Maternal and Child Health Services Title V Block Grant

North Carolina

FY 2022 Application/ FY 2020 Annual Report

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I. General Requirements

I.A. Letter of Transmittal

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STATE OF NORTH CAROLINA
DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER
GOVERNOR

MANDY COHEN, MD, MPH
SECRETARY

September 1, 2021

Michael Warren, MD, MPH, FAAP
Associate Administrator
ATTN: MCH Block Grant
Division of State and Community Health
5600 Fishers Lane, Room 18-31
Rockville, MD 20857
MWarren@hrsa.gov

Dear Dr. Warren:

Enclosed is North Carolina's application for the Maternal and Child Health Services Title V Block Grant Fiscal Year 2022. This grant is essential for maintenance and enhancement of our public health services.

Your consideration of our request is greatly appreciated. Should you have questions about the information contained in this application, please call Kelly Kimple, Chief, Women's and Children's Health Section, at (919)707-5512.

Sincerely,

DocuSigned by:
Mark T. Benton
85A1EF320AD641B

Mandy Cohen, MD, MPH
Secretary

Enclosure: *Maternal and Child Health Services Title V Block Grant FY22 Application/FY20 Annual Report*

cc: Mark Benton, Assistant Secretary for Public Health

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I.B. Face Sheet

The Face Sheet (Form SF424) is submitted electronically in the HRSA Electronic Handbooks (EHBs).

I.C. Assurances and Certifications

The State certifies assurances and certifications, as specified in Appendix F of the 2021 Title V Application/Annual Report Guidance, are maintained on file in the States' MCH program central office, and will be able to provide them at HRSA's request.

I.D. Table of Contents

This report follows the outline of the Table of Contents provided in the *"Title V Maternal and Child Health Services Block Grant To States Program Guidance and Forms,"* OMB NO: 0915-0172; Expires: January 31, 2024.

II. Logic Model

Please refer to figure 4 in the "Title V Maternal and Child Health Services Block Grant To States Program Guidance and Forms," OMB No: 0915-0172; Expires: January31, 2024.

III. Components of the Application/Annual Report

III.A. Executive Summary

III.A.1. Program Overview

The Title V Program in North Carolina (NC) is housed in the Women's and Children's Health Section (WCHS) in the NC Division of Public Health (NC DPH), within the NC Department of Health and Human Services (NCDHHS). The Title V Director serves as WCHS Chief, and the CYSHCN State Director serves as the Children & Youth (C&Y) Branch Head. WCHS is responsible for overseeing the administration of the programs carried out with allotments under Title V and for other programs including Title X, Early Intervention (EI), nutrition services (including the state WIC program), and immunizations. In addition to the C&Y Branch, the WCHS includes four other branches: Women's Health (WHB), EI, Immunization (IB), and Nutrition Services. The WCHS is one of ten offices and sections in the NC DPH, and the NC DPH works collaboratively with 85 local health departments (LHDs) which have local autonomy.

One overarching goal of the 2020 NC Title V Needs Assessment was to ensure that the process worked in alignment with Section, Division, and Department strategic planning efforts so that Title V resources could be leveraged as much as possible. These plans include, but are not limited to, the NC Perinatal Health Strategic Plan (PHSP), the CYSCHN Strategic Plan, the NC Early Childhood Action Plan, and the NC DPH Strategic Plan. The needs assessment process afforded the WCHS an opportunity to reexamine the 2015 priority needs which were intentionally written broadly and had not changed much since they were selected back in 2005. A WCHS 2020 NC Title V Needs Assessment Leadership Team was created in February 2019 which consisted of the Title V Director, the CYSHCN Director, the WHB Head, and the State Systems Development Initiative (SSDI) Project Coordinator. This group met monthly to create and implement a needs assessment work plan. The WCHS hosted a Title V MCH Internship Team supported by the National MCH Workforce Development Center during summer 2019 which allowed two MCH students, one in graduate school and the other an undergraduate, to assist in qualitative data collection activities. The needs assessment process included many opportunities for involvement by WCHS' stakeholders, including families and community representatives, other state agencies, program participants, and programmatic partners and providers including a MCHBG Big Questions Needs Assessment Survey administered in spring 2019 at conferences and meetings of programs supported by Title V; focus group and key informant interviews; and an electronic survey of WCHS partners and stakeholders to identify priorities and guide planning within the five MCHBG population domains. Partners and stakeholders received a personal invitation from the NC MCH Title V Director and/or WCHS Branch Heads to respond to the survey which elicited 934 completed responses from at least 99 counties.

In March 2020, an expanded Section Management Team (SMT) meeting, which, in addition to the Section Chief, Branch Heads, and Operation Manager also included unit supervisors and other critical WCHS members invited by SMT, was held to review the qualitative and quantitative data and determine the 2020 NC Title V Needs Assessment Priority Needs. Prior to the meeting, the Leadership Team developed prioritization criteria which was shared with staff along with an overview of the Title V Performance Measure Framework. A simple dot voting process was then used to determine the top priority needs. The Branch Heads worked with their staff and the SSDI Project Coordinator to draft the strategies, objectives, performance measures, and evidence-based or -informed strategy measures for the State Action Plan which was revised and completed by the Leadership Team in the context of NCDHHS strategic priorities and goals. The following table lists the eight selected priority needs and the accompanying National and State Performance Measures (NPMs & SPMs) by population domain.

MCH Priority Needs Linked to Performance Measures	
NC Priority Needs	**NPM/SPM**
Women/Maternal Health	
1. Improve access to high quality integrated health care services	NPM1 % of women, ages 18 through 44, with a preventive medical visit in the past year
2. Increase pregnancy intendedness within reproductive justice framework	SPM1 % of PRAMS respondents who reported that their pregnancy was intended (wanted to be pregnant then or sooner)
Perinatal/Infant Health	
1. Improve access to high quality integrated health care services	NPM3 % of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)
3. Prevent infant/fetal deaths and premature births	NPM4A) % of infants who are ever breastfed and 4B) % of infants breastfed exclusively through 6 months
	SPM2 % of women who smoke during pregnancy
Child Health	
4. Promote safe, stable, and nurturing relationships	NPM6 % of children, ages 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year
	SPM3 % of children with two or more Adverse Childhood Experiences (ACEs) (NCHS)
5. Improve immunization rates to prevent vaccine-preventable diseases	SPM4 % of children, ages 19 through 35 months, who have completed the combined 7-vaccine series (4:3:1:3*:3:1:4)
Adolescent Health	
6. Improve access to mental/behavioral health services	NPM10 % of adolescents, ages 12 through 17, with a preventive medical visit in the past year
CYSHCN	
7. Improve access to coordinated, comprehensive, ongoing medical care for CYSHCN	NPM11 % of children with and without special health care needs, ages 0 through 17, who have a medical home
Cross-Cutting/Systems Building	
8. Increase health equity, eliminate disparities, and address social determinants of health	SPM5 Ratio of black infant deaths to white infant deaths

The data and stakeholder feedback supported continued use of most of the NPMs it was using for the past five years, but WCHS has chosen new SPMs which align more directly with the objectives and strategies in the State Action Plan as well as the other current strategic plans including the NC Early Childhood Action Plan. While the following table shows that there has been incremental progress in most of the previously used indicators, there is still much room for improvement, particularly in decreasing racial/ethnic disparities and inequities. WCHS has moved NPM14.1 (Percent of women who smoke during pregnancy) to a SPM in the Perinatal/Infant Health Domain, and has dropped NPM14.2 (Percent of children, ages 0 through 17, who live in households where someone smokes) and NPM15 (Percent of children who are continuously and adequately insured). Data for NPM15 are actually disconcerting as, according to American Community Survey data, the percentage of children who were uninsured increased in 2018 for NC. The WCHS will certainly keep monitoring these data but will not report on them as NPMs for 2021-25.

Overview of Progress Made on 2016-20 NPMs and SPMs		
NPM/SPM	**Year**	**Data**
NPM1 Percent of women, ages 18 through 44, with a preventive medical visit in the past year	2015	70.1%
	2018	77.6%
NPM3 Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)	2015	77.5%
	2018	76.7%
NPM4A Percent of infants who are ever breastfed	2013	75.3%
	2016	82.5%
NPM4B Percent of infants breastfed exclusively through 6 months	2013	20.8%
	2016	23.4%
NPM6 Percent of children, ages 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year	2016	47.6%
	2017-18	43%
NPM10 Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year.	2016	85.5%
	2016-17	81%
NPM11 Percent of children with and without special health care needs, ages 0 through 17, who have a medical home	2016	52.6%
	2017-18	41%
NPM14.1 Percent of women who smoke during pregnancy	2015	9.4%
	2018	8.4%
NPM14.2 Percent of children, ages 0 through 17, who live in households where someone smokes	2016	19.2%
	2017-18	15.4%
NPM 15 Percent of children, ages 0 through 17, who are continuously and adequately insured	2016	66.8%
	2017-18	68.2%
SPM1 Percent of infants with confirmed hearing loss who are enrolled for intervention services no later than age 6 months	2015	41.1%
	2018	48.7%
SPM2 Number of substantiated reports of child abuse and/or neglect	2016	9358
	2019	9167
SPM3 Percent of infants and toddlers with Individualized Family Services Plans (IFSPs) who receive the early intervention services on their IFSPs in a timely manner (within 30 days)	2015	99.1%
	2018	99.5%
SPM4 The ratio of school health nurses to the public school student population	2016	1:1086
	2019	1:1021

The mission of the WCHS, to support and promote the health and well-being of NC individuals including mothers, infants, children, youth, and their families to reduce inequities and improve outcomes, aligns well with the goals of Title V. The WCHS works closely with local, state and national partners and serves as a critical collaborator and convener. From reproductive life planning and preconception health to perinatal and infant health to child/adolescent health including those with special health care needs, WCHS emphasizes a life course approach to achieving health and health equity in all populations. The Title V Program values evidence-based and evidence-informed strategies in promoting health, while following guidelines around best practice. Given the importance of cross-sector work, WCHS leverages the expertise and experience of our many partners and leaders in the state.

The WCHS oversees and administers an annual budget of over $679 million and employs 946 people. This is 48% of the DPH staff, along with 61% of the budget. The WCHS's broad scope promotes collaborative efforts while discouraging categorical approaches to the complex challenge of improving maternal and child health. The Section is committed to ensuring that services provided to families are easily accessible, user-friendly, culturally appropriate, and free from systemic barriers that impede utilization. While many staff members work in the central office in Raleigh, there are a number of regional consultants who work from home and regional offices. The EIB has a network of 16 Children's Developmental Service Agencies (CDSAs) serving all 100 counties.

The Title V Block Grant funds 26 WCHS state-level employees, with others funded in part per the cost allocation plan. These positions are primarily nurse consultants, public health genetic counselors, and public health program consultants within the WCHS, but also include staff members in the SCHS, the Chronic Disease and Injury Section

(CDIS), and the Oral Health Section to fund collaborative efforts. The funding that goes directly to LHDs is used to provide services for individuals without another payer source, as well as enabling services and population health education.

The WCHS supports services and programs for underserved and vulnerable populations using state appropriations, grant funding, Title V, Medicaid Federal Financial Participation, and other receipts. The WCHS provides Title V funding to LHDs through DPH's Consolidated Agreement which is a contract between the LHD and DPH that outlines requirements of DPH and the LHD including funding stipulations, personnel policies, disbursement of funds, etc. Program specific requirements for each state funded activity are provided in Agreement Addenda.

WCHS also collaborates on a number of activities with several professional organizations in the state including but not limited to: NC Medical Society; North Carolina Pediatric Society (NCPS); NC Obstetrical and Gynecological Society; Midwives of North Carolina; NC Friends of Midwives; and the NC Academy of Family Physicians. WCHS partners with the NC Institute of Medicine, the NC Hospital Association, and the NC Area Health Education Centers. The WCHS works closely with the NC Partnership for Children, Prevent Child Abuse NC, the NC Chapter of the March of Dimes (MOD), SHIFT (Sexual Health Initiatives For Teens) NC, NC Child, and other organizations. There are many accredited schools of public health and medicine in NC, and WCHS maintains close working relationships with many of them.

The WCHS is committed to building the capacity of women, children, and youth, including those with special health care needs, and families to partner in decision-making about state Title V activities and programs. There are several NCDHHS advisory councils and commissions that are in place and involve family members including, but not limited to: the Commission on CSHCN, Newborn Metabolic Committee, Newborn Hearing Advisory Committee, Office on Disability and Health Advisory Group, Association for School Health, MIECHV, Triple P, NC Baby Love Plus Community Advisory Network, Interagency Coordinating Council (for Early Intervention), the Care Coordination for Children Workgroup, and the Governor's Council on Sickle Cell Syndrome. The C&Y Branch continues to support a full-time Family Liaison Specialist (FLS) who is a parent of a CYSHCN to train and support family engagement in Branch programs and partner organizations and maintains an active group of Branch Family Partners. The WHB has recently created Village 2 Village, a community and consumer engagement work group whose members provide feedback on the PHSP strategies, publications, and services. Participants are NC residents between 18 to 44 years old from rural and urban counties who must have children no older than one year of age. As with the Branch Family Partners, participants are compensated for time, travel, meals, and lodging according to NC state government reimbursement guidelines.

The Title V program focuses on ensuring access while also facilitating a strategic approach utilizing needs assessments and convening partners and leaders in the development of strategic plans. Despite substantial successes, WCHS remains challenged by a variety of systemic barriers and recognize that there is still much work to be done to fully integrate a systems approach in NC. While there is a strong commitment to addressing social determinants of health and racism to achieve health and health equity, this work will take time. The Title V program continues to advocate for NC residents and is central to the current priorities of NCDHHS, including 1) Medicaid Transformation and incorporating social determinants of health, 2) the opioid crisis, and the effects on children and families, and 3) early childhood as the basis of health for all, in addition to the recent priority focus of the COVID-19 response. WCHS continues to work with the many partners to help achieve our goals and create a more strategic vision for NC, while maintaining the safety net, public health infrastructure at our LHDs, and a focus on evidence-based programs for maternal and child health. Promoting health and wellbeing and supporting North Carolinians, including our children and families, is especially critical as we move forward in our ongoing response to the COVID-19 pandemic and recovery.

III.A.2. How Federal Title V Funds Complement State-Supported MCH Efforts

MCH Block Grant funds provide critical infrastructure, support, and resources to the state's overall MCH efforts. In addition to Title V, WCHS is responsible for the administration of programs such as Title X, Maternal Health Innovation, Early Intervention, MIECHV, child abuse prevention, nutrition services (including the WIC program), and immunization which requires a coordinated, strategic approach, utilizing other federal or state funding while also leveraging the many partnerships with other state agencies, universities, FQHCs, non-profit organizations, and LHDs. The Title V program is a leader in efforts related to addressing social determinants and health equity within the DPH. Early childhood has been identified by the Governor as a priority of NC, and the WCHS was directly involved in the development of the NC Early Childhood Action Plan. WCHS brings resources, expertise, and training to fight the opioid epidemic to make sure women and their infants and children stay central to the conversation and that the lifelong effects of toxic stress and ACEs are considered. WCHS works with Medicaid on the NC transition to managed care, particularly with care management for pregnant women and at-risk children. As NC continues to address challenges, such as infant mortality and its disparities, the MCH Block Grant funds are the foundation on which NC can form a strategy to promote the health of individuals, infants, children/adolescents, and their families. With the ongoing response to the COVID-19 pandemic, we will all work to meet the needs of NC individuals, children and families.

III.A.3. MCH Success Story

The WCHS has been successful in leveraging Title V funding and programs to improve maternal health infrastructure in NC. Utilizing MCHB funding, the Maternal Health Innovation Program is a multi-faceted collection of innovative initiatives designed to address and reduce maternal morbidity and mortality in NC. The program has experienced the following successes:

1. Establishment of a state-focused Maternal Health Task Force, which has been successful at maintaining engagement of partners who guided the development of a draft Maternal Health Strategic Plan, with the goal of addressing disparities in maternal health and improving maternal health outcomes.
2. Creation of the Statewide Provider Support Network comprised of Family Medicine, Obstetrician and Perinatal Nurse Champions who represent each of the state's six Perinatal Care Regions (PCR). This group leads the efforts of examining areas of improvement in maternal health clinical practice.
3. The Perinatal Nurse Champions have worked in tandem to conduct trainings for 324 providers, inclusive of nurses, nurse midwives, and physicians on the latest, evidence-based protocols. They have assessed 40% of birthing facilities on their level of neonatal and maternal care along with completion of a gap analysis in maternal health service provision and are currently implementing action plans to address identified needs.
4. The Community Health Worker-Doula Program is being piloted in PCR 5 and is working with 15 pregnant people to improve maternal health outcomes.
5. University of North Carolina's Collaborative for Maternal and Infant Health's 4th Trimester Project has created a postpartum toolkit, inclusive of a postpartum planning tool, postpartum visit checklist and transitions to care protocols which is being piloted in provider practices and with new moms around the state.

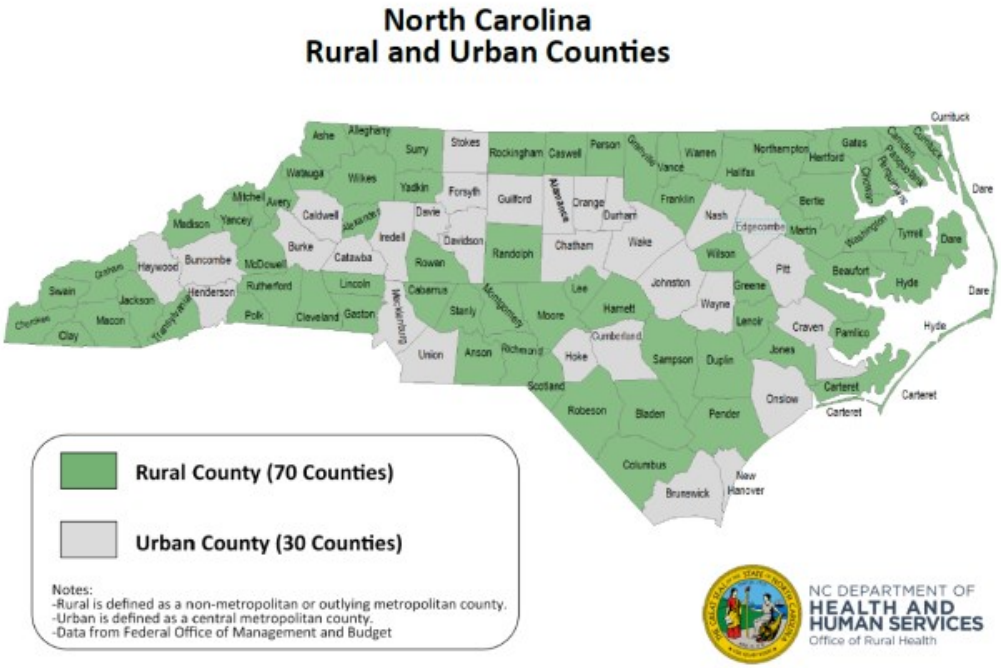
Another partnership is with CDC in implementing the Enhancing Reviews and Surveillance to Eliminate Maternal Mortality (ERASE MM) program. Moving toward a holistic approach to each woman's death, the scope of case reviews has expanded and now includes all maternal deaths. A nurse midwife and licensed clinical social worker have worked together to create a comprehensive case narrative, blending substance use, mental health conditions, trauma history and social determinates of health with medical issues to create a more in-depth narrative of the woman's life and death. Incorporation of the Utah Standardized Criteria for Review of Perinatal Suicides and Accidental Drug-Related Deaths, along with the Texas Disparities Trigger tool, has increased consistency in discussions and decisions. Recommendations have transitioned to a consistent who/what/when format allowing for greater clarity and specificity. Based on recommendations from our Maternal Mortality Review Committee, our community partner, UNC Collaborative for Maternal & Infant Health, has provided training on the Association of Women's Health, Obstetrics and Neonatal Nursing's (AWHONN) Post-Birth Warning Signs curriculum to over one thousand nurses and assisted with the incorporation of the AWHONN Post-Birth Warning Signs toolkit into the pre-discharge education protocols in twelve hospitals. In partnership with Eastern Area Health Education Center, Inc., a standardized online committee member orientation training was created for new members which includes modules on health disparities and discrimination.

III.B. Overview of the State

North Carolina's Demographics, Geography, Economy and Urbanization

The state of North Carolina (NC) covers 52,175 square miles including 48,710 in land, and 3,465 in water. The 100 counties that comprise the state stretch from the eastern coastal plains bordering the Atlantic Ocean, continue through the densely populated piedmont area, and climb the Appalachian Mountains in the west. These diverse geographical features pose a number of challenges to the provision of health care and other social services. In the sparsely populated western counties, there are vast areas of rugged terrain which make travel difficult especially during the winter months and contribute to the isolation of the rural inhabitants. In the coastal plain counties, which cover almost a quarter of the state, swamp lands, sounds that bisect counties in half, and barrier islands that are often inundated during hurricane season, also complicate transportation and contribute to isolation and health care access problems. While urban centers have better health care provider to population ratios, access to affordable health care may still be a problem due to potential disparities because of race/ethnicity, long wait times for appointments or lack of insurance coverage (Healthy People 2020). Moreover, because most local health departments (LHDs) have maintained their single-county autonomy, rural departments are often under-funded and have difficulties attracting sufficient staff and operating efficiently. According to the NC Office of Rural Health, 70 of the 100 NC counties are considered rural. Per data from the Federal Office of Management and Budget, counties are defined as rural if they are non-metropolitan or outlying metropolitan counties and urban if they are central metropolitan counties. The 30 urban counties shown in gray in the map (Figure 1) below have at least one urbanized area that has a population of at least 50,000.

