Maternal Infant and Early Childhood Home Visiting Program North Carolina 2020

Statewide Needs Assessment

University of North Carolina at Chapel Hill

School of Social Work

Jordan Institute for Families

Maternal, Infant, and Early Childhood Home Visiting Program North Carolina 2024

Statewide Needs Assessment Amendment*

North Carolina Department of Health and Human Services Division of Child and Family Well-Being MIECHV Team This MIECHV Needs Assessment was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling \$3,534,457 with 0 percentage financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government.

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*The 2020 MIECHV Needs Assessment was updated in early 2024. The 2024 Needs Assessment Amendment was approved by HRSA in February 2024. All updates to the 2020 MIECHV Needs Assessment are italicized and blue.

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Historical Context

The 2020 needs assessment was completed in the midst of significant social and public health events. The COVID-19 pandemic began its spread in early 2020, with the first case in North Carolina confirmed on March 3rd. On March 10th Governor Roy Cooper declared a state of emergency, and closed public schools and implemented a statewide stay-at-home order on March 30th. The health, economic, and social effects of COVID-19 are still being felt and the magnitude of the pandemic's impact is still not fully known. From conversations with home visiting partners during this time, we do know that most home visiting programs shifted almost seamlessly to virtual services. We also know that maintaining these virtual services throughout the COVID-19 pandemic has provided a lifeline for many vulnerable families in our state. Because this needs assessment focuses on data collected primarily in 2019, our findings do not reflect the current state of needs pertaining to COVID-19 in the summer and fall of 2020.

On May 25th, George Floyd was killed by police officers in Minneapolis, sparking nationwide protests demanding racial equity. His death catalyzed a broader reckoning with anti-Black racism in the U.S., exemplifying the many Black lives lost to senseless violence. In our report, we estimate that 68% of families served and 23% of home visitors in our state are Black. We recognize that Black families and communities live daily with the trauma of racial injustice, including the threat of violence, increased risk of mortality from COVID-19, and financial concerns due to the emerging economic crisis. We do not fully understand the impact of current events on the Black families being served in NC, but we recognize it as significant and important. As society reconsiders the roles of government and social services, including policing as well as home visiting, we must continue to examine how policy decisions advance racial equity and whether services reduce racial disparities.

Executive Summary

This report outlines the 2020 North Carolina (NC) Maternal Infant and Early Childhood Home Visiting (MIECHV) Needs Assessment, which examined existing home visiting programs and specific counties identified as at-risk through community assessments. The goal of this work was to highlight gaps in services for NC's at-risk populations and emphasize strengths in the state's home visiting programs.

The needs assessment identified six highest priority counties (i.e., Anson, Bertie, Richmond, Scotland, Vance, and Washington). These counties have the highest risk levels in the state but currently do not have a MIECHV-funded home visiting program. The five county-level domains of risk were: socioeconomic status, perinatal outcomes, substance use, child maltreatment, and crime. We performed Community Readiness Assessment sessions in the six highest priority counties to deepen our understanding of how these domains of risk impacted families and the county's readiness to implement a home visiting program. Stakeholders were asked to share knowledge about strengths, existing programs, and service gaps in their areas. In all six counties, stakeholders suggested that home visiting services could potentially benefit their communities, but all expressed the need for additional resources (e.g., funding, workforce development) for these services to be successful.

North Carolina's home visiting system continues to grow in its reach and continuum of services. Using a statewide survey and data provided from existing programs, we identified 13 active home visiting programs in NC, nine of which are evidence-based programs and therefore eligible for MIECHV funding. We estimate that in fiscal year 2018-2019, over **16,000 families** were served by home visiting programs and over **66,000 home visits** were provided in NC. However, North Carolinians' access to home visiting is primarily determined by where they live in the state: 12 counties served zero families with evidence-based home visiting programs, while 3 counties served over 1,000 families.

This report provides additional details about the county-level risk assessments, the inventory of home visiting programs in the state, and survey results regarding the quality and capacity of current home visiting programs. The results of this needs assessment will assist the NC Division of Public Health in identifying target populations and selecting home visiting strategies that best meet state and local needs.

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Introduction

The purpose of the 2020 North Carolina (NC) Maternal Infant and Early Childhood Home Visiting (MIECHV) needs assessment was to identify populations at the greatest risk for poor maternal and child health outcomes and support decision-making about home visiting models that best meet state and local needs.¹ The prior statewide needs assessment was conducted in 2010, at the initiation of the federal MIECHV program. A decade later, the NC MIECHV program is funding two models implemented in seven programs as part of growing system of statewide family support services. Like many programs, MIECHV services are limited in reach by funding. However, as part of the larger continuum of services, MIECHV programs provide critical support for NC's highest need families. Success of the larger system relies on the integration of MIECHV programs into the state's patchwork of public and private-funded home visiting services. This updated needs assessment provides comprehensive data on where needs in the state are greatest and identifies opportunities to strengthen and expand existing services.

This report has five sections. Part I: County Risk Assessment presents analyses of county-level quantitative data for a set of risk domains and indicators and identifies six "highest priority" counties with high risk and no MIECHV services. Part II: Readiness for Implementing Home Visiting presents findings from a qualitative analysis of focus groups conducted in the six high priority counties. These focus groups explored local readiness to implement home visiting programs. Part III: Existing Home Visiting Programs provides an in-depth inventory and descriptive analysis of existing home visiting programs in NC, focusing mainly on the quality and capacity of existing programs. The results of this section were primarily derived from a statewide survey conducted in late 2019. Part IV: Substance Use Disorder Prevention and Treatment focuses on the critical connection between home visiting and substance use services in NC. Like many other states in the region, NC is still recovering from a major substance use epidemic driven largely by untreated opioid addiction. Home visiting services offer a means of accessing treatment, particularly for pregnant women and new parents. This section describes the landscape of substance use services in NC and how to strengthen this service connection. Part V: **Coordination with other Needs Assessments** situates the MIECHV needs assessment within the larger context of public health and social services delivered in NC. We describe how the findings from this needs assessment were discussed with other state partners to inform how future efforts can continue coordination.

To begin, we will briefly describe the process of conducting the needs assessment. Our team at the University of North Carolina at Chapel Hill (UNC) utilized the resources provided by the U.S. Department of Health and Human Services Health Resources and Services Administration (HRSA) to guide our process. We also engaged public and private partners in the needs assessment process.¹ We primarily solicited feedback via an advisory group, which we convened regularly to provide updates and seek input. Advisory group members are listed in Table 1. Additionally, the UNC team held regular meetings with the NC MIECHV team and relied on their expertise for interpreting findings and engaging with local

¹ Health Resources & Service Administration, Maternal & Child Health. (2020). *Maternal, Infant, and Early Childhood Home Visiting Program supplemental information request (SIR) for the submission of the statewide needs assessment*.

https://mchb.hrsa.gov/sites/default/files/mchb/MaternalChildHealthInitiatives/HomeVisiting/miechv-needsassessment-update-sir.pdf

partners. Further, the NC Home Visiting Consortium, convened by the NC Division of Public Health, provided input and resources for this work. The UNC team provided regular updates at each quarterly Consortium meeting.

Table 1: Advisory Gr	oup Members and Organizations	
Name	Organization	Role
Serena Curry	Child First	Director of National Program Development
Diane Britz	Child First	North Carolina State Clinical Director
Kim Friedman	Family Connects International	Policy Engagement & Analysis Director
Rebecca Planchard	NC DHHS	Senior Early Childhood Policy Advisor
Hayley Young	NC DHHS	Data Office Director
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April Harley	Nurse-Family Partnership	NC Executive Director
Robin Roberts	Parents as Teachers	Regional Implementation Coordinator
Patti Learman	Parents as Teachers	State Coordinator
Safiyah Jackson	NC Partnership for Children	Early Childhood Systems Director
Donna White	NC Partnership for Children	Acting President
Melissa Godwin	UNC – NC Pregnancy and Opioid Exposure Project	Clinical Assistant Professor

Part I: County Risk Assessment

The first analytic phase of the NC MIECHV needs assessment identified communities at greatest risk for identified outcomes in the state. Guidance provided by HRSA directed our methodological approaches to quantitative risk assessment.

Risk Assessment Methodology

For the purposes of this needs assessment, HRSA defines "communities" as each of NC's 100 counties. However, geographic regions within counties (e.g., specific ZIP codes) could also potentially qualify as high-priority geographic areas. Further, HRSA guidelines identified five domains of risk to measure, with 13 specific risk indicators across these five domains. As noted by HRSA, "indicators were selected in collaboration with HRSA/MCHB to match as closely as possible the statutorily-defined criteria for identifying target communities for home visiting programs," with the exception of infant mortality and domestic violence, which were not included due to data limitations.² Therefore, these five domains (i.e., socioeconomic status, adverse perinatal outcomes, substance use disorder, crime, and child maltreatment) and 13 associated indicators reflect the population health outcomes targeted by most home visiting programs (Figure 1). Table 2 lists the definitions and data sources for the 13 indicators. Maps 1-13 display the risk levels (Z-score) for each indicator for each county.

HRSA's guidance for identifying at-risk counties (referred to as the "*Simplified Method*") uses the distribution of risk indicators to identify counties that are at least one standard deviation (SD) higher than the mean for all counties in the state. For North Carolina, if all 100 counties were placed on a bell curve, about 16 counties would fall above one SD in the high-risk direction. So, for each indicator, the analysis identified the 16 counties with the highest risk. As indicated in Figure 1, each domain contains either one, two, or four indicators. In the simplified method algorithm, if at least half of the indicators within a domain have Z-scores greater than or equal to one SD higher than the mean, then a county is considered high-risk for that domain. For example, the substance use disorder domain contains four indicators, so a county with at least two indicators in the high-risk range (i.e., greater than one SD), would be considered high risk for the substance use disorder domain. Then, the total number of domains identified as high risk is summed. Counties with two or more at-risk domains (out of five) were identified as high-risk counties.

² From the HRSA data summary: "Not included are indicators for infant mortality and domestic violence. Infant mortality was excluded from the Adverse Perinatal Outcomes domain because the level of suppression at the county level for 5-year aggregate data was too high for meaningful inclusion (all but 13 states have >50% of counties with suppressed data). Preterm and low birth weight births together are the second largest cause of infant mortality. Given that the other two indicators in the domain are direct precursors of infant mortality, we evaluated the extent to which similar counties were identified when infant mortality rate was included or excluded (among counties with non-suppressed data). The level of suppression for preterm birth and low birthweight was also substantial for individual year data. Thus, we compiled 3-yr and 5-yr aggregated data to obtain reliable estimates for smaller counties. Domestic violence was excluded because there are no national sources available with county-level data for domestic violence."

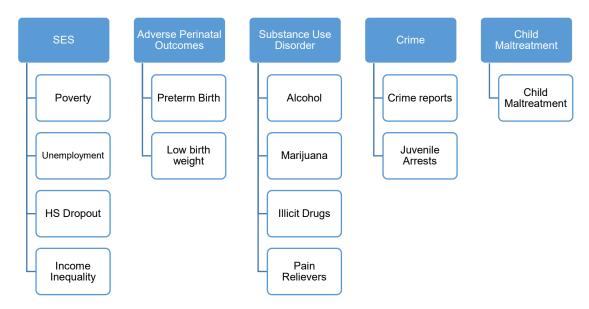


Figure 1. HRSA Risk Domains and Indicators

To complement HRSA protocols, we developed three additional "independent" methods to identify high-risk counties. Our team determined that the data sources identified in HRSA's Simplified Method provided strong indicators for identifying concentrations of risk. We also decided that the alignment of risk indicators with MIECHV statutes enhanced the policy-relevant nature of the analysis. Therefore, we used multiple methods as a sensitivity test to identify counties that consistently fell in the highest risk group across analytic methods. These methods used the same data sources but different quantitative methods from the Simplified Method. This approach ensured greater confidence in our identifications of higher-risk counties. We then explored those counties identified as high risk across all four methods (i.e., HRSA's Simplified Method + three independent methods).

The first independent analysis we conducted was the *Equal Weight Method*. Like the Simplified Method, this method assesses all 13 indicators. However, this method gives all indicators equal weight regardless of their risk domain. In the Simplified Method, a county identified as high risk in a domain with fewer indicators (i.e., maltreatment) is more likely to be identified as a high-risk county than a county identified as high risk in domains with more indicators (i.e., SES). Clearly, this is a valid approach for identifying counties at higher risk overall. However, it is also reasonable to consider each of the 13 risk indicators as distinctly important and unique. For example, if a county was identified as high risk for poverty but not for unemployment, high school dropout, or income inequality, then the Simplified Method would not consider that county at high risk for the SES risk domain, even if poverty significantly impacted that county's residents. To address this limitation, the Equal Weight Method flagged counties as high-risk if their Z-scores were at least one SD above the mean for any four or more risk indicators, regardless of domain. We also calculated the average Z-score for each county for descriptive purposes (Map 14).

Our second independent method was the *Limited Indicator Method*. This method examined a narrower set of indicators that our team and advisory group perceived to be the highest priority for the NC

MIECHV program: 1) poverty, 2) unemployment, 3) preterm birth, 4) low birth weight, and 5) maltreatment. These indicators correspond to the SES, adverse perinatal outcomes, and child maltreatment domains and more closely align with NC MIECHV's focus on substance use and maternal and child health. Further, we examined these five indicators equally, meaning that counties were flagged as at-risk if their Z-scores were at least one SD above the mean for three or more of these five indicators.

Our third independent analytic method was the *Latent Class Analysis Method* (LCA). Briefly, LCA is a person-centered (or in this case, county-centered) method that attempts to identify groups of counties that have similar profiles or clusters of the 13 indicators. Using model-based estimation methods, we identified three "classes" or groups of counties in NC. *Class One* included 36 counties that had average to low risk across all domains. *Class Two* was characterized by 46 counties that had higher rates of indicators in the substance use domain but average to low risk in other domains. *Class Three* included 18 counties characterized by high risk in SES, perinatal outcomes, crime, and maltreatment domains, but relatively moderate risk in substance use. We considered *Class Three* counties to be high-risk counties.

Domain		Indicator	Indicator Definition	Data Sources
Socioeconomic Status (SES)	1.	Poverty	% population living below %100 FPL	2017 Census Small Area Income and Poverty Estimates
	2.	Unemployment	% of the civilian labor force unemployed	2017 Bureau of Labor Statistics
	3.	HS Dropout	% of 16- to 19-year-olds not enrolled in school with no high school diploma	2013-2017 American Community Survey
	4.	Income Inequality	Gini Coefficient - 1 Yr. Estimate	2013-2017 American Community Survey
Adverse Perinatal Outcomes	5.	Preterm Birth	% live births <37 weeks	2013-2017 National Vital Statistics System - Raw Natality File
	6.	Low Birth Weight	% live births <2500 g	2013-2017 National Vital Statistics System - Raw Natality File
Substance Use Disorder	7.	Alcohol	Prevalence rate: Binge alcohol use in past month	2012-2014 National Survey of Drug Use and Health
-	8.	Marijuana	Prevalence rate: Marijuana use in past month	2014-2016 National Survey of Drug Use and Health
	9.	Illicit Drugs	Prevalence rate: Use of illicit drugs, excluding marijuana, in past month	2012-2014 National Survey of Drug Use and Health
	10.	Pain Relievers	Prevalence rate: Nonmedical use of pain medication in past year	2012-2014 National Survey of Drug Use and Health
Crime	11.	Crime Reports	# reported crimes/1000 residents	2016 National Archive of Criminal Justice Data
	12.	Juvenile Arrests	# crime arrests ages 0-17/100,000 juveniles aged 0-17	2016 National Archive of Criminal Justice Data
Child	13.	Child	Rate of maltreatment victims aged	2016 Administration for Children and
Maltreatment		Maltreatment	<1-17 per 1,000 children (aged <1- 17) residents	Families Child Maltreatment

The 2024 Needs Assessment Amendment builds on the 2020 Needs Assessment to gain insight into the potential impact of the COVID-19 pandemic and the passage of time on counties since the data for the 2020 Needs Assessment was collected and to expand the dimensions of the review of need. To accomplish this the 2024 Needs Assessment Amendment team identified nine new risk indicators and one repeated risk indicator used in the 2020 Needs Assessment. The 10 indicators are all within the five domains designated for review in the HRSA guidelines for the 2020 Needs Assessment (i.e., socioeconomic status, adverse perinatal outcomes, substance use disorder, crime, and child maltreatment). Table 2A lists the definitions and data sources for the 10 risk indicators. The selected indicators are reliable markers for detecting the accrual of risks and for identifying localities where the availability of MIECHV funding could impact the program's aims to improve maternal and child health; prevent child abuse and neglect; reduce crime and domestic violence; increase family education level and earning potential; promote children's development and readiness to participate in school; and, connect families to needed community resources and supports.

The first analysis conducted for the 2024 Needs Assessment Amendment used an Equal Weight Method. The nine risk indicators used for the analysis were assumed to have equal importance in identifying need. Maternity care access was not included in this first analysis but was used for a second analysis. County level data was collected for all 100 NC counties on each of the nine indicators. The mean and standard deviation for each indicator were calculated. Risk scores were assigned to counties based on how far above or below the group mean a county's indicator value was. For indicators where a higher value denoted higher risk, counties whose indicator value was one or more standard deviations above the mean were given a risk score of "7". Counties whose indicator value was between one standard deviation and a half standard deviation above the mean were given a score of "6". Counties whose indicator value was between a half standard deviation and a quarter standard deviation above the mean were given a score of "5". Counties whose indicator value was between a guarter standard deviation above and a quarter standard deviation below the mean were given a score of "4". Counties whose indicator value was between a quarter standard deviation and a half standard deviation below the mean were given a score of "3". Counties whose indicator value was between a half standard deviation and one standard deviation below the mean were given a score of "2". And, counties whose indicator value was equal or less than one standard deviation below the mean were given a score of "1". This scoring rubric was chosen to allow a finer determination of counties' level of risk for each indicator. Once each indicator had been scored, all nine indicator scores were summed for each county to determine counties' total risk scores. The mean total risk score for the group of counties determined to be at-risk in the 2020 Needs Assessment was then calculated. Any county whose total risk score was equal to or higher than the 2020 "at-risk" group's mean total risk score were determined to have a level of risk commensurate with that group and were added to the list of counties at-risk. This analysis identified 22 at-risk counties that were added to the list. For "average weekly wage", where a lower indicator value demonstrated higher risk, the scoring was reversed.

