarly, the limited supports available to families as their children grow can make parenting older children, including adolescents, a challenge. Informants wondered how families could be transitioned from one program to another as their children grow and needs change. Likewise, in addition to home visiting, communities need to offer a range of services to support healthy family development.

To support a continuum of family services, key informants shared ideas about workforce development. One informant highlighted the need for a well-trained workforce:

"For home visiting, people need to be cross-trained. That way they can work with different types of families based on their level of need, so it's more of a blended model. So many families and parents have different needs, whether

"Many home visiting programs are providing parenting support to families who don't need parenting help, but have other pressing issues such as mental health, substance abuse, and interpersonal violence."

it's chronic poverty or opioid crisis, or hunger. The workforce needs to have training in multiple issues."

Theme 3: Coordinating Services is Critical to Creating a Functioning System for Families

Service coordination at the state and local level emerged as a critical factor in making sure resources are strategically deployed and that families in need do not fall through the cracks. Key informants identified a number of problems in the current system, including competition, lack of coordination across services and programs, models being placed in communities that can't support them, and missed opportunities for workforce development. Coordination was a large theme and this section encompasses several areas.

"We need a system also to help families get the right amount of care, where some families are getting too much and other families are getting nothing."

In some areas of the state, multiple providers of home visiting services are "competing" for families. This sense of competition can lead to confusion among families and providers. Home visiting service providers in the same community are often unaware of the other services available, what they do, and who they serve. Given the unmet need identified by this report, making sure that home visiting services are coordinated and targeted is essential for maximizing impact on families.

Supporting the previously described theme on leadership and planning, some informants noted that the funding landscape for home visiting is very confusing and needs improved coordination. As a result of the current funding system, the array of available services was considered to be very inconsistent across North Carolina's counties, with the "services a family has available being haphazard and a lucky accident depending on where one lives."

"We need a better way to assure that there is strong coordination and communication among anyone doing home visiting. If Child Protective Services are involved then it is really important to integrate with them

In many cases, home visiting services are not coordinated with children's or mother's medical homes, which is a missed opportunity for improving health care for families. Given the growing expectation that clinics will reach beyond their walls to address some of the social determinants of health that impact their patients, building stronger, seamless connections between the health care system and home visiting programs could confer many advantages. Further, as one informant noted, "Home visitors see immediate needs for families – no heat, no power, no food, etc. So they work on these basic needs instead of the curriculum. It would be great if they [home visitors] had more supports to quickly refer families to social services to have those needs met – more connection between these two worlds." Improved coordination with programs and professionals in communities who can address these basic service needs for families has the potential to magnify the positive results from home visiting services. Although coordinating services seems like an obvious step for programs to take, one informant highlighted the challenge of creating connections across different program and locations: "Lots of models over lots of sites makes it difficult to have a coordinated effort to link with other services."

Conversations with key informants elevated that "There is a need to develop and pilot test some triage or coordinating mechanism that would help identify families and channel them into the right services." To better connect families with services, Wake County has made significant investment in a coordinated intake and referral online system. Although the online system is important, a staff member is also needed to troubleshoot the system and double-check the system to make sure families receive what

they need and document when needed services are not available to help. Further, one key informant identified that "it would be helpful if systems could talk to each other to know if a child is already in process of receiving services – that would reduce inefficiencies significantly."

Finally, key informants spoke about the opportunity to coordinate across models and programs to support the larger North Carolina home visitor workforce. Some programs have extremely limited resources for training, professional development, or workplace wellness programs, particularly small programs or those that are not evidence-based programs. Further, as a profession, home visitors were noted to spend a lot of travel time in their cars, using public restrooms, and dealing with challenging family situations and dynamics. A healthy and prepared home visiting workforce could be supported through shared training opportunities, newsletters, support networks, and competencies. Informants expressed considerable enthusiasm for the upcoming October 2018 Home Visiting Summit and hoped that this kind of partnership and coordination would continue.

Theme 4: System Improvements Guided by Implementation Science and Ongoing Evaluation are Needed

Informant comments elevated two additional areas that require attention: (1) implementing evidence-based and evidence-informed strategies, and (2) evaluating the results of those strategies. Questions were asked as to whether models, agencies, and/or funders were using implementation science to guide decisions about evidence-based program fit, agency and community capacity to support the model, necessary adaptation of models to meet local needs, and evaluation to assess whether the model was achieving the expected results.

One informant noted that "questions that should be asked before a new model is introduced to a community include: How does home visiting fit? Does it match with family needs? Does it match with community needs?" Suggested strategies to support the use of implementation science techniques in home visiting programs, and thereby increase the likelihood of program success, included funding community readiness grants. This strategy might also address a concern expressed by several informants that "there is a tension between geographic reach versus breadth and depth of services within one community. We can achieve programs in all 100 counties but is that of significant depth to make a difference?"

Not all communities have the resources to support all of the possible evidence-based models. Likewise, communities have

> *"A lot of times decisions are made about what community uses not based on what they need but by cost, or someone's pet program or whatever is easiest – communities need to use their data to match program to need."*

different strengths and challenges that are important to assess to match model to need. It may not be appropriate for one particular evidence-based practice to operate in every county in the state. Informants suggested that evaluation and reporting globally on home visiting services in the state would provide accountability for financial investments and, hopefully, engage policymakers and other potential funders in meaningful, productive ways. To do this well, evaluation results should include cost-benefit analysis. As one informant highlighted, "We need to do a better job of documenting cost savings – particularly those that are of interest to legislators – short-term and socially important. Document outcomes and how outcomes can be achieved with fidelity. Evaluation of home visiting needs to be more focused and part and parcel to all we are doing. It is nice to be able to show statistical significance in many areas, but many of those don't matter to policymakers – what is most relevant to them are things like reduced spending for jails, maltreatment services, foster care, special education, better health, less trauma, Medicaid savings, etc. We must tie outcomes to things that are driving our system and are expensive."

Some informants also suggested a need to evaluate and understand the family experience. As noted, "if we are going into a person's private space, their home, we should make sure that what we are doing is well-received and making a difference." Another person held aspirations that "home visiting can be a great source for data and advocacy to identify real trends and barriers in access to care and other issues across the state. Keeping the finger on the pulse of vulnerable families with data that could be translated for real-time advocacy such as, 'Here are the trends we are seeing for these kids in terms of gaps in access to Medicaid.' There is lot of potential for sharing great information about kids and new families across the state."

"I don't think that we have data systems that are telling us what's working and why. If we were reporting out regularly in a meaningful way on the outcomes we'd have more support for the programs. We need to look at nontraditional indicators such as impact on the health care system, ER visits (baby and mom), number of well child visits, how sick a child gets in first years of life, cost to health care, etc. We are so quick fix oriented – we should weave in some life course indicators to this work and look at global outcomes for the state."

Informants expressed optimism for the impact that North Carolina's home visiting and early childhood services could have on improving the well-being children and families. Overall, informants shared a sense that the state has strong programs, good history, coalitions coming together, and the potential to make something great happen together. Informant interviews frequently mentioned the unique challenges and opportunities in providing home visiting services in rural areas with fewer resources, fewer children, and potentially greater need than urban areas. Building services strategically to serve families living in rural communities was considered to be a potential area for North Carolina to demonstrate national leadership. Finally, informants expressed significant interest and engagement in the concept of creating a shared, North Carolina vision and plan for providing family support services.

Study Limitations

To provide a thorough and accurate reflection of the landscape of home visiting in North Carolina, our study team made concerted efforts to find all publicly available reports and studies, secure 100% completion of surveys from all home visiting programs, and identify key informants with diverse and highly informed perspectives. However, there were limitations to the information available to our team and reported in this report. First, the voices and opinions of families, local leaders, and home visitors are critical to understanding the home visiting landscape; however, these voices are entirely absent from this study and report. Although this initial assessment does not include these views, the authors anticipate a second phase of listening and learning in which the report findings will be shared with families and local stakeholders. Second, survey results essentially represent self-reported data. The validity of responses from individual programs could not be confirmed, and therefore, the results might tend toward positive bias. Third, although home visiting programs have become prominent in North Carolina, our team recognizes that a variety of organizations and programs across the state may be providing such services but did not receive the electronic survey. Further, our outreach efforts were more likely to reach evidence-based home visiting models because of their affiliation with larger systems and visibility through affiliation with national models. It is possible that home visiting services are provided in the state and their program leaders were not aware of the opportunity to participate in the study, suggesting that our findings are skewed toward evidence-based models. As this work continues to unfold, these unexplored programs should be considered and included in planning, coordination, and expansion efforts. Key informants represented a group of leaders with diverse experiences and perspectives on home visiting. Although the qualitative data collection was completed when prominent themes emerged, other leaders may hold ideas and opinions not reflected in this report.

Examples of Innovative Practices

The following section provides examples of innovative strategies used in other states to grow an effective home visiting system. Although solutions for North Carolina need to be "home-grown," efforts from other geographic areas can provide insight and guidance in how to move forward. This section provides a few examples of other state practices related to financing and coordination of services that can inform future conversations in North Carolina. As stakeholders across North Carolina consider strategies or plans, we recommended that they continue to talk with national leaders, funders, and organizations to learn from their successes and challenges.

Examples of Innovative Financing Strategies

Funding for home visiting is an ongoing challenge for growing and sustaining services statewide. Although the federal MIECHV program provided a much-needed infusion of federal resources (~$3 million) to support expansion of services in the state, the amount allocated is not sufficient to support full scale-up to serve all families in need in North Carolina. In 2017, the National Conference of State Legislatures examined state appropriations for home visiting. They reported that in addition to federal MIECHV, states were using general funds, tobacco settlements funds and taxes, TANF, Medicaid, federal child welfare funds, federal Project Launch funds, and private funds to sustain home visiting services. The 2018 Families First Prevention Services Act has the potential to support preventive and home visiting services in the near future. Unfortunately, North Carolina is listed as "information pending," so

it is unclear how the state compares to others regarding funding appropriation and year-to-year changes in funding.