Figure 1



According to the US 2020 Census, NC's official population was 10,439,388 which is an increase of 903,905 or

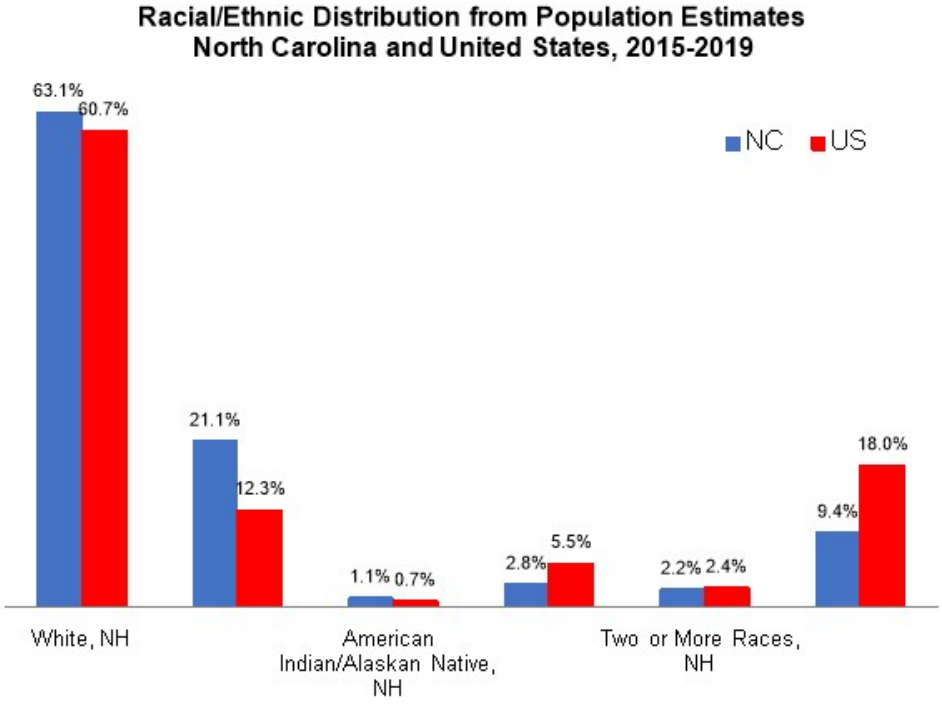
9.5% since 2010. This was the sixth largest increase among the states and the fifteenth fastest-growing state. (Carolina Demography Blog, April 26, 2021).

Per the 2015-2019 American Community Survey (ACS), the age distribution of the female population of NC mirrors that of the nation. Females in NC and in the US are also aging at approximately the same rate. The median age in NC is 38.7 years; for women, it is 40.2 years. The number of women in NC in their reproductive years (ages 15-44) compose 38.4% of the total female population. The population projections for 2025 show that the proportion of women of childbearing age will comprise 38.4% of the total female population (NC State Data Center).

The number of births in NC peaked in 2007, with 130,866 births, and there was a steady decline to a total of 118,983 born in 2013, but a slight rise to 120,826 in 2015 and a continued decline in 2019 with 118,725 births. Based on 2015-2019 ACS population estimates, children under five years make up 5.9% of NC's population, while children under 18 years comprise 22.4%. These percentages are similar to those for the US (6.1% and 22.6% respectively).

2015-2019 ACS census population estimates indicate that more than one out of every three individuals in the state is a member of a minority group. The Black population is the largest group at 21.1% of the population. The combined other minority groups – Latinos (9.4%), American Indian and Alaska Native (1.1%), Asian/Pacific Islanders (2.8%) and those reporting two or more races (2.2%) – represent a smaller proportion of the total population, but their numbers have increased significantly over the past decade. Data from the ACS show that NC's is now greater than one million people, which is an increase of 226,000 new residents since 2010 for a percent change of 28.3 which is higher than that of the US at 19.6. (UNC Carolina Population Center Carolina Demography's blog *North Carolina's Hispanic Community: 2020 Snapshot* posted February 5, 2021). See Figure 2 for a comparison of racial/ethnic distribution in NC and the US.

Figure 2



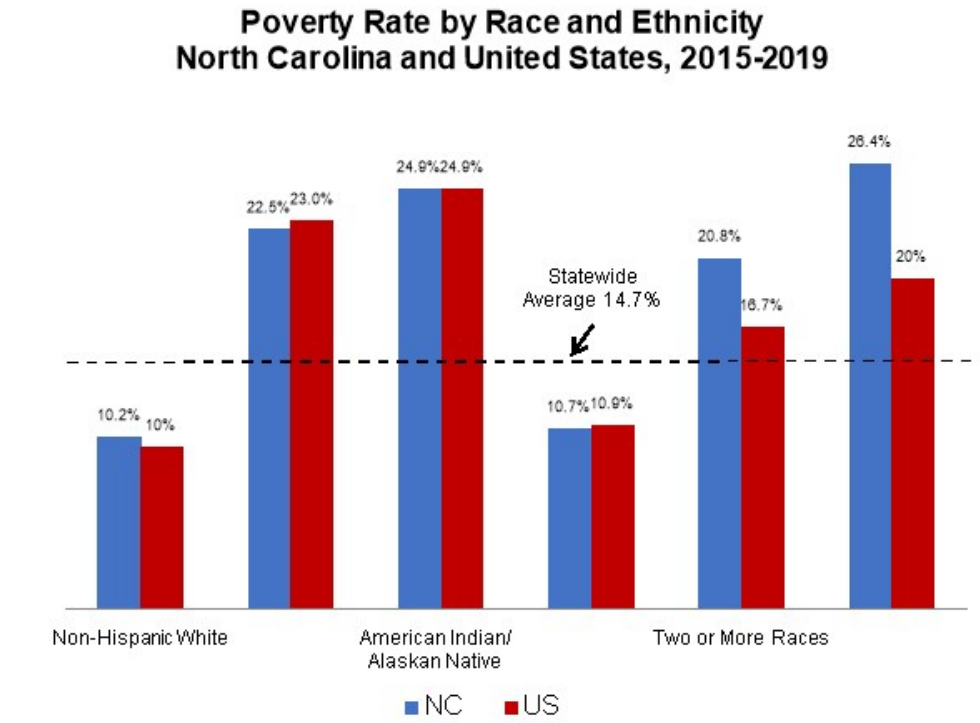
Source: U.S. Census Bureau: 2015-2019 American Community Survey 5-Year Estimates

According to ACS data, 1.4 million North Carolinians (14%) lived in poverty in 2019, making NC the state with the

13th highest poverty rate. Poverty rates by race and ethnicity in NC are similar to national rates in all categories except NC rates are higher for people of two or more races and for those of Hispanic/Latino ethnicity (Figure 3). Poverty rates for Black, American Indian, and Hispanic North Carolinians are more than twice the rates for whites. Women in NC are more likely to be in poverty (16%) than men (13.3%), and children under 18 in NC are at a higher rate of poverty (21.2%) than for the nation as a whole (18.5%).

Figure 3

While the state's poverty rate has declined slightly over the past ten years, income levels have not changed. Per 2015-2019 ACS data, the median household income level for North Carolinians was $54,602 as compared to $62,843 for the US, and this amount has not changed much over time (2010-2014 ACS data shows the NC level at $46,693 and the US level at $53,482).



Source: U.S. Census Bureau: 2015-2019 American Community Survey 5-Year Estimates

The *North Carolina Annual Economic Report: 2020*, released by the NC Department of Commerce in December 2020, notes that in between January 2017 to October 2019, NC added about 205,000 new jobs and had a rate of job growth of 4.7% as compared to 4.3% nationwide. This growth was mostly due to job growth in the following sectors: trade, transportation, and utilities; government; professional and business services; and education and health services. While it is too early to know the true economic impact of the COVID-19 pandemic, it is clear that Black and Latinx people are again being hit hardest, and that women in particular are more likely to have been laid off than men (McHugh, *Lessons from the Great Recession: Helping people, supporting communities, speeding recovery*, Budget & Tax Center, NC Justice Center June 4, 2020). While there has been some recovery in the initial wave of job losses during the COVID-19 pandemic, by the end of 2020, the unemployment rate was still higher for Black (8.8%) and Latinx (6.6%) workers than white workers (5.2%). (McHugh, *COVID-19 Recession Has Created Higher Unemployment for People of Color*, Budget & Tax Center, NC Justice Center, May 10, 2021).

Strengths and Challenges Impacting the Health Status of NC's MCH Population

The public health system in NC has a strong history with 85 autonomous LHDs serving all 100 counties ensuring access to maternal and child health services through Title V funding as well as other federal, state, and local funding. During FY18, the NC Division of Public Health (NC DPH) submitted documentation to the Public Health

Accreditation Board (PHAB) as part of the steps towards PHAB accreditation which highlighted some strengths and challenges that impact the health status of NC's maternal and child health population. Strengths included having a strong Division management team and strong relationships with local health directors and departments. Identified challenges included an aging workforce and loss of historical knowledge when staff members leave, updating and implementing new information technology systems, the growing population of our state leading to greater disparities in health status between rural and urban areas, and the aging of our populations with an impact on demand for health services. Work on the PHAB accreditation process was frozen for a one year period due to leadership changes within the NC DPH, but beginning in December 2019, the Division continued to move forward in pursuing accreditation. Document submission (as the next step in the process) was completed in spring 2021, and preliminary review results are expected by September.

LHDs are working hard to maintain local public health care management services under Medicaid transformation, but it is too soon to know exactly the full impact of that transformation. The NC DPH has been providing input to NC Medicaid and worked with the LHDs to maintain continuity for the Medicaid beneficiaries through the roll out of NC Medicaid Managed Care.

NCDHHS is also undergoing transition and working towards a reorganization to create a new Division of Child and Family Well-Being and bring together complementary programs from within NCDHHS that primarily serve children and youth to improve outcomes for children and their families. A change management firm was hired to work through the transition, and we will continue to highlight opportunity and monitor the impacts on NC's MCH workforce, programs and partners.

The COVID-19 pandemic has been a common challenge for us all, and NCDHHS has been proud of how we transformed how we work as a team to serve individuals, infants, children and families during an unprecedented global pandemic and know that ongoing dedication to the COVID-19 response and recovery, both shorter and long-term, are critical.

Delivery of Title V Services within NCDHHS

The Title V Program in NC is housed in the Women's and Children's Health Section (WCHS) in the NC DPH, with the Title V Director serving as Section Chief and the CYSHCN State Director serving as the Children & Youth (C&Y) Branch Head. Dr. Kelly Kimple, a pediatrician and preventive medicine physician, was named Title V Director in August 2016. Marshall Tyson became the CYSHCN State Director in January 2017 and retired in December 2020. Dr. Gerri Mattson, Pediatric Medical Consultant with the C&Y Branch is serving as the Interim CYSHCN State Director, and Carol Tyson, School Health Unit Supervisor is serving as the Interim C&Y Branch Head. WCHS is responsible for overseeing the administration of the programs carried out with allotments under Title V and for other programs including Title X, Early Intervention, nutrition services (including the state WIC program), and immunization. In addition to the C&Y Branch, the WCHS includes four other branches: Women's Health (WHB), Early Intervention, Immunization (IB), and Nutrition Services. In April 2021, a departmental reorganization was announced which is further detailed in the Needs Assessment Summary section of this application. Full impact of the reorganization is yet to be completely understood, but the current plan is to move the NSB, EIB, and the C&Y Branch into the new Division of Child and Family Wellbeing.

The mission of NC Department of Health and Human Services (NCDHHS), in collaboration with its partners, is to protect the health and safety of all North Carolinians and provide essential human services. The Department's vision is that all North Carolinians will enjoy optimal health and well-being. Governor Roy Cooper was sworn into his second term of office on January 9, 2021. Prior to being elected Governor, Cooper served as the NC Attorney General from

2001 to 2017 and was previously a member of the NC House of Representatives (1987-1991) and NC Senate (1991-2001). Governor Cooper appointed Dr. Mandy Cohen as Secretary of the NCDHHS on January 13, 2017. Dr. Cohen is an internal medicine physician who served as the Chief Operating Officer and Chief of Staff at the Centers for Medicare and Medicaid Services (CMS) prior to coming to NC. Among her top priorities in addition to the COVID-19 pandemic are combating the opioid crisis, building a strong, efficient Medicaid program, and focusing on early childhood. In October 2018, Danny Staley who had been the Director of the NC DPH since February 2015 resigned. Beth Lovette, the Deputy Director was named Acting Division Director. In June 2019, Secretary Cohen announced that effective July 22, Mark Benton, her current Deputy Secretary for Health Services would be the next leader of the DPH as the Assistant Secretary for Public Health. The Title V Director is directly supervised by Assistant Secretary Benton. The previous State Health Director position within the NC DPH is now the State Health Director/Chief Medical Officer of NCDHHS, who coordinates efforts across NCDHHS, which reflects the Division's and Department's value of collaboration and teamwork. Dr. Betsey Tilson, a pediatrician and preventive medicine physician, was appointed to Chief Medical Officer and State Health Director in August 2017.

The NC DPH is composed of the Director's Office and nine other offices and sections: Administrative, Local, and Community Support; Chronic Disease and Injury; Epidemiology; Environmental Health; Human Resources; Oral Health; State Center for Health Statistics; State Laboratory; and WCHS. NC DPH works collaboratively with 85 sub-state administrative units (single- and multi-county LHDs). The LHDs, which have local autonomy, have a longstanding commitment to the provision of multidisciplinary perinatal, child health, and family planning services, including prenatal care, care management, health education, nutrition counseling, psychosocial assessment and counseling, postpartum services, care coordination for children, well-child care, and primary care services for children. They are also instrumental in providing leadership for evidence-based programs county-wide such as Nurse Family Partnership, Healthy Families America, Teen Pregnancy Prevention Initiatives (TPPI), Triple P, Reach Out and Read, and other programs dictated by the needs of the county.

There is a weekly Division Management Team (DMT) meeting for DPH executive leadership and all the Section Chiefs within DPH. This meeting is a time to co-plan and discuss issues of overlapping responsibilities and strategies for service improvement. The WCHS Management Team (SMT), which consists of the WCHS Chief, the Operations Manager, and the five Branch Heads, meets weekly after the DMT meeting to further discuss any DMT agenda items and to assure internal communication and coordination occurs on a regular basis. This provides the Section with a format to facilitate joint planning, to keep key staff informed of current activities and issues, and to plan short and long-term strategies for addressing current issues, while also providing the Title V Director with an overview of factors influencing maternal and child health services. A similar process occurs within the Branches which are responsible for assessing and responding to the needs of their priority populations.

The WCHS oversees and administers an annual budget of over $679 million and employs 946 people. This is 48% of the DPH staff, along with 61% of the budget. The WCHS's broad scope promotes collaborative efforts while discouraging categorical approaches to the complex challenge of promoting maternal and child health. The Section is committed to ensuring that services provided to families are easily accessible, user-friendly, culturally appropriate, and free from systemic barriers that impede utilization. While many staff members work in the central office in Raleigh, there are a number of regional consultants who work from home and regional offices. The EIB has a network of 16 Children's Developmental Service Agencies (CDSAs) serving all 100 counties.

The Title V Block Grant funds 26 WCHS state-level employees, with many others funded in part per the cost allocation plan. These positions are primarily nurse consultants, public health genetic counselors, and public health program consultants within the WCHS, but also funds staff members in the SCHS, the Chronic Disease and Injury Section (CDIS), and the Oral Health Section. The funding that goes directly to LHDs is used to provide services for

individuals without another payer source, as well as enabling services and population health education.

NC's Systems of Care for Meeting the Needs of Underserved and Vulnerable Populations, Including CYSHCN

The WCHS supports services and programs for underserved and vulnerable populations using state appropriations, grant funding, Title V, Medicaid Federal Financial Participation, and other receipts. The WCHS provides Title V funding to LHDs through DPH's Consolidated Agreement which is a contract between the LHD and DPH that outlines requirements of DPH and the LHD including funding stipulations, personnel policies, disbursement of funds, etc. State, federal, or special project funds cannot be used to reduce locally appropriated funds. The Consolidated Agreement is revised and renewed annually. Program specific requirements for each state funded activity are provided in Agreement Addenda (AA) which are also revised annually. The AA provides a scope of work and deliverables which provide guidelines for the provision of services and outcomes. LHDs bill Medicaid and private insurance companies and have a sliding fee scale for uninsured patients. LHDs are free to allocate portions of the Title V funds to provide services to patients who are ineligible for Medicaid. WCHS also administers a limited amount of state appropriations for these services.

Services and resources for CYSHCN are included within all programs and initiatives under the C&Y Branch and in partnership with Early Intervention Branch. This intra-agency approach is inclusive, helping to ensure that all programs that serve young children, youth, and their families also provide for the subset of CYSHCN. There is no longer a discreet, separate agency/office or program for CYSHCN in NC as exists in most other states. The WCHS does not reimburse for services directly but supports the provision of services to children and youth who are not enrolled in Medicaid or Health Choice (NC Child Health Insurance Program) by contracting with LHDs and major medical facilities. In addition, C&Y Branch staff are supported by Title V to provide training and technical assistance to providers. To the greatest extent possible, services are offered within family-centered, community-based systems of care.

NC Title V leadership works diligently to maximize services for low income women and children by leveraging funds whenever possible, forming strong partnerships and interweaving funding from a variety of sources to support Title V performance measures, strengthen the integrity of the system of care and increase access for low income and disenfranchised individuals. The primary populations served through Title V funding are women, children, and families seen in LHDs for direct and enabling services. However, as part of the work of the WCHS, all infants born in NC are served through newborn screening efforts, all women of childbearing age are served through campaigns to promote preconception health, and these campaigns are intentionally becoming more inclusive of male partners and fathers.

In 2015, the C&Y Branch developed a strategic plan for the years 2015-2020 for child health and children and youth with special health care needs. While progress has been made and many of the recommendations completed (ADA assessments for many LHDs, integration of CYSHCN support in all programs in the C&Y Branch, development of an oral health checklist for parents and dentists, training to LHDs as medical home for CYSHCN, and increased internal and external partnerships to support the system of care for CYSHCN), long range goals of increasing access to care, integration of mental and behavioral health, improving the quality of care, and improving the system of care are incorporated in the Title V State Action Plan and will continue to be part of the C&Y Branch Strategic Plan which is being extended to 2025.

In 2017, it was determined that a more specific strategic plan needed to be developed for CYSHCN. The Standards for Systems of Care for CYSHCN was selected as the framework for the strategic plan, and a Summit was held in October 2017 that included all C&Y Branch staff as well as parents of CYSHCN and other internal and external

partners. Recommendations from the Summit included:

- Increasing the percent of CYSHCN that have access to behavioral, mental, and oral health services
- Increasing the number of counties implementing Innovative Approaches (Improving Systems of Care for CYSHCN)
- Increasing the capacity of health professionals to improve quality care for people with disabilities and CYSHCN through partnerships with major medical centers
- Increasing the number of CYSHCN that have access to patient and family centered care by training parents in Parents and Collaborative Leaders
- Increasing parent access to information by creating a CYSHCN webpage with info and links to credible source
- Increasing information on transitioning from pediatric to adult health services

In collaboration with our Branch Family Partners, the following activities are planned for FY21-25 that will support the C&Y Branch and CYSHCN Strategic Plans and the Title V State Action Plan:

- Title V is partnering with the NC Integrated Care for Kids (InCK) project, a demonstration project of integrating and coordinating systems of care for children. During the coming year, the School Health Unit will be working with school health centers to integrate physical and mental health services. This also supports our partnership with Department of Public Instruction (DPI) to increase mental health services for students. The School Health Unit will also be hiring a service integration consultant as part of the InCK team to work across schools in the engaged counties.
- Title V received the Pediatric Mental Health Care Access grant that is training primary care providers to access mental and behavioral health consultation through the NC Psychiatry Access Line (NC-PAL).
- The C&Y Branch has developed dental checklists for parents of CYSHCN and dentists to improve access and care for CYSHCN. During the next year, this training will be offered virtually and in-person to parents and providers.
- The C&Y Branch has convened a Transition Workgroup, including representation from the NC Division of Mental Health, Developmental Disabilities and Substance Abuse Services (NC DMH/DD/SAS), to develop checklists for parents and primary care providers to assist with transitioning youth from pediatric to adult health services.
- Supported by a grant from the National Center for Complex Health and Social Needs, Title V is working with Duke, UNC, family and community partnerships (including Medical Legal Partnership) to create several virtual convenings to address access to care, medical home, and community-based services and supports for children with complex needs.
- The nine-member Commission on CYSHCN, appointed by the Governor and supported by the CYB is charged with monitoring and evaluating the availability and provision of health services for CSHCN in NC and to monitor and evaluate the services for special needs children through NC Health Choice. The Commission makes recommendations for modifications or additions to the rules necessary to improve services to these children and make service delivery more efficient and effective. The C&Y Branch provides staffing support for the Commission.
- The C&Y Branch will continue to conduct ADA assessments for LHDs to increase access for CYSHCN.