The second method used to identify at-risk counties involved using only one indicator, each county's level of maternity care access. Maternity care access was analyzed individually based on the assumption that it is a leading indicator of perinatal community need. Maternity care access is a major source of inequity and poor maternal and child outcomes. Mothers and their babies in maternity care deserts are at higher

risk for poor health outcomes, including death. A maternity care desert is defined by the March of Dimes³ as a county without a hospital or birth center providing obstetric care and without any obstetric providers. They report the lack of maternity care access disproportionately impacts rural communities and minorities. Nationally, 1 in 4 Native American babies and 1 in 6 Black babies are born in areas with limited or no access to maternity care services. And, while the number of maternity care practitioners has grown in the past decade, only about 7% practice in rural areas and approximately two-thirds of maternity care deserts are in rural counties. Further, addressing this issue by making MIECHV funds available to counties with low or no access to maternity care aligns with the White House's "Blueprint for Addressing the Maternal Health Crisis"⁵. With specific regard to identifying at-risk counties, any county designated as a maternity care desert and not included in the 21 counties identified as at-risk in the analysis of the nine risk indicators was determined to be at-risk. Maternity care designated as counties with low access to maternity be at-risk counties were designated as counties with low access to maternity care at a not included to be at-risk counties that were added to the list of at-risk counties.

Table 2A: Risk Indic	Table 2A: Risk Indicators, Domains, and Definitions used in County Risk Assessment for 2024 Needs Assessment Amendment		
Domain	Indicator	Indicator Definition	Data Sources
Socioeconomic Status (SES)	14. Single Mother Families in Poverty	% of families in poverty that are single mother with children	2017-2021 North Carolina Office of State Budget and Management Census Estimated Percent of Population in Poverty
	15. 3 rd Grade Reading Retentions	% of students retained for not demonstrating reading proficiency on 3rd grade standards	2020-2021 State of North Carolina District Level Report Read to Achieve Grade 3 End-of-Year Results
	16. Average Weekly Wage	Average weekly wage	2022 U.S. Bureau of Labor Statistics, Southeast Information Office County Employment and Wages in North Carolina — Fourth Quarter 2022
Adverse Perinatal Outcomes	17. Maternity Care Access	County designation based on level of maternity care available	2023 March of Dimes Maternity Care Deserts Report for North Carolina
	18. Chronic Health Burden	% of birthing women with one or more chronic conditions	2023 March of Dimes Maternity Care Deserts Report for North Carolina
	19. Smoking During Pregnancy	% Mothers smoking during pregnancy	2017-2021 NC State Center for Health Statistics County Health Data Book
Substance Use Disorder	20. Overdose Deaths	Prevalence rate: Drug overdose deaths from all types of medications and drugs and of all intents in past year	2022 NCDHHS Opioid and Substance Use Action Plan Data Dashboard
	21. Children in Foster Care due to Parental Substance Use	% of children in foster care due to parental substance use	2021 NCDHHS Opioid and Substance Use Action Plan Data Dashboard
Crime	22. Juvenile Delinquency	Rate of delinquent complaints per 1,000 youth (aged 8-17)	2022 North Carolina Department of Public Safety County Databook
Child Maltreatment	23. Child Maltreatment	Rate of substantiated child maltreatment per 1,000 children (aged <1-17)	2018-2022 Annie E. Casey Foundation and NC Child Kids Count Data Center North Carolina Statistics on Children, Youth and Families in North Carolina

³ March of Dimes: NOWHERE TO GO: MATERNITY CARE DESERTS ACROSS THE U.S. (2022 REPORT) <u>https://www.marchofdimes.org/maternity-</u> <u>care-deserts-report: Retrieved</u> January 17, 2024.

Results of County Risk Assessment

Map 15 shows county risk profiles based on these four different assessment methods. We identified 10 counties as "highest priority" because these counties were consistently in the highest risk group across all four assessment methods. Counties classified as high risk by two or three of the assessment methods were designated as "high priority." Counties identified as high risk by only one assessment method were designated as "priority" counties. Counties not identified as high risk by any methods were designated as "low priority." Across these four priority groups, the average Z-scores were z = 0.46 (highest), z = 0.30 (high), z = 0.25 (priority), and z = -0.16 (low).

Four of the ten highest priority counties already have home visiting programs currently funded by MIECHV. The remaining six counties (Anson, Bertie, Richmond, Scotland, Vance, Washington) do not currently receive MIECHV funding, but our survey results indicated that they may have other home visiting services available to families. We identified eight additional "high priority" counties that were identified as high risk by two or three methods. Two of these counties are current MIECHV sites (Columbus and Bladen); the remaining six counties (Greene, Martin, Mecklenburg, Stokes, Warren, Wilson) are not.

The first analysis conducted for the 2024 Needs Assessment Amendment identified 22 at-risk counties to add to the list of at-risk counties identified by the 2020 Needs Assessment. The counties identified are: 1) Alexander; 2) Alleghany; 3) Beaufort; 4) Caldwell; 5) Clay; 6) Davidson; 7) Graham; 8) Jackson; 9) Jones; 10) Madison; 11) Montgomery; 12) Pamlico; 13) Perquimans; 14) Randolph; 15) Rockingham; 16) Rutherford; 17) Stanly; 18) Surry; 19) Swain; 20) Tyrrell; 21) Wilkes; and, 22) Yadkin. The second method analysis used to identify at-risk counties identified an additional three counties: Currituck, Gates, and Hyde. None of the counties identified as at-risk by the 2024 Needs Assessment Amendment are currently served by MIECHV-funded home visiting programs.

Review of Existing MIECHV Sites

This section briefly describes NC's current MIECHV program sites in order to provide additional details about the program's current implementation. Appendix 2 provides a more detailed fact sheet developed by HRSA to describe the NC MIECHV program in fiscal year 2019. Overall, NC's MIECHV programs funded two models (Nurse-Family Partnership and Healthy Families America) in a total of 14 counties, served a total of 402 households, and conducted 6,174 home visits. Notably, several of the current NC MIECHV programs are in counties that were not identified as high priority (i.e., high risk) by our needs assessment describes in the previous section. Phase Two of the county risk assessment includes adding in additional counties that are currently MIECHV sites; and providing relevant data. The additional counties described below are Buncombe, Burke, Durham, Gaston, Mitchell, Nash, and Yancey. Information from the NC Early Childhood Action Plan County Data Reports were used to supplement descriptions of these counties.

The review of existing MIECHV sites included in the 2020 Needs Assessment still represents the current state of NC's MIECHV program with the exception that the program now serves a total of 16 counties. Two NFP sites expanded their service areas by one county each since the 2020 Needs Assessment was completed. The specific counties added are described below in the relevant site descriptions.

Buncombe County Nurse-Family Partnership

The 2010 needs assessment identified multiple ZIP codes in Buncombe County as high-risk. Although we did not identify Buncombe County as high-risk in our current needs assessment, Buncombe has several negative maternal and child health outcomes that are higher than the state average. The county has a higher infant death rate for African American children (3.8 vs. 2.4 per 1,000), higher rates for children experiencing maltreatment, and less than 50% of eligible children enrolled in pre-kindergarten.⁴ In 2017, 18% of children in the county under age 18 were living in poverty.³

Buncombe County's MIECHV site is based in the Department of Public Health. This site serves families in the 28715, 28748, 28803, and 28806 ZIP codes. The Buncombe NFP program seeks to help individuals improve pregnancy outcomes, child health, and economic self-sufficiency. Since its establishment in 2009, the program has served over 500 families. In fiscal year 2019, the site served 26 households and completed 394 home visits.⁵ Among program participant households in fiscal year 2019, 58% had a household income at or below the poverty line.

Gaston County Nurse-Family Partnership

The current needs assessment identified Gaston County as a low-priority county. However, many county-level indicators demonstrate the need for MIECHV services in Gaston. Most notably, Gaston has higher rates of emergency room visits for children aged zero to eight (97 vs. 74 per 1,000) than the state overall. Additionally, Gaston County has a lower percentage of college- and career-ready students based on End-of-Grade 3rd grade reading assessments (40% vs. 45%).⁶ In 2017, 22% of children under age 18 in the county were living in poverty.

The Gaston Community Action Partnership currently oversees a Head Start program with locations throughout the county. Head Start aims to promote school readiness for Gaston residents. The Gaston County Health Department serves as the lead agency for the MIECHV-funded NFP program, with a focus area of 38 census tracts in the county. In fiscal year 2019, the site served 79 households and completed 1226 home visits.⁴ Among program participant households, 71% had a household income at or below the federal poverty line.

Northeastern Nurse-Family Partnership at Halifax Community College

Northeastern NFP serves a five-county region comprised of Edgecombe, Halifax, Hertford, and Northampton Counties (funded by MIECHV) and Nash County (funded by state allocations). Halifax Community College serves as the new lead agency, which was previously Northampton County Health Department. In fiscal year 2019, 55 households were served, and 1058 home visits were completed.⁴

⁴ North Carolina Department of Health and Human Services. (2020). *North Carolina Early Childhood Action Plan: Buncombe County data report*. Retrieved August 14, 2020 <u>https://www.ncdhhs.gov/about/department-initiatives/early-childhood-data/early-childhood-action-plan-county</u>

⁵ NC Division of Public Health, Women and Children's Health Section, Children and Youth Branch. (2019). WHC: Maternal, Infant, and Early Childhood Home Visiting Program. <u>https://publichealth.nc.gov/wch/aboutus/ebhv.htm</u> ⁶ North Carolina Department of Health and Human Services. (2020). North Carolina Early Childhood Action Plan: Gaston County data report. Retrieved August 14, 2020 <u>https://www.ncdhhs.gov/about/department-</u> initiatives/early-childhood/early-childhood-data/early-childhood-action-plan-county

Among program participant households in fiscal year 2019, 73% had a household income at or below the federal poverty line.

Edgecombe, Halifax, and Northampton Counties were all identified as highest priority communities by our analysis. Hertford was identified as a priority county and Nash County was identified as a low-priority county. However, several statistics indicate the need for MIECHV services in Nash, including a higher infant death rate than the state (8.3 vs. 7.1 per 1,000), a higher percentage of children considered food insecure than the state (21.9% vs. 20.9%), and a lower percentage of students reading at or above grade-level.⁷ In 2017, 24% of children under age 18 in the county were living in poverty.

Northeast NFP (housed at Halifax Community College) has expanded into Bertie County since the completion of the 2020 Needs Assessment. Bertie County was identified as an at-risk county in the 2020 Needs Assessment. Bertie County was the focus of Readiness Session #2 described below in Part II: Readiness for Implementing Home Visiting.

Robeson, Columbus, and Bladen Nurse-Family Partnership

Bladen, Columbus, and Robeson Counties were all identified as high- or highest priority communities by our risk analysis. The Robeson County Health Department serves as the lead agency for this NFP program. In fiscal year 2019, 109 households were served, and 1110 home visits were completed.⁴ Among program participant households in fiscal year 2019, 75% had a household income at or below the federal poverty line.⁴

The Robeson County Health Department, which implements the Nurse-Family Partnership home visiting model expanded into Scotland County since the completion of the 2020 Needs Assessment. Scotland County was identified as an at-risk county in the 2020 Needs Assessment. Scotland County was the focus of Readiness Session #4 described below in Part II: Readiness for Implementing Home Visiting.

Blue Ridge Healthy Families (Mitchell and Yancey County)

The Blue Ridge Healthy Families program implements the Healthy Families America (HFA) model. Blue Ridge Healthy Families provides home visiting services, parenting social events, a toy lending program, and child development workshops. This site also emphasizes parent communication with babies, nurturing babies, and active relationships between families and their medical providers. Our current risk assessment classified Yancey County as a low-priority county. However, Yancey had higher rates of child maltreatment, childhood food insecurity (23% vs. 21%), and higher asthma emergency room visits (16 vs. 9 per 1,000) compared to state averages.⁸ In 2017, 26% of children under age 18 in the county were living in poverty.

Though not identified as a high-risk county overall, Mitchell County showed signs of a need for a MIECHV site in several indicators. Compared to state averages, Mitchell had higher rates of child maltreatment for ages 0 to 8 years and higher rates of childhood food insecurity (24% vs. 21%), as well

⁷ North Carolina Department of Health and Human Services. (2020) *North Carolina Early Childhood Action Plan: Nash County data report*. Retrieved August 14, 2020 <u>https://www.ncdhhs.gov/about/department-initiatives/early-childhood/early-childhood-action-plan-county</u>.

⁸ North Carolina Department of Health and Human Services. (2020). *North Carolina Early Childhood Action Plan: Yancey County data report*. Retrieved August 14, 2020 <u>https://www.ncdhhs.gov/about/department-</u> <u>initiatives/early-childhood-data/early-childhood-action-plan-county</u>

as a very low percentage of eligible families receiving a daycare subsidy and enrolled in 4- or 5-star centers and homes in the county.⁹ In 2017, 26% of children under age 18 in the county were living in poverty. Like Yancey, Mitchell County works with Blue Ridge Healthy Families to provide home visiting services through HFA.

Catawba Valley Healthy Families

Implemented by Children's Hope Alliance, the Catawba Valley Healthy Families program delivers the Healthy Families America (HFA) program to families in Lesser Burke County, as defined by ZIP codes with high needs. Our assessment classified Burke as a low-priority county, but its higher overall rates of several indicators emphasized the need for MIECHV services. Compared to state averages, Burke County has notably higher rates of child maltreatment (aged 0-8) and childhood food insecurity (23.5% vs. 20.9%), and shows higher numbers for days to reunification, guardianship, or custody for children aged 0-5.¹⁰ In 2017, 22% of children under age 18 in the county were living in poverty.

In fiscal year 2019, 74 households were served by Catawba Valley Healthy Families and 1,559 home visits were completed.⁴ Among program participant households, 41% had a household income at or below the U.S. Federal Poverty Guidelines.

Healthy Families Durham

Our current needs assessment identified Durham County as a low-priority county. However, Durham County showed higher infant death rates among African American compared to white infants than the state and a substantially higher average number of days to reunification, guardianship, or custody for children aged zero to three and aged six to eight.¹¹ In 2017, 24% of children under age 18 in the county were living in poverty.

Through the Center for Child and Family Health, Healthy Families Durham implements HFA through MIECHV support in a subregion of the county. Termed the East Durham Initiative, this support program was justified by criteria in the 2010 needs assessment. In fiscal year 2019, 59 households were served, and 827 home visits were completed.⁴ Among program participant households in fiscal year 2019, 25% had a household income at or below the poverty line.

¹⁰ North Carolina Department of Health and Human Services. (2020). *North Carolina Early Childhood Action Plan: Burke County data report*. Retrieved August 14, 2020 <u>https://www.ncdhhs.gov/about/department-</u> initiatives/early-childhood/early-childhood-data/early-childhood-action-plan-county

¹¹ North Carolina Department of Health and Human Services. (2020). *North Carolina Early Childhood Action Plan: Durham County data report*. Retrieved August 14, 2020 <u>https://www.ncdhhs.gov/about/department-</u> <u>initiatives/early-childhood/early-childhood-data/early-childhood-action-plan-county</u>.

⁹ North Carolina Department of Health and Human Services. (2020). *North Carolina Early Childhood Action Plan: Mitchell County data report*. Retrieved August 14, 2020 <u>https://www.ncdhhs.gov/about/department-</u> initiatives/early-childhood-data/early-childhood-action-plan-county

Part II: Readiness for Implementing Home Visiting

The next section of this report provides information about community readiness for home visiting in the highest priority counties. Between June 29th and July 23rd, the team held meetings (ranging from 2-2.5 hours) with stakeholders in the six counties identified as highest risk. Stakeholders came from a variety of backgrounds including Departments of Social Services, Health Departments, and birthing centers. Engagement ranged from 4-10 participants in a virtual roundtable. The purpose of these meetings was to discuss each county's readiness to implement home visiting.

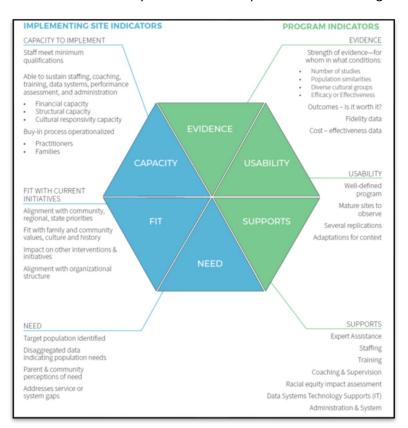


Figure 2. NIRN Hexagon Tool

The meetings included introductory information about home visiting programs and MIECHV, discussions of county-specific data, opportunities to share thoughts and opinions, and interactive polls. The team incorporated the National Implementation Research Network Hexagon Tool¹² as a guiding framework. This tool provides a structure for exploring readiness to implement a new program or practice. We also used the ZERO TO THREE home visiting planning tool as a resource for developing the facilitation guide.¹³ The Hexagon Tool consists of three implementing site indicators and three program indicators (Figure 2). We did not include a discussion of evidence as a readiness indicator because we focused the discussions on the implementation of evidence-based

home visiting. During the six community readiness sessions, we used interactive polls and discussion to explore indicators of need, fit, capacity, usability, and supports for implementing home visiting programs in each county. Using the Hexagon Tool, each readiness indicator had a set of questions for programs to consider based on their knowledge and responses to a corresponding rating scale (i.e., ranging from 1 to 5) used to summarize input from each participant group in each of the five indicators discussed. We report the summary scores for all five indicators by county in the individual sections below. Informal poll data were intended to add additional context to the qualitative discussion.

¹² Metz, A., & Louison, L. (2018). *The Hexagon Tool: Exploring context*. National Implementation Research Network, Frank Porter Graham Child Development Institute, University of North Carolina at Chapel Hill. Based on Kiser, Zabel, Zachik, & Smith (2007) and Blase, Kiser & Van Dyke (2013).