Given the need for expanded funding, states have explored innovative strategies to finance home visiting. The following two examples from Connecticut and South Carolina describe two "Pay-for-Success" strategies. Put simply, these financing models tie payment for services to impact. Similarly, Governor Cooper recently announced the intention to include North Carolina in a national "Results First" initiative. As the North Carolina Department of Health and Human Services (DHHS) explores this financing strategy, home visiting could be considered as a means of making an impact.

Connecticut Medicaid Rate Card Pilot. In 2018, the Connecticut Office of Early Childhood launched a pilot program in partnership with a nonprofit intermediary, Social Finance, to develop an "Outcomes Rate Card." Similar to other outcomes-based financing initiatives, the "rate card" is developed by government with a set of outcomes they are willing to "purchase" for a set amount from private providers. Additional bonuses are set for achieving higher outcomes determined by the government payer. In Connecticut, the rate card is available to MIECHV contract providers for outcomes-based bonus payments related to the following outcomes: (1) full-term birth, (2) caregiver employment, (3) safe children, and (4) family stability. An important feature of Connecticut's rate card is the risk-adjustment based on individual family risk levels, which provides an incentive to enroll hard-to-serve families and not simply work with the "easier" families. More information about outcomes rate cards can be found at the Social Finance website. More information about the Connecticut MIECHV pilot can be found at the Office of Early Childhood website. This model was recently recognized as a potential national model by the Aspen Institute.

South Carolina Pay for Success. The state of South Carolina is also launching an innovative Pay-for-Success model for home visiting. While the Connecticut Rate Card is available to all MIECHV service providers, the South Carolina approach focuses specifically on an expansion partnership with the Nurse-Family Partnership model. Similar to Connecticut, Social Finance worked with public and private partners in South Carolina to develop the financing structure. Financing for the program came from a combination of philanthropy and funding through a Medicaid waiver. A unique feature of the South Carolina model is the integration of a randomized-controlled trial to rigorously evaluate the cost-savings attributed to the Nurse-Family Partnership program outcomes. Outcomes examined will include (1) reduction in preterm births, (2) reduction in child hospitalization and emergency department usage due to injury, and (3) increase in healthy spacing between births. More information about this project can be found from the South Carolina Department of Health and Human Services. This project has received national media attention as being the first statewide Pay-for-Success initiative in the United States.

Examples of Innovative Statewide Home Visiting Coordination

Oregon Rural Home Visiting Systems Development and Coordination Pilot. Beginning in 2015, the Ford Family Foundation launched this project in partnership with Portland State University, the Oregon Health Authority, and three local rural early childhood systems. The project had three specific goals: (1) create a common referral process, (2) create a professional development plan for all home visitation providers, and (3) create a regional communication plan. To achieve these goals the Home Visiting System Coordination project began with four components: (1) internal communication, (2) shared intake and referral, (3) professional development, and (4) community awareness. Then, locally driven Plan-Do-Study-Act cycles were implemented for each of these components. More information about one local coordination project can be found at the Ford Family Foundation website. Beyond home visiting

services, part of this rural pilot work has led to the development of 16 regional Early Learning Hubs. The purpose of each hub is to provide an "aligned, coordinated and family-centered early learning system."

New Jersey Statewide Centralized Intake System. In 2016, the New Jersey Department of Health partnered with the Race to the Top Early Learning Challenge to expand their centralized intake system statewide. The system includes a standardized risk assessment and statewide integrated data system that helps local central intake sites avoid duplication of services. Although it took more than a decade to fully implement this system statewide, the efforts led to a more efficient and streamlined system.

Florida MIECHV Public-Private Partnership and Coordinated Intake & Referral. As opposed to placing the MIECHV program in state government, the state of Florida chose the Florida Association of Healthy Start Coalitions, Inc. as the lead organization and federal MIECHV grantee. Because this organization represents local coalitions across the state, it has an ongoing strategy for communicating with local partners. One example of this communication strategy is a regular newsletter that links programs across the state. This newsletter provides updates on the entire home visiting system, the MIECHV program specifically, and opportunities for professional development. Similar to New Jersey, Florida also developed a statewide centralized intake and referral system through the ten local Healthy Start Coalitions. The process for developing this system included a statewide learning collaborative model with local teams implementing an Action Learning Collaborated framework using structured Plan-Do-Study-Act strategy cycles. More information about the Florida coordinated intake and referral strategy was documented in a recent CityMatCH newsletter.

As North Carolina stakeholder groups come together to consider a vision, plan, and strategy for home visiting, available models and best practices from other states and communities can serve as valuable examples. The programs described above offer some directions and expertise. Other resources and supports are available through national networks such as the HRSA MIECHV Home Visiting Improvement Center and Collaborative Improvement and Innovation Network. With the significant interest and investment in home visiting across North Carolina's counties, talking with national leaders and organizations has the potential to increase the likelihood of success.

Recommendations

A synthesis of the information collected through this landscape assessment suggests potential directions for North Carolina. A number of recommendations and related strategies are described in this final section. This work is meant to foster ongoing dialogue and planning on the part of stakeholders, partners, communities, and families across the state. The system of home visiting programs is one crucial component of the system of care that supports maternal and child well-being. Planning for home visiting should follow, not lead, efforts to improve the system of care.

Recommendation #1: Identify and implement a sustainable statewide leadership structure that is responsive to local communities.

- The NC Home Visiting Consortium, currently convened by the NC Division of Public Health, should select a working group of diverse stakeholders to develop a short-term strategic action plan and identify a backbone organization to accomplish long-term goals.

Recommendation #2: Develop a statewide home visiting strategic vision and action plan that is completely integrated within a comprehensive system of care.

- Align statewide efforts related to key policy changes affecting home visiting: MIECHV, Family First Prevention Services Act, Medicaid Transformation (1115 Demonstration Waiver, Medicaid home visiting pilot).
- Consider leveraging the existing structures and processes for statewide planning efforts for early childhood (i.e., the Triple P statewide strategic plan, the Pathways to Grade Level Reading strategic plan, NC Perinatal Health Strategic Plan).
- Ensure transparency in the process by facilitating planning through an informed and neutral party.
- Strategic planning process should "de-mystify" the funding landscape and generate a shared understanding of available resources and how best to leverage resources across the state.

Recommendation #3: Identify new funding streams for home visiting in North Carolina to support an integrated family support system anchored by early home visiting.

- Explore innovative funding strategies from other states to consider for application in North Carolina (e.g. public-private partnerships).
- Explore enhanced opportunities for Medicaid coverage of home visiting services.
- Engage experts from the nonprofit organization Social Finance to explore innovative approaches to funding.

Recommendation #4: Build and support a well-trained, well-resourced home visiting workforce by developing a shared educational platform, providing continuing education, creating regional learning collaboratives, and providing skill-building opportunities toward core competencies.

- Survey home visitors at the October 2018 Home Visiting Summit to identify training needs and opportunities for support.
- Fund and implement statewide/regional family support learning collaboratives.
- Consider adopting the National Core Competency Framework produced by the Institute for the Advance of Family Support Professional to develop a shared foundation of standards and competencies for home visitors and family support professionals.

Recommendation #5: Report annually on a set of common indicators across all home visiting programs to provide information about the families served, outcomes achieved, and return on investment.

- Build from the shared measurement system identified in the strategic plan.
- Integrate the voices of families receiving services and home visitors delivering services.
- Consult with national Home Visiting Collaborative Improvement and Innovation Network (HV CoIIN) to examine best practices in continuous quality improvement in home visiting systems.
- Participate in the national Home Visiting Applied Research Collaborative Practice-Based Research Network (HARC PBRN) to explore participating in national opportunities for applied research.

- Work with advocacy groups to develop a communications strategy to disseminate results.

Recommendation #6: Assess community capacity, fit, need, and usability in the selection of home visiting models.

- Develop a technical assistance platform to create a process for assessing community readiness and determining model fit with community needs (i.e., use of the NIRN Hexagon Tool).
- Additional funding should be designated to support community readiness and planning for those communities that are not currently prepared to implement an evidence-based home visiting program in their community.
- At the state and local level, consider unmet needs inclusive of child age, race/ethnicity, language spoken in the home, family situation, and family income.
- Given that the home visiting workforce and target populations are typically overrepresented in communities of color and disadvantaged groups, ensure that racial/ethnic equity and inclusion are considered in implementing programs (e.g., Annie E. Casey Race Equity and Inclusion Action Guide).
- Focus on rural communities and their unique needs and resources.

Recommendation #7: Improve service coordination among home visiting programs and with other services, including medical homes and social services, to comprehensively address family needs.

- Increase funding of on-going community responsive structures and processes for an integrated family support system anchored by home visiting.
- Track referrals and service integration as process outcome in program evaluations.
- Identify opportunities to educate other service providers in the field of home visiting and benefits of service integration.
- Ensure state home visiting leaders occupy positions on lead state agencies to improve coordination efforts at the policy level.

Conclusions

Home visiting is an important component of a comprehensive system of supports for families in North Carolina. Safe, stable, and nurturing families are the foundation for health, school readiness, and prosperity across generations. While there has been significant engagement around and support of home visiting in the state, the hundreds of families on waiting lists for services and the many underserved rural counties continue to catalyze action among partners.

Each stage of the assessment process informed the recommendations and suggested next steps. The review of existing literature and published reports told an incomplete story about home visiting in North Carolina, identifying gaps in information and data discrepancies stemming from different report formats and inconsistent methods. Looking forward, new efforts need to be made to centralize reporting and to communicate consistently about the "state of the state" of home visiting in North Carolina. This effort toward an improved system is important not only for service providers and program planning but also

for securing financial and policy support for home visiting service that meet critical needs of North Carolina families.