The NC Early Childhood Action Plan (ECAP) was launched at the NC Early Childhood Summit on February 27, 2019. The ECAP was developed with input from over 350 stakeholders from across the state, including many from the WCHS, and more than 1,500 people provided feedback on the draft plan before it was finalized and released. Work on the plan started in August 2018 when Governor Cooper issued an executive order directing NCDHHS to develop an early childhood plan devoted to the health, safety, development, and academic readiness of young

children in NC. The ECAP's vision statement is: "All North Carolina children will get a healthy start and develop to their full potential in safe and nurturing families, schools and communities." The ECAP provides a framework to help NC create change for its young children by 2025. The overall goal of the plan is:

By 2025, all North Carolina young children from birth to age eight will be:

1. Healthy: children are healthy at birth and thrive in environments that support their optimal health and well-being.
2. Safe and Nurtured: Children grow confident, resilient, and independent in safe, stable, and nurturing families, schools, and communities.
3. Learning and Ready to Succeed: Children experience the conditions they need to build strong brain architecture and skills that support their success in school and life.

The WCHS continues to participate in activities supporting ECAP implementation, working to align with and amplify the strategies included in the ECAP to collaboratively achieve the outcomes.

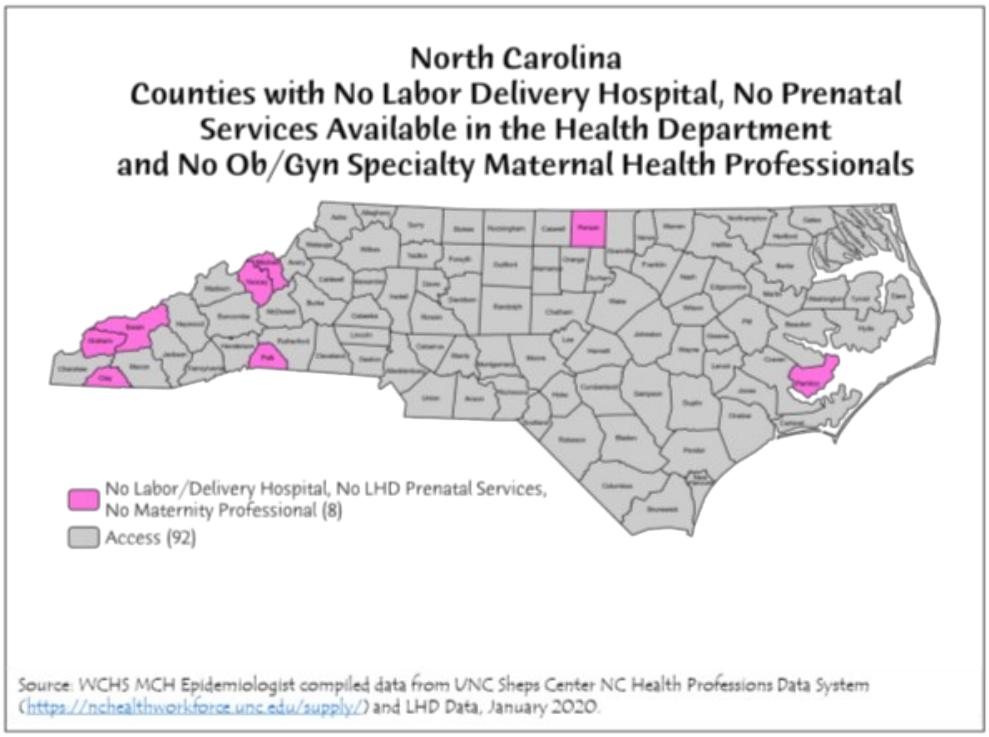
Along the maternal and child health continuum with the ECAP, implementation of the Perinatal Health Strategic Plan (PHSP): 2016-2020 continued. A new PHSP Program Consultant position was hired in June 2021 after a temporary staff member had been in that position since July 2020. Bi-monthly PHSP Team meetings are held along with four work groups (Data and Evaluation; Community and Consumer Engagement; Communications; and Policy) who meet as needed to move forward the work of the PHSP. While plans to hold an Infant Mortality Summit in spring 2020 were canceled because of the COVID-19 pandemic, work to develop a new 2021-2025 PHSP aligned with the NC ECAP and the Perinatal Systems of Care (PSOC) Task Force recommendations with a continued focus on equity was done, and the PSHP: 2021-2025 will be released in fall 2021.

According to data from the interactive NC Health Professions Data System (https://nchealthworkforce.unc.edu/) in 2019, for NC as a whole, there was an average of seven physicians with a primary care practice per 10,000 individuals. However, 34 counties have relatively few primary care physicians (less than 3 per 10,000 people) and two counties did not have any primary care physicians. NC also has an increasing shortage of health care professionals performing deliveries, and there have been seven rural hospital closures since 2010 in NC.

Per the NC Health Professions Data System, in 2019 there was an average of 1.55 physicians who specialty was general pediatrics per 10,000 population, but nineteen counties did not have any pediatricians. NC has several children's hospitals nationally ranked in pediatric specialties (i.e., UNC Children's Hospital; Duke Children's Hospital and Health Center; and Levine Children's Hospital), but access to these hospitals is often difficult for children not born in nearby cities and counties.

As shown in Figure 4, prenatal care providers are available in most, but not all counties in NC. Birthing facilities across NC have varied capabilities to care for mothers and newborns with complex needs. The current geographic distribution of these facilities makes it challenging for some moms and newborns with complex conditions to access medical care and facilities that can meet their needs.

Figure 4



The NC Child Fatality Task Force supported legislation (Session Law 2018-93) requiring a NCDHHS study of risk-appropriate neonatal and maternal care which corresponds to NPM3 and PSHP Strategy 3E - Ensure that pregnant women and high-risk infants have access to the appropriate level of care though a well-established regional perinatal system. The NCDHHS study occurred through a partnership between the NC Institute of Medicine (NCIOM) and the NC DPH, with NCIOM convening the Task Force on Developing a Perinatal Systems of Care (PSOC Task Force) during January-October 2019 and releasing a final report in April 2020 (*Healthy Moms, Healthy Babies: Building a Risk-Appropriate Perinatal System of Care for North Carolina*). The report "called on the state government, health care providers, health professional and trade organizations, health care payors, and other stakeholders to support the development of a regionalized and risk-appropriate perinatal system of care that addresses both clinical and non-clinical health needs of mothers and their babies and work toward a healthier future for all North Carolinians." Some of the Task Force recommendations were:

- Adopt national maternal and infant risk-appropriate level of care standards
- Require external verification of birthing facilities' maternal and neonatal level of care designations
- Re-establish NC's Perinatal and Neonatal Outreach Coordinator program
- Extend coverage for group prenatal care and doula support
- Collect and report data on maternal and infant outcomes by race and ethnicity
- Engage birthing facilities in quality improvement efforts to address racial and ethnic disparities in care
- Use community health workers to support pregnant women in their communities
- Implement patient navigators in birthing facilities, and
- Implement family-friendly workplace policies

In FY20, the WHB received a five-year HRSA State Maternal Health Innovation (MHI) grant which provides funding to assist states in collaborating with maternal health experts and maximizing resources to implement specific actions that address disparities in maternal health and improve maternal health outcomes, including the prevention and reduction of maternal morbidity and severe maternal morbidity (SMM). One stipulation of this funding was to create a

Maternal Health Task Force, which has been done, and this Task Force continues to promote adoption of some of the PSOC Task Force recommendations while creating its own set of recommendations. The MH Task Force, which is co-chaired by three people, will complete its Maternal Health Strategic Plan in winter 2021.

2020 marked the 50th anniversary of NC's Medicaid program, which provides health coverage for low-income adults, children, pregnant women, seniors, and people with disabilities. In 2019, Medicaid paid for 63,945 births, or 53.9% of all births in NC. In NC, as of July 1, 2021, income eligibility standards for selected coverage groups that use Modified Adjusted Gross Income (MAGI) rules in Medicaid and the Child Health Insurance Program (CHIP) are as follows:

NC Medicaid Income Eligibility Standards – 7/1/2021	
Coverage Group	**Percentage of the Federal Poverty Level**
Children Medicaid Ages 0-1	210
Children Medicaid Ages 1-5	210
Children Medicaid Ages 6-18	133
Children Separate CHIP	211 (6 up to 19)
Pregnant Women Medicaid	196
Pregnant Women CHIP	N/A

As documented more fully elsewhere in this document (III.C. Needs Assessment Summary and III.E.2.b.iv. Health Care Delivery Systems), NC was in the middle of implementing Medicaid transformation in FY19, but this implementation was suspended due to the lack of a state budget in November 2019. NC Medicaid Managed Care officially launched on July 1, 2021. Health Check (Medicaid for Children) is NC's preventive health and wellness program for NC Medicaid beneficiaries under age 21, and services provided under Health Check are part of the federal Early Periodic Screening, Diagnostic and Treatment benefit required by the Centers for Medicare & Medicaid Services. WCHS has partnered with NC Medicaid and Community Care of North Carolina (CCNC) to provide pregnancy care management services (OBCM) and the Care Coordination for Children (CC4C) program, a population management program for children ages 0 to 5 years who meet certain criteria (children with special health care needs or those exposed to toxic stress in early childhood). With Medicaid transformation, these programs will continue with some modifications. The Behavioral Health and Intellectual/Developmental Disability Tailored Plan is now scheduled to be launched on July 1, 2022.

NC Medicaid partnered with Duke University and the University of North Carolina (UNC) to apply for and received a $16 million federal funding grant from the Centers for Medicare and Medicaid Innovation to implement the Integrated Care for Kids (InCK) Model in five counties (Alamance, Granville, Vance, Durham and Orange). The funding runs from January 2020 to December 2026. NC InCK is designed to build and support the infrastructure needed to integrate health and human services for Medicaid and Health Choice enrolled beneficiaries from birth to age 20. One goal of service integration is to identify and address social drivers of health in addition to physical and behavioral health issues.

State Statutes and Regulations Relevant to the MCH Block Grant

While the public health system at the local level in NC is not state administered, there are general statutes in place for assuring that a wide array of maternal and child health programs and services are available and accessible to NC residents. State statutes relevant to Title V program authority are established for several programs administered by WCHS. These statutes, found in Article 5 – Maternal and Child Health and Women's Health of GS 130A: Public

Health, include (not an exhaustive list):

- GS130A-4.1. This statute requires the NCDHHS to ensure that LHDs do not reduce county appropriations for local maternal and child health services because they have received State appropriations and requires that income earned by LHDs for maternal and child health programs that are supported in whole or in part from State or federal funds received from NCDHHS must be used to further the objectives of the program that generated the income.

- GS130A-33.60. This statute establishes the Maternal Mortality Review Committee. The purpose of the committee is to reduce maternal mortality in this State by conducting multidisciplinary maternal death reviews and developing recommendations for the prevention of future maternal deaths to be disseminated to policy makers, health care providers, health care facilities, and the general public. The duties of the committee are cited as well as guidelines for the use of the information shared and the protections provided to committee members and their activities.

- GS130A-124. This statute requires NCDHHS to establish and administer the statewide maternal and child health program for the delivery of preventive, diagnostic, therapeutic and habilitative health services to women of childbearing years, children and other persons who require these services.

- GS130A-125. This statute requires NCDHHS to establish and administer a Newborn Screening Program which shall include, but not be limited to, the following: 1) development and distribution of educational materials regarding the availability and benefits of newborn screening, 2) provision of laboratory testing, 3) development of follow-up protocols to assure early treatment for identified children, and provision of genetic counseling and support services for the families of identified children, 4) provision of necessary dietary treatment products or medications for identified children as indicated and when not otherwise available, 5) for each newborn, provision of screening in each ear for the presence of permanent hearing loss, and 6) for each newborn, provision of pulse oximetry screening to detect congenital heart defects.

- GS130A-127. This statute requires NCDHHS to establish and administer a perinatal health care program. The program may include, but shall not be limited to, the following: 1) prenatal health care services including education and identification of high-risk pregnancies, 2) prenatal, delivery and newborn health care provided at hospitals participating at levels of complexity, and 3) regionalized perinatal health care including a plan for effective communication, consultation, referral and transportation links among hospitals, health departments, physicians, schools and other relevant community resources for mothers and infants at high risk for mortality and morbidity.

- GS130A-129-131.2 These statutes require NCDHHS to establish and administer a Sickle Cell Program. They require that LHD provide sickle cell syndrome testing and counseling at no cost to persons requesting these services and that results of these tests will be shared among the LHD, the State Laboratory, and Sickle Cell Program contracting agencies which have been requested to provide sickle cell services to that person. In addition, these statutes establish the Governor's Council on Sickle Cell Syndrome, describing its role and the appointments, compensation, and term limits of the council members.

- GS130A-131.8-9 These statutes establish rules regarding the reporting, examination, and testing of blood lead levels in children. Statutes 131.9A-9G include requirements regarding the following aspects of lead poisoning hazards: 1) investigation, 2) notification, 3) abatement and remediation, 4) compliance with maintenance

standard, 5) certificate of evidence of compliance, 6) discrimination in financing, 7) resident responsibilities, and 8) application fees for certificates of compliance.

- GS130A-131.15A. This statute requires NCDHHS to establish and administer Teen Pregnancy Prevention Initiatives. The statute describes the management and funding cycle of the program, with the Commission for Public Health adopting rules necessary to implement the initiatives.

- GS130A-131.16-17. These statutes establish the Birth Defects Monitoring Program within the State Center for Health Statistics. The program is required to compile, tabulate, and publish information related to the incidence and prevention of birth defects. The statutes require physicians and licensed medical facilities to permit program staff to review medical records that pertain to a diagnosed or suspected birth defect, including the records of the mother.

- GS130A-152-157. These statutes establish how immunizations are to be administered, immunization requirements for schools, child care facilities, and colleges/universities, and when and how medical and religious exemptions may be granted.

- GS130A-371-374. These statutes establish the State Center for Health Statistics within NCDHHS and authorize the Center to 1) collect, maintain, and analyze health data, and 2) undertake and support research, demonstrations and evaluations respecting new or improved methods for obtaining data. Requirements for data security are also found in the statutes.

- GS130A-422-434. These statutes establish the Childhood Vaccine-Related Injury Compensation Program, explain the Program requirements, and establish the Child Vaccine Injury Compensation Fund.

- GS130A-440-443. These statutes require health assessments for every child in this State enrolling in the public schools for the first time and establish guidelines for how the assessment is to be conducted and reported. Guidelines for religious exemptions are also included.

III.C. Needs Assessment
FY 2022 Application/FY 2020 Annual Report Update

The WCHS conceives of needs assessment as a continuous process, in which useful data, both quantitative and qualitative, relevant to the broad mission of the Section are continuously being gathered and analyzed with an eye to adjusting the program priorities and activities as appropriate. The data capacity of WCHS is strong. There is an MCH Epidemiologist and SSDI Project Coordinator in the Section Office, and each Branch within WCHS has staff members whose roles and responsibilities include coordinating data collection and analysis activities to guide effective monitoring, evaluation, and surveillance efforts and to help with program policy development and program implementation. These staff members also work directly with statisticians and data analysts in the NC State Center for Health Statistics (SCHS) who provide further analyses, as necessary. In addition, most of the programs and initiatives provided by the WCHS require local community action teams or advisory councils comprised of community members who provide input throughout the course of the project regarding emerging and ongoing needs. Often programs conduct focus groups and key informant interviews to gain more information from consumers, providers, and partners. Descriptions of how input from community groups, focus groups and other stakeholders was obtained and was used during FY20 can be found in the state action plan narrative domain reports.

The priority needs chosen during the 2020 Needs Assessment Process by Population Domain are:

NC Priority Needs by Population Domain
Women/Maternal Health
1. Improve access to high quality integrated health care services
2. Increase pregnancy intendedness within reproductive justice framework
Perinatal/Infant Health
1. Improve access to high quality integrated health care services
3. Prevent infant/fetal deaths and premature births
Child Health Domain
4. Promote safe, stable, and nurturing relationships
5. Improve immunization rates to prevent vaccine-preventable diseases
Adolescent Health
6. Improve access to mental/behavioral health services
CYSHCN
7. Improve access to coordinated, comprehensive, ongoing medical care for CYSHCN
Cross-Cutting/Systems Building
8. Increase health equity, eliminate disparities, and address social determinants of health

Changes in the Health Status and Needs of NC's MCH Population

There were no major changes in the overall health status and needs of NC's MCH population over the past year other than the ongoing effects of the COVID-19 pandemic and efforts to increase the percent of the population eligible for COVID-19 vaccines to become fully vaccinated.

Women/Maternal Health

Per data from the 2019 BRFSS, 76.1%% of women ages 18 to 44 surveyed had received a preventive medical visit in the past year which is higher than the national rate (72.8%) and is a bit lower than the 2018 NC rate of 77% (although confidence intervals overlap for the two years). Pregnancy intendedness data from the 2019 Pregnancy

Risk Assessment Monitoring System show that 56% of survey respondents either wanted to be pregnant then or sooner which is similar to the survey results for the past five years. As shown in the table below, there were no major changes over the past year in some of the other Core State Preconception Health Indicators available from BRFSS, and inequities between racial and ethnic population groups remain. It is too soon to tell how the COVID-19 pandemic will affect these indicators.

Characteristics of Women of Childbearing Age by Race/Ethnicity
North Carolina, 2018 & 2019

Percent of women respondents aged 18 to 44 who:	Year	Total	95% CI	NH White	95% CI	NH Black	95% CI	Hispanic	95% CI
Had a routine checkup in the past year	2018	77.0	73.3-80.2	75.2	70.2-79.7	83.4	76.3-88.7	75.3	64.7-83.5
	2019	76.1	72.4-79.5	74.6	69.2-79.3	86.4	80.1-90.9	69.8	60.2-78.0
Currently have some type of health care coverage	2018	79.9	76.4-83.0	87.9	83.9-91.0	83.9	76.6-89.3	35.8	26.4-46.5
	2019	80.3	76.8-83.4	88.6	83.9-92.0	85.0	78.4-89.9	35.6	27.1-45.0
Now take a multivitamin daily	2018	33.9	29.3-38.5	31.5	25.4-37.5	28.4	19.7-37.2	47.9	35.1-60.7
	2019	Not available as this question is only asked in BRFSS every other year.							
Are overweight or obese based on body mass index (BMI)	2018	58.5	54.2-62.8	53.6	48.0-59.2	70.5	61.4-78.3	64.4	50.7-76.1
	2019	62.4	58.1-66.5	55.7	49.8-61.4	73.8	65.7-80.5	67.4	55.6-77.3
Have been told by provider that they had hypertension (including during pregnancy)	2017	17.9	14.9-21.3	15.4	11.8-20.0	22.8	16.3-31.0	15.4	8.5-26.3
	2019	16.9	14.1-20.2	14.2	10.5-18.9	24.3	18.1-31.7	15.3	9.5-23.9
Currently smoke every day or some days	2018	15.0	12.4-18.1	19.2	15.4-23.6	10.6	6.4-17.1	4.9	1.9-12.2
	2019	16.9	14.0-20.3	18.7	14.6-23.7	16.9	11.7-23.9	5.7	2.8-11.3
Participated in binge drinking on at least one occasion in the past month	2018	15.6	12.9-18.8	20.5	16.5-25.1	10.9	6.7-17.4	6.4	2.9-13.6
	2019	17.3	14.4-20.7	20.2	16.0-25.1	14.3	9.5-20.9	9.6	5.2-16.9

Source: NC Behavioral Risk Factor Surveillance System/NC SCHS

Perinatal/Infant Health

While the state is still working to determine the AAP and ACOG/SMFM designations of birthing hospitals' levels of care, based on the current self-designated levels of care which do not align with the AAP guidelines, data for 2019 show that 80.1% of VLBW infants received care at currently designated Level III+ NICUs, which is similar to data for the past five years.

In 2019, North Carolina's infant mortality rate remained at a historic low of 6.8 infant deaths per 1,000 live births, but that means that 810 infants (a figure equal to about 11 school buses of 72 students each) died before reaching their first birthday. While the state has experienced substantial declines in overall infant mortality over the last two decades, reprehensible racial disparities in infant mortality persist. The disparity ratio between non-Hispanic Black and non-Hispanic white births increased slightly from 2010 to 2019, with mortality rates for infants born to non-Hispanic Black mothers more than twice as high as those born to non-Hispanic white mothers. Infant mortality rates

for non-Hispanic American Indians were 1.5 to 2.5 times higher than non-Hispanic white infants during the same years. Fetal death rates per 1,000 deliveries continue to tell the same story as in 2019, the non-Hispanic Black rate (11.3) was 2.2 times that of the non-Hispanic white rate (5.1) with a total state rate of 6.7. The latest data from the National Immunization Survey (NIS) show that 80.3% of infants born in NC in 2017 were ever breastfed which is a decrease from the previous year and is lower than the national rate of 84.1%. Breastfeeding initiation data obtained from birth certificates for infants born in 2019 indicate that 80.8% of all infants were breastfed at hospital discharge. However, Latinx infants were more likely to be breastfeeding (87.5%) than non-Hispanic Black (70.1%), non-Hispanic white (83.7%), or non-Hispanic American Indian (51.7%) infants. While birth certificate data on mothers who reported smoking during pregnancy continues to trend down (7.6% of all live births in 2019 as opposed to 10.9% of all births in 2011), this is probably underreported, and there's still room for improvement.