¹³ ZERO TO THREE. (2016). *Home visiting community planning tool*. <u>https://www.zerotothree.org/resources/172-the-zero-to-three-home-visiting-community-planning-tool</u>

The "need" indicator examines information about the population of concern, levels of risk by geographic area, perception of need by county residents, and whether home visiting could address county needs. Ratings ranged from *strongly meets need* (5) to *does not meet need* (1). For the "fit" indicator, questions addressed how well home visiting services would align with the priorities and values of the county, how the level of fit would impact implementation, the county's level of buy in, and potential intersections of extant programs with home visiting. Ratings ranged from *strong fit* (5) to *does not fit* (1). The "capacity" indicator explored each county's current ability to implement the program via questions about the potential availability of finances, a host agency, a workforce, leadership, technology, facilities, and data collection capabilities. Ratings ranged from *strong capacity* (5) to *no capacity* (1). The "usability" indicator assessed participants' awareness of existing home visiting programs, replications and assessments of programs, definitions of home visiting and who it serves, and guidance on how to adapt home visiting for the county. Ratings rage from *highly usable* (5) to *not usable* (1). The "supports" indicator asked about implementation support, start-up costs, and training and curricula needs and availability. Ratings ranged from *well supported* (5) to *not supported* (1).

The team sought to understand the perspectives of people living and working in the highest priority counties and their perceptions of their counties' strengths and challenges. To ensure transparency, we started each discussion session by reviewing the data used to identify each county as highest risk as well as supplemental data from other sources relevant to maternal and child health. Representatives described areas of strength in their county such as positive interagency collaboration, resourcefulness, and community resilience. Participants were also invited to identify their counties' areas of need, including monetary resources, program engagement, and resource limitations associated with rural geography. We also asked participants to speak about their capacity for new or expanded home visiting programs and what challenges or needs would come up in practice. After these meetings, the research team gathered and summarized feedback for the counties involved.

Community Readiness Session Summaries

Readiness Session #1: Anson County

Anson County has higher-than-state averages for the following: preterm birth (15%), low birth weight (13%), infant mortality (11 per 1,000 live births), poverty (33%), crime (33 reported crimes per 1,000 residents and 2,271 crime arrests per 1,000 juveniles ages 0-17), unemployment (5%), child maltreatment (26 per 1,000 children aged 0-3 and 18 per 1,000 children aged 4-5), and children without health insurance (6%).¹⁴

Stakeholders identified county location, potential for economic development partnership, generosity, community resilience, and community mutual support as strengths. Organizations and agencies collaborate well with one another. The county's challenges include a reduced quality of life, poverty, and lack of jobs, transportation, and internet access. Further, there is low awareness/uptake of programs

¹⁴ North Carolina Department of Health and Human Services (NC DHHS). (2019). *North Carolina provisional vital statistics*. <u>https://schs.dph.ncdhhs.gov/data/vital.cfm</u>; NC DHHS. (2020). *Early Childhood Action Plan county data reports*. <u>https://www.ncdhhs.gov/about/department-initiatives/early-childhood/early-childhood-data/early-childhood-action-plan-county</u>; NC Child. (2020). *2020 county data cards*. <u>https://ncchild.org/what-we-do/insights/data/county-data-cards/</u>

among county residents. Programs have experienced success in the past by "meeting people where they were," though difficulties in obtaining funding to support programs remains a barrier.

Average stakeholder responses to the polling questions are listed in the associated table. Stakeholders expressed interest in and a need for a home visiting program in the area, as well as the ability to support to support the implementation of a program. A lack of financial resources was identified as the primary barrier to moving forward.

Anson County	Average Rating
Need	4.0
Fit	4.1
Capacity	3.1
Usability	4.0
Supports	3.9

Readiness Session #2: Bertie County

Compared to statewide rates, Bertie County has higher rates of preterm birth (13%), low birth weight (13%), poverty (27%), marijuana use in the past month (8%), and unemployment (6%).¹³ Strengths identified during the discussion with stakeholders included the county's racial and ethnic diversity, community resources such as after school and summer programs, and the support that community members provide to one another. Challenges included the rurality and size of the county, limited resources, limited or poor-quality internet access, poverty, employment, and an inadequate number of health care providers. Further, programs may face challenges associated with community members' distrust of service providers coming into their homes.

Stakeholders expressed interest in a home visiting program in Bertie County. Identifying a trusted implementing agency, strong marketing of services, and the need for identified program supports are key factors in assessing the viability of implementing a home visiting program.

Bertie County	Average Rating
Need	3.2
Fit	3.6
Capacity	2.6
Usability	4
Supports	3

Readiness Session #3: Richmond County

Compared to statewide rates, Richmond County has higher rates of preterm birth (16%), low birth weight (12%), infant mortality (9 per 1,000), poverty (26%), crime (48 per 1000 residents), binge alcohol use in the last month (19%), and unemployment (9%).¹³ Stakeholders identified strong collaboration between organizations and agencies in the community as a key strength, as partners work together and support one another. The economy, increased substance use, inadequate services and supports for the Latinx community, and ensuring the sustainability of programs were identified as key challenges.

Key recommendations for implementing a home visiting program in Richmond County include: co-producing the program with the population served, identifying what makes a program successful in advancing improvement in outcomes, and addressing the root causes. Stakeholders also emphasized the need for a strong sustainability plan with funding to maintain all components of a program and the need to identify a program suited to the rural setting of this county.

Richmond County	Average Rating
Need	3.9
Fit	3.1
Capacity	3.2
Usability	3.9
Supports	4

Readiness Session #4: Scotland County

Scotland County Average Rating

24

Compared to state-level averages, Scotland County experiences higher rates of preterm births (15%), low birth weight (17%), infant mortality (8.9 per 1,000 live births), crime (47 reported crimes per 1,000 residents; 1,968 crime arrests per 1,000 juveniles ages 0-17), child maltreatment (46 per 1,000 children

aged 0-3; 27 per 1,000 children aged 4-5), teen pregnancy (46%), unemployment (8%), and poverty (26%).¹³ Strengths of Scotland County that were highlighted by stakeholders included the collaborative relationship between organizations and agencies and the county's strong sense of community and family. Stakeholders also underlined potential challenges associated with financial support and transportation.

Transparency and strong relationships with the community are important factors for new programs. Stakeholders expressed interest in home visiting, particularly regarding one model. However, challenges associated with funding and staff retention were raised as a concern, as program sustainability was a key priority expressed by stakeholders.

Readiness Session #5: Vance County

Compared to statewide rates, Vance County has higher rates of preterm birth (12%), low birth weight (13%), infant mortality (12 per 1,000 live births), poverty (23%), crime (41 reported crimes per 1,000 residents), binge alcohol use in the past month (18%), nonmedical use of pain medication in the past year (5%), unemployment (6%), child maltreatment (30 per 1,000 children age 0-3; 26 per 1,000 children aged 4-5), and children without health insurance rates (7%).¹³ Stakeholders in Vance County identified strong collaboration as a key strength of their community. Challenges discussed include staff retention, lack of resources in the county, transportation, availability of jobs,

poverty, and food insecurity.

Stakeholders indicated that building trust with community members, assessing a program's fit for the community, and planning implementation would be key for ensuring home visiting programs' success. A desire to think about whether a program is the right fit and plan for its implementation was key for this community.

Readiness Session #6: Washington County Rates of low birth weight (12%), infant mortality (16%), poverty (41%), crime (56 per 1000 residents), unemployment (7%), child maltreatment (20%), and children without health insurance (11%) are higher in Washington County than in North Carolina overall.¹³ Stakeholders identified the relationships between partner agencies and organizations, relationships with fellow

leaders in the community, and willingness to collaborate as strengths of the county. Additional strengths discussed were the ability to form relationships with partners and the potential for a greater impact on the population served because of the small size of the community. Stakeholders identified challenges with accessing funding, restrictive eligibility for programs or opportunities, and distance to hospitals with obstetrical and delivery services.

Vance County	Average Rating
Need	3.8
Fit	4.1
Capacity	3.6
Usability	4
Supports	3.4

Washington County	Average Rating
Need	3.3
Fit	4
Capacity	3
Usability	4
Supports	4

valice county	Average Rating
Need	3.8
Fit	4.1
Capacity	3.6
Usability	4
Supports	3.4

Need	3.2
Fit	4
Capacity	3
Usability	4.7
Supports	4.7

Stakeholders observed the need for home visiting programs to consider how to reach the greatest number of individuals given the travel time between locations in their community. Overall, there is a high level of interest in a home visiting program, though assistance, support, and guidance will be needed to achieve implementation readiness.

Community Readiness Sessions Findings

Throughout the Community Readiness Assessment Sessions, participants expressed high interest in a home visiting program in their communities. A prime concern for stakeholders was the financial resources required to support and sustain these programs, including by offering competitive wages to recruit a workforce (e.g., nurses) to implement these programs. Participants also underlined the need to partner with trusted community organizations and stakeholders in establishing home visiting programs, particularly to mitigate distrust related to individuals coming into the home. Building trust will also require educating service recipients about the intent of the program and the role of the home visitor. In sum, there is a demonstrable need and desire for these services, yet these counties currently lack the financial resources to implement a home visiting program.

Part III: Existing Home Visiting Programs

Methodology

This section of the report shifts from a discussion of county-level risk assessments to a broader review of the range of home visiting programs available in NC. Information about individual home visiting programs across the state was collected through an online Qualtrics software-based survey. The survey included programs funded by NC MIECHV as well as programs funded by other sources. The survey was first developed as part of statewide landscape study conducted in 2017. The landscape study survey was cross walked with the MIECHV needs assessment requirements to ensure that all relevant domains were collected. The survey was developed through an iterative process with feedback from the advisory group. Appendix 1 includes the full version of the survey.

Recruitment and Response

Advisory group members and key informants helped our research term assemble an inventory list of current home visiting programs in NC. 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, we widely distributed an anonymous survey link 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 MIECHV needs assessment survey was open from November 2019 to April 2020.

Data Analysis

Univariate descriptive statistics were calculated for survey responses using SPSS software. Data were collected at the agency or site level.

Results: Inventory and Capacity of Home Visiting Programs

To measure the capacity of home visiting programs in North Carolina, we used the 2020 statewide survey to identify the number and types of individuals and families who received services in NC from 2018-2019. In addition to the survey data collected from individual sites, we requested service data for each of the evidence-based national models operating in NC. We also reviewed information available online from each model to identify any additional programs in operation that were not identified through the survey or key informant requests. Tables 3 and 4 provide detailed information about the inventory of home visiting programs in NC. Table 3 provides the name of the model, the number of sites and counties it operates in, and information about the evidence supporting the effectiveness of the model.

A review of North Carolina's inventory and capacity for home visiting was completed in January 2023. The results of that review indicate that the inventory and capacity described in the 2020 Needs Assessment still illustrates the extent of the home visiting field in North Carolina accurately well with only two changes. The models described are all still being implemented in the state and the capacity estimate continues to be representative. The first change to the home visiting landscape since the 2020 Needs Assessment is the addition of Healthy Beginnings to the list of home visiting models being offered in North Carolina. Healthy Beginnings has been offered in North Carolina for many years and was somehow missed during the survey of home visiting models conducted for the 2020 Needs Assessment. The Healthy Beginnings model is focused on providing support to minority women and their children from birth to age two. Secondly, in January 2024 funding for the Adolescent Parenting Program serving Avery County ended. Table 3A gives updated information about North Carolina's home visiting program inventory.

Model	Website	# Sites	# Counties	EBP- MIECHV ³	EBP- NCPC⁴	CEBC Scientific Rating ⁵
Adolescent Parenting Program ¹	https://www.teenpregnancy.ncdhhs. gov/app.htm	25	24	NR	EI Promising	3
Attachment and Biobehavioral Catchup	http://www.abcintervention.org/	16	10	Yes	EB Established	1
Book Harvest Book Babies	http://bookharvestnc.org/programs/ book-babies/	2	2	NR	NR	NR
Child First	http://www.childfirst.org/	5	26	Yes	NR	NR
Early Head Start – Home Based	https://eclkc.ohs.acf.hhs.gov/progra ms/article/home-based-option	17	29	Yes	NR	3
Family Connects	http://www.familyconnects.org/	3	4	Yes	EI Promising	NR
Healthy Families America	http://www.healthyfamiliesamerica. org/	3	5	Yes	EB Established	1
Home Instruction for Parents of Preschool Youngsters	https://www.hippyusa.org/	1	1	Yes	NR	2
Nurturing Parent Program	https://www.nurturingparenting.com L	4	7	No	El Promising ²	NR
Nurse-Family Partnership	https://www.nursefamilypartnership. org/	14	23 and Eastern Band of Cherokee Indians	Yes	EB Well Established	1
Parents as Teachers	https://parentsasteachers.org/	36	39	Yes	EB Established	3
ParentChild+	https://www.parentchildplus.org/	2	1	No	NR	3
Safe Care - Augmented	https://safecare.publichealth.gsu.edu	1	1	Yes	EI Promising	2

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

This inventory includes programs where home visits are frequent and are the primary service offered. We do not include several maternal and child health and child welfare programs operating in North Carolina that offer home visits as supplemental services such as the Part C Early Intervention Program (<u>NC Infant Toddler Program</u>), <u>care management services</u> such as Care Management for High-Risk Pregnant Women and the Care Management for At-Risk Children Program, or child welfare in-home services such as <u>Intensive Family Preservation</u> <u>Services</u>. These programs are a critical part of the continuum of family support programs but are beyond the scope of the MIECHV needs assessment.

¹The Adolescent Parenting Program sites use either the Partners for a Healthy Baby (n = 15) or the Parents as Teachers curriculum (n = 10). The Partners for a Healthy Baby Program (<u>https://cpeip.fsu.edu/phb/</u>) has not been rated by the identified groups. On June 1, 2020 all APP programs have transitioned to the PAT model.

² The North Carolina Partnership for Children has rated NPP program versions differently. 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" (i.e., Young Parents and Their Families; Nurturing Skills for Families; and Nurturing Fathers).

³ The MIECHV evidence-based practice designation (Yes/No) is from the <u>Home Visiting Evidence of Effectiveness</u> literature review.

⁴The NCPC rating is drawn from the NC Partnership for Children's <u>Smart Start Resource Guide NC of Evidence-Based and Evidence Informed</u> <u>Programs and Practices</u>.

⁵ The CEBC scientific rating is from the <u>California Evidence-Based Clearinghouse for Child Welfare</u>: 1 = *well-supported*, 2 = *supported*, 3 = *promising*.

Model	Website	# Sites	# Counties	EBP- MIECHV ³	EBP- NCPC ⁴	CEBC Scientific Rating ⁵
Adolescent Parenting Program ¹	https://www.teenpreg nancy.ncdhhs.gov/app .htm	25	23	NR	El Promising	3
Attachment and Biobehavioral Catchup	http://www.abcinterv ention.org/	16	10	Yes	EB Establishe d	1
Book Harvest Book Babies	<u>http://bookharvestnc.</u> org/programs/book- <u>babies/</u>	2	2	NR	NR	NR
Child First	<u>http://www.childfirst.</u> <u>org/</u>	5	26	Yes	NR	NR
Early Head Start – Home Based	<u>https://eclkc.ohs.acf.h</u> <u>hs.gov/programs/artic</u> <u>le/home-based-option</u>	17	29	Yes	NR	3
Family Connects	<u>http://www.familycon</u> <u>nects.org/</u>	3	4	Yes	El Promising	NR
Healthy Families America	<u>http://www.healthyfa</u> <u>miliesamerica.org/</u>	3	5	Yes	EB Establishe d	1
Home Instruction for Parents of Preschool Youngsters	<u>https://www.hippyusa</u> .org/	1	1	Yes	NR	2
Nurturing Parent Program	<u>https://www.nurturin</u> gparenting.com	4	7	No	El Promising ²	NR
Nurse-Family Partnership	https://www.nursefa milypartnership.org/	14	23 and Eastern Band of Cherokee Indians	Yes	EB Well Establishe d	1
Parents as Teachers	<u>https://parentsasteac</u> <u>hers.org/</u>	36	39	Yes	EB Establishe d	3
ParentChild+	<u>https://www.parentch</u> ildplus.org/	2	1	No	NR	3
Safe Care - Augmented	https://safecare.publi chealth.gsu.edu/	1	1	Yes	El Promising	2
Healthy Beginnings	https://wicws.dph.ncd hhs.gov/services.htm	16	18	NR	NR	NR

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

This inventory includes programs where home visits are frequent and are the primary service offered. We do not include several maternal and child health and child welfare programs operating in North Carolina that offer home visits as supplemental services such as the Part C Early Intervention Program (NC Infant Toddler Program), care management services such as Care Management for High-Risk Pregnant Women and the Care Management for At-Risk Children Program, or child welfare in-home services such as Intensive Family Preservation Services. These programs are a critical part of the continuum of family support programs but are beyond the scope of the MIECHV needs assessment. ¹ The Adolescent Parenting Program sites use either the Partners for a Healthy Baby (n = 15) or the Parents as Teachers curriculum (n = 10). The Partners for a Healthy Baby Program (https://cpeip.fsu.edu/phb/) has not been rated by the identified groups. On June 1, 2020 all APP programs have transitioned to the PAT model.

² The North Carolina Partnership for Children has rated NPP program versions differently. 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" (i.e., Young Parents and Their Families; Nurturing Skills for Families; and Nurturing Fathers).

³ The MIECHV evidence-based practice designation (Yes/No) is from the Home Visiting Evidence of Effectiveness literature review.

⁴ The NCPC rating is drawn from the NC Partnership for Children's Smart Start Resource Guide NC of Evidence-Based and Evidence Informed Programs and Practices.

⁵ The CEBC scientific rating is from the California Evidence-Based Clearinghouse for Child Welfare: 1 = wellsupported, 2 = supported, 3 = promising.