The data collected through the survey provided a much clearer view into the reach and implementation of the evidence-based home visiting models currently used in North Carolina. The strong response rate (93%) for a survey that was time-consuming to complete is an indication of the commitment of these programs and their leadership in participating in larger conversations about home visiting in the state. The survey results allowed the research team to develop detailed maps to demonstrate areas of the state that are well resourced as well as counties where more work needs to be done. Further, the team was able to create social network maps to illustrate how different groups connect or disconnect at the county level. Finally, the survey began to paint a picture of the home visiting workforce – a diverse group of dedicated professionals and paraprofessionals with unique assets and training needs.

Key informants contributed a broader understanding of the systems around home visiting in North Carolina. Conversations about the history of home visiting programs and partnership development within North Carolina informed the recommendations, as did feedback on the current status of services for families. These experts brought many different perspectives to the topic, yet their responses could be summarized into four themes: (1) strategic planning and leadership, (2) building a continuum of family services, (3) coordinating services, and (4) evaluating programs to ensure they are achieving positive outcomes. Conversations with the three advisory groups who informed and supported the assessment layered additional understanding and perspectives. Paired with the data from the survey, the study team compiled a series of recommendations for home visiting in North Carolina.

Looking forward to next steps, the study team acknowledges that an essential group of voices was not included in this work – the perspectives of families, home visitors, and community leaders. As partners begin to review and discuss the report findings, it is imperative that these key stakeholders are engaged in the process and their voices inform the next steps. Further, given that people of color are overrepresented in both the home visiting workforce and families in need of services, attention must be paid to the impact of the social determinants of health and larger issues of systemic and interpersonal bias on families and workers alike.

The October 2018 Home Visiting Conference offers one venue for collecting ideas and strategies for developing concrete action steps based on this study's recommendations. In addition, facilitated discussions with the various groups and coalitions working in the area of early childhood development will also be essential to creating a shared vision of home visiting in North Carolina and coalescing around leadership and strategies. As these home grown plans emerge, it will be valuable for the North Carolina leadership to continue seeking input and resources from national MIECHV centers and experts in home visiting. Home visiting holds great potential for supporting families. If the significant commitment of time, expertise, and energy that this report exemplifies is any indication, the future for home visiting in North Carolina is very bright.

APPENDICES

1. Home Visiting Program Inventory
2. Evidence-Based Home Visiting Model Description
3. Literature Review Search Methods
4. Statewide Survey
5. Statewide Survey Results
6. Current Leadership Groups in North Carolina Relevant to Home Visiting
7. Family Support Matrix
8. System Map of State Early Child Leadership Groups
9. Two County System Graphs of Home Visiting Collaboration

Appendix 1
Home Visiting Program Inventory

The following table compiles all home visiting models identified in this landscape study, our best estimate of the number of sites and counties served across the state, and 3 ratings of the level of evidence for each model.

Model	Website	# Sites	# Counties	EBP-MIECHV[4]	EBP-NCPC[5]	CEBC Scientific Rating[6]
Adolescent Parenting Program[1]	https://www.teenpregnancy.ncdhhs.gov/appp.htm	21	22	NR	EI Promising	3
Attachment and Biobehavioral Catchup	http://www.abcintervention.org/	21	15	Y	EB Established	1
Book Harvest Book Babies	http://bookharvestnc.org/programs/book-babies/	1	1	NR	NR	NR
Child First	http://www.childfirst.org/	5	27	Y	NR	NR
Early Head Start – Home Based	https://eclkc.ohs.acf.hhs.gov/programs/article/home-based-option	18	28	Y	NR	3
Family Connects	http://www.familyconnects.org/	3	3	Y	EI Promising	NR
Healthy Beginnings[2]	https://whb.ncpublichealth.com/services.htm	?	?	NR	NR	NR
Healthy Families America	http://www.healthyfamiliesamerica.org/	5	5	Y	EB Established	1
Home Instruction for Parents of Preschool Youngsters	https://www.hippyusa.org/	1	1	Y	NR	2
Nurturing Parent Program	https://www.nurturingparenting.com/	?	?	N	EI Promising[3]	NR
The Nurse-Family Partnership	https://www.nursefamilypartnership.org/	14	28	Y	EB Well Established	1

Parents as Teachers	https://parentsasteachers.org/	40	48	Y	EB Established	3
Safe Care - Augmented	https://safecare.publichealth.gsu.edu/	2	2	Y	EI Promising	2

Notes: NR=Not Rated; EI=Evidence-Informed, EB=Evidence-Based

[1]The Adolescent Parenting Program sites use either the Partners for a Healthy Baby or the Parents as Teachers curriculum. The *Partners for a Healthy Baby* program (https://cpeip.fsu.edu/phb/) has not been rated by the identified groups.

[2]The Healthy Beginnings sites use the Partners for a Healthy Baby curriculum

[3]The North Carolina Partnership for Children has rated NPP program versions differently. The *NPP: Parents and Their Infants, Toddlers, and Preschoolers* is rated as "EI-Promising." The other NPP programs for children 0-5 years are rated as "EI-Emerging" (*Young Parents and Their Families; Nurturing Skills for Families;* and *Nurturing Fathers*)

[4]MIECHV evidence-based practice designation (*Yes*/*No*) is from the Home Visiting Evidence of Effectiveness literature review

[5]NCPC rating come from the NC Partnership for Children Resource Guide Resource Guide of Evidence-Based and Evidence-Informed Programs and Practice

[6]CEBC scientific rating is from the California Evidence-Based Clearinghouse for Child Welfare, 1=*Well-Supported*, 2=*Supported*, 3=*Promising*

Appendix 2
Evidence-Based Home Visiting Model Description

This table is a compilation of the "Model Overview" reported in the Home Visiting Evidence of Effectiveness review limited to programs currently operating in North Carolina.

Model	Theoretical Model	Model Components	Target Population
Attachment and Biobehavioral Catchup (ABC)	The intervention is based on attachment theory and stress neurobiology.	The ABC Intervention is a training program for caregivers that a parent coach delivers in the family's home. Sessions 1 and 2 are designed to help caregivers reinterpret children's behavioral signals, providing nurturance even when it is not elicited. Sessions 3 and 4 are designed to help caregivers learn to follow their children's lead. Sessions 5 and 6 are designed to help caregivers recognize their own overwhelming or frightening behaviors and to develop alternative responses. Sessions 7 and 8 are designed to help caregivers overcome automatic responses to their children that are based on the caregiver's experiences and could interfere with providing nurturing, sensitive care. Sessions 9 and 10 are designed to reinforce knowledge gained during previous sessions. The most crucial aspect of the ABC intervention is the parent-coach's use of immediate feedback (referred to as "in the moment" comments) on the caregiver's interaction with the child. Throughout the home visiting session, the parent-coach comments on the caregiver's interactions to help the caregiver attend to the target behaviors, including following the child's lead with delight, using nurturing behaviors, and avoiding frightening behaviors. The ABC model also incorporates homework and video feedback.	The ABC Intervention is a training program for caregivers of infants and young children 6- to 24-months old, including high-risk birth parents and caregivers of young children in foster care, kinship care (e.g., a grandparent raising a grandchild), and adoptive care.
Child First	Child First intervenes with vulnerable young children and families at the earliest possible time to prevent and treat the effects of trauma and	Each family is assigned a Child First team consisting of a mental health/developmental clinician, who is responsible for assessment and a	Child First targets pregnant women and families of children 0-5 years in which (1) children have emotional, behavioral, or developmental

	adversity. The goal is to decrease the incidence of emotional and behavioral disturbance, developmental and learning problems, and abuse and neglect among high-risk young children and their families. The Child First model is based on brain development research that shows extremely high-stress environments (including poverty, maternal depression, domestic violence, abuse and neglect, substance abuse, and homelessness) are toxic to the developing brain of the young child; and the presence of a nurturing, consistent, and responsive parent-child relationship buffers and protects the brain from these stressors.	therapeutic intervention, and a care coordinator, who is knowledgeable about community services and supports. This team provides the following services in either the family home or a early care and education setting (the first month focuses on family engagement and assessment, followed by intervention): • *Assessment of child and family needs.* • *Observation and consultation in early care and education setting.* • *A child and family plan of care.* • *Parent-child mental health intervention.* • *Care coordination.*	challenges; or (2) the family faces multiple challenges that may lead to negative child outcomes, such as maternal depression, domestic violence, substance abuse, homelessness, or abuse and neglect. Families are served without regard for ability to pay, legal status, or number of children in the family.
Early Head Start – Home Based	Early Head Start–Home Visiting is a comprehensive, two-generation federal initiative aimed at enhancing the development of infants and toddlers while strengthening families. The program is founded on 9 principles: (1) high-quality services; (2) activities that promote healthy development and identify atypical development at the earliest stage possible; (3) positive relationships and continuity, with an emphasis on the role of the parent as the child's first, and most important, relationship; (4) activities that offer parents a meaningful and strategic role in the program's vision, services, and governance; (5) inclusion strategies that respect the unique developmental trajectories of young children in the context of a typical setting, including children with disabilities; (6) cultural competence that acknowledges the profound role culture plays in early development; (7) comprehensiveness, flexibility, and responsiveness of services that allow children and families to move across various program options over time as their life situation demands; (8) transition planning; and (9) collaboration with community partnerships that allow programs to expand their services.	Early Head Start programs include home- or center-based services, a combination of home- and center-based programs, and family child care services (services provided in family child care homes). The focus of this report is on the home-based service option. Early Head Start–Home Visiting home-based services include (1) weekly 90-minute home visits, and (2) two group socialization activities per month for parents and their children.	Early Head Start–Home Visiting targets low-income pregnant women and families with children 0-3 years. To be eligible for Early Head Start–Home Visiting, most families must be at or below the federal poverty level. Early Head Start–Home Visiting programs must make at least 10% 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 develop specific program eligibility criteria, aligned with the program's performance standards.
Family Connects	The Family Connects model aims to bring together families, community agencies, and health care	Family Connects is a manualized intervention that provides 1-3 home visits from a registered nurse	The intervention is available to all families with newborns residing within a defined service area.