Child Health

According to data from the 2018-19 NSCH, 91.1% of NC parents surveyed responded that their child was in excellent or very good health, which was a slight increase from the 2017-18 result of 88.7%. Younger children (<6 years) and children whose parents had more education, private insurance, and higher income were more likely to be considered in very good or excellent health. Percentages were higher for non-Hispanic white (92.8%) and Hispanic (90.8%) children then non-Hispanic Black (85.6%) children. The percent of children ages two through four receiving WIC services in NC who were overweight or obese (had a body mass index [BMI] ≥ 85th percentile) remained at just over 30% in 2019, which is similar to the past four years. Additional data from the 2018-19 NSCH show that 48.1% of children in NC between 9-35 months had received appropriate developmental screening which is an increase from 43% in the 2017-18 NSCH and higher than the national average of 36.4%. While this makes NC the fifth leading state in the nation, there is still much room for improvement. It should be noted that the percentage for NC should be interpreted with caution as the estimate has a 95% confidence interval width exceeding 20 percentage points and may not be reliable. While the percentage of children with ≥2ACEs decreased from the 2017-18 to 2018-19 NSCH, 19.2 % down to 15.3%, the decrease is likely not significant. The immunization coverage rates for the combined 7-series for infants reported in 2020 showed significant increases over rates reported in 2019. NCDHHS will continue to track the impact of the COVID-19 pandemic on childhood immunization rates. Both national and NC data showed declines in rates of vaccinations and well child visits during the earlier part of the pandemic, and NCDHHS continues to advocate and work with partners on catch-up opportunities, seeing improvement in the vaccinations administered in our NC Immunization Registry comparable to previous years. However, there is still work to be done to catch up on childhood immunizations and well child visits.

Adolescent Health

Per NSCH single year data, the percentage of adolescents (ages 12 through 17) with a preventive visit increased slightly from 2016 (85.5%) to 2019 (87.3%), but this increase or plateau is probably not going to be sustained in 2020 due to the COVID-19 pandemic, particularly with School Health Centers being closed for much of the year. There was a drop of more than a thousand students receiving preventive and medical visits at the centers between the 2018-19 and 2019-20 school years and about 25,000 fewer visits. Teen immunization rates reported in 2020 showed a statistically significant increase over 2019 reports for teens receiving the meningococcal conjugate vaccine, and there was also an increase in teens receiving one or more doses of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis, but the rate for the human papillomavirus series dropped slightly. According to 2018-19 NSCH data, 16.1% of parents in NC responded that their child (age 10 to 17) was obese with a BMI ≥95th percentile (BMI is based on parents' recollection of the selected child's height and weight). This is an increase from 13.5% in the 2017-18 survey. Children and youth who parents reported that they had experienced two or more adverse childhood experiences, who were on Medicaid, and who were low-income (<200% of the federal poverty level) were more likely to be reported as being obese.

CYSHCN

Through the use of a five item, parent-reported screening tool, there were an estimated 21.7% of CYSHCN in NC per the 2018-19 NSCH, which is almost identical to the 2017-18 NSCH results of 21.2%. The 2018-19 NSCH shows that CYSHCN were in NC were less likely to be in very good or excellent health as children without special health care needs (75.8% for CYSHCN v. 95.3% for non-CYSHCN), and this difference appears to be statistically significant. CYSHCN in NC age 10-17 years were more likely to be obese (20.3%) than children and youth without special health care needs (14.4%) according to the same survey. The percent of CYSHCN in NC receiving care in a medical home increased from 41% in the 2017-18 NSCH to 48.4% in the 2018-19 NSCH, but that still leaves the majority of CYSHCN not receiving care within a medical home.

Changes in NC's Title V Program Capacity and MCH Systems of Care

During FY21, the Title V Program Director continued to lead COVID-19 pandemic response efforts, particularly in the areas of nutrition and vaccine rollout, serving on multiple NCDHHS teams to ensure that vaccine was made available quickly to all eligible populations in an equitable manner. She managed the work of the Immunization Branch and worked with teams spread across NCDHHS, all while continuing to monitor work on the Title V State Action Plan.

Two major changes in the MCH systems of care in NC, the transformation to NC Medicaid Managed Care and the planned creation of the new NCDHHS Division of Child & Family Well-Being, are in their infancy, and it is too soon to tell exactly what the impact of those changes will be on the delivery of MCH services.

NC Medicaid Managed Care was officially launched on July 1, 2021, after being originally legislated in 2015, with nearly 1.6 million Medicaid beneficiaries now receiving the same Medicaid services through NC Medicaid Managed Care health plans. NC Medicaid Managed Care establishes a payment structure that rewards better health outcomes, integrating physical and behavioral health, and investing in non-medical interventions aimed at reducing costs and improving the health of Medicaid beneficiaries. All beneficiaries moving to NC Medicaid Managed Care were enrolled in one of five health plans or the Eastern Band of Cherokee Indians Tribal option by either selection of a health plan during the open enrollment period which ran from March 15 to May 14, 2021, or through the auto-enrollment process. Under managed care, Medicaid providers enroll with one or more health plan networks. Some beneficiaries, including those people with significant behavioral health needs, intellectual/developmental disabilities, and traumatic brain injury, are not required to choose a health plan at this time, as the Behavioral Health and Intellectual/Developmental Disability Tailored Plan is set to launch on July 1, 2022. Other beneficiaries, such as those receiving Family Planning Medicaid or children in foster care or receiving Community Alternatives Program for Children (CAP/C) services will remain in traditional Medicaid, which is called NC Medicaid Direct.

All pregnant women enrolled in managed care through pre-paid health plans (PHPs) will continue to receive a coordinated set of high-quality maternity services through the Pregnancy Medical Program (PMP), which will be administered as a partnership between PHPs and local perinatal service providers. Birthing people will continue to be screened using a standardized screening tool to identify and refer those at risk for an adverse birth outcome to the Care Management for High-Risk Pregnant Women (CMHRP) program, a more intense set of care management services coordinated and provided by LHDs. In addition, the Care Management for At-Risk Children (CMARC) program which serves children ages zero-to-five, will continue as PHPs will contract with LHDs for the provision of local care management services.

In April 2021, the Secretary of NCDHHS announced the following five major changes to the Department's

organizational structure which stemmed from lessons learned during the COVID-19 pandemic:

1. Creation of a new leadership position of a Chief Health Equity Officer who will lead cross department work on equity and manage an expanded Office of Health Equity (formerly the Office of Minority Health and Health Disparities) and the Office of Rural Health to help embed equity in every aspect of the Department's work.
2. Alignment of NCDHHS divisions and programs to focus on whole-person health by creating two positions - the Chief Deputy Secretary for Opportunity and Well-Being (managing programs and policies that promote the economic and social well-being of families, children, individuals and communities across North Carolina) and the Chief Deputy Secretary for Health (managing programs and policies that foster the whole-person health of North Carolinians).
3. Establishment of a new Division of Child and Family Well-Being to elevate and coordinate the critical work of supporting children and families in North Carolina.
4. Establishment of an Office of Emergency, Preparedness, Response, and Recovery to bring together teams from across NCDHHS to prepare for, respond to, and recover from disasters and health emergencies affecting North Carolina, strengthening the Department's partnership with the Division of Emergency Management at the Department of Public Safety.
5. Creation of the Deputy Secretary for Operational Excellence to better integrate accountability, performance management, and quality improvement in all aspects of how we do business and the Deputy Secretary for Policy, Strategy, and External Engagement positions to promote transparent communication with and authentic engagement of stakeholders.

The change that will impact the WCHS most directly is the establishment of the Division of Child and Family Well-Being (DCFW). The DCFW will bring together complementary programs from within NCDHHS that primarily serve children and youth to improve outcomes for children and their families. The programs include:

- Nutrition programs for children, families, and seniors, including WIC, CACFP, FNS/SNAP, and the special metabolic formula program
- Health-related programs and services for children that enable them to be healthy in their schools and communities, such as school health promotion, home visiting services, and children and youth with special health care needs programs
- School and community mental health services for children and youth, including supporting children with complex needs, coordination with schools, and systems of care work to meet needs of families who are involved in multiple child service agencies
- Early Intervention/ Infant-Toddler Program, which providers supports and services to young children with developmental delays or established conditions

From WCHS, the plan is to move the Nutrition Services Branch (WIC, CACFP), the Early Intervention Branch, and the Children and Youth Branch. No positions will be eliminated, but job roles and responsibilities may change as a result of the reorganization. While details are still being worked out, NCDHHS understands the critical importance of strong collaborations and structures to maintain a coordinated, life course approach to maternal and child health.

Title V Partnerships and Collaborations with Other Federal, Tribal, State, and Local Entities that Serve the MCH Population

The broad reaching partnerships and collaborations of NC's Title V program described in other sections of this application have continued in the past year and will continue moving forward. Work by the Title V Program Director and staff members to help promote COVID-19 prevention efforts and testing have been immense and have strengthened relationships both with other state agencies and non-governmental partners. As mentioned above, the transformation to NC Medicaid Managed Care and the creation of the new Division of Child and Family Well-Being

will also strengthen existing partnerships and create opportunity for new collaborations.

Efforts to Operationalize the Five-Year Needs Assessment Process

As stated earlier, WCHS conceives of needs assessment as a continuous process. Given that, the biggest effort to operationalize the Five-Year Needs Assessment process over the past year has been to align WCHS staff members around the State Action Plan to better understand how the state priority needs, strategies, objectives, and performance and outcome measures fit into the work that they are doing. In developing the population narratives, relevant portions of the State Action Plan are shared with program staff for input on the annual report and annual plan. While the Section's work on the COVID-19 pandemic shifted some priorities, the WCHS mission to support and promote the health and well-being of NC individuals including mothers, infants, children, youth, and their families to reduce inequities and improve outcomes continued to drive the work of WCHS staff members.

Changes in Organization Structure and Leadership

Other than the changes which will come with the creation of the new division, there was only one major leadership change in FY21 within the WCHS. In December 2020, the C&Y Branch Head, Marshall Tyson, retired. Carol Tyson, the School Health Unit Manager, has served as the Interim Branch Head since his retirement, and Dr. Gerri Mattson, the Pediatric Medical Consultant, has served as the Interim CYSHCN State Director. Interviews were held for the Branch Head position with a recommended candidate, but with the creation of the new division, efforts to fill the position have been put on hold.

Emerging Public Health Issues

In addition to the ongoing COVID-19 pandemic and Medicaid Transformation, there continue to be a number of emerging public health issues which impact WCHS and its priority populations. One is the continued opioid crisis which seems to have become even more exacerbated during the COVID-19 pandemic as the rate of unintentional overdose deaths rose from 16.5 deaths per 100,000 residents in 2018 to 22.1 deaths per 100,000 residents in 2020. While the percent of newborns engaged in CMARC who were affected by substance use indicated by a Plan of Safe Care referral dropped from 4.1% in 2019 to 3.7% in 2020, the year to date percentage as of March 2021 is up to 3.9%. The percent of children who are in foster care due to parental substance use in NC has risen from 42.5% in 2018 to 45.3% in 2020. In addition to substance use, the stress related to the COVID-19 pandemic, job loss, social isolation, school closures, lack of usual supports, among other situations have highlighted the worsening mental health crisis among children and adults that will have to be addressed both during the COVID-19 response and long-term with recovery.

While health inequity due to systemic racism and structural disadvantage is not an emerging public health issue but a longstanding one, the COVID-19 pandemic has exposed the disproportionate impact of crisis in a profound way, not only on physical health outcomes, but on access to mental health support, food security, and employment, among others. The NCDHHS organizational changes are being made in an attempt to help address these inequities.

Five-Year Needs Assessment Summary
(as submitted with the FY 2021 Application/FY 2019 Annual Report)

III.C.2.a. Process Description

NC Needs Assessment Process Goals, Framework, and Methodology

Process Goals

The WCHS conceives of needs assessment and priority-setting as a continuous process, in which useful data, both quantitative and qualitative, relevant to the broad mission of the Section are continuously being gathered and analyzed with an eye to adjusting the priorities and the activities of the Section as appropriate. The data capacity of WCHS is strong. There is an MCH Epidemiologist and SSDI Project Coordinator in the Section Office, and each Branch within WCHS has staff members whose roles and responsibilities include coordinating data collection and analysis activities to guide effective monitoring, evaluation, and surveillance efforts and to help with program policy development and program implementation. These staff members also work directly with statisticians and data analysts in the NC State Center for Health Statistics (SCHS) who provide further analyses, as necessary. In addition to these ongoing analyses of relevant inputs, the Section utilizes formal needs assessment processes, such as the five year MCH Block Grant needs assessment, to review and adjust Section priorities and activities. Throughout its work on the 2020 NC Title V Needs Assessment, the goal was to ensure that the needs assessment process worked in alignment with Section, Division, and Department strategic planning efforts and priorities so that Title V resources could be leveraged as much as possible. The 2015 priority needs, which had only been tweaked slightly since they were selected back in 2005, were intentionally written quite broadly as they were originally defined as core WCH Indicators to be used to communicate the value of the work done by the WCHS with policymakers, stakeholders, and the general public and to promote a common vision among staff. They have worked well in that regard, but the 2020 NC Title V Needs Assessment afforded the WCHS an opportunity to reexamine those priority needs and determine whether they were still useful or needed to be changed entirely.

Framework

A WCHS 2020 NC Title V Needs Assessment Leadership Team was created in February 2019 which consisted of the Title V Director, who is the WCHS Chief; the CYSHCN Director, who is the C&Y Branch Head; the Women's Health Branch Head; and the State Systems Development Initiative (SSDI) Project Coordinator. This group met monthly to create and implement a work plan of needs assessment activities, engaging the Section Management Team (SMT) throughout the process as necessary for input and ideas. One of its first activities was to determine the 2020 NC Title V Needs Assessment Framework shown below (Figure 5) which emphasizes the team's guiding principles as well as the life course perspective. The intent from the start was to leverage other efforts and to align with strategic plans, programs, and projects that are already in place in NC to serve the MCH population across the life course. The MCHBG Needs Assessment was built within the context of multiple collaborative efforts, some of which are listed below:

- NC Early Childhood Action Plan
- NC Opioid Action Plan
- Maternal Mortality Review Committee
- NCIOM Perinatal System of Care Task Force
- NCIOM Maternal Health Task Force
- NC Public Health Genomics Plan
- NC Early Home Visiting Landscape Assessment
- NC Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Needs Assessment
- Healthy NC 2020 and 2030
- Integrated Care for Kids (InCK)
- Perinatal Health Strategic Plan
- NC Infant-Toddler Program State Systemic Improvement Plan (SSIP)
- NC Child Fatality Task Force
- Pathways to Grade Level Reading
- Think Babies™ NC

- Children & Youth Branch Strategic Plan
- Children & Youth with Special Health Care Needs Strategic Plan
- NCIOM Essential for Childhood Task Force Recommendations

Figure 5

Methodology

The methodology used in the 2020 NC Title V Needs Assessment was a mix of qualitative and quantitative data collection from stakeholders, families, and other partners. It was an iterative process that started with a big questions survey conducted in spring 2019, then moved to focus groups and key informant interviews which were held that summer. The analyses resulting from these qualitative data collection efforts informed the creation of a stakeholder survey that was conducted in winter 2019. An expanded SMT meeting was held in March 2020 to discuss the results of the partner survey and previous data collection efforts, and eight final priority needs were determined through a voting process using prioritization criteria established by SMT. The general process is shown in the below figure:

Figure 6

Stakeholder Involvement, Including Families (Individuals and Family-Led Organizations)

The 2020 NC Title V Needs Assessment included lots of opportunity for involvement by Title V stakeholders, including families and community representatives, program participants, and programmatic partners and providers which are highlighted below in the descriptions of the quantitative and qualitative assessment methods.

Quantitative and Qualitative Assessment Methods

General MCHBG Big Questions Needs Assessment Survey

The MCHBG Big Questions Needs Assessment Survey, which was based on the Minnesota Department of Health's Discovery Survey, was administered between February and April 2019 at conferences and meetings of programs supported by Title V. All surveys were completed by hand and entered into SurveyMax, apart from the Be Smart survey results which were completed electronically. In total, 168 people responded to the survey which was conducted at the following conferences and meetings:

- Preconception Health Peer Educator Training
- Perinatal Health Strategic Plan Coordinator Meeting
- Building Bridges Conference
- Adolescent Parenting Program Networking Meeting
- NC Sickle Cell Provider Meeting
- Northeast Preconception Health Summit, and
- "Be Smart" Family Planning Medicaid Strategic Planning Partners Meeting

Survey participants were asked to respond to the following four questions and provide some demographic information (age, gender, ethnicity, race, and primary county of work):

1. What is the most important thing women, children, and families need to live their fullest lives?
2. What are the biggest unmet needs of women, children, and families in your community?
3. What is the greatest disparity – whether racial, geographic, or other – that affects women, children, and families in NC?
4. What health and other life challenges are specific to your age group?

Survey results showed that, not surprisingly, most of the unmet needs, challenges, and disparities that women, children, and families in NC face reported by respondents are related to social determinants of health. Numerous respondents highlighted that unmet needs of accessible, affordable, high quality health care posed challenges and perpetuated health disparities within communities. Furthermore, limited access to transportation, housing, and nutritious foods were also among the most frequently discussed unmet needs and challenges among the MCH population.

Focus Groups and Key Informant Interviews

The WCHS hosted a Title V MCH Internship Team supported by the National MCH Workforce Development Center during summer 2019 which allowed two MCH students, one in graduate school and the other an undergraduate, to assist in qualitative data collection activities for the 2020 NC Title V Needs Assessment. Based on their analysis of the MCHBG Big Questions Needs Assessment Survey (see Appendix A), they worked with WCHS staff members to create focus group and key informant questions. They then conducted the interviews and focus groups and analyzed the results. The significant work of these interns greatly contributed to a comprehensive and informative qualitative data collection portion of the 2020 NC Title V Needs Assessment.

Three key informant interviews were conducted with leadership from the following WCHS programs: Healthy Start Baby Love Plus – Fatherhood Initiative; Child Maltreatment Prevention; and Healthy Beginnings and the Infant Mortality Reduction Initiative. The three focus groups, which focused on hearing from youth and parents/caregivers, were conducted with Adolescent Parenting Program Participants (n=33), Branch Family Partners (n=11), and the Innovative Approaches – Parent Advisory Council of Columbus County (n=6).

After conducting these interviews and focus groups, the interns cleaned and transcribed the data, stripping the participant

identifiers to maintain the confidentiality of the respondents. Once everything was transcribed, they began memoing – recording reflective notes about what one is learning from the data regarding emerging concepts and relationships. Themes generated from the MCHBG Big Questions Needs Assessment Survey were used to develop the initial codebook for the project, but new codes were added when necessary as each transcript was analyzed. All transcripts were coded using the Atlas TI software. Once coding was complete, the interns independently analyzed each code across the various data sources (e.g., analyzing the "Education" code across all focus group, survey, and key informant interview transcripts) to generate code-specific themes. They compared their themes and addressed any discrepancies that arose, then synthesized the emergent themes and created two PowerPoint presentations (one for the C&Y Branch and one for the SMT) and a written report (see Appendix A) which proposed preliminary priority needs for each population domain.

NC MCHBG Partner Survey

The final step in the qualitative data collection process of the 2020 NC Title V Needs Assessment was to conduct an electronic survey (see Appendix A) of WCHS partners and stakeholders to identify priorities and guide planning within the five MCHBG population domains. Partners and stakeholders received a personal invitation from the NC MCH Title V Director and or WCHS Branch Heads to respond to the survey through a link to SurveyMax. The survey, open from December 16, 2019 through January 10, 2020, had 934 completed responses from at least 99 counties. The responders were predominantly LHD employees (44%), health care professionals (30%), or community service providers - social worker, home visitor, infant-toddler specialist, etc. (15%). Advocacy organization employees (4%), parents of children with special health care needs (3%), members of WCHS advisory councils or coalitions (1%) also responded as well as a few insurance or managed care organization employees and consumers (1% combined). The majority of responders were 40 years or older (65%), female (88%), and non-Latinx White (72%). Eleven percent of the respondents identified as non-Latinx Black and three percent as Latinx. Only five percent were younger than 30 years of age. Future efforts will be made to amplify the youth voice, parent/caregiver voice, and those from historically marginalized communities.

Respondents were asked to rank their top three priorities in addressing health needs or concerns for six different population domains based on the HRSA domains (women before becoming pregnant; women during and/or after a pregnancy; infants; children; youth; and children with special health care needs). A list of several concerns was provided for each domain along with a request to mention additional priorities that might not have been included.

The SSDI Project Coordinator and the MCH Epidemiologist analyzed the survey data and created tables by population domain with the concern areas sorted from the most often prioritized in the top three to the least (See Appendix A). The lower the mean, the more respondents who ranked the concern first versus third. Overall, the most common concerns crossing all population domains were improving access to healthcare services, improving access to mental and behavioral services, and promoting safe and nurturing relationships.