County	APP	ABC	BB	CF	EHS	FC	HFA	HIPPY	NFP	NPP	PAT	PC+	SC	TOTAL
Alamance	28	х									101			129
Alexander					53									53
Alleghany														0
Anson					22									22
Ashe											34			34
Avery														0
Beaufort				56										56
Bertie				16	30				25					71
Bladen				1										1
Brunswick				61										61
Buncombe	7	Х			88				291		20			406
Burke					63		49							112
Cabarrus	24	Х									66			90
Caldwell	29				36									65
Camden				1										1
Carteret				33	15									48
Caswell					33									33
Catawba	15				75						95			185
Chatham					33									33
Cherokee											79			79
Chowan				3										3
Clay														0
Cleveland									134					134
Columbus	18			27					69		19			133
Craven		Х		63	15									78
Cumberland	32				10					19				61
Currituck				26										26
Dare				16							14			30

County	APP	ABC	BB	CF	EHS	FC	HFA	HIPPY	NFP	NPP	PAT	PC+	SC	TOTAL
Davidson	17					144					150			311
Davie											49			49
Duplin				2							9			11
Durham		12	330		36	1804	120				120			2422
Edgecombe	17			2					43					62
Forsyth			343			1977			243		343			2906
Franklin											6			6
Gaston	23	Х							97					120
Gates				1										1
Graham														0
Granville											30			30
Greene														0
Guilford	53	Х			201	3300			340	287	84			4265
Halifax				3					20		3			26
Harnett	18													18
Haywood									45					45
Henderson	31				123						51			205
Hertford				10					3		26			39
Hoke											25			25
Hyde				8										8
Iredell											51			51
Jackson		Х							44					44
Johnston		1												1
Jones				1	15									16
Lee	28										45			73
Lenoir											15			15
Lincoln														0
Macon					8				19		2			29
Madison			1											0

County	APP	ABC	BB	CF	EHS	FC	HFA	HIPPY	NFP	NPP	PAT	PC+	SC	TOTAL
Martin				17							11			28
McDowell					10				35					45
Mecklenburg		Х			29				363	Х	306	Х		698
Mitchell							15							15
Montgomery														0
Moore														0
Nash				12					41					53
New Hanover	23	50		115							50			238
Northampton				19					18					37
Onslow	40			29	144									213
Orange	23	Х			65									88
Pamlico				11	15									26
Pasquotank				17										17
Pender		Х		46										46
Perquimans				6										6
Person											26			26
Pitt				78					103		24			205
Polk					1				7					8
Randolph											45			45
Richmond					22									22
Robeson	24								217					241
Rockingham	19								72		105			196
Rowan	19										25			44
Rutherford					4				89					93
Sampson					33		Х				60			93
Scotland	14								25					39
Stanly														0
Stokes										25	25			50
Surry										25	25			50

County	APP	ABC	BB	CF	EHS	FC	HFA	HIPPY	NFP	NPP	PAT	PC+	SC	TOTAL
Swain									22					22
Transylvania					0									0
Tyrrell				4										4
Union					22					Х				22
Vance	25										19			44
Wake		Х		2	169			52	109		172		Х	504
Warren														0
Washington				18										18
Watauga	16													16
Wayne				1							40			41
Wilkes														0
Wilson	37	Х												37
Yadkin										50	50			100
Yancey							21							21
Eastern Band of														
Cherokee Indians									78					78
TOTAL									2502					16201
	580	63	673	705	1370	7225	205	52	2552	406	2420	0	0	<u>16251</u>

APP = Adolescent Parenting Program; ABC = Attachment and Biobehavioral Catchup; BB = Book Babies; CF = Child First; EHS = Early Head Start; FC = Family Connects; HFA = Healthy Families America; HIPPY = Health Instruction for Parents of Preschool Youngsters; NFP = The Nurse-Family Partnership; NPP = Nurturing Parenting Program; PAT = Parents as Teachers; PC+ = Parent-Child Plus; SC = SafeCare

^a Family Connects added Watauga County site in 2020; HFA added Sampson County in 2020

We identified 13 home visiting models operating in NC.¹⁵ The efficacy of home visiting is supported by a wealth of rigorous research. Moreover, external raters have reviewed this research to determine which programs are "evidence-based." Evidence-based programs are identified using the Home Visiting Evidence of Effectiveness (HoMVEE) tool used by HRSA to identify programs eligible for MIECHV funding.¹⁶ There are currently 9 HRSA-designated evidence-based programs in NC: Attachment and Biobehavioral Catchup, Child First, Early Head Start-Home Based Option, Family Connects, Healthy Families America, Home Instruction for Parents of Preschool Youngsters, Nurse-Family Partnership, Parents as Teachers, and Safe Care Augmented.

Because definitions of "evidence-based" can vary, Table 3 also includes designations from the North Carolina Partnership for Children's Resource Guide of Evidence-Based Programs and Practice (NCPC) and the California Evidence-Based Clearinghouse for Child Welfare (CEBC). The Adolescent Parenting Program has not been reviewed by HomVEE but is designated as "evidence informed promising" by NCPC and "3-promising" by CEBC. The Nurturing Parent Program does not meet HomVEE's criteria for evidence-based programs but was designated as "evidence informed promising" by NCPC. ParentChild+ (formerly the Parent-Child Home Program) does not meet HomVEE's criteria for evidence-based programs but has been designated as "3-promising" by CEBC. The Book Babies program was developed in Durham and is currently undergoing rigorous evaluation, but it has not been rated by these three external sources.

Table 4 provides an inventory of programs by county. We identified 179 home visiting provider-county pairs (one home visiting program may serve multiple counties), spanning 13 home visiting programs operating in 88 counties and the Eastern Band of the Cherokee Indians. The most widely available programs in terms of number of counties served are Parents as Teachers (39), Early Head Start-Home Based Option (29), Child First (26), and Nurse-Family Partnership (23 counties and Eastern Band of Cherokee Indians). Several programs (i.e., HIPPY, SafeCare, ParentChild+) operate in only one county. Guilford County has the greatest diversity of program offerings (7), followed by Durham and Wake County (6 each). On average, a given county in NC has 1.8 home visiting programs.

Estimating the total number of individuals and families served by home visiting statewide is challenging. Based on survey responses and additional information provided by models, our needs assessment identified **16,201 families served** and **66,641 home visits** provided in 2018-2019. The National Home Visiting Resource Center developed state profiles for all states as part of the 2019 Home Visiting Yearbook.¹⁷ The state profile for NC is provided in Appendixes 2 and 3 and includes an inventory of 9 programs designated by HRSA as evidence-based. Their review identified 106 local agencies, 86,550 home visits provided, 13,240 families served, and 13,471 children served.

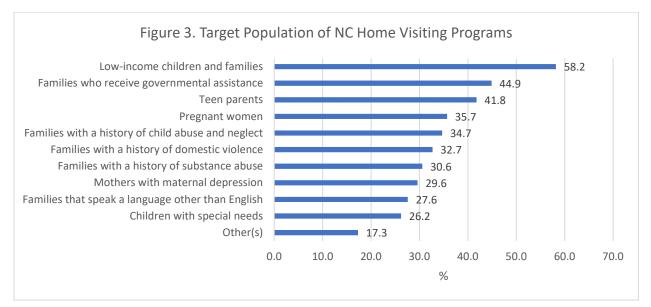
¹⁵ We follow HRSA's definition of home visiting: "programs where home visits are frequent, and are the primary service offered." We do not include several maternal and child health and child welfare programs operating in North Carolina that offer home visits infrequently or as supplemental services such as the Part C Early Intervention Program (<u>NC Infant Toddler Program</u>), <u>care management services</u> such as Care Management for High-Risk Pregnant Women and the Care Management for At-Risk Children Program, or child welfare in-home services such as <u>Intensive Family Preservation Services</u>. These programs are a critical part of the continuum of family support programs but are beyond the scope of the MIECHV needs assessment.

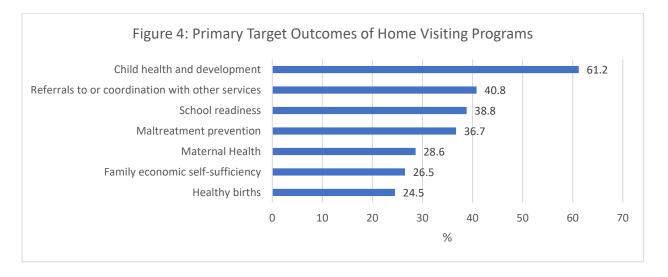
¹⁶ U.S. Department of Health and Human Services (US DHHS). (2020). *Home visiting evidence of effectiveness*. <u>https://homvee.acf.hhs.gov/index.php/</u>

¹⁷ National Home Visiting Resource Center. (2020). 2019 yearbook. <u>https://nhvrc.org/yearbook/2019-yearbook/</u>

Results: Types of Families Served

The families served by home visiting services in NC and those services' goals generally reflect the target populations and program goals for the models operating in the state. Figures 3 and 4 display survey results about home visiting target populations and outcomes. The most common target population was low-income children and families (58%) and the most common outcome was child health and development (61%).



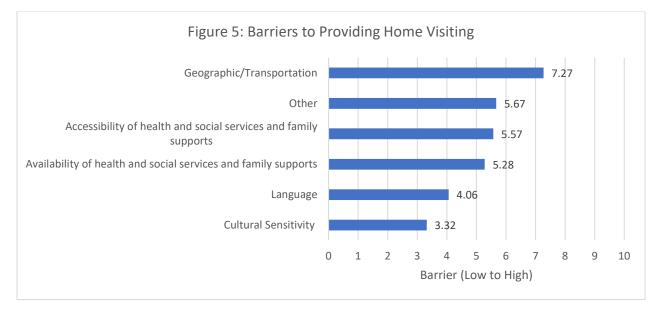


Results: Gaps in Home Visiting Services

Measuring attrition across home visiting programs is complicated by those programs' varying definitions of attrition, program engagement, and program completion. The survey asked respondents to report the percentage of families that completed or graduated from a program, based on their own definitions. Based on this item, 59% of families who exited a program completed or graduated. Survey results indicated that 52% of programs had a waitlist, 32% had no waitlist, and 16% were not allowed to

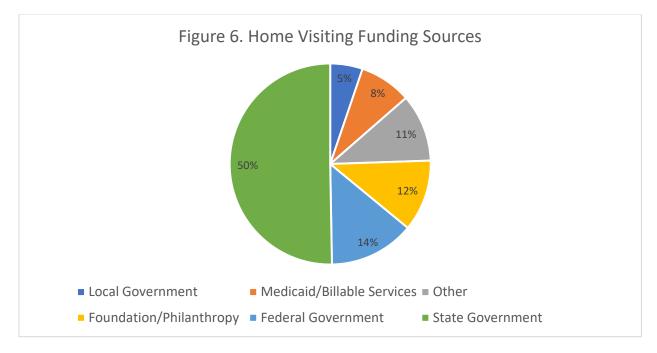
maintain a waitlist due to their funding or model specifications. Among programs with a waitlist, the average number of families on the waitlist was 14.1, and the largest reported waitlist was 40 families. We asked survey respondents to report the percentage of staff retained during the reporting period. Among those who reported this data, average staff retention was 90%.

Using a 0-10 scale, survey respondents identified barriers to delivering home visiting services. Results (Figure 5) indicate that geographic/transportation (M = 7.3) issues were the greatest perceived barrier of those listed and cultural sensitivity was perceived to be the lowest barrier (M = 3.3). The "other" barrier category had the second highest rating (M = 5.7). The 13 unique text responses to the "other" category included categories of affordable childcare, affordable housing, poverty, and services for undocumented parents



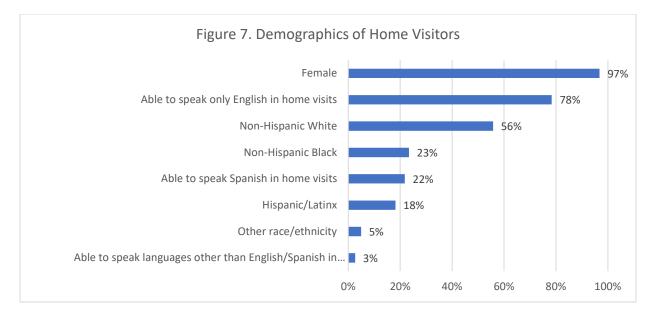
Results: Costs and Funding of Home Visiting

Home visiting programs in NC are funded by numerous public and private sources, and most individual community programs operate using a patchwork of funding sources. We asked survey respondents to report the proportion of their overall financial support from federal, state, local, foundation, or billable services (i.e., Medicaid). Survey responses indicated that state government (50%), federal government (14%), and foundation funding (12%) were the three largest funding sources. When asked whether programs' overall funding levels had changed in the past year, 45% of respondents reported that funding had stayed the same, 17% said funding increased, 11% said funding decreased, and 27% did not respond. The average cost per family ranges greatly between programs, but the average reported program cost per family was \$4,500.



Results: Home Visiting Staff

Home visiting programs vary greatly in staffing structure, requirements, and qualifications. Based on survey results, a home visiting program has on average 4.5 full-time home visitors, 1 part-time home visitor, and 1 supervisor. On average, each program has less than 1 vacant full-time home visitor position. As shown in Figure 7, 97% of home visitors are female, 56% are White, 23% are Black, 18% are Hispanic/Latinx, 22% can speak Spanish in home visits, and 78% speak only English in home visits. Only 5% of home visitors are a race or ethnicity other than Black, White, or Hispanic/Latinx and only 3% of home visitors can speak a language other than English or Spanish in home visits. Most home visiting programs reported requiring home visitors to have a 4-year degree (74%), a minimum level of experience for employment (74%), certification or accreditation (68%), and model-specific trainings (99%). On average, programs have 2.7 professionally licensed home visitors on staff.

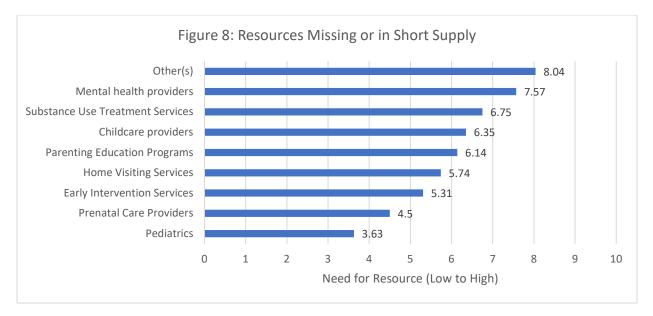


Results: Barriers to Community Services

We asked respondents to rate on a 0-10 scale the extent to which specific resources for families were missing or in short supply in their community (Figure 8). Mental health providers (M = 7.6) was the greatest identified need, followed by substance use treatment services (M = 6.6). In contrast, pediatrics (M = 3.6) and prenatal care providers (M = 4.5) were rated as relatively more accessible. The "other" category had the highest average rating (M = 8.0) and included 35 open-ended responses. The most salient "other" barriers related to transportation (11), housing (9), childcare (4), mental health (4), family planning (2), and parenting education (2).

North Carolina is currently rolling out a new statewide care coordination platform called NCCARE360.¹⁸ Although this service was not available statewide during the survey response period, 25% of respondents reported using NCCARE360.

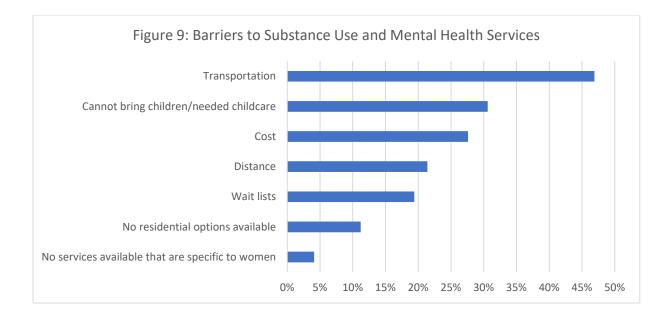
¹⁸ NCCARE360. (2020). Building connections for a healthier North Carolina. <u>https://nccare360.org/</u>



We asked several questions addressing respondents' awareness of substance use and mental health services. The vast majority of programs (89%) reported working with providers who delivered behavioral health services and providers who served pregnant women specifically (85%). Among all home visiting programs, 52% provide referrals to behavioral health providers and 14% receive referrals from substance use providers. Only 14% of programs reported having a behavioral health provider on staff and 5% reported a substance use provider on staff.

In light of the U.S.'s opioid epidemic, we also asked about respondents' awareness of specific programs and services related to substance use services. The vast majority of respondents (91%) reported awareness of behavioral health or substance use services for pregnant and parenting women and families. However, only 30% of respondents reported awareness of Plan of Safe Care policies¹⁹ and 63% reported awareness of access to office-based services or medicated assisted treatments (MAT; now referred to as medications for opioid use disorders [MOUD]) such as methadone or buprenorphine. When asked about the greatest barriers program participants face when seeking behavioral health services, transportation (47%) was the most common perceived barrier, followed by lack of childcare (31%). The availability of residential options (11%) and services specific to women (4%) were less commonly perceived challenges to receiving services.

¹⁹ NC DHHS. (2020). *Infant plan of safe care*. <u>https://www.ncdhhs.gov/divisions/mental-health-developmental-disabilities-and-substance-abuse/infant-plan-safe-care</u>



Results: Community and Organizational Relationships

To measure community buy-in and support, we provided a 0-10 scale ranging from *no support* to *total support*. The average level of community buy-in and support was high (M = 7.4, SD = 2.1, median = 8). Over 75% of respondents reported a 7 or higher for this item. Coordination of services in early childhood is an ongoing challenge and priority in these communities. Further, 83% of respondents reported that their community had a local early childhood system coordination entity or council. We had expected this figure to be closer to 100%, given that NC has a comprehensive statewide Smart Start network consisting of 75 local partnerships.²⁰

Part IV: Substance Use Disorder Prevention and Treatment

This section provides information about opioid use among women in the perinatal and postnatal period, current treatment programs in NC, barriers to treatment, and potential opportunities for collaboration in the state. The NC Division of Mental Health, Developmental Disabilities and Substance Abuse Services has offered perinatal-focused substance use treatment services since the early 1990s and has done significant work to centralize service coordination and promote integrated care models. Despite these efforts, there continues to be a gap in services for treatment that disproportionately impacts rural and low-income families.

This part of our needs assessment focused on the opioid epidemic and home visiting as an important part of the state's Opioid Action Plan. Families served by home visiting programs struggle with substances other than opioids (e.g., alcohol, tobacco, and other prescription drugs) that can have a devastating impact on pregnant women and children. Given NC's focus on opioid use disorder treatment policies and programs and the ongoing opioid epidemic, we decided to highlight this type of addiction and associated services specifically. Ongoing collaboration with statewide agencies, including the NC

²⁰ Smart Start. (2020). Smart Start. <u>http://www.smartstart.org/</u>

Division of Public Health and the NC Division of Social Services as well as local healthcare and behavioral health providers and agencies, is vital for increasing service access and awareness of the opioid epidemic's impact on families in North Carolina.