	providers together through nurse home visits to ensure that all families have the support and resources they need to promote the well-being of their newborns. The program uses a triage model of care and defined service areas to provide 1–3 home visits to every family living within a service area, typically when the infant is 2 to 12 weeks old. Families with identified needs can receive further support, including additional home visits, telephone contacts, and connections to community resources for longer-term services.	to all families with newborns living in a specified service area. During the first home visit, the nurse conducts a physical health assessment of the mother and newborn, provides guidance on topics common to all families (e.g., infant feeding and safe sleeping practices), and assesses family risks and needs. The risk and needs assessment covers 12 factors in 4 domains associated with mother and infant health and well-being). If an assessment indicates a risk/need, nurses directly support families or connect them to community resources, typically through additional home visits and/or telephone contacts. In cases of mild risk, nurses may provide direct support, such as feeding assistance. If a family's risk is more significant, the nurse collaborates with the family to connect them to desired community services and supports. Supports may include intensive, targeted home visiting programs such as Healthy Families America or Early Head Start, mental health services, public assistance programs, or primary health care providers. Nurses use a searchable database of local agencies, created by local program staff, in making referrals. One month following case closure, a staff member (the nurse home visitor or another staff member) calls families to determine whether the family contacted the referred agency(ies), is receiving services, has any additional needs, and was satisfied with the program.	The program targets families with newborns ages 2-12 weeks but may reach families earlier or later (up to age 6 months) when special needs are present (for instance, if an infant had been admitted for neonatal intensive care). Sites must have a recruitment plan to reach all eligible families in their defined community area, which could be a city, county, or other geographic area.
Healthy Families America	HFA is theoretically rooted in the belief that early, nurturing relationships are the foundation for life-long healthy development. Building on attachment and bio-ecological systems theories and the tenets of trauma-informed care, interactions between direct service providers and families are relationship-based; designed to promote positive parent-child relationships and healthy attachment; strengths-based; family-centered; culturally sensitive; and reflective.	HFA includes (1) screenings/assessments to determine families at risk for child maltreatment or other adverse childhood experiences; (2) home visiting services; and (3) routine screening for child development and maternal depression. In addition, many HFA sites offer services such as parent support groups and father involvement programs. HFA encourages local sites to implement enhancement services such as these that further address the specific needs of their communities and target populations.	HFA is designed for parents facing challenges such as single parenthood; low income; childhood history of abuse and other adverse child experiences; and current or previous issues related to substance abuse, mental health issues, and/or domestic violence. Individual HFA sites select the specific characteristics of the target population they plan to serve (such as first-time parents, parents on Medicaid, or parents within a specific geographic region); however, the HFA National Office requires

			that all families complete the parent survey (formerly the Kempe Family Stress Checklist), a comprehensive assessment to determine the presence of various factors associated with increased risk for child maltreatment or other adverse childhood experiences. The HFA National Office requires that families be enrolled prenatally or within three months of birth. Once enrolled, HFA sites offer services to families until the child's third birthday, and preferably until the child's fifth birthday.
Home Instruction for Parents of Preschool Youngsters	HIPPY is a home visiting model that focuses on parent-involved early learning. HIPPY services are offered directly to parents, who then work with their own 3-, 4-, and 5-year-old children. HIPPY's mission is to help parents prepare their children for success in school. The model supports parents to become their children's first teacher by giving them the tools, skills, and confidence they need to work with their children in the home.	The HIPPY model includes four distinct features: • A developmentally appropriate school readiness curriculum • Weekly home visits and regular group meetings • Role play as the method of instruction • Staffing structure that includes peer home visitors from the community in which the family is being served and professional coordinators with sensitivity to the needs of vulnerable families	HIPPY is designed for parents who have doubts about or lack confidence in their ability to instruct their children and prepare them for school. Frequently, these parents did not graduate from high school or have only limited formal education, limited English proficiency, limited financial resources, or other risk factors. HIPPY serves parents with children ages 3 through 5.
Nurturing Parent Program	The Nurturing Parenting Programs are family-based prevention and intervention programs designed to develop nurturing parenting practices. The program is competency-based. Each group- and home-based session has stated competencies intended to measure when parents have acquired a new understanding and demonstrate new skills that represent nurturing parenting strategies and practices. The underlying theoretical assumptions of the Nurturing Parenting Programs are the following: 1. Human behavior is multidimensional. 2. Positive and negative life events carry both cognitive and affective cellular memories. 3. Nurturing Parenting instruction is based on proven psycho-educational and cognitive-behavioral approaches to learning. 4. Nurturing Parenting embraces the theory of re-parenting. In the	Nurturing Programs for adult parents or young (teen) parents and their infants, toddlers, and preschoolers can be delivered in three models: (1) home-based only; (2) group-based only; or (3) combination group- and home-based. The focus of this report is on the home-based service option.	The Nurturing Parenting Programs target families at risk for abuse and neglect with children from the prenatal period to age 18. There are five general Nurturing Parenting Programs that specifically target children during the prenatal period or from birth to age 5 that can be delivered primarily in the home (several adaptations and enhancements have been developed; see Adaptations and Enhancements for more information): • Nurturing Program for Prenatal Families • Nurturing Program for Parents and Their Infants, Toddlers and Preschoolers • Nurturing Program for Teen Parents and their Children • Nurturing Skills for Families Program

	practice of re-parenting, new patterns of behavior replace older, destructive ones over time. 5. Nurturing oneself as a man or a woman is paramount to becoming a nurturing father or mother. 6. Parenting is a role with defined responsibilities that promote the growth and development of parents' sons and daughters into healthy and caring children. 7. Parenting beliefs are learned early in life from the experiences a child has during the process of growing up. 8. For parents to change longstanding maladaptive beliefs regarding parenting—and consequently their parenting behaviors—they must receive long-term, family-based education provided in competency-based lessons offered in a sequential manner.		• Nurturing Skills for Teen Parents Program
The Nurse-Family Partnership	NFP is shaped by human attachment, human ecology, and self-efficacy theories. NFP nurse home visitors use input from parents, nursing experience, nursing practice, and a variety of model-specific resources coupled with the principles of motivational interviewing to promote low-income, first-time mothers' health during pregnancy, care of their child, and own personal growth and development. Nurse home visitors build on parents' own interests to attain the model's goals.	NFP includes one-on-one home visits between a registered nurse educated in the NFP model and the client.	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.
Parents as Teachers	The theory of change for the PAT model is that affecting parenting knowledge, attitudes, behaviors and family well-being impacts the child's developmental trajectory. The overall PAT model is grounded in Urie Bronfenbrenner's human ecology theory and family systems theory. The home visits focus on three areas of emphasis—parent-child interaction, development-centered parenting, and family well-being. PAT is informed by additional theories including developmental parenting, attribution theory, and self-efficacy theory.	The PAT model has four components that all affiliates are required to provide: (1) one-on-one personal (or home) visits, (2) group connections (or meetings), (3) health and developmental screenings for children, and (4) linkages and connections for families to needed resources.	PAT affiliates select the specific characteristics and eligibility criteria of the target population they plan to serve. Such eligibility criteria might include children with special needs, families at risk for child abuse, income-based criteria, teen parents, first-time parents, immigrant families, low literate families, or parents with mental health or substance use issues. The PAT model is designed to serve families throughout pregnancy through kindergarten entry. Families can enroll at any point along this continuum. Curriculum materials provide

			resources to continue services through the kindergarten year if an affiliate wants to do so.
Safe Care - Augmented	SafeCare is a structured parenting program that is designed to address the behaviors that can lead to child neglect and abuse. The program was developed to offer a more easily disseminated and streamlined program to parents at risk for child abuse and neglect, based on key components of its precursor, Project 12-Ways. SafeCare provides parent training in three focused areas: (1) parent-child/parent-infant interactions, (2) infant and child health, and (3) home safety. The model emphasizes learning in a social context and uses behavioral principles for parent training across the three modules. SafeCare Augmented, an enhanced version of SafeCare, adheres to the SafeCare model with additional training on motivational interviewing and domestic violence. Project 12-Ways employs an ecobehavioral approach to the treatment and prevention of child abuse and neglect. Ecobehavioral refers to the multifaceted in-home services provided to families. Twelve key services are offered: (1) parent-child interaction, (2) stress reduction for parents, (3) basic skills training for children, (4) money management training, (5) social support, (6) home safety training, (7) multisetting behavior management, (8) infant and child health and nutrition, (9) problem solving, (10) marital discord counseling, (11) alcohol abuse referral, and (12) a variety of pre- and post-natal prevention services for young and unwed mothers.	SafeCare, like its precursor Project 12-Ways, includes one-on-one home visits between providers and families. All SafeCare modules include baseline assessments and observations of parental knowledge and skills, parent training, and follow-up assessments to monitor change. Each module typically involves a baseline assessment session, followed by four training sessions, and concludes with a follow-up assessment. Providers use a four-step approach to address target behaviors: (1) describe and explain the rationale for each behavior, (2) model each behavior, (3) ask the parent to practice the behavior, and (4) provide positive and constructive feedback. The training is designed to promote generalization of skills across time, behaviors, and settings. SafeCare Augmented adds domestic violence training and motivational interviewing, a technique that explores and builds on an individual's motivation to change.	SafeCare, like its precursor Project 12-Ways, is designed for families with a history of child maltreatment or risk factors for child maltreatment, including young parents; parents with multiple children; parents with a history of depression or other mental health problems, substance use, or intellectual disabilities; foster parents; parents being reunified with their children; parents recently released from incarceration; and parents with a history of domestic violence or intimate partner violence. The program also serves parents of children with developmental or physical disabilities, or mental health, emotional, or behavioral issues. SafeCare is intended to complement the more specialized intervention services these families might be receiving from other agencies. SafeCare is available to parents with children ages birth to 5 and has been used with culturally diverse populations. SafeCare Augmented was adapted for high-risk, rural families who do not have a long history of involvement with child welfare services.