Quantitative Data Sources

The main quantitative data sources of the NC 2020 Title V Needs Assessment, as well as the MCHBG annual reports, are the data systems that WCHS staff members routinely use for ongoing surveillance and needs assessment. These include the following:

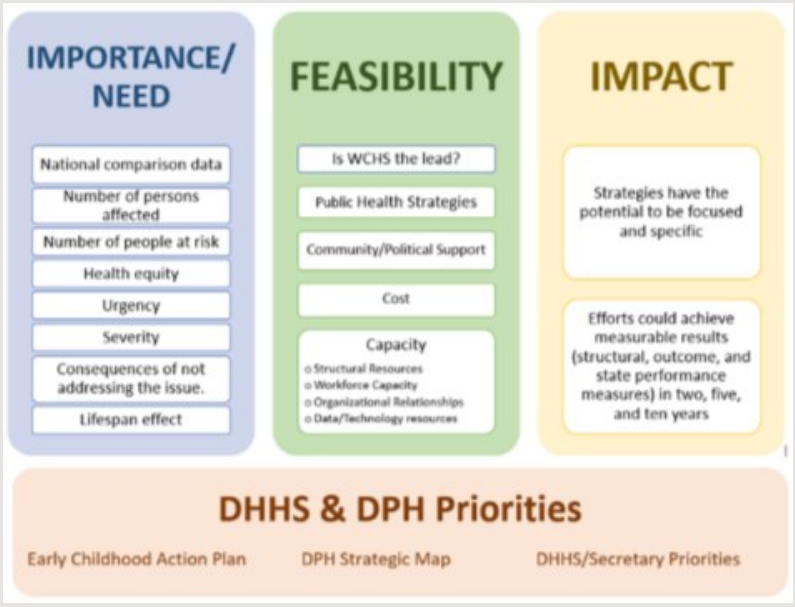
- Vital Statistics (e.g., birth and death files) from the NC State Center for Health Statistics (SCHS) including:
  - NC Composite Linked Birth File
  - Tracking Maternal and Child Health Data in North Carolina
  - Tracking Preconception Health in North Carolina
- National Survey of Children's Health (NSCH)
- Federally Available Data (FAD) for National Performance and Outcome Measures
- Behavioral Risk Factor Surveillance System (BRFSS)
- Pregnancy Risk Assessment Monitoring System (PRAMS)
- US Census Data
- Local Health Department - Health Systems Analysis (LHD-HSA)
- School Health Center Annual Report

- Healthy NC 2030 A Path Toward Health Data Book
- The NC Child Health Report Card
- WCSWeb Database
- NC Crossroads WIC System
- Title V CSHCN Help Line Data
- QuitlineNC Data

Interface between Collection of Data, Finalization of the Priority Needs, and Development of NC's State Action Plan

In March 2020, an expanded SMT meeting, which included unit supervisors and other critical WCHS members invited by SMT, was held to review the qualitative and quantitative data and determine the 2020 NC Title V Needs Assessment Priority Needs. The Title V Director led the meeting, sharing a PowerPoint presentation which highlighted the data collection results and provided an overview of the current context of the NCDHHS priorities and how Title V activities were aligned. Based on stakeholder feedback, she shared potential priorities by domain that the Leadership Team had gleaned from the data collection activities, and staff members were given the opportunity to add to or modify these potential priorities. Prior to the meeting, the Leadership Team developed prioritization criteria (see Appendix A) which were summarized into this image (Figure 6) and shared with staff along with an overview of the Title V Performance Measure Framework.

Figure 7



A simple dot voting process was then used to determine the top priority needs, with every person receiving ten dots to use as they wished, although they had to vote for at least one priority in each of the domains. After the initial voting, there was a bit more discussion to come to consensus on the priority needs and the corresponding National and State Performance Measures. The Leadership Team finalized the wording of the priority needs, then the Branch Heads worked with their staff and the SSDI Project Coordinator to draft the strategies, objectives, performance measures, and evidence-based or -informed strategy measures for the State Action Plan which was revised and completed by the Leadership Team.

III.C.2.b. Findings

III.C.2.b.i. MCH Population Health Status

Women/Maternal Health

Access to quality health care services, including mental health services, and, in particular, preconception health services, was one of the emerging priority needs based on the qualitative data collection and analysis for the Women/Maternal Health domain, and a review of quantitative data collection supports this need. 2018 Census data shows that the state's uninsured

rate is the ninth highest in the country at 10.7%. Per NC BRFSS data, while the rate of women age 18 to 44 years reporting that they have some type of health care coverage has increased from 73.5% in 2013 to 79.9% in 2018, there are still disparities by race/ethnicity, with 87.9% of white, non-Hispanic women reporting coverage, but only 79.8% of Black, non-Hispanic women, and only 35.8% of Latinx women. Table 1 shows that while some additional preconception health indicators have improved over time for the total population, such as percent of women who had a routine checkup in the past year and the percent of women who smoke, several indicators related to chronic health conditions (overweight/obesity, hypertension, and binge drinking) and the percent of women taking a daily multivitamin have gotten worse over time. Disparities between race/ethnicities still exist. The BRFSS data indicate that Black women were more likely to have a routine checkup in the past year than White or Latinx women, but are more likely to experience overweight/obesity and hypertension. They are also less likely to take a daily multivitamin. Improving access to and quality of preconception and well-woman care continue to be an important part of the PHSP as it gets updated for 2021-2025. Emphasis on improving determinants of health through Medicaid transformation should also improve women's health.

Table 1 - Characteristics of Women of Childbearing Age by Race/Ethnicity North Carolina, 2013 & 2018

Percent of women respondents aged 18 to 44 who:	Year	Total	95% CI	NH White	95% CI	NH Black	95% CI	Hispanic	95% CI
Had a routine checkup in the past year	2018	77.0	73.3-80.2	75.2	70.2-79.7	83.4	76.3-88.7	75.3	64.7-83.5
	2013	71.5	68.5-74.4	70.1	66.0-73.8	79.8	73.9-84.7	67.5	58.3-75.5
Currently have some type of health care coverage	2018	79.9	76.4-83.0	87.9	83.9-91.0	83.9	76.6-89.3	35.8	26.4-46.5
	2013	73.5	70.6-76.3	83	79.6-86	71.1	64.4-77	31.6	23.8-40.5
Now take a multivitamin daily	2018	33.9	29.3-38.5	31.5	25.4-37.5	28.4	19.7-37.2	47.9	35.1-60.7
	2013	43	39.4-46.7	45.5	40.7-50.4	35.4	28.6-42.9	50.5	41.1-59.8
Are overweight or obese based on body mass index (BMI)	2018	58.5	54.2-62.8	53.6	48.0-59.2	70.5	61.4-78.3	64.4	50.7-76.1
	2013	55.9	52.4-59.4	51.4	46.8-55.8	67.5	59.9-74.3	57.9	47.7-67.5
Have been told by provider that they had hypertension (including during pregnancy)	2017	17.9	14.9-21.3	15.4	11.8-20.0	22.8	16.3-31.0	15.4	8.5-26.3
	2013	15.6	13.5-18.0	14.9	12.2-18.2	21.2	16.7-26.7	10.9	6.1-18.7
Currently smoke every day or some days	2018	15.0	12.4-18.1	19.2	15.4-23.6	10.6	6.4-17.1	4.9	1.9-12.2
	2013	19.6	17.2-22.2	24.6	21.2-28.4	17.1	12.8-22.6	4.7	2-10.4
Participated in binge drinking on at least one occasion in the past month	2018	15.6	12.9-18.8	20.5	16.5-25.1	10.9	6.7-17.4	6.4	2.9-13.6
	2013	13.3	11.3-15.6	14.7	12-17.7	12.9	8.9-18.2	3.6	1.5-8.4

Other priority needs that surfaced in the qualitative and quantitative needs assessment activities were related to reproductive justice and intended pregnancies. NC PRAMS data show that close to 60% of women responded that their pregnancy was intended (wanted to be pregnant then or sooner) and this is a small increase from the 2014 rate of 55.8%. Annual rates broken down by race/ethnicity fluctuated a lot because of smaller sample size, but white and Hispanic women were more likely to respond that their pregnancy was intended than Black women. NC is pleased to be able to partner with Upstream and the NC Reproductive Life Planning Stakeholders group to be able to ensure that women have access to the highly effective contraceptive method of their choice when they want it.

Maternal morbidity and severe maternal mortality rates were also concerning. Fortunately, in 2019, NC was one of nine states receiving a five-year cooperative agreement under HRSA's State Maternal Health Innovation Program which will assist the state in addressing disparities in maternal health and improving maternal health outcomes. A Maternal Health Task Force, which is an outgrowth of the work of the Perinatal Systems of Care Task Force and aligned with the PHSP, NC ECAP, and Maternal Mortality Review Committee has been convened. Other program activities include implementation of a Provider Support Network, the 4th Trimester Project (improve postpartum care), and expansion of telehealth, doula, and community health worker services, along with implicit bias training for providers.

Perinatal/Infant Health

While NC's infant mortality rate has slowly declined over the past ten years from 8.6 deaths per 1,000 live births in 2000 to 6.8 in 2018, mortality rates of Black infants continue to be more than twice those of white infants, with the Black:white disparity ratio in 2018 being 2.44 (Figure 7). Disparity ratios are also high among non-Hispanic American Indians, with rates 1.6 to 2 times higher than non-Hispanic white infants over the same period. A Perinatal Periods of Risk (PPOR) analysis done recently by the SCHS for 2014 to 2017 showed that while in all four periods of risk (Maternal Health/Prematurity, Maternal Care, Newborn Care, and Infant Health), non-Hispanic Black infants had higher fetal-infant mortality that the other race/ethnicity study groups, the most excess deaths for non-Hispanic Black infants occurred during the Maternal Health/Prematurity period, which means that efforts to reduce low and very low birthweight and prematurity must continue and expand, including addressing root causes such as structural racism and improving determinants of health.

Figure 8

Additional priorities that surfaced from the qualitative data for the Perinatal/Infant Health domain included promoting postpartum care and support, improving access to prenatal care, preventing substance use (including tobacco and alcohol), supporting father involvement, and increasing breastfeeding. All of these items are also found in the PHSP, and many are in the NC ECAP. In addition, the recently released recommendations from the NCIOM's Task Force on Developing a Perinatal Systems of Care should help drive some improvement in birth and maternal outcomes.

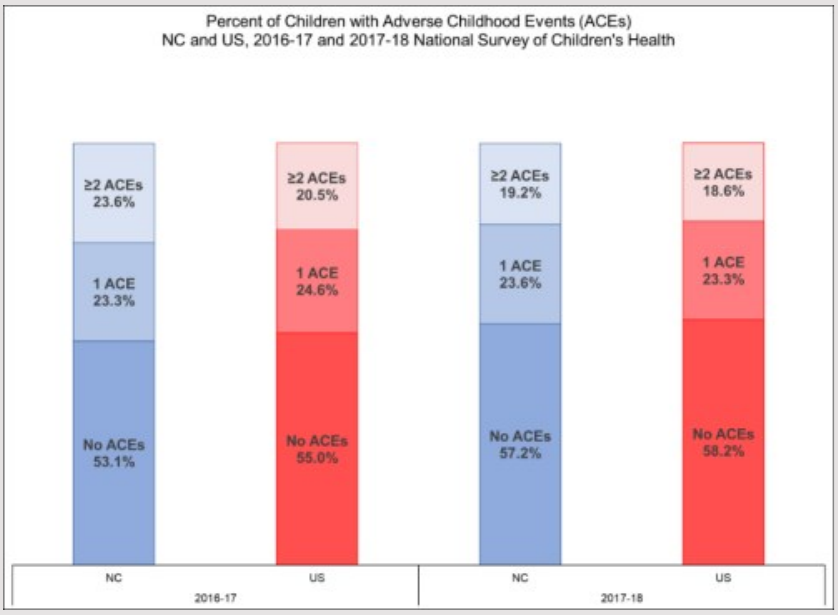
Child Health

The qualitative data collection process overwhelmingly highlighted the priority needs in the Child Health domain to be to promote safe and nurturing relationships and improve access to mental and behavioral health programs as well as access to health care and dental care. Quantitative data also support these priorities. While NC has always prided itself on high childhood immunization rates for children age 19 to 35 months, which is an important part of a well-child visit, the state has seen these levels plateau over the past several years, and that was before the effects of the COVID-19 pandemic. In addition, according to the *Children's Health Care Report Card* for NC created by Georgetown University Health Policy Institute Center for Children & Families, while the percentage of children without health insurance had been going down between 2008 and 2015, from 9.9% to 4.6%, it slowly ticked back up annually to 5.3% in 2018. There were an estimated 130,000 children uninsured in NC in 2018, an increase of approximately 13 percent since 2016. The Georgetown researchers found that loss of coverage was higher for white and Latinx children, children age five years and younger, and children from low- and moderate-income households.

Children thrive in safe, stable, and nurturing environments. Children who experience adverse childhood experiences (ACEs), such as death of a parent, witnessing violence, living with someone with severe depression or a problem with alcohol or drugs, having parents who have separated or divorced, or having been treated or judged unfairly due to race/ethnicity, have an increased risk of greater physical and mental health challenges as one grows up. According to the NSCH data from 2016-17 and 2017-18, NC is doing somewhat worse than the US as a whole with regard to the percentage of children with ≥ 2ACEs (19.2% in NC in 2017-18 as compared to 18.6% - although the confidence intervals for NC are wider than for the US because of smaller sample size), but both the US and NC showed declines since 2016-17 (Figure 8). Breaking down the NC sample by race/ethnicity is not advised due to small sample sizes except for white and Hispanic

children, and in 2017-18, the percentage of children with ≥ 2ACEs was 14.4% and 16.6%, respectively. Partners within and outside of NCDHHS are working to decrease this percentage for all children and promote resilience, particularly through the efforts of the NC Essentials for Childhood (NCE4C) Initiative. Given the importance, this indicator was chosen as one of the Healthy NC 2030 goals, and it is included in the NC ECAP.

Figure 9

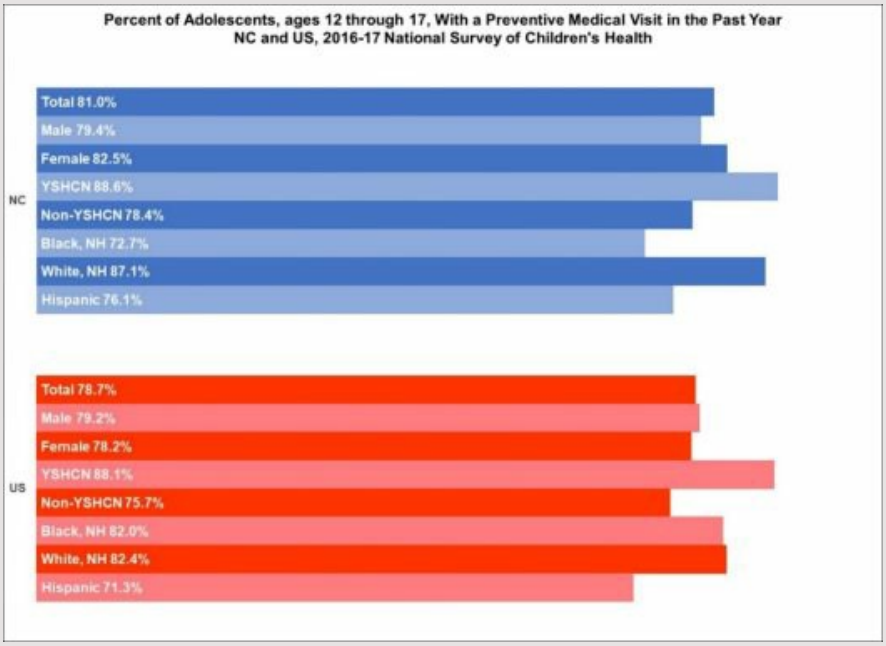


Increasing the number of children who receive appropriate developmental, psychosocial, social determinants of health, and behavioral health screening tools is another way to promote children being raised in a safe, nurturing environment. While NSCH data indicate that NC has a higher percentage of children, ages 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year (43% vs. 33.5%), there is still much room for improvement. A breakdown by race/ethnicity is not available. Through a variety of programs, the C&Y Branch not only offers training opportunities on developmental screening to providers but also assists parents in child health clinics and home visiting programs as well as the Triple P – Positive Parenting Program.

Adolescent Health

Not surprisingly, the qualitative data results for the Adolescent Health domain were very similar to the Child Health domain as improving access to mental and behavioral health services and promoting safe and nurturing relationships ranked at the top along with preventing teen suicide and injuries. Ensuring that youth receive well visits inclusive of mental and behavioral health screenings and related referrals continues to be a priority for the C&Y Branch. According to the 2016-17 NSCH, which is the most recent year available due to changes in the measure between the 2017 and 2018 surveys, 81% of adolescents in NC received a preventive medical visit in the past year which is higher than the national rate of 78.7% (Figure 9). More females (82.5%) than males (79.4%) had a preventive medical visit, and more YSHCN (88.6%) had a visit than non-YSCHN (78.4%). While more non-Hispanic White youth (87.1%) and Hispanic youth (76.1%) had a visit than non-Hispanic Black youth (72.7%), the confidence intervals for Black and Hispanic youth survey data were wide, so should be interpreted with caution. Additionally, 2017-18 NSCH data did show that 55.5% of NC adolescents age 12-17 without special health care needs had a medical home while only 47.5% did nationwide. Teen suicide rates for NC have risen over the past decade just as they are for the nation, with NC rates for youth ages 10 to 17 increasing from 2.3 per 100,000 youth population in 2010 to 4.9 per 100,000 in 2018.

Figure 10

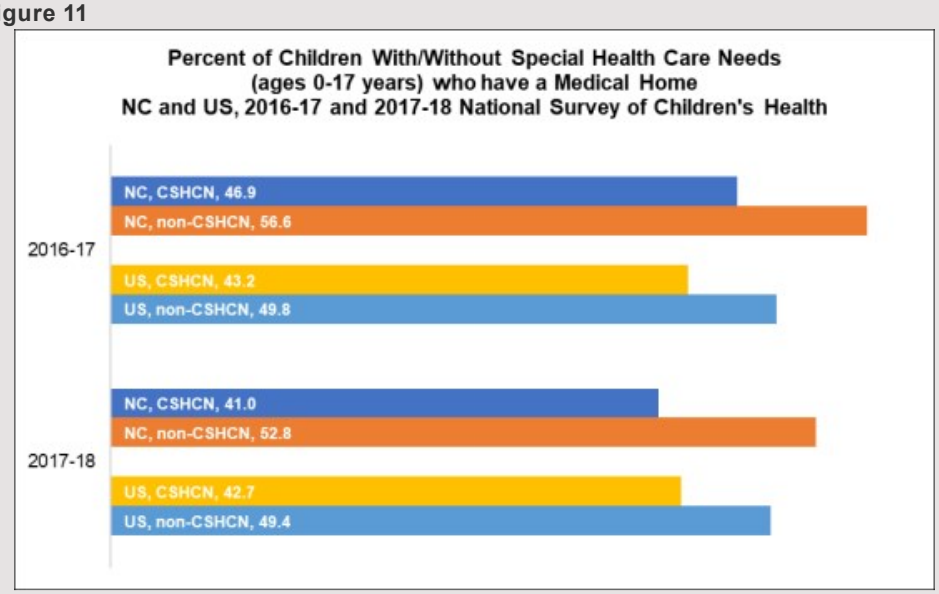


In addition to supporting local health departments and school health centers to provide youth health care and behavioral health services, the C&Y Branch will continue to provide technical assistance to school health nurses, partner with the Department of Public Instruction with the Leadership Exchange for Adolescent Health Promotion, and engage youth and hear their voices through the Youth Public Health Advisor Program, as well as partner with the NC Pediatric Mental Health Care Access Program.

Children and Youth with Special Health Care Needs

Ensuring that CYSHCN receive coordinated, comprehensive, ongoing medical care was the top priority identified through the qualitative portion of the needs assessment, along with other related items such as improved access to mental and behavioral health services, respite care, and community-based services as well as empowering families to become equal partners in making decisions. Transitioning from a pediatric doctor to a doctor for adults was not selected as a priority in the partner survey, but it was discussed frequently during the focus group held with parents of CSHCN. While having a medical home should help ensure that CYSHCN receive coordinated, comprehensive care, data from the NSCH (Figure 10) indicate that CSHCN are less likely to have a medical home that non-CSHCN. This is true for NC and the nation, although NC had higher rates than the US for both groups of children. Percentages for all groups decreased in the most recent 2017-18 survey. Another important part of coordinated care is making sure that transition services to adult health care are available for CYSHCN. NSCH data for 2017-18 indicate that only 24.1% of adolescents with special health care needs in NC received such services, leaving lots of room for improvement.

Figure 11



The C&Y Branch has a very active Branch Family Partnership which enables families with CSHCN to voice their challenges and successes routinely to Branch staff members. Work to ensure coordinated, family-centered care will continue through them, the Family Liaison Specialists, the CYSHCN Help Line and outreach team, and the Innovative Approaches Initiative, as well as through the Commission on CSHCN. In addition, the strong linkage with the NC Infant-Toddler Program will incorporate priorities related to family engagement, developmental screening, and ensuring safe, nurturing environments.

III.C.2.b.ii. Title V Program Capacity

III.C.2.b.ii.a. Organizational Structure

The NCDHHS is one of ten agencies in the NC Governor's Cabinet and is divided into 30 divisions and offices which fall under four broad service areas – health, human services, administrative, and support functions. Divisions and offices include: Administrative Divisions and Offices (e.g., Budget and Analysis, Controller, and General Counsel); Aging and Adult Services; Services for the Blind; Child Development and Early Education; Services for the Deaf and the Hard of Hearing; Council on Developmental Disabilities, Economic Opportunity; Education Services; Environmental Health; Health Service Regulation; Medical Assistance (state Medicaid); Mental Health, Developmental Disabilities, and Substance Abuse Services; Public Health; Office of Rural Health and Community Care (ORHCC); Office of the Secretary; Social Services; State Operated Healthcare Facilities; Vital Records; and Vocational Rehabilitation Services. DHHS also oversees 14 facilities: alcohol and drug abuse treatment centers; developmental centers; neuro-medical treatment centers; psychiatric hospitals; and two residential programs for children.