Although we primarily discuss services for women, fathers and male caregivers also suffer from substance use disorders and can benefit from treatment. Although, home visiting programs have historically developed services for pregnant women and female caregivers, most programs are eager to engage all members of the family, including fathers and male caregivers.

The time frame for completion of the 2024 Needs Assessment Amendment did not allow for a comprehensive review and update to North Carolina's capacity to provide substance abuse treatment and counseling services. In general, the capacity described in the 2020 Needs Assessment is still representative of the substance abuse treatment and counseling services available in North Carolina.

Opioid Use

In the U.S., drug overdoses involving opioids accounted for almost 70% of the 67,367 overdose deaths in 2018. That year in NC, nearly five people died every day from an opioid overdose.^{21,22} This epidemic is disproportionately impacting women, who are more likely to be prescribed opioids and use them for longer than men.²³ Between 2015 and 2017, opioid use in the past month among pregnant women increased nationally from 19,000 to 32,000 – an alarming statistic give than opioid use among pregnant women is associated with increased likelihood of preterm labor, early onset delivery, poor fetal growth, and stillbirth.

Intrinsically, pregnant women want to improve their health to support their child.²² Mothers who are unable to quit or cut back on their opioid use likely have a substance use disorder, a diagnosable medical condition of the brain that results in continued use despite negative consequences. Regular use of opioids by pregnant women can result in the child being born with a condition known as Neonatal Abstinence Syndrome (NAS). NAS can have a time-limited impact on a child's central nervous system, autonomic nervous system, gastrointestinal system, and respiratory system. Fortunately, when prenatal opioid exposure is known, NAS can be anticipated and met with care plans created in advance, as NAS symptoms are transient and treatable. In NC, from 2004 to 2015 the rate of infants identified with drug withdrawal syndrome increased by 511%.²⁴ However, this number does not differentiate infants exposed to prescribed opioids (e.g., for medication-assisted treatment [MAT]). The state's number of

 ²¹ NC DHHS. (2020). NC Opioid Action Plan data dashboard. <u>https://injuryfreenc.shinyapps.io/OpioidActionPlan/</u>
²² The NC Opioid Action Plan was released in June 2017 and updated in June 2019. See NC Opioid and Prescription Drug Abuse Advisory Committee. (2019). North Carolina's Opioid Action Plan: Updates and opportunities. https://files.nc.gov/ncdhhs/OAP-2.0-8.7.2019 final.pdf

²³ Jones, H. (January 25, 2019). *The opioid epidemic: The landscape of comprehensive care for women with opioid use disorder and their children* [PowerPoint slides]. Raleigh, NC: 2019 NC Public Health Leaders' Conference. <u>https://publichealth.nc.gov/phl/docs/OpioidEpidemicComprehensiveCareforWomenandTheirChildren(Jones).pdf</u>

²⁴ North Carolina Pregnancy & Opioid Exposure Project. (2014). *Pregnancy and opioid exposure: Guidance for North Carolina*. <u>https://ncpoep.org/wp-content/uploads/2015/03/NCPOEP_toolkit.pdf</u>

infant hospitalizations associated with drug withdrawal increased 230% from 2009 to 2018 (i.e., from 3.2 to 11.1 hospitalizations per 1,000 live births).²⁵

Clearly, preventing opioid use among pregnant women in NC will have demonstrable benefits. Treatment for opioid use among pregnant women can have significant outcomes, including preventing a substance-exposed pregnancy, improving birth outcomes, improving the quality of life for women and children, leading in turn to recovery and reduced costs to healthcare and other systems.

Substance Use Treatment

Substance use treatment for pregnant and parenting women can have several positive effects on the quality of their and their children's life and health.²³ Levels of care and approaches to treatment vary depending on an array of factors including the severity of the substance use, patient needs, availability of services, and capacity to pay. Addiction treatment services (ranging from least to most intensive) include early intervention, outpatient, intensive outpatient/partial hospitalization, residential/inpatient, and medically managed intensive hospital/inpatient services. Encouragingly, NC remains at the forefront of treatment service provision and continues to adapt these services to the needs of mothers and families.²⁶ North Carolina also offers gender-specific treatment options such as treating the mother-child dyad, providing essential services like childcare and transportation, and family residential services for pregnant and parenting women who require a higher level of care.²⁷ The following section details the specific programs and services available in NC.

Capacity for Substance Use Treatment and Counseling

According to the 2019 North Carolina Home Visiting Needs Assessment survey, 52% of home visiting programs made referrals to mental or behavioral health providers and 36% made referrals to substance use providers. Although this data does not show whether services were received, it indicates the presence of these services and many home visiting programs' awareness of them. In 2017, Governor Roy Cooper launched the North Carolina Opioid Action Plan to decrease opioid overdoses in the state by decreasing the supply of opioids, supporting families, increasing harm reduction programming, addressing non-medical drivers of health, and expanding access to treatment and recovery.²⁸ As a result of this action plan and the funding it made available, more North Carolinians have access to robust services that address aspects of substance use beyond addiction. Beyond the traditional, general population inpatient and outpatient treatment, the state also has initiatives, positions, and resources designed specifically for pregnant and parenting mothers. Through these tailored programs, a strong capacity management system, and educational materials, NC is offering pregnant and parenting mothers a robust network of services, which we enumerate below.

²⁵ NC DHHS, Injury and Violence Prevention Branch. (2019). *NC overdose data: Trends and surveillance*. <u>https://www.injuryfreenc.ncdhhs.gov/DataSurveillance/StatewideOverdoseSurveillanceReports/CoreOverdose-SlideSet-November2019.pptx</u>

²⁶ Godwin, M., Green, S., Jones, H., & Robbins, S. (2020). Perinatal substance use disorders treatment. *North Carolina Medical Journal*, *81*(1): 36-40. <u>https://doi.org/10.18043/ncm.81.1.36</u>

²⁷ North Carolina Pregnancy & Opioid Exposure Project. (2014). *Pregnancy and opioid exposure: Guidance for North Carolina*. <u>https://ncpoep.org/wp-content/uploads/2015/03/NCPOEP_toolkit.pdf</u>

²⁸ NC Opioid and Prescription Drug Abuse Advisory Committee. (2019). *North Carolina's Opioid Action Plan: Updates and opportunities*. <u>https://files.nc.gov/ncdhhs/OAP-2.0-8.7.2019_final.pdf</u>

North Carolina Perinatal and Maternal Substance Use and CASAWORKS for Families

The North Carolina Perinatal and Maternal Substance Use and CASAWORKS for Families are two initiatives focused on holistic substance use treatment for pregnant and parenting mothers. To increase access to services, all programs in the initiative are available to families regardless of whether the services are located in their geographic area. The initiative consists of 28 residential and outpatient programs in 13 counties across the state. All programs employ gender-specific and trauma-informed behavioral health treatment. The care they provide extends beyond substance use to include behavioral health services, parenting support, therapy, referrals for coordinated medical care for both mothers and children, transportation services, case management, and job readiness. All the residential programs serve women, and some provide MAT/MOUD. Some of the specific treatment models used by these programs include:

- Seeking Safety
- Beyond Anger and Violence
- Beyond Trauma
- A Healing Journey for Women
- Helping Women Recover
- The Matrix Model
- Cognitive Behavioral Therapy, including Dialectical Behavioral Therapy
- Contingency Management
- Motivational Interviewing

Specific parenting support programs include:

- Nurturing Program for Families in Substance Abuse Treatment and Recovery
- Strengthening Families Program
- Circle of Security
- Celebrating Families!
- Triple P

As shown by evaluations of these programs over multiple years, participating mothers and children have improved outcomes including healthier birth weights, lower recidivism with child welfare, fewer days in foster care compared to families not receiving services, increased use of pediatric services, increased family bonds, and reduced parent conflict.²⁴

North Carolina Perinatal Substance Use Specialist

The Alcohol Drug Council of North Carolina has a dedicated specialist position, co-funded by NC DMH/DD/SAS and DPH Maternal and Child Health Section, to provide program and treatment information and referrals for pregnant and parenting women. Each week, this specialist sends out a list of available beds in residential treatment to various providers as part of overseeing their capacity.²⁴ They also provide warm hand-off referral services to Local Management Entities-Managed Care Organizations (LME-CMO) throughout the state for geographically specific treatment services.

North Carolina Pregnancy & Opioid Exposure Project

The NC Pregnancy and Opioid Exposure Project²⁹ is a project of the NC Division of Mental Health, Developmental Disabilities, and Substance Abuse Services. This project offers information about the types of services available for pregnant and parenting mothers whose children have been exposed to opioids and hosts an interactive map of those services in NC. The map specifies the services available at various locations, including the agency, service type(s), county, address, contact information, and whether they accept Medicaid. The website also contains resources for service providers, including a document (*Pregnancy and Opioid Exposure: Guidance for North Carolina*) with information for professionals in multiple fields about opioid exposure during pregnancy.³⁰

Local Management Entities-Managed Care Organizations (LME-MCO)

The North Carolina Department of Health and Human Services (NCDHHS) currently contracts with Medicaid-managed care organizations (i.e., Local Management Entities-Managed Care Organizations [LME-CMOS]) to manage, facilitate, coordinate, and monitor services in specific geographic areas related to substance use disorders, mental health, and intellectual or developmental disability services. A phone-based screening, triage, and referral program is in place to help individuals seeking services if they reside in the catchment areas for a specific NCDHHS LME-MCO.³¹ Although they do not exclusively offer gender-based care, these organizations have a greater knowledge of the targeted services for perinatal women who are Medicaid beneficiaries.

Plan of Safe Care

Federal policy requires each state to develop a plan to address the needs of substance-exposed infants, including requirements for referrals to child protective services, safe care plan development for the infant, and the substance use disorder treatment needs of the family or caregiver.³² The goals of the NC plan are: 1) to include infants, children, and families in the Plans of Safe Care; 2) to support the health of the infant and mother rather than penalizing the mother and family; and 3) to increase access to treatment and support for all women with a substance use disorder and their children. The local child welfare agency sends a referral to the Care Management for At-Risk Children program (CMARC, formerly CC4C) and care mangers create a plan of care and provide assessments, referrals, and services.³³ Home visiting programs are among the community resources that care managers can refer families to and coordinate with other services.

²⁹ North Carolina Pregnancy and Opioid Exposure Project. (2020). *North Carolina Pregnancy & Opioid Exposure Project*. <u>https://ncpoep.org/</u>

³⁰ Community Care of North Carolina. (2019). *Pregnancy Medical Home Program care pathway: Management of substance use in pregnancy*. <u>https://www.communitycarenc.org/sites/default/files/2019-07/PMH_Pathway-Management_of_Substance_Use_in_Pregnancy-2019.pdf</u>

³¹ NC DHHS, NC Medicaid Division of Health Benefits. (2020). *Local management entities*.

https://medicaid.ncdhhs.gov/providers/programs-and-services/behavioral-health-idd/local-management-entities ³² Administration for Children & Families. (2017). *CAPTA program instruction*. <u>https://files.nc.gov/ncdhhs/ACYF-CB-</u> PI-17-02%20CAPTA%20CARA.pdf

³³ NC DHHS. (2020). *Infant plan of safe care*. <u>https://www.ncdhhs.gov/divisions/mental-health-developmental-disabilities-and-substance-abuse/infant-plan-safe-care</u>

Medicaid Care Management

In the Care Management for High Risk Pregnancies (CMHRP) program, Medicaid-eligible pregnant mothers at risk of having preterm births are served by nurses and social workers in collaboration with health care providers who help them access prenatal services (e.g., drug screenings and home visits).³⁴ The program also offers educational materials to healthcare providers through their Pregnancy Medical Home (PMH) Care Pathway, including a report with extensive recommendations for providers at all levels of treatment (i.e., screening, assessment, intervention, referral, and patient management). For interested providers, Governor Cooper's North Carolina Opioid Action Plan has established the *Menu of Local Actions* webpage displaying local strategies being implemented in communities across the state along with information and resources.

Gaps in Services

As described above, treatment services are available to all pregnant women or women with children throughout North Carolina, regardless of where they live, through the North Carolina Perinatal and Maternal Substance Use and CASAWORKS for Families initiatives. In the 2020 MIECHV Needs Assessment Survey, over 30% of participants indicated that families with a history of substance abuse were a primary target population for their program, while other participants indicated that current drug use results in ineligibility for services in their program. Over 90% of survey participants indicated their awareness of mental health and/or substance use treatment providers in the state, and nearly 86% indicated that their agency works with providers serving pregnant women with mental and/or substance use treatment needs. These high levels of awareness and collaboration parallel statewide increases in buprenorphine prescriptions, the number of individuals served by treatment, and the number of peer support specialists in the state as part of the North Carolina Opioid Action Plan. Between 2013 and 2019, the number of individuals served annually by substance use treatment programs more than doubled from 9,912 to 21,117.²⁰ Our readers should note that Northampton, Washington, Halifax, and Bertie counties both had high rates of pain medication use and were identified as "highest priority" by the North Carolina MIECHV Needs Assessment. Opportunities for closing gaps in services include increased awareness of programs and resources available in North Carolina, including through the LME-MCOs, by home visitors.

Barriers

In the 2020 MIECHV need assessment survey, participants reported that transportation (47%), need for childcare (31%), and cost (28%) were the biggest barriers to mental health and substance use disorder treatment. Indeed, barriers to substance use disorder treatment and counseling are present in each stage of the process. For instance, healthcare professionals consistently miss signs and symptoms of addiction among women and are less likely to screen them for substance use disorders. Without being screened and identified, women are less likely to connect with treatment for substance use. At the same time, only 4% of MIECHV survey participants indicated a lack of gender specific services as a barrier to mental health and substance use treatment.

Lack of health insurance coverage presents another significant barrier. At six weeks postpartum, women who are not eligible for standard Medicaid lose access to their healthcare benefits and often disengage

³⁴ Community Care of North Carolina. (2019). *Pregnancy Medical Home Program care pathway: Management of substance use in pregnancy*. <u>https://www.communitycarenc.org/sites/default/files/2019-07/PMH_Pathway-Management_of_Substance_Use_in_Pregnancy-2019.pdf</u>

from the health system, including primary care visits. Because primary care providers can complete substance use screenings and referrals, losing access to healthcare means that potentially fewer new mothers will get screened and referred. When women who are in treatment lose Medicaid coverage, some discontinue treatment due to their inability to pay out of pocket for services (e.g., MAT) despite the potential availability of state funded services through the LME-MCO. For pregnant and parenting women, attending substance use treatment programs may cause them to feel shame due to associated stigma and fear of losing their child(ren) to social services. In a Substance Abuse and Mental Health Services Administration survey of women who needed and perceived a need for treatment, cost/insurance barriers (34%) and social stigma (29%) were the second and third most prevalent reasons for not receiving substance use disorder treatment.³⁵

Opportunities for Collaboration

To increase access to substance use disorder treatment and counseling for pregnant and parenting women in North Carolina, we must leverage current statewide efforts to end the opioid epidemic and the know-how of partners engaged in that work. Collaborative efforts should address related gaps in services and barriers to services in NC, including transportation, Medicaid/insurance issues, program capacity, stigma, and identification and referral of clients.

Governor Cooper's North Carolina Opioid Action Plan includes seven strategies for addressing the opioid epidemic in the state. They are:

- 1. Creating a coordinated infrastructure
- 2. Reducing the oversupply of prescription drugs
- 3. Reducing the diversion and flow of illicit drugs
- 4. Increasing community awareness and prevention
- 5. Increasing naloxone availability and linkages to care
- 6. Expanding access to treatment and recovery
- 7. Measuring impact

Part of the 6th strategy entails two agendas targeting pregnant women: 1) increasing the number of OB/GYN and prenatal prescribers with DATA waivers to prescribe MAT and 2) supporting pregnant women with opioid addiction in recieving prenatal care, SUD treatment, and having healthy birth outcomes. The Opioid and Prescription Drug Abuse Advisory Committee (OPDAAC) offers a promising venue for promoting these agendas. Created as part of the state's Opioid Action Plan, the OPDAAC allows individuals, agencies, and communities to provide information about their practices, successes, and issues related to curbing OUD. It also allows these groups to network and meet subject matter experts to increase their toolkit for serving mothers and forge coalitions with groups focused on this population. The state plan is also driving efforts to increase access to MAT services and improve integrated care. Increasing inter-agency communication and awareness (e.g., through OPDAAC) may

³⁵ Substance Abuse and Mental Health Service Administration (SAMHSA), U.S. Department of Health and Human Services. (2015). *Substance abuse treatment: Addressing the specific needs of women* [HHS Publication No. (SMA) 15-4426]. <u>https://4ee72909-7c3b-44f3-8f59-</u>

⁴⁹b2d8a1fa15.filesusr.com/ugd/210306 e77e3fb0db6149b7b4079306df0d2962.pdf

improve rates of screening in primary care and emergency room settings and, in turn, increase referrals to agencies and programs offering gender-informed care.

By coordinating with LME-MCOs and local service providers (e.g., outpatient and inpatient SUD treatment centers, mental health providers, primary care providers, and hospitals), the MIECHV program can better help pregnant and parenting mothers access Medicaid and other publicly funded services and at the same time expand affordable services to help alleviate the financial burden of treatment.

Part V: Coordination with other Needs Assessments

Home visiting programs in North Carolina are embedded within larger maternal and child health systems as well as early childhood and child protection systems. To ensure the NC MIECHV needs assessment is integrated with these systems, we coordinated with representatives of the Title V Maternal and Child Health Block Grant (Title V MCH Block Grant), Head Start, and Child Abuse Prevention and Treatment Act (CAPTA) programs in North Carolina throughout the project. Representatives of these programs also served as members of the Advisory Group, enabling them to hear about the approach of the needs assessment and provide feedback.