Appendix 3
Literature Review Search Methods

Search locations	Procedures of search	Search terms
HomVee (https://homvee.acf.hhs.gov)	Procedures of search on the website: Homvee website -> 'program model reports' -> (Select *name of program*, for e.g., *Nurse-Family Partnership*) -> 'study database' -> select only studies from North Carolina -> obtain documents (for e.g., databases or Internet) -> extract data	Model names for *program* (e.g., *Nurse-Family Partnership*)
Google Search Engine	Input search words/phrases into search engine -> Go to websites -> extract data from webpages or from documents (e.g., annual reports)	Model names and 'North Carolina'
Databases (e.g., PsycInfo)	Input search words/phrases into search engine -> Go to websites -> extract data from webpages or from documents (e.g., annual reports)	Model names and 'North Carolina'
Research Connections (https://www.researchconnections.org/childcare/welcome)	Input search words/phrases into search engine -> Go to websites or obtain documents (e.g., databases or Internet) -> extract data	Model names and 'North Carolina'

Appendix 4
Statewide Survey

Survey of North Carolina Early Home Visiting Programs

Thank you for participating in this survey as part of the North Carolina Landscape Study of Early Home Visiting, administered by our team at the Jordan Institute for Families in the School of Social Work at the University of North Carolina at Chapel Hill. To learn more about this study, please visit our website.

If you have any questions, you can email us at homevisitingstudy@unc.edu

The purpose of this survey is to:

1) Develop an inventory of all of the home visiting programs in the state

2) Better understand the families our programs serve

We will provide this information back to you in a final report via our website. Our findings will **describe** the field of home visiting in North Carolina and will **not evaluate** any specific program.

Please answer each question to the extent that you are able. We understand all programs are different and we want to capture the diversity of services in the continuum. You may want to have several people from your local organization work together to fill out this survey. There are 3 "modules" for this survey that request information regarding A) Program Administration, B) Service Delivery, and C) Service Population. Different types of information and sources might be needed for each of the 3 modules.

A few terms that we want to define to clarify for this survey:

Home-Visiting Program: a specific home-visiting program or model being delivered at the local level (such as Nurse-Family Partnership or Early Head Start-Home Visiting).

Local Organization: the agency that houses and administers the home-visiting program such as a health department or local Smart Start. In some cases, the local organization is a home-visiting program affiliate.

National Organization: An organization, in most cases outside North Carolina, which provides support and oversight regarding implementation of your home-visiting programs.

First, please provide contact information for someone we can contact if more information is needed later:

Contact information:

First/Last Name: _TEXT BOX_

Local Organization Name: _TEXT BOX_

Local Organization Address: _TEXT BOX_

Email Address: _TEXT BOX_

Phone Number: _TEXT BOX_

What is the role of the primary contact for the survey: _DROP DOWN_

a. Executive Director

b. Program Manager
c. Data/Evaluation Lead
d. Other

MODULE A: Program Administration

*This section includes questions regarding administration of your **home-visiting program** and structure of your **local organization**. The purpose of these items is to get an understanding of how different **home-visiting programs** are funded, supported, and organized.*

Please tell us more about your organization:

1. Organization Type: _DROP DOWN_
    a. Private for-profit
    b. Private non-profit
    c. Government
    d. Other

2. Please select all of the positions/groups that comprise your local organization's structure: _CHECK BOXES_
    a. Board of Directors
    b. Community Advisory Board
    c. Non-Clinical Management Staff (e.g., executive director, administrator)
    d. Full-time home visitors
    e. Part-time home visitors
    f. Home-visiting supervisors
    g. Evaluation/Data team
    h. In-house clinical consultant
    i. Other

3. What is the home visiting program model that your organization implements? _CHECK BOX_
    a. Nurse-Family Partnership
    b. Parents as Teachers
    c. Early Head Start – Home Visiting
    d. Healthy Families
    e. Family Connects
    f. Other

4. **Currently,** how many home visitor positions, both full-time and part-time, are employed on your staff? Do not count vacant positions, only those positions that are currently filled.
    a. Full-time home visitors: _TEXT BOX_
    b. Part-time home visitors: _TEXT BOX_
    c. Supervisors (full or part-time): _TEXT BOX_

5. For your organization to be **fully staffed**, at your current level of funding, how many home visitor positions, both full-time and part-time, are needed?
    a. Full-time home visitors: _TEXT BOX_
    b. Part-time home visitors: _TEXT BOX_
    c. Supervisors (full or part-time): _TEXT BOX_

6. What are the demographics of your program's current home visiting staff (all home visitors and supervisors)? Approximately what percent (%) of your home visitors are:
    a. Non-Hispanic White
    b. Non-Hispanic Black
    c. Hispanic/Latinx
    d. Other race/ethnicity
    e. Female
    f. Able to speak only English in home visits
    g. Able to speak Spanish in home visits
    h. Able to speak languages other than English/Spanish in home visits

The next set of questions are about the funding of your home visiting program.

7. If you were asked to report it to your funder, what would be your best estimate of your average cost per family to deliver your home visiting program as designed? _TEXT BOX_

8. How did you (or would you) determine this calculation (i.e., what factors or components are you including – staff time, overhead costs, materials, etc.)? _TEXT BOX_

9. What financial resources support your home-visiting program? For the past three years (2015, 2016, 2017), estimate the percent of support your home visiting program receives from each funding source. Each column should add to 100%. On the next screen you will be asked to list private foundation or other sources.

Source	**Year One (ex: 2015)**	**Year Two (ex: 2016**	**Year Three (ex: 2017)**
Federal Government			
State Government			
Local Government			
Billable Services/Medicaid			
Foundation/Philanthropy			
Other			

10. Please list each Foundation/Philanthropy that supports your home visiting program.

11. Please list others sources of funding.

12. Does your local organization provide in-kind support for your home visiting program? Yes/No Radio Buttons
    a. If Yes, what support does your local organization provide in-kind? _TEXT BOX_

Next, we would like to know about partners you work with on collaboration and advocacy as an organization. We will ask you later about referrals and service partners. For now, we are interested in who you would consider part of your organization's network for "collaboration" and "advocacy".

*Collaboration and advocacy partnerships can take many forms, so think about what makes sense for your organization. For example, for "**collaboration**," if you have written a grant to expand home visiting*

*services in your system of care, who have you worked with as a partner? For "**advocacy**," think about who you have worked with to advocate for home visiting funding at the local or state level. We will ask you to first list organizations you have been involved with in any way in the last year. Then, we will ask about the strength of that relationship.*

13. Please list the names of the specific organizations you have worked with in the last year for either "collaboration" or for "advocacy."

14. For each organization you list, please indicate the strength of the organizational relationship for both collaboration and advocacy.
    1 = 'weak single issue partnership requiring minimal contact'
    2 = 'moderate partnership, we have worked together on occasion, but inconsistently'
    3 = 'strong partnership, they are a consistent and reliable partner'.

Organization/Agency	**Collaboration (Weak, Moderate, Strong)**	**Advocacy (Weak, Moderate, Strong)**
Auto-populate from Q13		
Auto-populate from Q13		
Auto-populate from Q13		
Auto-populate from Q13		

15. Does your organization currently anticipate any substantial future changes to service delivery in the next year regarding your home visiting program in the following areas?
    a. No
    b. Yes, Expanding service area
    c. Yes. Reducing service area
    d. Yes, Increasing enrollment capacity
    e. Yes, Decreasing enrollment capacity
    f. Other

Module B. Program Model Inventory

16. Is your home visiting program currently accredited or certified by the relevant national organization? YES/NO Radio Buttons
    a. If Yes, who accredits/certifies your program? _TEXT BOX_
    b. If Yes, what year was your program first accredited/certified?

17. What curriculum is used in your home visiting program? _TEXT BOX_

18. Who would you identify as your program's primary target/priority populations? _CHECK BOX_
    a. Low-income children and families
    b. Children with special needs
    c. Families that speak a language other than English
    d. Teen parents
    e. Families who receive governmental assistance
    f. Families with a history of child abuse and neglect

g. Families with a history of domestic violence
h. Families with a history of substance use
i. Mothers with maternal depression
j. Other

19. What are the eligibility criteria to receive home visiting services through your program? _TEXT BOX_

20. Are there any further exclusion criteria that would make someone ineligible for services? _TEXT BOX_

21. What are the demographics of your current program's participants? Please list the approximate distribution by % of your participants across the following categories.
    a. Non-Hispanic White
    b. Non-Hispanic Black
    c. Hispanic/Latinx
    d. Other race/ethnicity
    e. Female
    f. Speak only English in the home
    g. Speak Spanish in the home
    h. Speak languages other than English /Spanish in the home
    i. Medicaid-Eligible

22. What are your program's primary target outcomes? Check the top three (3). _CHECK BOX_
    a. Healthy births
    b. Child health and development
    c. Maternal health
    d. School readiness
    e. Maltreatment prevention
    f. Family economic self-sufficiency
    g. Referrals to or coordination with other services
    h. Other

23. Please describe any outcome reporting that is currently required by your funders or other groups. What outcomes do you report and how often? _TEXT BOX_

24. What is the typical starting salary range for your home visitors? DROP-DOWN_

25. What is the education requirements for full-time home visitors employed at your local organization? _DROP-DOWN_

26. Do you have a minimum level of experience for full-time home visitors employed at your local organization? YES/NO

27. Are individual home visitors required to be certified or accredited to work in your home visiting program? YES/NO

28. Please describe who accredits or certifies individual home visitors: _TEXT BOX_

29. Does your local organization offer any additional training beyond what may be provided by the program model? _YES/NO_

30. Does your national organization offer any additional training or professional development for home visitors? YES/NO

31. Please describe the supervision requirements for home visitors in your program?
    a. How many hours per month for individual supervision? _TEXT BOX_
    b. How many hours per month for group supervision? _TEXT BOX_
    c. Number of direct observations of home visitors by supervisors? _TEXT BOX_
    d. Other supervision requirements? _TEXT BOX_

32. What processes does your home visiting program use monitor model fidelity? _TEXT BOX_

33. Does your program participate in a centralized intake system? YES/NO Radio Buttons
    a. If Yes, what is the format? Options: Web-based, Paper, Other
    b. If Yes, about what percent of all participants are identified through the centralized intake process in an average month?