The Secretary of NCDHHS reports to the Governor and within her office has one Chief Deputy Secretary, a Chief Financial Officer, the State Health Director and Chief Medical Officer, and five Deputy Secretaries, including the Deputy Secretary for Health Services under which the NC Division of Public Health (NC DPH) is located. The Assistant Secretary for Public Health serves as the Director of NC DPH.

The NC DPH is composed of the Director's Office and nine other offices and sections: Administrative, Local, and Community Support; Chronic Disease and Injury; Epidemiology; Human Resources; Oral Health; State Center for Health Statistics; State Laboratory of Public Health; Vital Records; and WCHS. NC DPH works collaboratively with a network of 85 sub-state administrative units (single- and multi-county LHDs). Each local public agency enters into an annual Consolidated Agreement with the DPH that governs many public health services delivered by the local agency. Each individual service that agencies provide using state or federal pass-through funding is managed by an Agreement Addendum to this contract which contains a scope of work and specifies the standards of the services to be provided. The LHDs, which have local autonomy, have a longstanding commitment to the provision of multidisciplinary perinatal, child health, and family planning

services, including prenatal care, care management, health education, nutrition counseling, psychosocial assessment and counseling, postpartum services, care coordination for children, well-child care, and primary care services for children. They are also instrumental in providing leadership for evidence-based programs county wide such as Nurse Family Partnership, Healthy Families America, Teen Pregnancy Prevention Initiatives (TPPI), Triple P, Reach Out and Read, and other programs dictated by the needs of the county.

The Title V Program in NC is housed in the WCHS, with the Title V Director serving as Section Chief and the CYSHCN State Director serving as the C&Y Branch Head. WCHS is responsible for overseeing the administration of the programs carried out with allotments under Title V and for other programs including Title X, Early Intervention, nutrition services (including the state WIC program), and immunization. In addition to the C&Y Branch, the WCHS includes four other branches: Women's Health (WHB), Early Intervention, Immunization (IB), and Nutrition Services. Members of the WCH Section Office in addition to the Section Chief include the Operations Manager, the Executive Director of Child Maltreatment Prevention Leadership Team, the SSDI Project Coordinator, the MCH Epidemiologist, and an Administrative Assistant.

A list of the major programs/activities of WCHS by funding source(s) and population domain, including all those that are funded by the federal-state MCH Block Grant, can be found in Appendix B.

III.C.2.b.ii.b. Agency Capacity

The NC Title V Program's capacity to promote and protect the health of all mothers and children, including CSHCN is strong, but the WCHS continually strives to improve this capacity.

Since January 1, 1995, all SSI beneficiaries <16 years old have been eligible for Medicaid in NC. In fact, NC provides Medicaid coverage to all elderly, blind and disabled individuals receiving assistance under SSI. The NC child health insurance program (Health Choice) serves as an additional payment source for these children. The Title V program continues to assure that all SSI beneficiaries receive appropriate services. Each month, WCHS receives approximately 335 referrals of newly eligible SSI children. Infants and children under five years of age are referred to the Care Coordination for Children program. The parents of those ages 5 and older are contacted by letter to let them know about our toll-free Help Line. The purpose of both contacts is to make families aware of the array of services offered under Medicaid, as well as other programs for which their child may qualify. NC also provides Medicaid coverage for pregnant women with incomes equal to or less than 196% of the federal poverty guidelines. Family planning services to men and women of childbearing age with family incomes equal to or less than 195% of the federal poverty guidelines are also provided by Medicaid.

The WCHS continues to leverage its Title V funding to ensure a statewide system of comprehensive, community-based, coordinated, family-centered care services. Descriptions of collaborations with other public and private organizations and how services are coordinated at the community level can be found in Section C (Partnerships, Collaboration, and Coordination) and throughout the State Action Plan.

III.C.2.b.ii.c. MCH Workforce Capacity

As of July 2020, the WCHS oversees and administers an annual budget of over $625 million and employs 927 people. This is 47% of the DPH staff, along with 67% of the budget. The WCHS's broad scope promotes collaborative efforts while discouraging categorical approaches to the complex challenge of promoting maternal and child health. The Section is committed to ensuring that services provided to families are easily accessible, user-friendly, culturally appropriate, and free from systemic barriers that impede utilization. While many staff members work in the central office in Raleigh, there are a number of regional consultants who work from home and regional offices. The EIB has a network of 16 Children's Developmental Service Agencies (CDSAs) serving all 100 counties.

The Title V Block Grant funds 26 WCHS state-level employees, with many others funded in part per the cost allocation plan. These positions are primarily nurse consultants, public health genetic counselors, and public health program consultants within the WCHS, but also funds staff members in the SCHS, the Chronic Disease and Injury Section (CDIS), and the Oral Health Section. The funding that goes directly to LHDs is used to provide services for individuals without another payer source, as well as enabling services and population health education.

Key senior management level employees in the Title V Program include the following:

Title V Director/Section Chief – Dr. Kelly Kimple became the Title V Program Director in August 2016 and served as Acting State Health Director from January-August 2017. Her undergraduate work included a dual major in Biological Basis of Behavior and Spanish from the University of Pennsylvania. She completed her MD and MPH at UNC-CH. She holds certification in both the American Board of Preventive Medicine and the American Board of Pediatrics. Prior to becoming the Title V Director, she was an Assistant Professor in the UNC Department of Pediatrics and a pediatrician at the Siler City Community Health Center. She also served as Director of the UNC Children's Readmissions Reduction Program and Transition Clinic with Medical-Legal Partnership and as a faculty member for the Leadership Education in Neurodevelopmental Disorders at the UNC Carolina Institute for Developmental Disabilities.

Section Business Operations Manager – Sarah Dozier assumed this position in January 2020. Prior to this role, she was with the Office of the Internal Auditor evaluating various initiatives, programs, systems and projects across NCDHHS. She previously served as the Budget Director of the Department of Public Instruction, the CFO and Accounting/Budget Director of the Department of Natural and Cultural Resources, and has worked at the NC Office of the State Auditor. She earned her Bachelor of Business Administration in Accounting and Information Technology at Campbell University.

CYSHCN State Director/C&Y Branch Head – Marshall Tyson became Branch Head in January 2017 after serving as Acting Branch Head since June 2016. Prior to becoming Branch Head, Marshall served as the Health and Wellness Unit Manager in the C&Y Branch. He earned his undergraduate degree at East Carolina University and received his MPH in Public Health Leadership from UNC-CH in 2000. In addition, in 2014 he graduated from the Maternal and Child Health Public Health Leadership Institute.

WHB Head – Belinda Pettiford assumed this position in March 2012 after serving as a WHB Unit Supervisor. She has undergraduate degrees in psychology and community health education from UNC-Greensboro and earned her MPH in health policy and administration from the UNC School of Public Health in 1993. Prior to becoming the Unit Supervisor in 2000, she served as the Program Manager of the Healthy Start Baby Love Plus Program and as the Program Manager for the Healthy Beginnings Program.

NSB Head – Mary Anne Burghardt became Branch Head in May 2016 after serving as Interim Branch Head since May 2015. Prior to this role, she was the Public Health Nutrition Unit Supervisor. She has an undergraduate degree in Nutrition from Pennsylvania State University, earned an MS in Foods and Nutrition from Marywood College, and is a Registered Dietitian. She has also served as a Nutrition Program Consultant, a Pediatric Dietitian with a CDSA, and has held positions in acute care hospitals, rehabilitation centers, the WIC Program and long term care.

EIB Head – Sharon Loza assumed this position in January 2020. Prior to this role, she served as a Consultant at the Frank Porter Graham Child Development Institute. She formerly served as the Data Manager and Lead for the NC ITP State Systemic Improvement Plan and also worked as an Implementation Specialist with the NC Race to the Top-Early Learning Challenge grant. She holds a MEd in Early Intervention and Family Support from the UNC-CH, a MA in Liberal Studies from the UNC-Greensboro, and is currently pursuing her PhD in at NC State University in the Department of Educational Leadership, Policy, and Human Development.

SSDI Project Coordinator – Sarah McCracken Cobb began working in this position on July 1, 2000. She completed her undergraduate degree in chemistry at the UNC-CH in 1987 and earned an MPH from Boston University in 1989. After serving in the US Peace Corps, she has held assessment positions with NC DPH in HIV/AIDS, immunization, and maternal health programs.

MCH Epidemiologist – Kathleen Jones-Vessey became the MCH Epidemiologist in July 2019 after working with the National Center for Health Statistics for about two years. She has over 20 years of experience working with the SCHS, most recently the Head of the Statistical Services Branch which implements both PRAMS and BRFSS. She has a BA in Sociology from George Mason University and a Master's in Sociology from Virginia Tech.

Pediatric Medical Consultant for the C&Y Branch – Dr. Gerri Mattson joined WCHS in August 2005. She received her MD from the Medical College of Virginia in 1993, completed her internship and residency at Emory University in 1996, and received her MSPH from the UNC School of Public Health in 2004. Her expertise is available to a wide range of public and private providers on best and promising practices in policy, program development, and evaluation related to child and adolescent health.

Medical Consultant for the WHB - Dr. Rachel Urrutia was hired in 2018. She is board certified in both obstetrics and gynecology and preventive medicine. She is an Assistant Professor in the Department of Obstetrics and Gynecology at UNC-CH. She practices OB/Gyn at Reply OB/Gyn and Fertility in Cary, NC. She earned her medical degree at Harvard University and completed an MS in in Clinical Research, Epidemiology at UNC-CH.

Family Liaison Specialists (FLSs) – The C&Y Branch has 1.5 Full-Time Equivalents (FTEs) for parents of CYSHCN. One full time position (Family Liaison Specialist) is supported fully by Title V funding; the other part-time position is through EHDI federal funding. Holly Shoun served as the EHDI Parent Consultant for nine years, beginning in 2011, but she is now serving as the interim Family Liaison Specialist with a new person hired for the EHDI position. In addition to being the parent of a child with special health care needs, she has a degree in Biology from UNC-CH and a MA in Secondary Education and Teaching from East Tennessee State University.

The WCHS is committed to providing culturally competent approaches in its delivery of services. This begins with hiring staff from various racial and ethnic backgrounds to staff training and development. Managers are committed to recruiting staff utilizing non-traditional approaches and ensuring that interview teams are also diverse. Members of the WCHS also participate in a Reading Circle which includes books from multiple cultural perspectives; various team members lead the book discussions. WCHS partners with numerous community based organizations for program design and implementation. Educational and outreach materials utilized by the programs are also reviewed for health literacy and cultural appropriateness. Feedback is obtained from culturally diverse focus groups, surveys, and parents to provide culturally sensitive services across NC. Committees and taskforces include representatives from a wide range of ethnic and cultural backgrounds. Language to assure culturally appropriate services are included in all contracts and monitored in deliverables. Translators, including those for the hard of hearing and deaf populations, are also mandated in all direct service contracts.

III.C.2.b.iii. Title V Program Partnerships, Collaboration, and Coordination

As the NC Title V Program is housed in the WCHS and the WCHS Chief is responsible for administering both the Title V Program and the other federal and state programs located in the five Branches, the Title V Program's relationship with other MCHB investments (e.g., SSDI, MIECHV, ECCS, etc.) and other Federal investments (e.g., PREP, WIC, Immunizations, etc.) is very strong. Through the SMT weekly meetings and other opportunities, the Title V Director and Branches discuss plans and activities to work with partners. The weekly DMT meetings provide an avenue for the Section Chief to partner with administrators of other HRSA programs and other programs within the NC DPH (e.g., chronic disease, vital records, injury prevention, etc.). The NC Association of Local Health Directors (NCALHD) meets monthly, and, on the day prior to each of these meetings, committee meetings are held which include staff members from WCHS and other DPH Sections which enable the Title V Program to work collaboratively with NCALHD on matters that pertain to all LHDs. WCHS staff members, particularly the Regional Nurse, Social Work, Immunization, and Nutrition Services Consultants, also visit the LHDs regularly to perform monitoring and consulting duties and to provide technical assistance.

The NC DHHS houses the state's Medicaid, Social Services/Child Welfare programs, so within the management structure of the Department interagency coordination is expected and facilitated between the Title V Program and those programs. A copy of the current Inter-Agency Agreement between the state's Medicaid agency and the Title V program is included in this application. As highlighted in other sections of this application, NC is in the midst of transitioning from a predominantly fee-for-service Medicaid delivery system to managed care, and the WCHS has been in partnership, and will continue to be in partnership, with NC Medicaid throughout that transition.

Additionally, the DPH is signatory to a formal written agreement with the Division of Vocational Rehabilitation (assumes

responsibility for Supplemental Security Income eligibility determination). Programs within the WCHS also collaborate with the Division of Public Instruction (DPI); ORHCC (works with federally qualified health centers and other primary care providers); and Division of Child Development and Early Education (DCDEE). The WCHS also collaborates with the Department of Insurance closely on ACA and the Department of Corrections around incarcerated parents and other issues.

There are fourteen accredited schools of public health in NC and WCHS maintains close working relationships with many of them, particularly the UNC-Chapel Hill Gillings School of Global Public Health with its Department of MCH, but also with the Departments of Public Health at UNC-Greensboro and East Carolina University and the Department of Public Health Education at NC Central University. Division staff members serve as adjunct faculty members and are frequent lecturers, in addition to serving on advisory committees. Faculty members are asked to participate in DPH and WCHS planning activities to provide review and critique from an academic and practice perspective. The Title V Director also serves on the Residency Advisory Committee for the UNC Preventive Medicine Residency at the UNC School of Medicine, facilitating networking and public health rotations.

WCHS also collaborates on a number of activities with several professional organizations in the state including: NC Medical Society: NCPS; NC Obstetrical and Gynecological Society; Midwives of NC; NC Friends of Midwives; and the NC Academy of Family Physicians. WCHS partners with the NC Institute of Medicine, the NC Hospital Association, and the NC Area Health Education Centers. The Section works closely with the NC Partnership for Children (SmartStart), Prevent Child Abuse NC, NC Child, the NC Chapter of the March of Dimes, SHIFT (Sexual Health Initiatives For Teens) NC, CCNC, and many other organizations.

The Section's capacity in implementing family/consumer partnership and leadership programs is strong, but certainly has areas for ongoing work. The C&Y Branch established a new model for its Branch Family Partnership (BFP) in FY12 in an effort to develop more meaningful partnerships with families using the services administered by the Branch and to ensure that the family voice was heard and integrated both at the state and the local levels as much as possible. More information about the BFP can be found in Section III.E.2.b.ii. (Family Partnership) of the State Action Plan.

In addition to the BFP, the C&Y Branch obtains family input through the EHDI Family Partnership, EHDI parent staff position, and communication received through the CSHCN Hotline. Qualitative data are obtained through focus groups with various programs as described in the work done on the C&Y Strategic Plan and in ongoing planning. There are also the FLS positions which have always been filled by people who have a CSHCN. The EIB also has staff members serving on the BFP. The WHB includes consumers with review of local family planning materials and frequently conducts focus groups to ensure family feedback is part of program design and implementation. Healthy Beginnings, Baby Love Plus, ICO4MCH, and TPPI all require consumer members on their community advisory councils and the Governor's Council on Sickle Cell Syndrome entails consumer participation on its 15-member Council. Village 2 Village is a community and consumer education work group created to help advance the work of the PHSP. Family/consumer partnership also remains a hallmark of the work of our partnering organizations.

III.C.2.c. Identifying Priority Needs and Linking to Performance Measures

As noted earlier, an expanded SMT meeting was held to determine the priority needs for the 2021-25 reporting cycle. Along with the priority needs, the group also drafted a revised WCHS mission statement that SMT finalized later which is support and promote the health and well-being of NC individuals including mothers, infants, children, youth, and their families to reduce inequities and improve outcomes. While WCHS works to increase health equity throughout its programs and within each population domain, it was decided that a separate priority need specific to health equity and social determinants of health was also necessary. Table 2 lists the eight priority needs and the accompanying performance measures by population domain.

Table 2 – MCH Priority Needs Linked to Performance Measures	
NC Priority Needs by Population Domain	**National/State Performance Measures**
Women/Maternal Health	
1. Improve access to high quality integrated health care services	NPM1 - % of women, ages 18 through 44, with a preventive medical visit in the past year
2. Increase pregnancy intendedness within reproductive justice framework	SPM1 - % of PRAMS respondents who reported that their pregnancy was intended (wanted to be pregnant then or sooner)
Perinatal/Infant Health	
1. Improve access to high quality integrated health care services	NPM3 - % of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)
3. Prevent infant/fetal deaths and premature births	NPM4A) - % of infants who are ever breastfed and 4B) - % of infants breastfed exclusively through 6 months
	SPM2 - % of women who smoke during pregnancy
Child Health Domain	
4. Promote safe, stable, and nurturing relationships	NPM6 - % of children, ages 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year
	SPM3 - % of children with two or more Adverse Childhood Experiences (ACEs) (NCHS)
5. Improve immunization rates to prevent vaccine-preventable diseases	SPM4 - % of children, ages 19 through 35 months, who have completed the combined 7-vaccine series (4:3:1:3*:3:1:4)
Adolescent Health	
6. Improve access to mental/behavioral health services	NPM10 - % of adolescents, ages 12 through 17, with a preventive medical visit in the past year
CYSHCN	
7. Improve access to coordinated, comprehensive, ongoing medical care for CYSHCN	NPM11 - % of children with and without special health care needs, ages 0 through 17, who have a medical home
Cross-Cutting/Systems Building	
8. Increase health equity, eliminate disparities, and address social determinants of health	SPM5 - Ratio of black infant deaths to white infant deaths

III.D. Financial Narrative

	2018		2019	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	$17,502,497	$14,660,222	$17,222,472	$19,770,945
State Funds	$38,894,828	$40,487,295	$34,324,098	$39,888,265
Local Funds	$0	$0	$0	$0
Other Funds	$65,356,296	$57,347,438	$65,356,296	$58,719,041
Program Funds	$68,371,572	$71,157,117	$70,779,201	$69,967,790
SubTotal	$190,125,193	$183,652,072	$187,682,067	$188,346,041
Other Federal Funds	$400,388,060	$303,997,950	$404,992,804	$280,628,316
Total	$590,513,253	$487,650,022	$592,674,871	$468,974,357

	2020		2021	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	$17,424,544	$18,812,551	$18,806,308	
State Funds	$41,861,408	$38,249,324	$34,195,972	
Local Funds	$0	$0	$0	
Other Funds	$66,078,190	$52,819,279	$66,371,749	
Program Funds	$70,779,201	$73,859,576	$69,967,790	
SubTotal	$196,143,343	$183,740,730	$189,341,819	
Other Federal Funds	$403,362,999	$281,671,839	$393,826,669	
Total	$599,506,342	$465,412,569	$583,168,488	

	2022	
	Budgeted	Expended
Federal Allocation	$18,806,308	
State Funds	$37,169,426	
Local Funds	$0	
Other Funds	$65,371,749	
Program Funds	$73,859,576	
SubTotal	$195,207,059	
Other Federal Funds	$456,342,218	
Total	$651,549,277	

III.D.1. Expenditures

The NC General Assembly (NCGA) approves all block grants as distinct parts of the state budget. However, because the state fiscal year is July 1 – June 30, there is a difference in the amounts of Title V funding in the approved state plan from the annual Maternal and Child Health Block Grant award to the state. All budget and expenditure actions relating to the Title V funds occur within the approved state plan. Amounts of expenditures reported in the annual report therefore are within the state fiscal year. Because the same period is used year after year, the amounts reflect a consistent 12-month period of performance. The budgeted amounts are based on the previous year's funding at the time of the MCHBG application/report preparation and submission. In FY20, federal Maternal and Child Health Block Grant expenditures were $18,812,551, which is a decrease of $958,394 from the previous year. This decrease may be partially explained by the impact of COVID-19 pandemic on programs and the April 2020 request by the NC Office of State Budget and Management to reduce unnecessary General Fund expenditures for the rest of the fiscal year by implementing budget management measures such as limiting the purchase of goods and services to mission critical and COVID-19 items only; limiting travel and training requirements; limiting hiring for vacant positions; and making no reallocations (position reclassifications) or salary adjustments.

III.D.2. Budget

NC’s Maternal and Child Health Block Grant financial management plan assures the compliance with the Title V fiscal requirements.

Section 503 (a)

The state requires that all state match for the grant be budgeted in the same cost center with the relevant federal dollars. Upon expenditure of those pooled dollars, the state draws the appropriate number of federal dollars to reflect the 4:3 federal to state match rate. There are some cost centers in which federal dollars are not matched to stated dollars; in other words, 100% of the budgeted funds are federal. For these dollars, the state designates with special codes the proper amount of state dollars elsewhere in the budget as match.

Section 503 (c)

Administrative costs are identified in specific cost centers. Typically, these are costs that are charged in the division's cost allocation plan, and certain direct costs for administrative offices. Budgets for these cost centers are summed and compared to the total budget to assure they are not more than 10% of the total grant amount.

Section 505 (a) (3) (A & B)

The state budget’s available funds are in a series of cost centers called RCCs. These centers are used to group dollars intended for certain types of programs and services. The RCCs are assigned to one or both of the 30% "set aside" categories, and are assessed a percentage of the budget that can be attributable to services in the category.

For example, the RCC 5745 consists of allocated funds to local health departments for child health services. We determine the proportion of the funds that are attributed to preventive and primary care services and services for children with special health care needs, then multiply the percentages by the allocation to come up with the respective amounts for each category. This assessment is performed for each RCC in which Title V funds are budgeted, and the sums for the two categories are compared to the total budget award to determine compliance.