Once data collection was completed, the team also held a focused workgroup discussion with these group representatives to share findings and discuss opportunities for future service coordination. During this discussion, representatives from Title V, NC Division of Social Services, and the statewide Head Start collaboration office at the NC Division of Public Instruction shared information about the needs assessment processes associated with their respective programs. We briefly describe several examples of areas of overlap and continued communication that emerged for each of these sectors.

First, the workgroup examined key areas of overlap with the broader Title V needs assessment. This needs assessment was conducted by the Women's and Children's Health Section of the NC Division of Public Health and incorporates processes from the Maternal and Child Health Block Grant needs assessment into a continuous needs assessment process. Fortunately, the Women's and Children's Health Section also oversees the MIECHV program, creating natural alignment between the NC Title V and MIECHV needs assessment and broader program goals. The Women's and Children's Health team will also incorporate MIECHV needs assessment findings into their review of priorities and activities relevant to home visiting. The Title V needs assessment used a variety of quantitative and qualitative approaches to understand the needs of women and children. Focus group discussions about the perinatal/infant health domain identified several priorities relevant to home visiting: promoting postpartum care and support, improving access to prenatal care, preventing substance use (including tobacco and alcohol), supporting father involvement, and increasing breastfeeding.

The Title V needs assessment also identified several priority needs relevant to home visiting programs: improving access to high quality integrated health care services; promoting safe, stable, and nurturing relationships; preventing infant/fetal deaths and premature births; increasing health equity; eliminating disparities; and addressing social determinants of health. The workgroup's review of the NC MIECHV needs assessment findings included a discussion of other programs compatible with home visiting services.

Second, three representatives from the NC Division of Social Services participated in discussions of the Child Abuse Prevention and Treatment Act (CAPTA) needs assessment and child welfare services, highlighting two opportunities for service coordination. For one, discussions underscored that comparatively few respondents (30%) were aware of Plan of Safe Care policies. Future coordination will involve examining which home visiting models were more aware of Plan of Safe Care to allow for focused outreach and communication to increase awareness and professional development regarding implementation of Plan of Safe Care policies. The second potential area of coordination related to planning around the implementation of the Family First Prevention Services Act (FFPSA).³⁶ NC MIECHV needs assessment data will provide a foundation for future coordination with NC DSS as they develop an array of evidence-based programs, including approved home visiting programs, for inclusion in the state FFPSA plan.

The workgroup also reviewed the 2019 report of the NC Community Child Protection Teams Advisory Board, which included recommendations for improving the child protection system at state and local levels. Several recommendations resonate with the findings of the NC MIECHV needs assessment. The first recommendation was to "improve access to behavioral health services of children, youth, and families served by child welfare." As discussed, MIECHV survey respondents similarly reported that behavioral health providers were the most needed resource in the community. The report also recommended promoting the safety of vulnerable infants and strengthening the Plan of Safe Care approach by informing and clarifying practices, policies, and procedures. This recommendation also aligns with our survey's findings that home visiting agencies reported less familiarity with Plan of Safe Care policies.

Third, the needs assessment findings were reviewed in the conversation with the Head Start statewide coordination office. Although each local implementing agency conducts their own needs assessment, the statewide coordinator identified the great value in the MIECHV needs assessment data for informing statewide planning regarding Early Head Start-Home Based Option services. Given that resources for Head Start are always limited, some local programs are considering whether to continue offering slots for Early Head Start home visiting. The MIECHV needs assessment provides useful information about the availability of other home visiting programs in the community that could potentially replace Early Head Start. Moreover, as programs apply for Head Start funding, the risk assessment and services data will be useful for justifying funding requests for expansion slots.

Clearly, the 2020 MIECHV needs assessment's findings have demonstrable relevance to many priority areas across the NC Department of Health and Human Services as well as many initiatives beyond the state. Beginning in 2019, North Carolina created a new Home Visiting and Parenting Education (HV/PE) System planning workgroup (Appendix 7), which includes stakeholders from NC DHHS and many public and private entities and provides an arena for continued connection, collaboration, and coordination. Fortunately, its new acting director has been a member of the MIECHV needs assessment advisory group, ensuring that our assessment data will directly inform the statewide body most responsible for

³⁶ The Family First Prevention Services Act (FFPSA), enacted as part of Public Law (P.L.) 115–123, authorized new optional title IV-E funding for time-limited prevention services for mental health, substance abuse, and in-home parent skill-based programs for children or youth who are candidates for foster care, pregnant or parenting youth in foster care, and the parents or kin caregivers of those children and youth (Administration for Children & Families. [2020]. *Title IV-E Prevention Program*. <u>https://www.acf.hhs.gov/cb/title-iv-e-prevention-program</u>).

developing home visiting services in the future. As the quality and availability of home visiting continues to grow through the state, the results of the 2020 MIECHV needs assessment will provide a strong foundation of knowledge to inform areas of growth and ongoing strategic planning.

Given the short turnaround time to complete the 2024 Needs Assessment Amendment, other needs assessment coordination with Title V MCH Block Grant, Head Start, and CAPTA program representatives was limited; however, the coordination with these entities conducted during the 2020 Needs Assessment is still relevant and the collaborative efforts continue. Members of the 2024 Needs Assessment Amendment team did meet with a member of the North Carolina Division of Public Health team responsible for the completion of the Title V MCH Block Grant to discuss the amendment purpose, design, data and analysis. As a result of these discussions, the amendment team received some Block Grant data. And, members of North Carolina's MIECHV team now participate in the North Carolina Perinatal Health Equity Collective. The 2024 Needs Assessment Amendment builds on and extends the utility of the 2020 Needs Assessment to provide relevant information and direction for continued growth in the availability and value of home visiting for North Carolina's families and children.

Conclusions

Key Findings

Through the 2020 MIECHV Needs Assessment, the team identified the counties listed below as at risk.

- 1. Anson County
- 2. Bertie County
- 3. Bladen County
- 4. Brunswick County
- 5. Buncombe County
- 6. Burke County
- 7. Carteret County
- 8. Cherokee County
- 9. Cleveland County
- 10. Columbus County
- 11. Cumberland County
- 12. Durham County
- 13. Edgecombe County
- 14. Gaston County
- 15. Greene County
- 16. Guilford County
- 17. Halifax County
- 18. Hertford County
- 19. Iredell County
- 20. Lenoir County

- 21. Martin County
- 22. McDowell County
- 23. Mecklenburg County
- 24. Mitchell County
- 25. Nash County
- 26. New Hanover County
- 27. Northampton County
- 28. Onslow County
- 29. Pender County
- 30. Person County
- 31. Richmond County
- 32. Robeson County
- 33. Scotland County
- 34. Stokes County
- 35. Vance County
- 36. Warren County
- 37. Washington County
- 38. Wilson County
- 39. Yancey County

Through the 2024 MIECHV Needs Assessment Amendment, the team identified 25 additional counties listed below as at risk.

- 1. Alexander
- 2. Alleghany
- 3. Beaufort
- 4. Caldwell
- 5. Clay
- 6. Currituck
- 7. Davidson
- 8. Gates
- 9. Graham
- 10. Hyde
- 11. Jackson
- 12. Jones
- 13. Madison

- 14. Montgomery
- 15. Pamlico
- 16. Perquimans
- 17. Randolph
- 18. Rockingham
- 19. Rutherford
- 20. Stanly
- 21. Surry
- 22. Swain
- 23. Tyrrell
- 24. Wilkes
- 25. Yadkin

MIECHV funding can only be expended to serve communities identified as at-risk in the 2020 Needs Assessment and the 2024 Needs Assessment Update. Though the 2020 Needs Assessment and the 2024 Needs Assessment explored numerous risk indicators and identified at-risk counties, we understand that other possible indicators of county need have not been included in either analysis and that local conditions change with time. So, in the event NC wishes to use the MIECHV award to fund a community that is not designated as at-risk in the approved needs assessment, the NC MIECHV Team will submit a prior approval request to HRSA for the approval of an amended needs assessment that specifically justifies redesignation of such a community as at-risk.

Dissemination

A brief summary of the findings of the 2020 MIECHV Needs Assessment was presented to the Home Visiting and Parenting Educations System planning workgroup, the Home Visiting Consortium, and the MIECHV needs assessment advisory group. <u>The Jordan Institute for Families</u> has a <u>section of its website</u> dedicated to sharing information about the 2020 MIECHV Needs Assessment. This information includes a brief summary of the 2020 MIECHV Needs Assessment, as well as three issue briefs. The topics of these briefs are 1) <u>County Risk Assessment</u>, 2) <u>Home Visiting Programs in North Carolina</u>, and 3) <u>Home Visiting and Substance Use Disorder Treatment</u>. The availability of these briefs was announced at the 2020 NC Infant & Early Childhood Mental Health, Home Visiting & Parent Education Conference and shared with Home Visiting Consortium Members. Additionally, the Jordan Institute for Families is sharing a brief announcement about the MIECHV needs assessment in its upcoming newsletter, including a link to information posted online. Once the final report is approved, it will be shared on this <u>website</u>.

Appendix

Appendix 1: 2020 Needs Assessment Survey

Thank you for participating in this survey as part of the **North Carolina Statewide Needs Assessment** for the **Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Program**, 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.

The MIECHV Program is administered by the Health Resources and Services Administration (HRSA) in partnership with the Administration for Children and Families (ACF). Program awardees receive funding through the MIECHV Program to implement evidence-based home visiting programs and promising approaches. Awardees have the flexibility to tailor their program to serve the specific needs of their communities. Through a statewide needs assessment, awardees identify target populations and select home visiting service delivery models that best meet state and local needs.

The purpose of the MIECHV need assessment is to:

- 1. Identify at-risk communities;
- 2. Understand the needs of families; and
- 3. Assess services in NC communities' early childhood systems.

We are also collecting information about **parenting education programs** in North Carolina. Parenting programs are an important part of the continuum of early childhood services available to families in your community.

Our findings will <u>describe</u> the home visiting and parenting education service landscape in North Carolina and will <u>not evaluate</u> any specific program.

If you have any questions you can email us at <u>homevisitingstudy@unc.edu</u>. The final needs assessment will be available in fall 2020.

This study was reviewed by the UNC Office of Human Research Ethics (IRB# 19-0970).

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 several "modules" that request information regarding program administration, service delivery, service population, early childhood systems, and substance use and behavioral/mental health services. Different types of information and sources might be needed for each of the modules.

Please respond to this survey based on your organization's experience in fiscal year 2018 - 2019 (July 1, 2018 - June 30, 2019).

A few terms that we want to define to clarify for the purposes of this survey: <u>Home Visiting Program</u>: 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 and/or parenting

education program(s) such as a health department or local Smart Start. In some cases, the local organization is a home visiting or parenting education program affiliate.

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

○ First/La	st Name				
🔿 Local O	rganization Name				
🔿 Local O	rganization Address				
🔿 Email A	ddress				
O Phone	Number				
What is the role	e of the primary contact for this survey?				
○ Executi	ve Director				
O Program	n Manager				
O Data/Ev	valuation Lead				
\bigcirc Other	Other				
your local organ visiting program	ludes questions regarding administration of your home visiting program and structure of nization . The purpose of these items is to get an understanding of how different home ns are organized, supported, and funded. me visiting program model that your organization implemented in fiscal year 2018-2019? apply)				
	Nurse-Family Partnership				
	Parents as Teachers				
	Early Head Start - Home Visiting				
	Healthy Families				
	Family Connects				

Attachment and Biobehavioral Catch-up (ABC)

Child FIRST

Home Instruction for Parents of Preschool Youngsters (HIPPY)

Ot	ther	(s)

We want to know about your typical staffing patterns in fiscal year 2018-2019. How many home visitors, both full-time and part-time, were employed on your staff? Do not count vacant positions, only those positions that were filled.

O Full-time home visitors:	
O Part-time home visitors:	
O Home visiting supervisors (full- or part-time):	
How many positions were vacant?	
O Full-time home visitors	
O Part-time home visitors	
O Home visiting supervisors (full- or part-time)	

In order to meet the needs of your community in fiscal year 2018-2019, how many home visitors, both full-time and part-time, do you think you would have needed?

O Full-time home visitors:	
O Part-time home visitors:	

What percentage of your staff did you retain in fiscal year 2018-2019?

What were the demographics of your program's home visiting staff (all home visitors and supervisors) in fiscal year 2018-2019?

Approximately what percent (%) were: non-Hispanic White non-Hispanic Black Hispanic/Latinx Other race/ethnicity Female Able to speak only English in home visits Able to speak Spanish in home visits Able to speak Ianguages other than English/Spanish in home visits The next set of questions are about the funding of your **home visiting program** in fiscal year 2018-2019. What financial resources supported your **home visiting program** in fiscal year 2018-2019? Estimate the percent of support your home visiting program received from each funding source. **The sum of all funding resources should add to 100%.**

	Federal Government	State Government	Local Government	Medicaid/Billable Services	Foundation/Philanthropy	Other
2018						

In fiscal year 2018-2019, did your funding increase, stay the same, or decrease compared to fiscal year 2017-2018?

Increased

Decreased

Stayed the same

What would be your best estimate of the average cost per family to deliver your **home visiting program** as designed in fiscal year 2018-2019?

In fiscal year 2018-2019, did your **local organization** develop a regular report regarding service utilization and outcomes?

Do you have a stakeholder advisory group?

In your community, how would you rate overall public support and community buy-in for your **home visiting program** in fiscal year 2018-2019?



Who would you identify as your **home visiting program's** primary target/priority populations in fiscal year 2018-2019? (Check all that apply.)

Low-income children and families
Children with special needs
Families that speak a language other than English
Teen parents
Families who receive governmental assistance
Families with a history of child abuse and neglect
Families with a history of domestic violence
Families with a history of substance use
Mothers with maternal depression
Pregnant Women
Other(s)

In fiscal year 2018-2019, what were the eligibility criteria to receive home visiting services through your program?

Were there any further exclusion criteria that made someone ineligible for services?

Please describe any barriers to recruitment of program participants.

What were the demographics of your program's participants (the parents/caregivers) in fiscal year 2018-2019?

About what percent (%) were: non-Hispanic White non-Hispanic Black Hispanic/Latinx Other race/ethnicity Female Speak only English in the home Speak Spanish in the home

Speak languages other than English/Spanish in the home

Medicaid-eligible

What were your **home visiting program's** primary target outcomes in fiscal year 2018-2019? (Check all that apply.)



Healthy births

Child health and development
Maternal health
School readiness
Maltreatment prevention
Family economic self-sufficiency
Referrals to or coordination with other services
Other

What was the typical starting salary range for full-time home visitors employed at your **local organization** in fiscal year 2018-2019?

- Less than \$10,000
- \$10,000 \$19,999
- \$20,000 \$29,999
- \$30,000 \$39,999
- \$40,000 \$49,999
- \$50,000 \$59,999
- \$60,000 \$69,999
- \$70,000 \$79,999
- \$80,000 \$89,999
- \$90,000 \$99,999
- \$100,000 \$149,999
- O More than \$150,000

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

- Less than high school
- O High school graduate

Some college
2-year degree
4-year degree
Professional degree
Doctorate

Did you require a minimum level of experience for full-time home visitors employed at your **local** organization?

YesNo

If so, how many years of experience?

In fiscal year 2018-2019, were individual home visitors required to be certified or accredited to work in your **home visiting program**?

O Yes

🔘 No

If so, what certification or accreditation did you require? Are home visitors required to complete any trainings based on the model?

O Yes

🔾 No

If so, please describe the required training.

How many of your home visitors had a professional license in fiscal year 2018-2019? What professional development opportunities were available to your staff in fiscal year 2018-2019? We want to know the local areas where programs provide **home visiting services**, so we are asking you to list the specific counties 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 county level, so please provide your best estimate based on the information you do collect and your knowledge of your service area.

For each row, please write the following:

1) a county in your service area;

2) the total number of caregivers that you served in that county in fiscal year 2018-2019; and

3) the estimated number of caregivers you could have served in that county.

Repeat this information for each county in your service area.

This set of questions is about the families served by your **local organization** in fiscal year 2018-2019. Did your **local organization** have a waitlist?

○ Yes

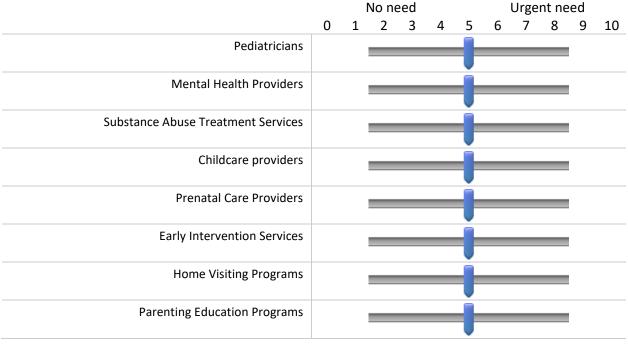
- No (not at capacity)
- O No (not allowed to have a waitlist by funder or model)

About how many families were on the waitlist at a time?

Of the families who left your program in fiscal year 2018-2019, what percent completed the program, based on whatever program standard you use to indicate "completion" or "graduation"? Please provide a summary estimate of the total number of actual home visits provided by your **local organization** in fiscal year 2018-2019. This is the total aggregate number of home visits across all families and all home visitors.

The following questions pertain to your **local organization** and any home visiting program(s) housed within it.

What resources for families were missing or in short supply in your community in fiscal year 2018-2019?



What barriers did your program(s) face in fiscal year	2018	3-201	.9?								
	0	1	2	3	4	5	6	7	8	9	10

Geographic/Transportation	
Language	
Cultural Sensitivity	
Availability of health and social services and family supports	
Accessibility of health and social services and family supports	

Does your organization use NCCARE360?

0	Yes

◯ No

○ Not sure

In your community, is there a local early childhood system coordination entity or council?

YesNo

O Not sure

If yes, what group is the lead agency or backbone organization?

Is your organization aware of mental/behavioral health and/or substance use services for pregnant and parenting women and families?

○ Yes

 \bigcirc No

O Not sure

Is your organization aware of Plan of Safe Care policies in your community?

0	Yes
0	No
\bigcirc	Not sure

Is your organization aware of access to office-based services or Medicated-Assisted Treatment (MAT) such as Methadone or Buprenorphine serving pregnant and parenting women?