34. What is the process for receiving a referral TO your home visiting program? _TEXT BOX_

35. Please list up to 10 primary referral sources TO your home visiting program. Then, what percent of referrals to your organization come from these sources (e.g. Clinic A provides 30% of our referrals)

Referring Organization	Percent of Referrals TO Your Program
Able to populate	
Able to populate	
Able to populate	
Able to populate	

36. What is the process for receiving a referral FROM your home visiting program for other services? _TEXT BOX_

37. Please list up to 10 primary referral destinations FROM your organization. Then, what percent of referrals FROM your organization go to each destination?

Organization Receiving Referral	Percent of Referrals FROM Your Program
Able to populate	
Able to populate	
Able to populate	
Able to populate	
Able to populate	

We want to know the local areas where programs provide services, so we are asking you to list the specific ZIP codes you serve. We will use this information to create local service maps across the state. This will help us all better understand where more services are needed. We realize that you may not collect data at the ZIP code level, so please provide your best estimate based on the information you do collect and your knowledge of your service area.

38. What counties are in your service area? _SELECTION BOX_

39. For each row, please write in the following:
    1) a ZIP code in your service area
    2) the total number of families currently on your caseload in that ZIP code
    3) the estimated maximum number of families that could be on your caseload in that ZIP code

Repeat this information for each ZIP code in your service area.

For example, if 27599 is in your service area, first determine how many total families are on your program's caseload in 27599. Then, give your best estimate of the maximum number of families you could have on your program's caseload at one time given your current staffing and funding levels. So, if you are currently serving 10 families in 27599, but have capacity to serve 20 families in 27599 at one time, then you would respond: **27599 10 20**

ZIP Code	Total Number of Families Currently on the Caseload	Maximum Number of Families that Could Be on the Caseload
Able to populate	*Able to populate*	*Able to populate*
Able to populate	*Able to populate*	*Able to populate*
Able to populate	*Able to populate*	*Able to populate*
Able to populate	*Able to populate*	*Able to populate*
Able to populate	*Able to populate*	*Able to populate*

Module C. Target Population/Service Population

This last set of questions is about the families served by your program.

40. What is your metric for counting the population served (e.g. child, family, or individual)? _DROP_DOWN_

41. Does your program currently have a waitlist? _Yes / No (not at capacity) / No (not allowed to have a waitlist by a funder or model)

42. About how many families are on the current waitlist?

43. If your home-visiting program had expanded funding and additional staff to serve all qualified families in your service area, how many families would you expect to serve annually?

44. Of the families who left the program last year, what percent "completed" the program, based on whatever program standard you use to indicate "completion" or "graduation" _TEXT BOX_

45. Please provide a summary estimate of the total number of actual home visits provided by your organization in calendar year 2017. This is the total aggregate number of home visits across all families and all home visitors. _TEXT BOX_

This is the end of the survey, please use the following space to fill in any additional information that you think is important for us to understand about your home visiting program, or the field of home visiting in North Carolina. _TEXT BOX_

Appendix 5
Statewide Survey Results

Which best describes your organization type?

Organization Type	Percent
Government	22.6
Other	6.0
Private for-profit	1.2
Private non-profit	70.2

N=84, Unweighted

Currently, how many home visitors, both full-time and part-time, are employed on your staff? Do not count vacant positions, only those positions that are currently filled.

Positions employed	Minimum	Maximum	Mean
Full-time home visitors	0	20	3.83
Part-time home visitors	0	5	0.46
Home-visiting supervisors (full or part-time)	0	3	1.02

N=84, Unweighted

For your organization to be fully staffed, at your current level of funding, how many home visitor positions, both full-time and part-time, are needed?

Positions needed	Minimum	Maximum	Mean
Full-time home visitors	0	20	3.70
Part-time home visitors	0	5	0.48
Home-visiting supervisors (full or part-time)	0	3	0.93

N=84, Unweighted

What are the demographics of your program's current home visiting staff (all home visitors and supervisors)? Approximately what percent (%) of your home visitors are:

HV Demographics	Mean Percent
Non-Hispanic White	45.78
Non-Hispanic Black	30.69
Hispanic/Latinx	19.94
Other race/ethnicity	3.59

Female	98.93
Able to speak only English in home visits	79.12
Able to speak Spanish in home visits	28.31
Able to speak languages other than English/Spanish in home visits	2.29

N=80, Weighted

If you were asked to report program costs to your funder, what would be your best estimate of your average cost per family to deliver your home visiting program as designed?

	Minimum	Maximum	Mean
Average Cost Estimate	$200.00	$11,556.00	$3,519.53

N=62, Weighted

What financial resources support your home-visiting program? For the past 3 years (2015, 2016, 2017), estimate the percentage of support your home visiting program received from each funding source.

Funding Source	2015	2016	2017
Federal Government	31.85	32.09	32.02
State Government	42.34	41.98	41.81
Local Government	4.27	4.44	4.59
Medicaid/Billable Services	2.63	2.61	2.80
Foundation/Philanthropy	13.54	13.02	13.43
Other	5.37	5.87	5.35

N=75 for, 76 for 2016 and 2017, Weighted

Does your local organization provide in-kind support for your home visiting program?

Provides Support	Percent
Yes	73.2
No	26.8

N=71, Unweighted

Does your organization currently anticipate any substantial changes to service delivery in the next year relevant to the following areas of your home visiting program?

Anticipate Substantial Changes	Percent
No	67.9
Other changes	6.2
Yes, decreasing enrollment capacity	1.2

Yes, expanding service area	6.2
Yes, expanding service area, Yes, increasing enrollment capacity	2.5
Yes, increasing enrollment capacity	13.6
Yes, increasing enrollment capacity, Other changes	1.2
Yes, reducing service area	1.2

N=81, Unweighted

Is your home visiting program currently accredited or certified by the relevant national organization?

Currently accredited or certified	Percent
Yes	72.8
No	27.2

N=81, Unweighted

If yes, what year was your program first accredited/certified?

	Minimum	Maximum	Mean
Year	1991	2018	2007

N=51, Unweighted

What are the demographics of your program's current participants? Please list the approximate distribution by % of your participants across the following categories:

Program participant demographics	Mean Percent
Non-Hispanic White	30.61
Non-Hispanic Black	36.12
Hispanic/Latinx	27.47
Other race/ethnicity	5.83
Female	88.20
Speak only English in the home	71.20
Speak Spanish in the home	23.94
Speak languages other than English /Spanish in the home	4.64
Medicaid-Eligible	89.16

N=71,71,71,71,67,70,70,68,66, Weighted

What is the typical starting salary range for your home visitors?

Salary Range	Percent
Less than $10,000	1.0
$20,000 - $29,999	17.8
$30,000 - $39,999	42.1
$40,000 - $49,999	18.3
$50,000 - $59,999	17.3
$60,000 - $69,999	3.5

N=76, Weighted

What is the minimum education requirement for full-time home visitors employed at your local organization?

Education Requirement	Percent
2 year degree	23.2
4 year degree	59.8
High school graduate	3.1
Professional degree	12.8
Some college	1.2

N=80, Weighted

Do you have a minimum level of experience for full-time home visitors employed at your local organization?

Minimum experience required	Percent
Yes	74.5
No	24.5

N=81, Weighted

Are individual home visitors required to be certified or accredited to work in your home visiting program?

Home visitors required to be accredited or certified	Percent
Yes	66.7
No	33.3

N=81, Weighted

Does your local organization offer any additional training beyond what may be provided by the program model?

Locally offered additional training	Percent
Yes	93.7
No	6.3

N=80, Weighted

Does your national organization offer any additional training or professional development for home visitors?

Nationally offered additional training or professional development	Percent
Yes	98.1
No	1.9

N=58, Weighted

Please describe the supervision requirements for home visitors in your program.

Supervision requirements	Mean
How many hours per month for individual supervision?	4.23
How many hours per month for group supervision?	3.72
Number of direct observations of home visitors by supervisors?	3.21

N=72, 65, 68, Weighted

Does your program participate in a centralized intake system?

Centralized intake system	Percent
Yes	36.7
No	63.3

N=79, Weighted

What is your metric for counting the population served (e.g. child, family, or individual)?

Population served metric	Percent
Family	58.0
Individual child	17.4
Individual parent/caregiver	24.6

N=69, Unweighted

Does your program currently have a waitlist?

Waitlist	Percent
No (not allowed to have a waitlist by a funder or model)	5.1
No (not allowed to have a waitlist)	3.0
No (not at capacity)	20.2
Yes	71.8

N=70, Weighted

About how many families are on the current waitlist?

	Minimum	Maximum	Mean
Waitlist estimate	0	110	26.44

N=52, Weighted

If your home-visiting program had expanded funding and additional staff to serve all qualified families in your service area, how many families would you expect to serve annually?