Section 505 (a) (4)
The maintenance of effort from 1989 is $29,063,379. Total state funds budgeted for MCH programs for FY22 as shown in Form 2 is $37,169,426. This includes state funds used for matching Title V funds, which for the FY22 application is $14,106,377.

III.E. Five-Year State Action Plan

III.E.1. Five-Year State Action Plan Table

State: North Carolina

Please click the links below to download a PDF of the Entry View or Legal Size Paper View of the State Action Plan Table.

State Action Plan Table - Entry View

State Action Plan Table - Legal Size Paper View

III.E.2. State Action Plan Narrative Overview

III.E.2.a. State Title V Program Purpose and Design

The mission of the WCHS, to support and promote the health and well-being of NC individuals including mothers, infants, children, youth, and their families to reduce inequities and improve outcomes, aligns well with the goals of Title V. The WCHS works closely with local, state and national partners and serves as a critical collaborator and convener. From reproductive life planning and preconception health to perinatal and infant health to child/adolescent health including those with special health care needs, WCHS emphasizes a life course approach to achieving health and health equity in all populations. The Title V Program values evidence-based and evidence-informed strategies in promoting health, while following guidelines around best practice. Given the importance of cross-sector work, WCHS leverages the expertise and experience of our many partners and leaders in the state.

In providing preventive health services, programs for CYSHCN, as well as a wide range of programs addressing well-being of mothers, infants, children, and families, the WCHS partners with our LHDs and other community agencies as experts at engaging local communities and stakeholders, while we provide regional consultation, training and technical assistance, and statewide leadership and vision. For example, an array of preventive health services is offered in virtually all LHDs, allowing most clients to receive a continuum of reproductive health services at a single site. Standards for provision of WCHS supported prenatal and postpartum services are based on the American College of Obstetrics and Gynecology (ACOG) guidelines. These standards have been revised to be consistent with best practices derived from the current scientific literature as well as with the relevant NC regulations and are published in the Maternal Health Policy Manual. They are also consistent with the new eighth edition of the American Academy of Pediatrics/ACOG Guidelines for Perinatal Care. Because of the consistency with these nationally recognized guidelines, there is a good case to be made that these standards should also provide the basis for standards for the prenatal care provided by Medicaid managed care and ultimately commercial managed care agencies. Consultation and technical assistance for all contractors is available from WCHS staff members with expertise in nursing, social work, nutrition, health education, and medical services. Staff members include regional consultants who routinely work with agencies within assigned regions.

The Title V program focuses on ensuring access while also facilitating a strategic approach utilizing needs assessments and convening partners and leaders in the development of strategic plans, including but not limited to the Early Childhood Action Plan, Perinatal Health Strategic Plan, the CYSHCN Strategic Plan, and the DPH Strategic Plan. Despite substantial successes, WCHS remains challenged by a variety of systemic barriers and recognize that there is still much work to be done to fully integrate a systems approach in NC. While there is a strong commitment to addressing social determinants of health and racism to achieve health and health equity, as described in the PHSP, this work will take time. The Title V program is central to the current priorities of NC, including Medicaid reform and incorporating social determinants of health, the opioid crisis, and the effects on children and families, and early childhood as the basis of health for all, and will continue to advocate for North Carolinians. WCHS continues to work with the NC General Assembly and other partners to help us achieve its goals and create a more strategic vision for NC, while maintaining the safety net, public health infrastructure at our LHDs, and a focus on evidence-based programs for maternal and child health.

III.E.2.b. State MCH Capacity to Advance Effective Public Health Systems

III.E.2.b.i. MCH Workforce Development

The WCHS is committed to recruiting and maintaining qualified staff members in its Title V program. At the state level, the Office of State Human Resources (OSHR) is under the legal direction of NC General Statute chapter 126 in the provision of personnel policies and procedures. The OSHR manual outlines systematic recruitment, selection and career support programs that identify, attract, and select from the most qualified applicants for employment and encourage diverse representation at all levels of the workforce. Employment is offered based upon the job-related qualifications of applicants for employment using fair and valid selection criteria. Selection decisions are made with the aid of federal and state anti-discrimination laws.

WCHS follows OSHR policy and procedures for evaluating employees' performance. The performance management system consists of a process for communicating employee performance expectations, maintaining ongoing performance dialogue, development plan, and conducting annual performance appraisals. There are also procedures for addressing performance that may fall below expectations and for encouraging employee development. Priority consideration is given when a career state employee applies for a promotion and the eligible employee is in competition with outside applicants.

The OSHR maintains a compensation plan which provides a salary rate structure to appropriately compensate all positions subject to the State Personnel Act. Historically, state employees were classified and compensated under two different systems: salary graded and career banded. In 2013, the OSHR was directed by the NC General Assembly to conduct a Statewide Compensation System Project to address the problems caused by having two outdated systems. Implementation of the new Statewide Classification and Compensation System began in June 2018 with the number of job classifications reduced from 2,300 to 1,400. As with the rollout of any major systems change, there were some errors in how positions got classified and delays in hiring and processing reclassifications. Modifications to these classifications are ongoing. Benefits for state employees include many types of leave (vacation, sick, community service, holiday, military, family medical), retirement system contributions, medical insurance, voluntary supplemental retirement plan contributions, and supplemental insurance coverage. Some state employees also became eligible for up to eight weeks of Paid Parental Leave on September 1, 2020, when Governor Cooper's Executive Order No. 95 went into effect. Originally this was a benefit just for employees of state agencies under the Governor's oversight, but some other state agencies opted-in to cover their personnel.

NCDHHS makes it a priority to assure that new employees are adequately oriented to and trained for their positions. There are online courses required of every NCDHHS employee covering topics such as new employee orientation, performance management, orientation to the timekeeping system, and workplace harassment. DPH new employee orientation includes information about the three core functions and ten essential services of public health. Supervisors are also required to attend in person Equal Employment Opportunity training. In response to staff feedback, DPH also developed a Division-wide orientation offered quarterly for all new employees to enhance the knowledge of the varied and complex work of public health and promote a collaborative approach.

WCHS strives to invest in its workforce in not only knowledge and expertise, but also personal and professional development. Leadership training is available to Title V program staff through the NC Public Health Leadership Institute, as well as other programs through NCDHHS, AMCHP, and CityMatCH. Staff members are assessed for perceived training needs and education and training resources are matched to those areas when possible. Excellent training resources are brought to the WCHS through partnerships with Area Health Education Centers (AHECs), UNC's Leadership Education in Neurodevelopmental Disabilities and Related Disorders (LEND) program, National Implementation Research Network (NIRN), and through partnerships with universities and medical schools, etc. Staff hold peer-to-peer trainings for WCHS staff members as well. Trainings are often recorded and offered to new staff

as they come on board or to key partners as needed. Examples of subject matter included in trainings are motivational interviewing, systems development and integration, how to implement and sustain evidence-based programs with model fidelity, data analysis, quality improvement assessments, and trauma-informed services. As possible, staff members are sent to national conferences and annual meetings.

The C&Y Branch will continue to promote the MCH Navigator and the UNC MCH Workforce Development Center training opportunities among staff. The Workforce Development Committee will continue to make recommendations about training needs and opportunities related to DPH and NCDHHS priorities, including health equity.

For FY22,the C&Y Branch Substance Use Action Team, formerly the Opioid Action Team, will continue to work with staff to incorporate substance use (alcohol, tobacco, opioids, drugs, etc.) data into existing programs and initiatives and work with program staff to develop upstream strategies to reduce and prevent the impact of substance use on children and families. The Branch will explore ongoing facilitated discussions on advancing health equity and reducing the racial gap in key indicators of child health. In addition, the Branch anticipates one to two meetings of the full Branch staff and family partners, pending the hiring of a new Branch Head. These meetings will incorporate training opportunities to increase knowledge, skills and abilities related to health equity and other key child health issues.

As other federal grant opportunities have expanded, training collaboration has been enhanced. The Building Bridges Conference is held every few years to include local staff from multiple programs serving families, i.e., Baby Love Plus, Healthy Beginnings, Sickle Cell, and TPPI. Using a combination of several funding sources, topics such as reproductive life planning, life course perspective, depression and mental health, healthy weight, and SDoH are provided through this in-person conference. Similar trainings are provided statewide utilizing web-based platforms.

Quarterly “Lunch and Learn” sessions are held in the C&Y Branch for each program to provide an updated overview of their services. Broad discussions are then held about interface of services, integration of planning, and ways to improve joint efforts among programs. “Lunch and Learn” sessions are also offered by the Office of Minority Health and Health Disparities.

For some time now, the NC Home Visiting Consortium has been working on developing a set of standard core competencies for home visitors and parent educators. The goal is to professionalize the field across NC by standardizing the knowledge, skills, and abilities of home visitors and parenting educators. At the 2019 NC Home Visiting Summit, a workshop was held to discuss the need for core competencies. As a result of the workshop, a number of stakeholders were recruited to participate in a Core Competency Committee which met bi-weekly to draft a set of competencies. The MIECHV Program Manager, HFA State Consultant, and NFP State Consultant are members of the Committee. A second workshop to review the draft core competencies was held at the 2020 NC Home Visiting Summit. The Core Competency Committee has finalized the competencies, and they will be reviewed by the Home Visiting Parenting Education Collaborative. Once approved, the plan is to recommend that home visiting and parenting education professionals adopt them for use.

Both Baby Love Plus and the NC Sickle Cell Program (SCP) provide consumer-driven trainings at least annually, with family members serving on the planning teams. Adolescent Parenting Program (APP) also holds an annual graduation and skill-building meeting which is one of the highlights of the program year.

The WHB has held a regular Reading Circle focused on cultural awareness for many years. The group is on a temporary hiatus with plans to restart it soon. Books are selected representing various racial, ethnic, and cultural backgrounds; a group discussion allows for awareness building and individual experiences to be shared.

As part of the CoIIN team focused on SDoH, all team members have been able to attend the foundational Phase I 2-day training on institutional racism led by the Racial Equity Institute (REI), and many members were able to attend Phase II training together in November 2019. As part of the PHSP, this team has made the bold decision to focus on institutional racism. The WHB was also able to have REI conduct its Groundwater Presentation, a 3-hour introduction to racial equity, at a Branch meeting in May 2017. Additional WHB staff have also attended the REI Phase I training with more attendance requests made frequently. By the end of FY17, all the management staff and supervisors in the C&Y Branch and all MIECHV staff had attended Phase I. Some DMT and other managers have attended Phase I, and a larger group of DPH managers participated in the REI Groundwater Presentation training in February 2019. The SDoH CoIIN is finalizing a foundational health equity training module which will be made available to all DPH employees through the learning management system later in FY22.

Much state funding has been lost over the past several years, except that portion needed to meet Title V or Medicaid matching requirements. Some pockets of state funding remain such as that funding local school nurses and school health centers. Although this has allowed the WHCS to maximize the reach of Title V, it also presents difficulties in extricating Title V funding and service impacts from the total effort. For instance, positions in the C&Y Branch are funded by Title V, Medicaid match, Medicaid receipts and various grants. The operational support for programs and contracts is also a mixture of funding sources. The Office on Disability and Health (NCODH) Program Director is primarily supported through Title V. Home visiting programs are funded with a mixture of funds including state appropriations, private philanthropic organizations, MIECHV grant funds, Title V funds, and staff members are supported through either MIECHV or Title V funding. The Title V program continually assesses staffing needs and other resources given the funding shortages. Title V has received additional federal grants to support and expand its work, including the Maternal Health Innovations grant and the CDC ERASE Maternal Mortality grant. The WCHS continues to work with its partners on stated goals and strengthened collaborations with agencies and organizations, such as universities, in order to best leverage resources.

III.E.2.b.ii. Family Partnership

The WCHS is committed to building the capacity of women, children, and youth, including those with special health care needs, and families to partner in decision-making about state Title V activities and programs. There are several NCDHHS advisory councils and commissions that are in place and involve family members including, but not limited to: the Commission on CSHCN, Newborn Metabolic Committee, Newborn Hearing Advisory Committee, Office on Disability and Health Advisory Group, Association for School Health, MIECHV, Triple P, NC Baby Love Plus Community Advisory Network, Interagency Coordinating Council (for Early Intervention), the Care Coordination for Children Workgroup, Council on Developmental Disabilities, and the Governor's Council on Sickle Cell Syndrome. The C&Y Branch has families represented on all advisory councils and working groups, and its direct care programs such as newborn hearing, metabolic, and genetic counseling all provide satisfaction surveys for each family served. The WHB receives feedback from its family partners in a variety of ways: through Community Advisory Councils/Networks in TPPI, Healthy Beginnings, ICO4MCH, and NC Baby Love Plus; through work with PPE counselors at universities and community colleges; and through focus groups held while developing the PHSP and SCP guidance. Family partners are asked for input on grant applications, including the MCH Block Grant, and on educational materials and public awareness campaigns. LHDs are required to routinely survey their clients for feedback which is reviewed during monitoring visits by WCHS Regional Consultants. One of the priority needs highlighted in the PHSP was to increase family-driven service provision. One response to this need was the creation of Village 2 Village, a community and consumer engagement work group whose members provide feedback on the PHSP strategies, publications, and services. Participants are NC residents between 18 to 44 years old from rural and urban counties who must have children no older than one year of age. Participants are compensated for time, travel, meals, and lodging according to NC state government reimbursement guidelines. More recently, the new Maternal Health Task Force was developed to enhance maternal health work in our state. We were intentional to include a person with lived experience as a co-chair along with ensuring that at least one person with lived experience from each of the six perinatal care regions. As the Task Force meets, bi-monthly, each agenda includes time for sharing the perspective of consumers and/or community members.

The C&Y Branch continues to support a full-time Family Liaison Specialist (FLS) to train and support family engagement in Branch programs and partner organizations. Currently the position is vacant with a temporary employee hired until the position can be reclassified and filled. In addition, the Branch continued to employ a part-time Parent Consultant who serves the EHDI Program. These employees have CSHCN and are able to utilize their lived experience and acquired knowledge to support the family engagement efforts of the Branch. These staff have worked to institutionalize family engagement in all areas of the Branch and uphold the Branch family engagement philosophy: 1) Build and maintain relationship with families to ensure C&Y Branch programs and services are family centered; 2) Recognize, respect, and support the knowledge, skills and expertise that families possess; and 3) Assure that families are actively engaged in program planning, implementation, and evaluation. The C&Y Branch has developed a multi-faceted framework that offers a variety of opportunities to empower parent and youth partners to share their knowledge and expertise, including those who serve as Branch Family Partners (BFP). The C&Y BFP Steering Committee meets quarterly and is comprised of nine diverse parents of CYSHCN with a full range of experience with systems of care, the Branch Head, four Branch Unit Managers, the FLS, the CYSHCN Access to Care Specialist, and representatives from the EIB. The group size and makeup are conducive to real, intimate conversation and brainstorming. These parents are a part of a collaborative process to make decisions regarding program development, implementation, and evaluation and to provide consultation and feedback regarding Branch programming, services, and strategies. In addition, these parents often represent the Branch and model family engagement on various state and regional groups. The C&Y Branch continues to use Title V funding to provide travel assistance and stipends to compensate family members for their time and effort. One recurring task of the BFP Committee is to provide input on the MCH Block Grant by reviewing the application and attending the annual review. The C&Y Parent Leadership Trainers are trained to implement the Parents as Collaborative Leaders: Improving

Outcomes for Children with Disabilities curriculum, which uses a peer-to-peer training model to support and build the leadership skills of parents of CYSHCN. In FY21, the FLS collaborated with parent trainers to convert the trainings to be deliverable virtually; the number of trainings and participants was triple that of the number in FY20. BFPs are included in educational opportunities alongside staff including attending national and state conferences, planning and participating in C&Y Branch meetings and other trainings hosted by the Branch. As two of the core constructs of the C&Y Strategic Plan deal specifically with including families and being family centered, the Branch will continue to seek out opportunities to strengthen relationships with families and to ensure meaningful input into all services for children and their families delivered through programs at every level.

The Branch continues to sponsor family representation in Title V supported, state advisory councils. Supported families actively participate on the NC Triple P Partnership for Strategy and Governance and the NC Triple State Partners Collaborative. Family partners co-chair the Genetics and Genomics Advisory Council (GGAC) and will play a key role on promoting and operationalizing the GGAC's strategic plan. The Early Hearing Detection Intervention (EHDI) Advisory Committee retains dedicated family partners attending the quarterly meetings and providing practical vision to the newborn hearing screening and EHDI programming. In August 2020, the EHDI Parent Support Team was formed which is entirely parent led. Family partners will also continue to attend the CSHCN Commission's two subcommittees – Behavioral Health and Oral Health. These groups provide feedback and recommendations on services or policies impacting Medicaid populations. Efforts to empowering the youth and integrating their voice throughout Title V endeavors continue to broaden. One new parent/youth program engagement opportunity will include the development of a training cadre to explain the medical home constructs targeting families of children with all abilities. The training will incorporate AAP elements of a medical home and how parents can build and maintain a successful partnership with their child's health provider, along with empowering their child to be comfortable in eventual ownership of their health care, including transition to adult health care. In addition, plans are in place to explore the expansion of the training about dental home strategies for serving Hispanic populations. FY21 saw the development and piloting of a new sexual health curriculum for children with disabilities. This training curriculum was designed by family partners with a vision of developing a cadre of parent trainers and continuing the Branch's commitment of peer to peer training models.

Many BFPs have shared their experiences about their involvement. One parent said, "The number of areas that I'm able to share information about the Branch has grown because of the local community's awareness of this Division. And because the Branch has become a supporter and promoter of parent lead activities, others now find this a creditable service to offer and are following the Branch's lead. Agencies are asking 'how did you do that' so parents are seen as leaders and experts and being asked to share their story and advice on engaging other parents and agency professionals." Another parent shared, "Coming from a perspective of a family partner who has been involved with the Branch and other community organizations, the progress we [the Branch] have made [regarding authentic family engagement] and the timeframe should be modeled across the country." Recently a bilingual parent trainer said, "After my son was diagnosed and after all the process with the surgeries, I reflected about how lonely I felt during the process, and how I would love to know parents in the same situation to talk with and share things that only they would understand. I had the opportunity to be trained as a parent leader and become a trainer, and that was the moment when I really felt I was helping families because I had direct contact with them and they were able to share concerns, good and bad experiences. I liked to see how excited they were able to learn new things that they will share with new families. That makes me feel very happy to actually see the results of what I'm doing. Thank you for this wonderful opportunity."

Staff members of the WCHS, as state employees, cannot advocate directly to the state legislature or US Congress on behalf of their programs; however, they can provide information to family partners to help them in their advocacy work.

III.E.2.b.iii. MCH Data Capacity

III.E.2.b.iii.a. MCH Epidemiology Workforce

The MCH epidemiology workforce of WCHS is strong. There are twenty full-time equivalent positions whose primary roles and responsibilities include coordinating data collection and analysis activities to guide effective monitoring, evaluation, and surveillance efforts and to help with program policy development and program implementation. Each of the staff members have formal and on the job training and, based on their position responsibilities, fall along the spectrum of having the Competencies for Applied Epidemiologists in Governmental Public Health Agencies (Assessment and Analysis, Basic Public Health Sciences, Communications, Community Dimensions of Practice, Cultural Competency, and Financial and Operational Planning and Management) created by the CDC and the Council of State and Territorial Epidemiologists. Currently there are four Public Health Epidemiologist positions across the Section (one each in the Section Office, WHB, IB, and NSB) and 16.5 FTEs in additional data positions. Title V funding supports four of the positions in full (including the .5 FTE position) and one position partially. The remaining positions are covered by Title X, MIECHV, Healthy Start, SSDI, state funding, and other funding sources. The table below displays the breadth of data positions across the branches within the WCHS, listing the position title and level of education for each position that is currently filled. There are four vacant data positions at the moment with active recruitment efforts underway to fill them. Two former C&Y Branch staff members with master's degrees are working part-time (.5 FTE each) to cover the position duties for the C&Y Branch vacancy. Four data positions may be moved to the new Division of Child and Family Well-Being (the Nutrition Public Health Epidemiologist and three Early Intervention Branch data analyst positions), but the WCHS will continue to collaborate with them and share data as much as possible.

WCHS MCH Epidemiology Workforce	
Working Title	**Education Level**
WCH Section Office	
MCH Epidemiologist	Master's
SSDI Project Coordinator/Data Analyst	Master's
Children & Youth Branch	
Data Manager	Master's
Early Hearing & Detection Data Coordinator	Master's
Data Analyst	Vacant
Women's Health Branch	
Reproductive Health Data Manager	Master's
Teen Pregnancy Prevention Initiatives Evaluation Consultant	Master's
Evaluator Personal Responsibility Education Program (PREP) Evaluator	Master's
Maternal Health Epidemiologist	Doctorate
NC Healthy Start Baby Love Plus/Healthy Beginnings Data Manager	Bachelor's
Sickle Cell Data Manager	Master's
Maternal Health Program Manager (.5 FTE data manager)	Vacant
Immunization Branch	
Immunization Epidemiologist	Master's
Data Coordinator	Master's
Data Analyst	Bachelor's
NC Immunization Registry Unit Manager	Bachelor's
Data Coordinator	Vacant
Nutrition Services Branch	
Nutrition Epidemiologist	Master's
Early Intervention Branch	
Data Manager	Master's
Data Coordinator	Bachelor's
Data Coordinator	Vacant

Another critical piece of the MCH epidemiology workforce in NC is the existence of the NC State Center for Health Statistics (SCHS) which is responsible for data collection, health-related research, production of reports, and maintenance of a comprehensive collection of health statistics. According to their website (https://schs.dph.ncdhhs.gov/), the SCHS provides:

- A source of information to monitor the health conditions of North Carolinians
- Analyses of important health issues, such as birth defects and infant mortality statistics
- A central collection site for information about cancer, birth defects, births, deaths, marriages and divorces
- Accurate and timely information for use in setting health policy, planning prevention programs, directing resources and evaluating the effect of health programs and services
- A safe and secure environment for its confidential records

WCHS provides Title V funding to the SCHS which is used to partially support several positions (SCHS Director, Statistical Services Unit Manager, and Birth Defects Monitoring Program staff, admin staff, and temps), as well as fully funding a statistician position in the Statistical Services Unit which supports the work of the Child Fatality Task

Force preparing child death data reports and analyses. Title V funding is also used to support the Behavioral Risk Factor Surveillance System and Pregnancy Risk Assessment Monitoring System.