0	Yes
0	No
\bigcirc	Not sure

In fiscal year 2018-2019, did your local organization work with providers delivering mental/behavioral health and/or substance use services?

\bigcirc	Yes

🔿 No

In fiscal year 2018-2019, did your local organization work with providers serving pregnant women delivering mental/behavioral health and/or substance use services?

O Yes

O No

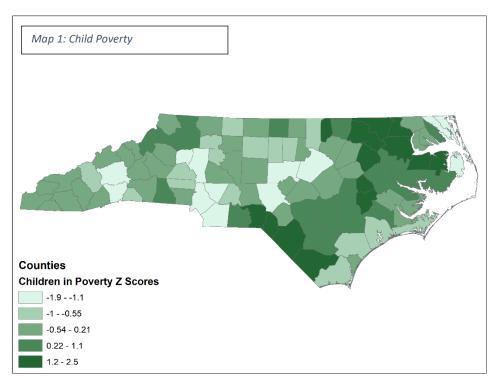
Select the ways in which you worked with these providers.

Referrals by your program to mental/behavioral health providers
Referrals by your program to substance use providers
Referrals by mental/behavioral health providers to your program
Referrals by substance use providers to your program
Your program has mental/behavioral health providers on staff
Your program has substance use providers on staff

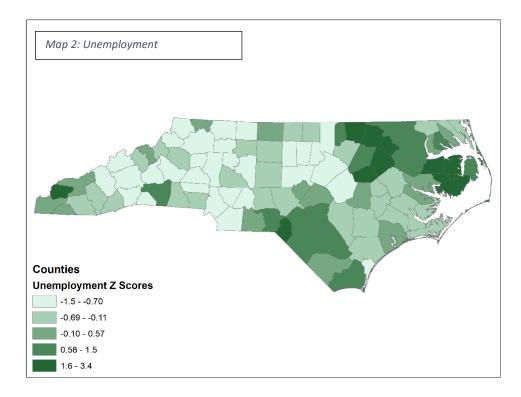
What were the greatest challenges faced by your program participants who were seeking these services? Select the top 3 barriers.

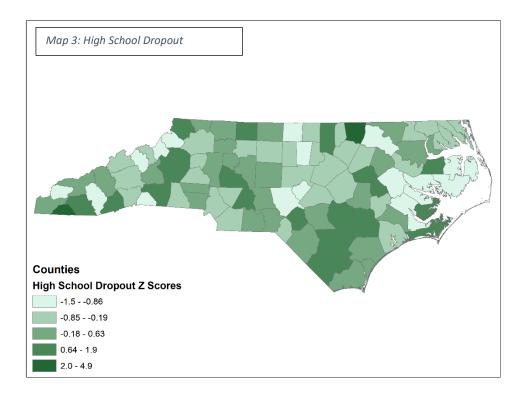
Wait lists
Transportation
Distance
No residential options available
Cannot bring children/ needed child care
No services available that are specific to women
Cost

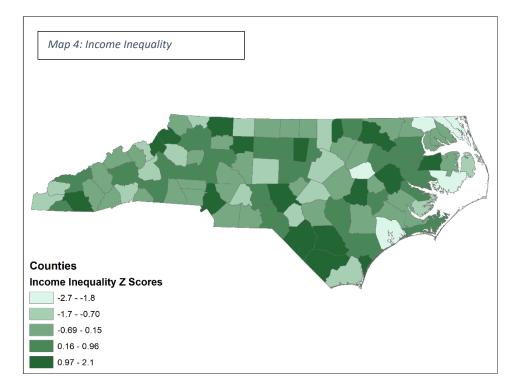
This is the end of the survey. Please use the following space to fill in any additional information that you think is important for us to understand about your home visiting/parenting education program(s) or the field(s) of home visiting/parenting education in North Carolina.

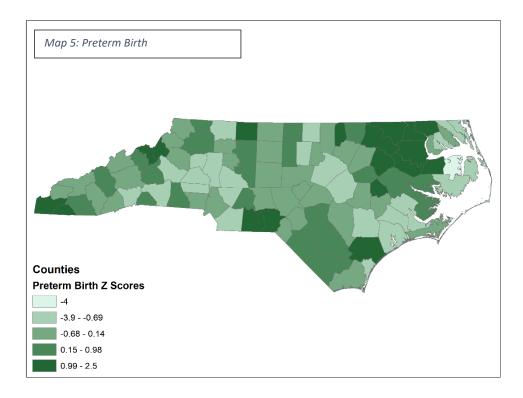


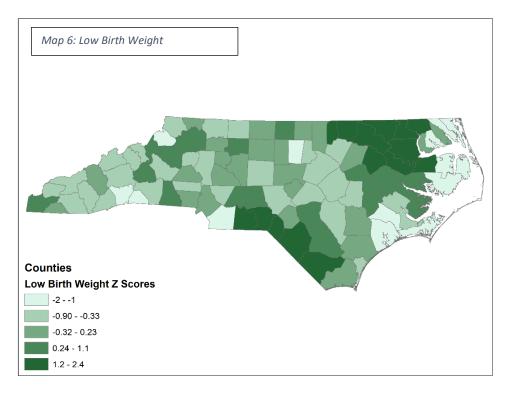
Appendix 2: Risk Indicator Maps

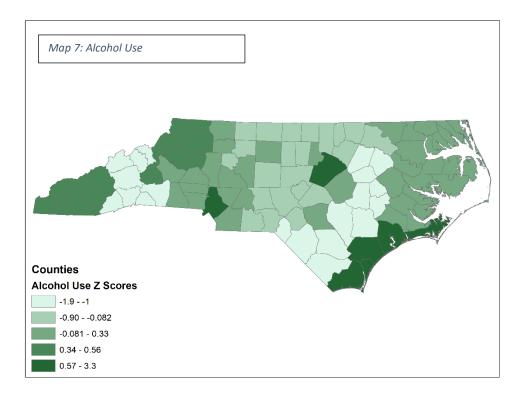


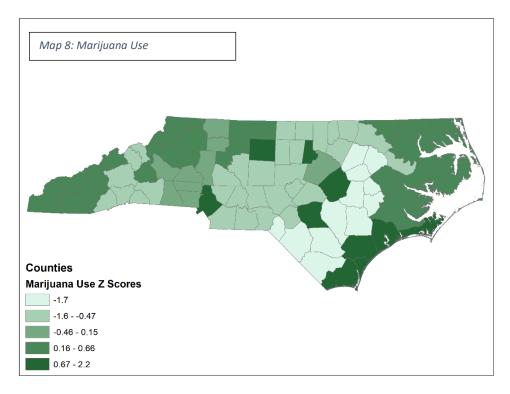


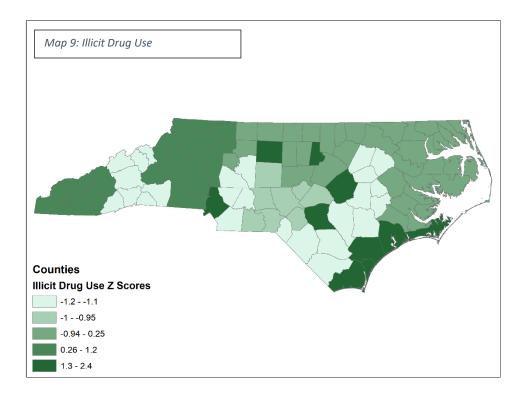


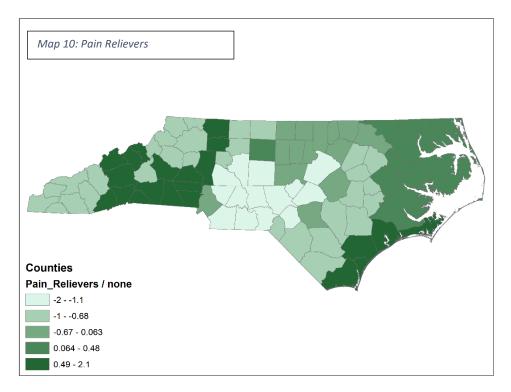


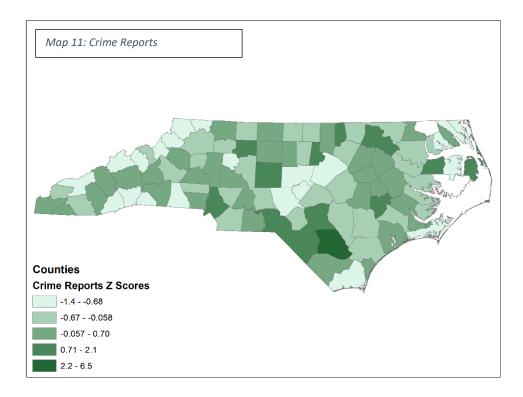


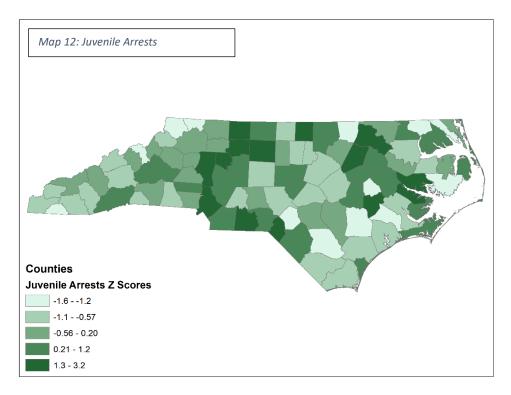


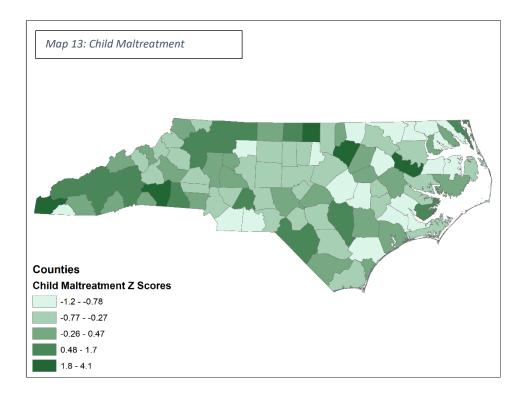


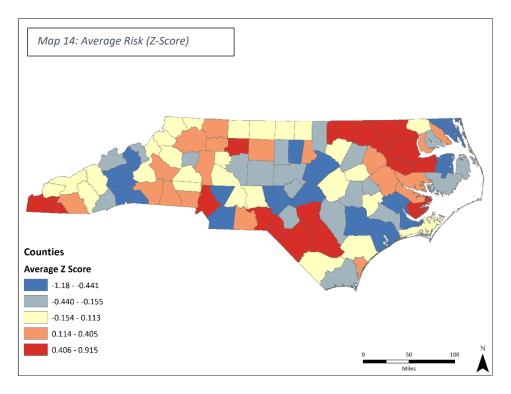


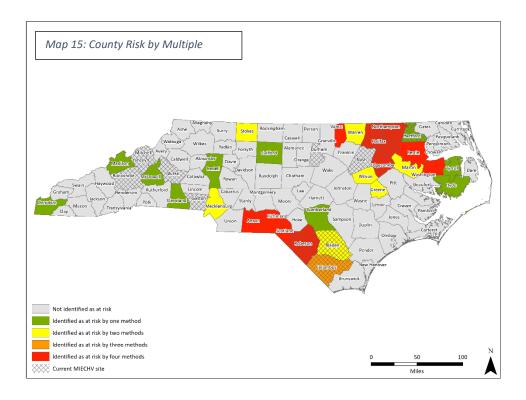


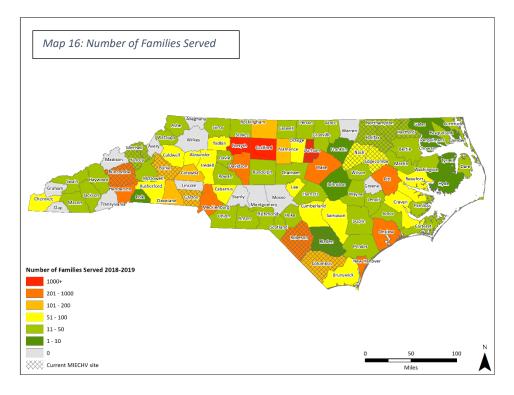


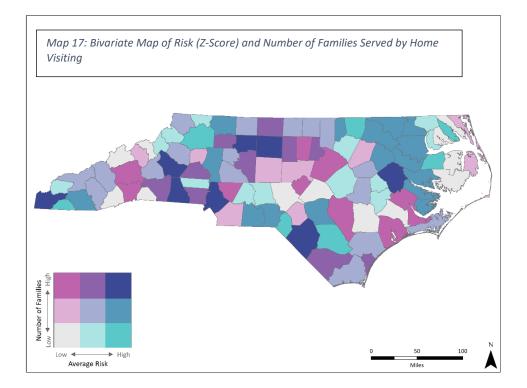


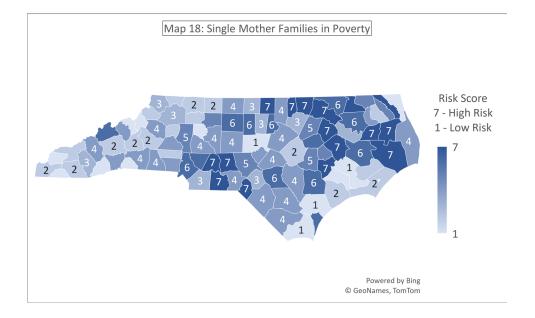




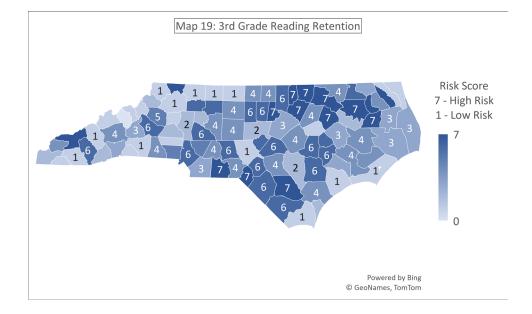


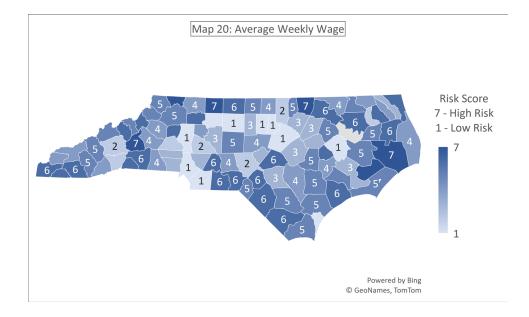


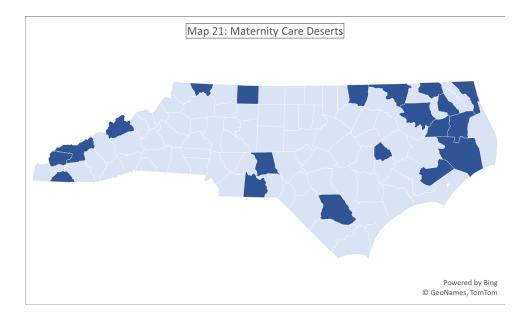


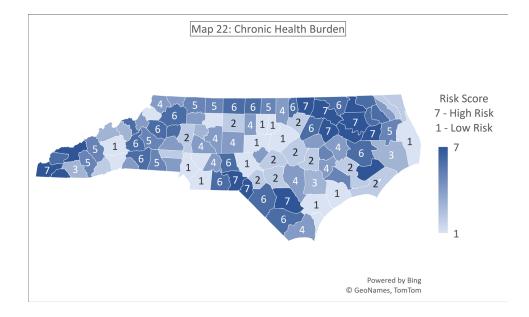


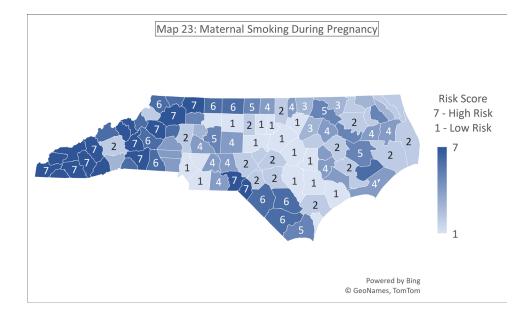
Appendix 2: 2024 Needs Assessment Amendment Risk Indicator Maps