	Minimum	Maximum	Mean
Estimate of families	0	27,000	783.05

N=42, Unweighted

Of the families who left the program last year, what percentage "completed" the program, based on whatever program standard you use to indicate "completion" or "graduation"?

	Minimum	Maximum	Mean
Percent Completed	0	100	56.29

N=61, Weighted

Please provide a summary estimate of the total number of actual home visits provided by your organization in calendar year 2017. This is the total aggregate number of home visits across all families and all home visitors.

	Minimum	Maximum	Mean	Sum
Estimated visits	4	5182	1074.82	73,088

N=68, Unweighted

Appendix 6
Current Leadership Groups in North Carolina Relevant to Home Visiting

Group Name	Institutional Home	Membership	Structure/Role
North Carolina Home Visiting Consortium	North Carolina Division of Public Health (NC DPH)	Currently limited to representatives from the evidence-based home-visiting programs in NC and state MIECHV team. Recently included funder representatives and subject matter experts, as needed.	Meets quarterly to provide platform for home visiting program leaders to meet. Charter for the group has been drafted, outlining the purpose and function of the group. Recent work has focused on planning the 2018 Home Visiting Summit.
North Carolina Home Visiting Leadership Group	North Carolina Partnership for Children	Currently includes representatives from: • MIECHV (NC DPH) • NC Partnership for Children (NCPC) • Head Start Collaborative Office • UNC Jordan Institute for Families • North Carolina Early Childhood Foundation • Pritzker Children's Initiative • North Carolina Institute of Medicine Essentials for Childhood	Developed as a subgroup of the NC Home Visiting Consortium to plan the leadership track of the 2018 Home Visiting Summit. Additionally, the group has begun work to develop planning strategies to improve coordination and integration of the field of home visiting in NC.
Governor's Early Childhood Advisory Council	Executive Branch, established by Executive Order	Council is comprised of a range of experts in the field of early childhood appointed by the North Carolina Governor. The Council will have 3 primary objectives: • Creating and guiding a bold early childhood action plan that aligns with other efforts to advance the state's early childhood system. • Building awareness of the importance of high-quality early childhood experiences to future education and career success, and to ensure young children in North Carolina are learning and thriving. • Recommending and advocating for policies and funding that improve equitable access to high-quality early childhood services and better outcomes for young children and families.	Overall goal is to "to advise on learning opportunities from birth to age 8, emphasize importance of child development for building a strong workforce and economy." Additionally, the group is named in the North Carolina MIECHV plan as the advisory committee to the NC DPH.

NCIOM E4C Evidence-Based Practice Workgroup	North Carolina Institute of Medicine (NCIOM)	Comprised of representatives of the NCIOM Essentials for Childhood Task Force and representatives from agencies delivering evidence-based programs in NC. The focus is on evidence-based practices impacting child well-being broadly, but has focused a great deal on home-visiting.	NCIOM convenes meetings regularly. The group focused on examining the funding process for EBPs in the state and exploring how to build local capacity for implementing evidence-based practices and aligning grant-making and reporting requirements for agencies.
Think Babies	Zero to Three	North Carolina Early Education Coalition is coordinating a statewide Think Babies Leadership Team. This team is aligning the policy goals of the initiative's major partners to shape this agenda and to develop an implementation strategy.	Focused on raising awareness of the importance of healthy beginnings, supported families, and high-quality early care and education experiences in the long-term health and well-being of children and their families. In addition to a comprehensive communications campaign on early childhood development, the Coalition's aligned policy plan, will create synergy among advocates working across the state and inform policymakers and the public of ways they can promote healthy development and school readiness for all children.
Family Forward NC	North Carolina Early Childhood Foundation	Family Forward NC is convening an advisory council to assist and further the work.	Family Forward NC is an initiative to support a range of family-friendly business practices and policies that have been shown to benefit children and have a positive impact on business, including flexible schedules and paid parental leave. Family-friendly policies allow parents to support their children's optimal development and the documented results of these practices show benefits on several risk factors for child abuse and neglect. Family Forward NC is focused on policies that benefit young children 0 -8 years, recognizing that many of these policies have a spillover effect and benefit all parents, and in some instances (e.g., flexible schedules), all employees.
NC Pathways to Grade-Level Reading	North Carolina Early Childhood Foundation	Network of early learning and education, public agency, policy, philanthropic and business leaders working across disciplines, sectors and systems including more than 200 organizations and individuals who are Pathways Partners. Work has been facilitated through 3 phases by "Data Action Team", "Learning Teams", and "Design Teams."	Pathways brings state and local stakeholders and leaders together, across health, family support, and early learning and education disciplines; across government, policy, private sector and nonprofit sectors; across 0-5 years and kindergarten through 3rd grade systems; and across political identities.

North Carolina Infant/Young Child Mental Health Association (NCIMHA)	Private nonprofit membership association	Volunteer board of directors consisting of 14 members with expertise in infant and early childhood mental health.	NCIMHA is the only statewide organization dedicated specifically to the healthy emotional, cognitive, and social development of children prenatal to 5years old. The 2012 "Growing Up Well: Supporting Young Children's Social-Emotional Development and Mental Health in NC" study completed by the NCIOM, at the request of the NC Legislature, recommended that the NCIMHA take the lead in working with other state agencies and organizations to "Develop the Workforce that Provides Social-Emotional and Mental Health Services and Supports."
North Carolina Perinatal Health Strategic Plan	North Carolina Division of Public Health	Perinatal Health Strategic Planning Committee was chaired by Belinda Pettiford of NC DPH and included more than 20 experts in perinatal health.	This plan is designed to address infant mortality, maternal health, maternal morbidity, and the health of men and women of childbearing age. The framework selected by the Perinatal Health Strategic Planning Committee was adapted from the 12-Point Plan to Close the Black-White Gap in Birth Outcomes: A Life-Course Approach. A review of the framework determined these strategies were appropriate for all populations, not just African American families. This adapted framework was used to develop the strategies of the NC Perinatal Health Strategic Plan. The action steps were developed by more than 125 maternal and child health experts from across the state.
MIECHV = Maternal Infant and Early Child Home Visiting Program. NC DPH = North Carolina Division of Public Health. NCIOM = North Carolina Institute of Medicine.			

Appendix 7
Family Support Matrix

The following figure locates the position of home visiting programs within the larger family support system and across child development. This figure is not intended to be comprehensive but to reflect this study's qualitative findings regarding the need to think about home visiting across a continuum of family support services. Home visiting occupies a relatively small, but critical, point of connection for new families and young children.

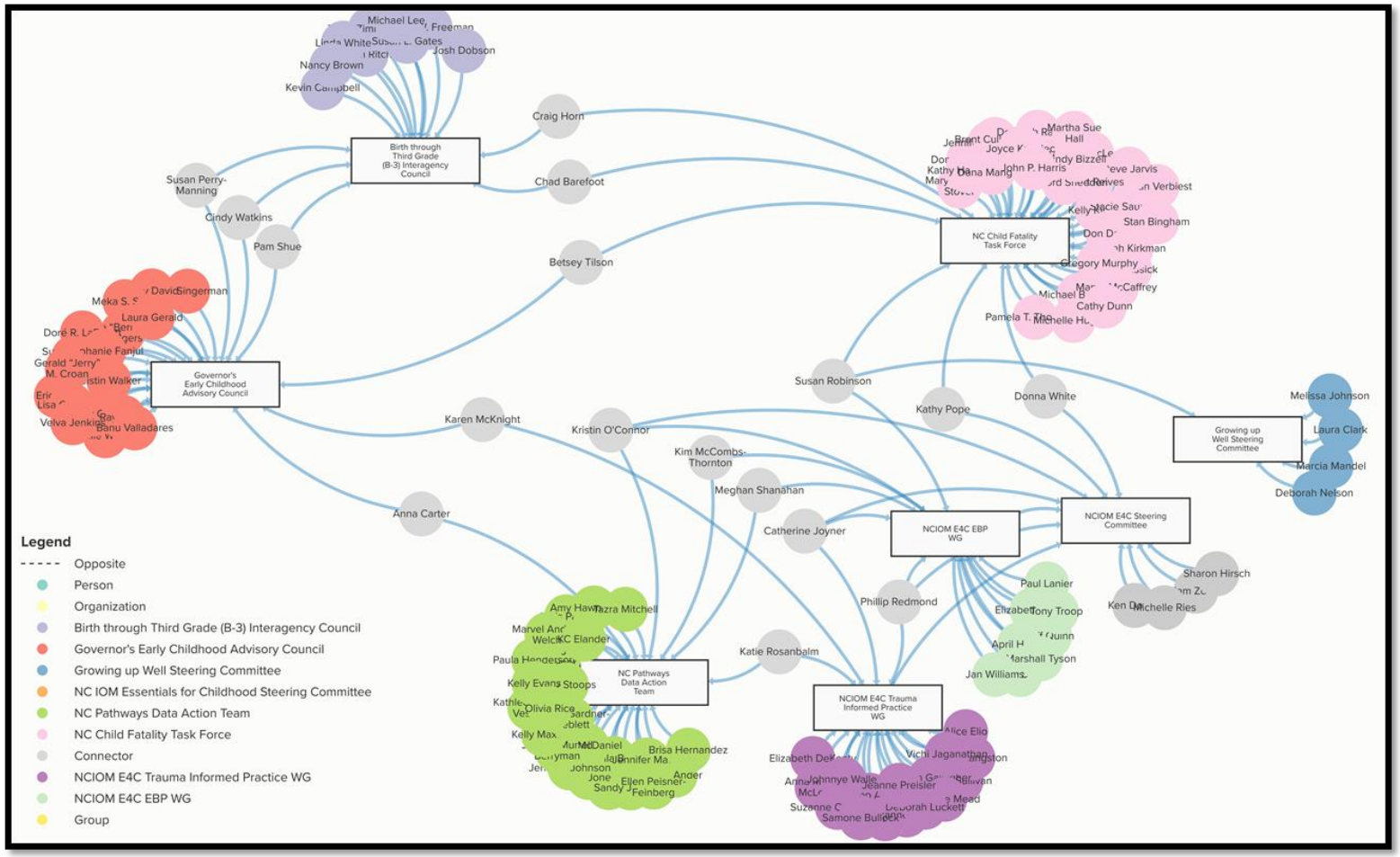
WHEN are families supported?