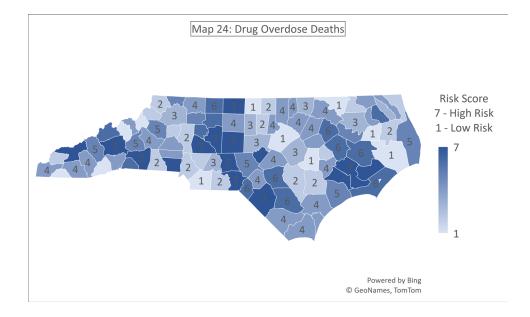


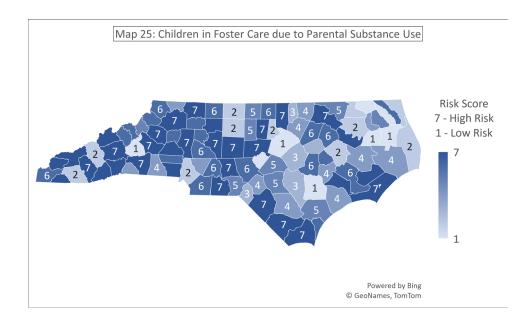


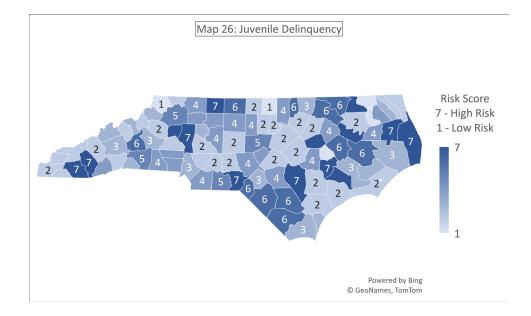


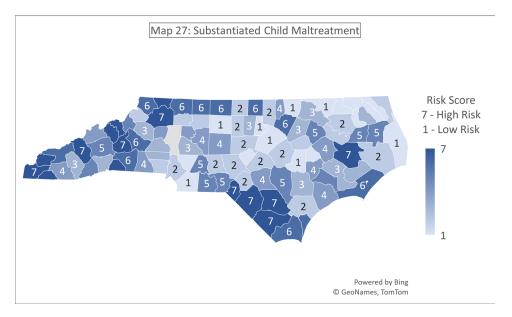


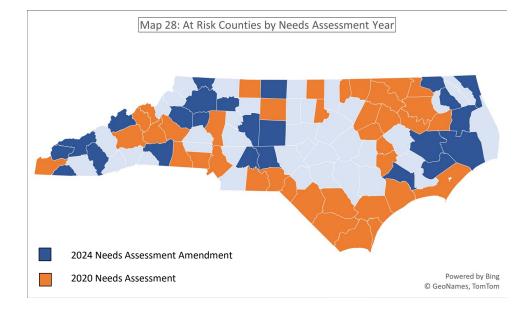












Appendix 3: Detailed County Risk Tables by Method and Current Home Visiting

	Risk Group (#	High Risk by Simplified	High Risk by LCA	High Risk by Equal Weight	High Risk by Limited Indicator	Average Risk Z-	Current MIECHV	EBHV Model in
County	Methods)	Method	Method	Method	Method	Score	Site	County
Alamance	0 - Low Priority	No	No	No	No	-0.20	No	Yes
Alexander	0 - Low Priority	No	No	No	No	-0.29	No	No
Alleghany	0 - Low Priority	No	No	No	No	-0.09	No	No
Anson	4 - Highest Priority	Yes	Yes	Yes	Yes	0.24	No	Yes
Ashe	0 - Low Priority	No	No	No	No	-0.13	No	Yes
Avery	0 - Low Priority	No	No	No	No	0.07	No	No
Beaufort	0 - Low Priority	No	No	No	No	0.35	No	Yes
Bertie	4 - Highest Priority	Yes	Yes	Yes	Yes	0.55	No	Yes
Bladen	2 - High Priority	Yes	Yes	No	No	0.39	Yes	Yes
Brunswick	1 - Priority	No	No	Yes	No	0.25	No	Yes
Buncombe	0 - Low Priority	No	No	No	No	-0.49	Yes	Yes
Burke	0 - Low Priority	No	No	No	No	0.33	Yes	Yes
Cabarrus	0 - Low Priority	No	No	No	No	-0.51	No	Yes
Caldwell	0 - Low Priority	No	No	No	No	0.02	No	Yes
Camden	0 - Low Priority	No	No	No	No	-0.84	No	Yes
Carteret	1 - Priority	No	No	Yes	No	0.41	No	Yes
Caswell	0 - Low Priority	No	No	No	No	-0.07	No	Yes
Catawba	0 - Low Priority	No	No	No	No	0.01	No	Yes
Chatham	0 - Low Priority	No	No	No	No	-0.36	No	Yes
Cherokee	1 - Priority	Yes	No	No	No	0.45	No	Yes
Chowan	0 - Low Priority	No	No	No	No	0.21	No	Yes
Clay	0 - Low Priority	No	No	No	No	0.41	No	No
Cleveland	1 - Priority	Yes	No	No	No	0.28	No	Yes
Columbus	3 - High Priority	Yes	Yes	Yes	No	0.07	Yes	Yes
Craven	0 - Low Priority	No	No	No	No	-0.28	No	Yes
Cumberland	1 - Priority	Yes	No	No	No	0.54	No	Yes
Currituck	0 - Low Priority	No	No	No	No	-0.48	No	Yes
Dare	0 - Low Priority	No	No	No	No	-0.24	No	Yes
Davidson	0 - Low Priority	No	No	No	No	-0.21	No	Yes
Davie	0 - Low Priority	No	No	No	No	-0.14	No	Yes
Duplin	0 - Low Priority	No	No	No	No	-0.56	No	Yes
Durham	0 - Low Priority	No	No	No	No	0.11	Yes	Yes
Edgecombe	4 - Highest Priority	Yes	Yes	Yes	Yes	0.21	Yes	Yes
Forsyth	0 - Low Priority	No	No	No	No	0.39	No	Yes
Franklin	0 - Low Priority	No	No	No	No	-0.12	No	Yes
Gaston	0 - Low Priority	No	No	No	No	0.19	Yes	Yes
Gates	0 - Low Priority	No	No	No	No	-0.04	No	Yes
Graham	0 - Low Priority	No	No	No	No	-0.05	No	No
Granville	0 - Low Priority	No	No	No	No	-0.26	No	Yes
Greene	2 - High Priority	No	Yes	No	Yes	-0.20	No	No
Guilford	1 - Priority	Yes	No	No	No	0.37	No	Yes
Halifax	4 - Highest Priority	Yes	Yes	Yes	Yes	0.66	Yes	Yes
Harnett	0 - Low Priority	No	No	No	No	-0.50	No	No
Haywood	0 - Low Priority	No	No	No	No	0.04	No	Yes

County	Risk Group (# Methods)	High Risk by Simplified Method	High Risk by LCA Method	High Risk by Equal Weight Method	High Risk by Limited Indicator Method	Average Risk Z- Score	Current MIECHV Site	EBHV Model in County
Henderson	0 - Low Priority	No	No	No	No	-0.56	No	Yes
Hertford	1 - Priority	No	Yes	No	Yes	0.49	Yes	Yes
Hoke	0 - Low Priority	No	No	No	No	-0.37	No	Yes
Hyde	0 - Low Priority	No	No	No	No	-0.19	No	Yes
Iredell	1 - Priority	Yes	No	No	No	0.26	No	Yes
Jackson	0 - Low Priority	No	No	No	No	-0.08	No	Yes
Johnston	0 - Low Priority	No	No	No	No	-0.10	No	Yes
Jones	0 - Low Priority	No	No	No	No	-0.20	No	Yes
Lee	0 - Low Priority	No	No	No	No	-0.46	No	Yes
Lenoir	1 - Priority	No	Yes	No	No	-0.14	No	Yes
Lincoln	0 - Low Priority	No	No	No	No	-0.04	No	No
Macon	0 - Low Priority	No	No	No	No	0.13	No	Yes
Madison	0 - Low Priority	No	No	No	No	-0.34	No	No
Martin	3 - High Priority	Yes	Yes	No	Yes	0.75	No	Yes
McDowell	1 - Priority	No	No	No	Yes	-0.06	No	Yes
Mecklenburg	2 - High Priority	Yes	No	Yes	No	0.59	No	Yes
Mitchell	0 - Low Priority	No	No	No	No	-0.36	Yes	Yes
Montgomery	0 - Low Priority	No	No	No	No	-0.17	No	No
Moore	0 - Low Priority	No	No	No	No	-0.55	No	No
Nash	0 - Low Priority	No	No	No	No	-0.32	Yes	Yes
New Hanover	1 - Priority	No	No	Yes	No	0.54	No	Yes
Northampton	4 - Highest Priority	Yes	Yes	Yes	Yes	0.41	Yes	Yes
Onslow	1 - Priority	No	No	Yes	No	0.01	No	Yes
Orange	0 - Low Priority	No	No	No	No	-0.57	No	Yes
Pamlico	0 - Low Priority	No	No	No	No	0.41	No	Yes
Pasquotank	0 - Low Priority	No	No	No	No	0.41	No	Yes
Pender	2 - High Priority	Yes	No	Yes	No	0.25	No	Yes
Perquimans	0 - Low Priority	No	No	No	No	-0.21	No	Yes
Person	1 - Priority	Yes	No	No	No	0.04	No	Yes
Pitt	0 - Low Priority	No	No	No	No	0.37	No	Yes
Polk	0 - Low Priority	No	No	No	No	-0.57	No	Yes
Randolph	0 - Low Priority					-0.37		Yes
Richmond	4 - Highest Priority	Yes	No Yes	No Yes	Yes	0.43	No No	Yes
Robeson	4 - Highest Priority	Yes	Yes	Yes	Yes	0.43	Yes	Yes
Rockingham	0 - Low Priority	No	No	No	No	-0.01	No	Yes
•					No	-0.01		
Rowan Rutherford	0 - Low Priority	No No	No No	No No	No	0.14	No No	Yes Yes
	0 - Low Priority 0 - Low Priority	No	No	No	No	-0.29	No	Yes
Sampson Scotland	4 - Highest Priority	Yes	Yes	Yes	Yes	0.29	No	No
Stanly	0 - Low Priority	No	No	No	No	-0.19	No	No
Stokes			No	No	No	0.05	No	Yes
	1 - Priority	Yes No	No	No	No	0.05	No	Yes
Surry Swain	0 - Low Priority 0 - Low Priority	No		No	No	0.31	No	
			No					Yes
Transylvania	0 - Low Priority	No	No	No	No	-0.29	No	No
Tyrrell	0 - Low Priority	No	No	No	No	-0.29	No	Yes
Union	0 - Low Priority	No	No	No	No	-0.73	No	Yes
Vance	4 - Highest Priority	Yes	Yes	Yes	Yes	0.60	No	Yes
Wake	0 - Low Priority	No	No	No	No	-0.72	No	Yes

County	Risk Group (# Methods)	High Risk by Simplified Method	High Risk by LCA Method	High Risk by Equal Weight Method	High Risk by Limited Indicator Method	Average Risk Z- Score	Current MIECHV Site	EBHV Model in County
Warren	2 - High Priority	Yes	Yes	No	No	0.42	No	No
Washington	4 - Highest Priority	Yes	Yes	Yes	Yes	0.74	No	Yes
Watauga	0 - Low Priority	No	No	No	No	-0.12	No	No
Wayne	0 - Low Priority	No	No	No	No	-0.29	No	Yes
Wilkes	0 - Low Priority	No	No	No	No	0.27	No	No
Wilson	2 - High Priority	Yes	Yes	No	No	-0.09	No	No
Yadkin	0 - Low Priority	No	No	No	No	0.12	No	Yes
Yancey	0 - Low Priority	No	No	No	No	-0.51	Yes	Yes

Appendix 3A: Detailed County Risk Table

<u>County</u>	<u>2020 MIECHV</u> <u>Needs</u> <u>Assessment At-</u> <u>risk County</u>	<u>Total Risk</u> <u>Score</u>	At-risk by Total Risk Score	At-risk by Maternity Care Desert Designation
<u>Alamance</u>	No	<u>35</u>	No	<u>No</u>
Alexander	No	<u>40</u>	Yes	<u>No</u>
Alleghany	No	<u>44</u>	Yes	<u>Yes</u>
<u>Anson</u>	Yes	<u>49</u>	NA 2020 At-risk County	NA 2020 At-risk County
<u>Ashe</u>	No	<u>34</u>	<u>No</u>	<u>No</u>
<u>Avery</u>	No	<u>31</u>	No	<u>No</u>
<u>Beaufort</u>	No	<u>49</u>	Yes	<u>No</u>
<u>Bertie</u>	Yes	<u>37</u>	NA 2020 At-risk County	NA 2020 At-risk County
<u>Bladen</u>	Yes	<u>52</u>	NA 2020 At-risk County	NA 2020 At-risk County
Brunswick	Yes	<u>36</u>	NA 2020 At-risk County	NA 2020 At-risk County
Buncombe	Yes	<u>33</u>	NA 2020 At-risk County	NA 2020 At-risk County
<u>Burke</u>	Yes	<u>43</u>	NA 2020 At-risk County	NA 2020 At-risk County
<u>Cabarrus</u>	No	<u>25</u>	No	<u>No</u>
<u>Caldwell</u>	No	<u>43</u>	Yes	No
<u>Camden</u>	No	<u>28</u>	No	No
<u>Carteret</u>	Yes	<u>35</u>	NA 2020 At-risk County	NA 2020 At-risk County
<u>Caswell</u>	No	<u>33</u>	No	<u>No</u>
<u>Catawba</u>	No	<u>32</u>	No	No
<u>Chatham</u>	No	<u>26</u>	No	No
<u>Cherokee</u>	Yes	<u>43</u>	NA 2020 At-risk County	NA 2020 At-risk County
<u>Chowan</u>	No	<u>31</u>	No	No
<u>Clay</u>	No	<u>39</u>	Yes	Yes
<u>Cleveland</u>	Yes	<u>37</u>	NA 2020 At-risk County	NA 2020 At-risk County
<u>Columbus</u>	Yes	<u>52</u>	NA 2020 At-risk County	NA 2020 At-risk County
<u>Craven</u>	No	<u>31</u>	<u>No</u>	<u>No</u>

<u>Cumberland</u>	Yes	<u>36</u>	NA 2020 At-risk County	NA 2020 At-risk County
<u>Currituck</u>	<u>No</u>	<u>20</u>	No	Yes
Dare	No	<u>29</u>	No	No
Davidson	No	42	Yes	No
Davie	No	32	No	No
Duplin	No	29	No	No
Durham	Yes	25	NA 2020 At-risk County	NA 2020 At-risk County
Edgecombe	Yes	51	NA 2020 At-risk County	NA 2020 At-risk County
Forsyth	No	33	No	No
Franklin	No	32	No	No
Gaston	Yes	40	NA 2020 At-risk County	NA 2020 At-risk County
Gates	No	28	No	Yes
Graham	No	40	Yes	Yes
Granville	No	35	No	No
Greene	Yes	36	NA 2020 At-risk County	NA 2020 At-risk County
Guilford	Yes	25	NA 2020 At-risk County	NA 2020 At-risk County
Halifax	Yes	52	NA 2020 At-risk County	NA 2020 At-risk County
Harnett	No	33	No	No
Haywood	No	38	No	No
Henderson	No	29	No	No
Hertford	Yes	39	NA 2020 At-risk County	NA 2020 At-risk County
Hoke	No	32	No	No
Hyde	No	32	No	Yes
Iredell	Yes	28	NA 2020 At-risk County	NA 2020 At-risk County
Jackson	No	47	Yes	No
Johnston	No	22	No	No
Jones	No	44	Yes	No
Lee	No	<u>32</u>	No	No
<u>Lenoir</u>	Yes	<u>44</u>	NA 2020 At-risk County	NA 2020 At-risk County
Lincoln	No	<u>29</u>	No	No
<u>Macon</u>	No	<u>36</u>	No	No
Madison	No	<u>41</u>	Yes	Yes
Martin	Yes	<u>38</u>	NA 2020 At-risk County	NA 2020 At-risk County
<u>McDowell</u>	Yes	<u>44</u>	NA 2020 At-risk County	NA 2020 At-risk County
Mecklenburg	Yes	<u>24</u>	NA 2020 At-risk County	NA 2020 At-risk County
<u>Mitchell</u>	Yes	<u>40</u>	NA 2020 At-risk County	NA 2020 At-risk County
<u>Montgomery</u>	No	<u>45</u>	Yes	Yes
Moore	No	<u>28</u>	No	No
<u>Nash</u>	Yes	<u>36</u>	NA 2020 At-risk County	NA 2020 At-risk County
New Hanover	Yes	30	NA 2020 At-risk County	NA 2020 At-risk County
Northampton	Yes	36	NA 2020 At-risk County	NA 2020 At-risk County
Onslow	Yes	<u>26</u>	NA 2020 At-risk County	NA 2020 At-risk County
Orange	No	26	No	No

Pamlico	<u>No</u>	<u>46</u>	Yes	Yes
<u>Pasquatank</u>	<u>No</u>	<u>31</u>	No	No
Pender	Yes	<u>26</u>	NA 2020 At-risk County	NA 2020 At-risk County
Perquimans	<u>No</u>	<u>41</u>	Yes	Yes
Person	Yes	<u>39</u>	NA 2020 At-risk County	NA 2020 At-risk County
<u>Pitt</u>	<u>No</u>	<u>35</u>	No	<u>No</u>
Polk	<u>No</u>	<u>38</u>	No	<u>No</u>
Randolph	<u>No</u>	<u>41</u>	Yes	<u>No</u>
<u>Richmond</u>	Yes	<u>52</u>	NA 2020 At-risk County	NA 2020 At-risk County
<u>Robeson</u>	Yes	<u>55</u>	NA 2020 At-risk County	NA 2020 At-risk County
Rockingham	<u>No</u>	44	Yes	No
Rowan	<u>No</u>	<u>38</u>	No	<u>No</u>
Rutherford	No	<u>49</u>	Yes	No
Sampson	No	<u>32</u>	No	<u>No</u>
Scotland	Yes	<u>55</u>	NA 2020 At-risk County	NA 2020 At-risk County
<u>Stanly</u>	No	<u>41</u>	Yes	No
<u>Stokes</u>	Yes	<u>46</u>	NA 2020 At-risk County	NA 2020 At-risk County
<u>Surry</u>	No	<u>40</u>	Yes	No
<u>Swain</u>	No	<u>49</u>	Yes	Yes
<u>Transylvania</u>	<u>No</u>	<u>33</u>	No	<u>No</u>
Tyrrell	<u>No</u>	<u>40</u>	Yes	<u>No</u>
Union	No	<u>21</u>	No	No
Vance	Yes	<u>46</u>	NA 2020 At-risk County	NA 2020 At-risk County
Wake	<u>No</u>	<u>15</u>	No	<u>No</u>
<u>Warren</u>	Yes	<u>42</u>	NA 2020 At-risk County	NA 2020 At-risk County
Washington	Yes	<u>41</u>	NA 2020 At-risk County	NA 2020 At-risk County
Watauga	<u>No</u>	<u>25</u>	No	No
<u>Wayne</u>	<u>No</u>	<u>31</u>	No	<u>No</u>
<u>Wilkes</u>	<u>No</u>	44	Yes	No
Wilson	Yes	<u>32</u>	NA 2020 At-risk County	NA 2020 At-risk County
<u>Yadkin</u>	<u>No</u>	<u>40</u>	Yes	<u>No</u>
<u>Yancey</u>	<u>Yes</u>	<u>37</u>	NA 2020 At-risk County	NA 2020 At-risk County
2020 MIECHV <u>Needs</u> Assessment At- risk County Mean Total Risk Score	<u>39</u>			

Appendix 4: MIECHV State Profile for North Carolina Appendix 5: NHVRC Home Visiting Yearbook NC Profile Appendix 6: NC Child County Data Cards for High-Risk Counties Appendix 7: HV/PE Systems Plan Appendix 8: State Leaders Letters