WHERE are families supported?

	PRENATAL – 2	2-4 years	5-8 years	8-18 years
In their homes	• Pregnancy care management • Home Visiting	• Home Visiting	• Triple P • Home-Based parenting	• Triple P
In an office or clinic	• Prenatal care • Healthy Start	• Pediatric medical home • Behavioral health services	• Pediatric medical home • Behavioral health services • Triple P	• Pediatric medical home • Behavioral health services • Triple P
In their schools	• Center-based supports • Early Head Start	• Center-based supports • Early Head Start	• School-based health centers	• School-based health centers
In their communities	• Breastfeeding friendly locations • Community and faith-based orgs	• Safe environments for play • Community and faith-based orgs	• Safe schools • Community and faith-based orgs	• Safe schools • Community and faith-based orgs

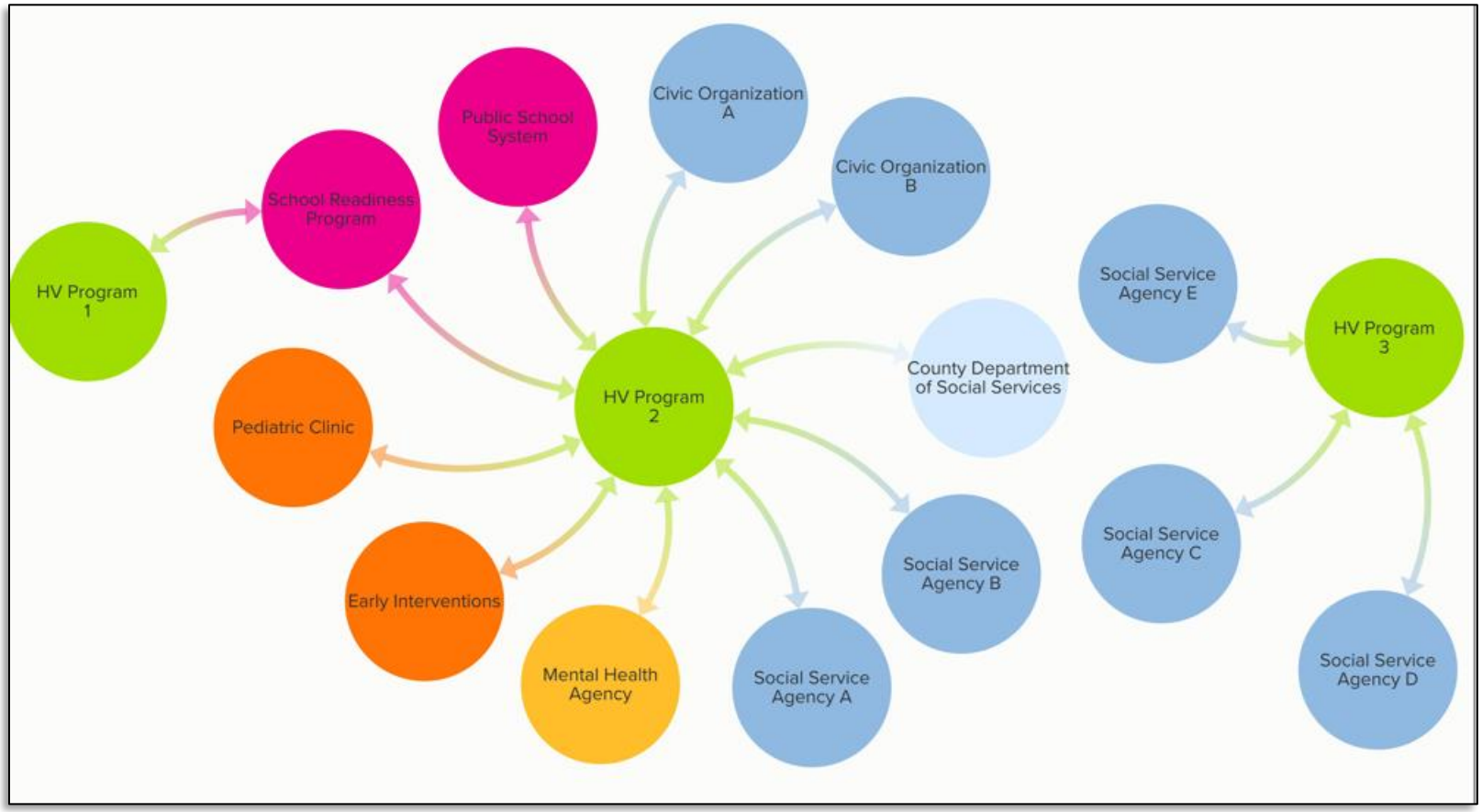
Appendix 8
System Map of State Early Child Leadership Groups

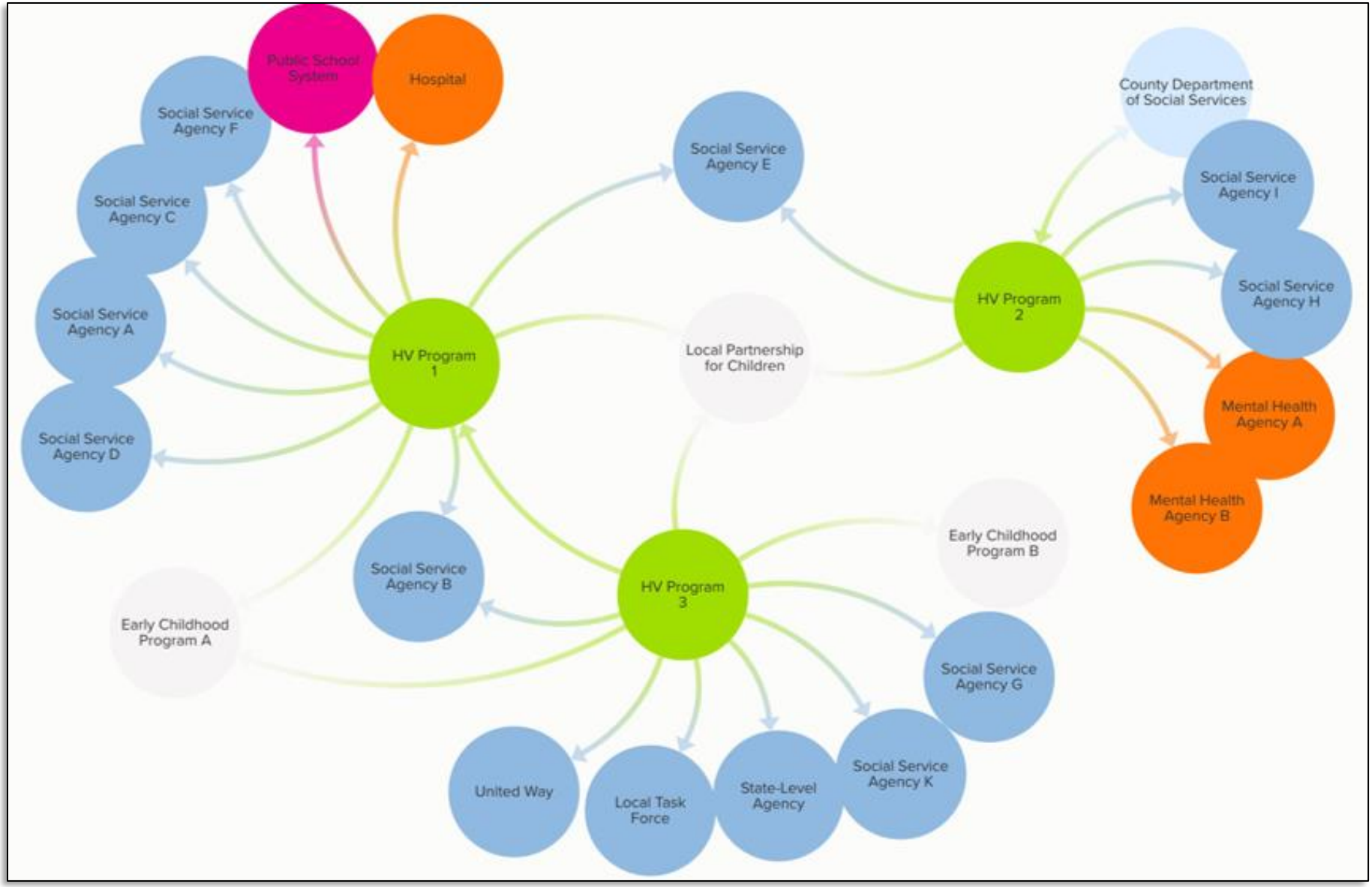
To interact with an updated, interactive version of the map click here.



Appendix 9
Two County System Graphs of Home Visiting Collaboration

The following graphs depict network connections in two counties. The next phase of evaluation work will consist of developing network graph for all counties/regions of the state as appropriate for use in local system discussions and planning.




Public School System
Hospital
Social Service Agency F
Social Service Agency C
Social Service Agency A
Social Service Agency D
HV Program 1
Social Service Agency E
Local Partnership for Children
County Department of Social Services
Social Service Agency I
Social Service Agency H
HV Program 2
Mental Health Agency A
Mental Health Agency B
Early Childhood Program B
Social Service Agency B
Early Childhood Program A
HV Program 3
Social Service Agency G
United Way
Local Task Force
State-Level Agency
Social Service Agency K