Title V funding also funds several positions in the Injury and Violence Prevention Branch (IVPB) within the CDIS. The Section's collaboration with IVPB strengthens the MCH epidemiology workforce, particularly in the area of youth suicide and violence death prevention. Funding partially supports two injury epidemiology positions (Injury Epidemiologist Supervisor and the NC Violent Death Reporting System Supervisor) as well as supporting a Suicide Prevention Program Manager position and contributing to the IVPB Head position, along with providing some operating expenses to the Section.

The Perinatal Health Strategic Planning Team's Data and Evaluation Work Group began meeting in 2014 with the inception of the strategic plan and has evolved over time to include participants from the WCHS, SCHS, and partner organizations such as NC Child, March of Dimes, Collaborative for Maternal and Infant Health, Tobacco Prevention and Control Branch/CDIS, and the NC Coalition Against Domestic Violence at its monthly meetings. The Work Group's purpose, which was revised slightly in spring 2021 in anticipation of the release of the 2021-25 Perinatal Health Strategic Plan, is to provide guidance related to data and evaluation to the larger Planning Team, review individual, family, and community data across North Carolina, and identify strategies measuring the success of the Plan to inform policy and practice. The Work Group was instrumental in helping the larger Planning Team identify performance indicators for the new version of the plan and will update these indicators annually.

In addition, the WHB has just reinstituted a Data Team that meets monthly to better connect the Branch's programs and data, streamlining data processes and creating better ways to disseminate data in meaningful ways within the Branch. They also serve as a resource group for all WHB data needs.

The DPH Epidemiology and Evaluation Team (EET) provides a monthly forum for epidemiology and evaluation staff members to share works in progress in a friendly, respectful atmosphere and to obtain constructive feedback and assistance with project challenges. Anyone who self-identifies as having some job responsibilities in epidemiology or evaluation and/or anyone with a strong interest in epidemiology or evaluation is welcome. EET held its 20th Annual EET Poster Day in June 2021, with participants able to share posters created for local, state, and national conferences with DPH staff members. Prior to 2020, Poster Day was held in a conference room on the DPH campus with more than 100 people attending. Moving it to a virtual platform in 2020 due to the COVID-19 pandemic has limited the number of presentations, but perhaps helped EET attract a wider audience as participants can view the recording of the presentations at their convenience.

All staff members that make up the MCH epidemiology workforce within the WCHS are encouraged to participate in local, state, and national conferences and seek out professional development opportunities such as the DPH SAS Users Group, the AMCHP Conference, and the CityMatCH Leadership and MCH Epidemiology Conference.

During the COVID-19 pandemic, many members of the MCH epidemiology workforce described above provided countless hours to the NC DPH Epidemiology Section to provide data entry and analysis to update the NCDHHS COVID-19 Metrics Dashboard. The MCH Epidemiologist worked as a member of the Epi COVID Data Team from May to December 2020, assisting with daily, weekly, and ad hoc statistical analysis and reporting, providing on-boarding training to new Epi COVID Data Team members, and developing reports demonstrating the burden of the COVID-19 pandemic on women, infants, and children, all while continuing to provide data support to the WCHS as needed. In 2021, MCH epidemiology workforce members of the WHB were deployed to help with COVID vaccine data entry efforts, and, of course, the Immunization Epidemiologist and her coworkers have been engaged in all COVID-19 vaccination efforts along with the WCHS Section Chief.

III.E.2.b.iii.b. State Systems Development Initiative (SSDI)

The WCHS uses State Systems Development Initiative (SSDI) funding to maintain the current SSDI Project Coordinator's position. The primary role of this position is to help increase the Section's capacity to utilize and analyze data to assess, plan and evaluate maternal and child health services provided by the Section. Two goals of the grant are to 1) build and expand state MCH data capacity to support the Title V MCH Block Grant program activities and contribute to data-driven decision making in MCH programs, including assessment, planning, implementation, and evaluation; and 2) to advance the development and utilization of linked information systems between key MCH datasets in the state. These goals complement the work of the WCHS as a whole.

It is fortunate for the WCHS that the NC SCHS has a long history of collecting vital statistics data, linking data with infant birth certificates, and in conducting statewide surveys; thus, the work of the SSDI Project Coordinator is to promote data utilization and provide better means of data distribution. The SCHS website houses the Tracking Maternal and Child Health Data in NC webpage which provides trend data for the Minimum/Core (M/C) Dataset for Title V MCH Block Grant programs that is compiled by the SSDI Project Coordinator.

The WCHS partnership with the SCHS supports accessible, timely and linked MCH data systems, as documented on Form 12. Since 1985, NC has linked Medicaid newborn hospitalization records to live birth certificates to identify which births were to families enrolled in Medicaid. This birth file with added health services data is referred to as the NC Composite Linked Birth File. Data from this birth file are posted on the SCHS website in a variety of ways. Data that are linked annually to the live birth file include:

- Medicaid newborn enrollment records
- Medicaid maternal delivery records
- Summary of Medicaid newborn costs in the first 60 days of life
- Summary of Medicaid infant costs in the first year of life
- Prenatal WIC records
- Infant death records
- Maternal death records
- Birth defects cases identified through the Birth Defects Registry surveillance system
- Pregnancy Risk Assessment Monitoring System (PRAMS) survey data

Linkages with hospital discharge records for newborns and for mothers/delivery records are currently under development.

The MCH Epidemiologist, a position supervised by the SSDI Project Coordinator, has direct electronic access to the NC Composite Linked Birth File as well as to other vital statistics data, hospital discharge, and emergency department data. In addition, she can access newborn hearing screening data from WCSWeb Hearing Link. Staff members within the Genetic Newborn Screening Unit in the C&Y Branch have access to newborn bloodspot screening data, and the epidemiologist in the Nutrition Services Branch has access to additional WIC data. While the WCHS has had consistent access to PRAMS data for many years (and access to the electronic data source on an as needed basis), an application for CDC funding was not submitted by SCHS in 2020. However, the SCHS has committed to conducting an in-house PRAMS-like survey to obtain similar data for WCHS surveillance.

The SSDI Project Coordinator and MCH Epidemiologist serve on the Maternal Health Innovations (MHI) Evaluation Team and have helped orient the new MHI Epidemiologist hired in February 2021. The MCH Epidemiologist supports the work of the Maternal Mortality Review Committee by identifying pregnancy-associated deaths through multiple data sources including vital statistics data linkages, literal cause(s) of death recorded on death certificates, diagnoses record on hospital discharge and emergency department data, and pregnancy checkbox information on

the death certificate. She also prepares data reports on severe maternal morbidity for use by the WCHS and collaborates with academic and HRSA colleagues. During FY20, the MCH Epidemiologist also conducted analysis and participated on the North Carolina state team as part of the Medicaid Innovation Accelerator Program (IAP) technical assistance project on Maternal Mortality/Severe Maternal Morbidity (MM/SMM). As part of this project, the MCH Epi conducted comparative analysis of SMM data sources for the Medicaid population which will guide future surveillance in the state. In addition, she makes annual presentations to the Child Fatality Task Force and relevant committees regarding infant and child deaths.

The SSDI Project Coordinator is responsible for coordinating the completion of the MCH Block Grant narrative by working with the WCH Section Management Team (SMT) and Branch staff members. She provides rationale for the MCH Block Grant national and state performance measure objectives and assists with the development of the evidence-based or -informed strategy measures (ESMs) and the State Action Plan. She works with data coordinators, epidemiologists, and evaluators within the section to compile the necessary data for the Block Grant. The Federally Available Data (FAD) Excel workbook is extremely helpful in making comparisons from one year to the next and across demographic and other subgroups.

NC chose option b – Provide data support to states participating in quality improvement (QI) activities (e.g., Collaborative Improvement and Innovation Networks [CoIIN]) – as its state-specific goal based on the SSDI Project Coordinator's involvement in the CoIIN efforts to reduce infant mortality. She continues serve as coordinator of #impactEQUITYNC, which is a partnership of the WCHS and several non-profits. #impactEQUITYNC was initially started to create and promote the use of a Health Equity Impact Assessment tool, but in the upcoming year will also be taking on some of the work initially begun with the Social Determinants of Health CoIIN. The SSDI Project Coordinator worked with a subgroup of #impactEQUITYNC members to revise the Health Equity Impact Assessment Tool during the spring/summer of 2021.

As needed, the SSDI Project Coordinator also provides data support to staff members across all the branches in WCHS. Recent and ongoing examples of this support include assisting with the strategic planning efforts of the WCHS, serving as the chair of the Data and Evaluation Work Group of the Perinatal Health Strategic Planning Team, assisting with ongoing evaluation of the ICO4MCH initiative, and serving as a co-coordinator of the NC DPH Epidemiology and Evaluation Team. During FY21, the Data and Evaluation Work Group created a data brief highlighting the accomplishments and challenges experienced with implementation of the 2016-2020 Perinatal Health Strategic Plan. The SSDI Project Coordinator also served as a co-chair of the DPH Health Equity Committee for two years and helped extensively with the release of the DPH Health Equity Framework by coordinating the creation of a video and virtual Town Hall led by the DPH Division Director.

III.E.2.b.iii.c. Other MCH Data Capacity Efforts

In addition to those data and information systems mentioned previously, there are several others employed by the WCHS and throughout NC DPH and NCDHHS that help support access to up-to-date MCH data. Again, the SCHS is a key resource as it provides so many different data reports and analyses based on vital statistics data. In 2018, LHD clinical service data reporting and analysis moved to a secure, direct file upload format called the Local Health Department Health Services Analysis (LHD-HSA) system and located at the SCHS. Data analysis now occurs by SCHS statisticians using SAS. Quarterly and ad hoc custom reports are available on program-specific data and cross-cutting public health issues. Some of these data are used by the WHB in their LHD agreement addenda Outcome Objectives Data Reports and in the Family Planning Annual Report (FPAR).

The SCHS website also hosts the Healthy North Carolina 2030 (HNC 2030) report and 2020 State Health Improvement Plan, which is a companion report to HNC 2030 and the 2019 NC State Health Assessment. The HNC 2030 Scorecard supports the 2020 State Health Improvement Plan as LHD and other partners link their local scorecards to the state scorecard to show the collective impact occurring statewide on 21 population indicators. Results-based accountability drives the HNC 2030 plan (asking how much did we do, how well did we do it, and is anyone better off), and the scorecard shows change over time as well as providing the story behind the data.

The SCHS is committed to restructuring its current website to a modern website that is centered on using data to highlight health equity and disparities. The Center initially decided to use open-source software called Indicator-Based Information System for Public Health (IBIS-PH) but abandoned this approach in May 2021 because the software did not have strong documentation, technical assistance was limited, and NC felt it could build a similar system with existing resources. The NC Community Health and Equity Indicators (NC CHIE) website prototype will be available in December 2021 for focus group testing (pending COVID-19 pandemic delays). Plans are to display the data with attention to low health literacy needs with respectful portrayals of community data. The website will include HNC 2030 Indicators and a Health Equity Dashboard.

Additionally, our MCH Epidemiologist routinely collaborates with statistical staff at the SCHS on a variety of Vital Statistics data quality improvement projects to help ensure the accuracy of NC MCH data. SCHS and WCHS collaborations have included resolving errors in prenatal care information in the birth file, generating facility level birth data quality reports, and verifying the accuracy of pregnancy checkbox information on the death certificate through data linkages and certifier confirmation of pregnancy.

In addition to the NC Composite Linked Birth File described earlier, each month a subset of the birth file is shared with the Early Hearing and Detection Intervention (EHDI) program which is matched with newborn screening data through the WCSWeb Hearing Link data system to ensure proper follow up. The MCH Epidemiologist works closely with EHDI program staff to enhance access to birth data and improve EHDI/birth data linkage rates.

The NC Early Childhood Integrated Data System (ECIDS), a system integrating early childhood education, health, and social services data from state agencies is now in use and continues to be updated. The Early Childhood Action Plan Data Dashboard tracks progress toward the targets and sub-targets of the 2025 goals of the NC Early Childhood Action Plan (ECAP). ECAP County Data Reports are also available. The WCHS also relies heavily on NC Child, a non-profit founded in 2014 to “advance public policies to ensure that every child in North Carolina has the opportunity to thrive – whatever their race, ethnicity, or place of birth” (https://ncchild.org/about-us/ accessed July 26, 2021) in using data from their NC Child Health Report Card, published biannually in partnership with the NC Institute of Medicine, and using KIDS COUNT data which is available through NC Child’s partnership with the Annie E. Casey Foundation.

The NC Violent Death Reporting System (NC-VDRS) is a CDC-funded statewide surveillance system that collects detailed information on deaths resulting from violence (homicide, suicide, unintentional firearm deaths, legal intervention, and deaths for which intent could not be determined) that occur in NC. NC-VDRS began collecting data in January 2004 from a number of data sources such as death certificates, medical examiner reports, and law enforcement reports. In 2021, the IVPB released the NC-VDRS Data Dashboard visualization tool, providing key takeaways on the metrics page and providing more detail including data at a county and demographic level where available on individual pages of the dashboard covering overall violent death, suicide, homicide, and firearm-related deaths.

The IVPB also oversees two other dashboards. The NC Opioid Action Plan Data Dashboard which provides integration and visualization of state, regional, and county-level metrics for stakeholder across the state to track progress toward reaching the goals outlined in the NC Opioid Action Plan. The NC Alcohol Data Dashboard presents data on excessive alcohol use, alcohol outlet density, and alcohol consumption rates as well as related public health strategies, immediate- and long-term impacts of excessive use, and cost to communities.

Immunization data from the NC Immunization Registry (NCIR), a web-based statewide-computerized immunization information system that maintains and consolidates immunization records, is used to assess provider-level vaccination coverage.

As outlined in the MCH Success Story, the NC WCHS is also making great strides with its Maternal Mortality Review Committee and implementing the MHI Program, and data sharing partnerships and quality improvement initiatives mentioned in that section will continue.

During the pandemic, WCHS has also been fortunate to have continuous access to COVID-19 surveillance and vaccine data for women and children in the state. The NC COVID-19 Dashboard was launched in May 2020 as an interactive data dissemination tool that provides an overview of COVID-19 metrics and healthcare capacities that the state is following to inform decisions. The dashboard has grown over time as the COVID-19 pandemic has progressed. As of July 2021, the Dashboard contains the following sections:

- Summaries
- County Alert System
- Vaccinations
- CLI Surveillance
- Cases
- Cases Demographics
- Testing
- Hospitalizations
- Hospitalization Demographics
- Contact Tracing
- Outbreaks and Clusters (*including weekly updates of clusters occurring in childcare or school settings*)
- Wastewater Monitoring
- Reports on COVID-19 Patients Presumed to be Recovered, Risk Factors for Severe Illness from COVID-19, and COVID-19 Cases in Rural Counties
- Data Behind the Dashboards

The COVID-19 Vaccine Management System (CVMS) is a secure, cloud-based system that enables COVID-19 vaccine management and data sharing across recipients, care providers, hospitals, agencies, and local, state, and federal governments on one common platform, in addition to the NCIR. (https://covid19.ncdhhs.gov/vaccines/info-

health-care-providers/covid-19-vaccine-management-system-cvms accessed July 26, 2021). Another tool to help NC reach its goal of vaccinating as many North Carolinians as quickly and fairly as possible is an interactive web-based map application that shows census tracts in North Carolina with the highest rates of social vulnerability and the lowest rates of COVID-19 vaccination. Access to timely vaccination data disaggregated by race, ethnicity, and other social determinants of health has guided North Carolina's work to reach underserved and historically marginalized populations and deliver equitable access to COVID-19 vaccines.

WCHS is also working with NCDHHS to refine our data use and data sharing agreements throughout the Department. A draft of the NCDHHS Data Sharing Guidebook was shared with the DPH EET in November 2020 with a request to complete data asset inventory forms. According to the draft, the purpose of the Guidebook is to:

- Establish clear pathways for data sharing and integration, for requestors and data owners
- Establish a common legal framework for data sharing and integration across NCDHHS
- Support data use that leads to improved data quality, insights, and improvements
- Clarify processes to reduce burden on staff requesting and granting access to data, increase efficiencies, and ensure privacy and security safeguards

Work to finalize these data sharing processes across NCDHHS and within NC DPH is continuing. DPH's Office of Regulatory and Legal Affairs continues to review current WCHS data use agreements and discuss revisions with the Title V Director and other staff members to ensure data access and security are maintained.

III.E.2.b.iv. MCH Emergency Planning and Preparedness

According to the NC Emergency Operations Plan (NCEOP) 2020 Plan Summary, the NCEOP "establishes a comprehensive framework of policy and guidance for state
and local disaster preparedness, response, recovery and mitigation operations. The plan details capabilities, authorities and responsibilities. It establishes mutual understanding among federal, state, local and other public and private non-profit organizations. The NCEOP is designed for worst case scenarios – to include catastrophic events." In addition, it describes a system of how to effectively use both Federal, State, and local government resources as well as private resources and is intended in all instances to be consistent with the National incident Management System. The NCEOP is reviewed annually, with the most recent updates made in September 2020 and posted in December 2020. If, after the annual plan review, more than 25% of the content requires a change, a revision occurs to the plan. The most recent revision of the NCEOP was in August 2017, with only updates (<25% of the content changed) occurring at least annually since then.

Again, per the NCEOP 2020 Plan Summary, "Chapter 166A of the North Carolina General Statutes establishes the authority and responsibilities of the Governor. The Governor delegates authority to the Secretary of the Department of Public Safety who will serve as the State Coordinating Officer (SCO) and will be responsible for direction and control of state operations. The Secretary of the Department of Public Safety delegates authority to the NCEM [NC Emergency Management] Director who is granted the responsibility and authority to respond to emergencies and disasters."

The Operations Section of the State Emergency Response Team (SERT) is responsible for coordinating and directing state government and emergency management field activities in response to emergencies and recovery from disasters. There are four branches that fall under the Deputy Operations Chief which are Communications, Emergency Services, Human Services, and Infrastructure. While the needs of the MCH population are considered under each of these branches, they are particularly supported by the Emergency Services Branch as they manage the delivery of health and human related services in times of disaster for all citizens, but especially the most vulnerable including children, elderly, disabled, and low-income families. The SERT is comprised of subject matter experts from state agencies, including NCDPH, private industry, voluntary, and faith-based organizations.

DPH activities, coordinated under the leadership of NCDHHS and supported by Public Health Law, Chapter 130A of the NC General Statutes, include assessment of public health needs, human health surveillance, food and drug device safety, public health information, vector control, biological hazards, and victim identification and mortuary services, among others. There is a Public Health Preparedness and Response Steering Committee that meets quarterly as part of the Communicable Disease and Biohazard Response Operations, and the University of North Carolina houses a Center for Public Health Preparedness which delivers training, conducts research, and provides technical assistance to public health professionals statewide. If there is an infectious disease outbreak, the Public Health Command Center will be activated. The NC Public Health Information Network (NCPIHN) is used to monitor and provide alerts for cases and outbreaks of human illness and integrates routine disease surveillance, syndromic surveillance through the NC Disease Event Tracking and Epidemiologic Collection Tool (NCDETECT) and the Health Alert Network (HAN). NC DPH also leads the Public Health Heat Emergency Response Work Group.

WCHS is frequently involved in response activities, whether it be in response to hurricanes that frequently impact North Carolina or the COVID-19 pandemic. WCHS staff work closely with others on activities such as making sure that vaccine is appropriately stored and distributed where needed under adverse conditions, that metabolic formula reaches those families in need, shelters are staffed by public health nurses, or ensuring that the nutritional needs of infants, children and families are met while maximizing flexibility under federal waivers. While the WCHS is not an official member of the SERT (the Chronic Disease and Injury Section, Epidemiology Section, and Office of the Chief

Medical Examiner represent the Division along with the Division Director), the Title V Director and other staff are called upon as needed depending on the type of emergency response that is warranted. WCHS support for LHD is ongoing, and is enhanced during times of emergencies.

Within 30 days of employment, all WCHS employees are required to complete two online Incident Command System Trainings offered through the Federal Emergency Management Agency Emergency Management Institute. The courses, ICS-100: Intro to Incident Command System (ICS) and ICS-700: Intro to National Incident Management System (NIMS), provide overviews of the principles and basic structures of ICS and NIMS and explain the relationship between them.

In addition, WCHS employees are required to familiarize themselves with the DPH Emergency Action Plan during orientation as well as receive a copy of the site-specific Emergency Evacuation Plan for their work location which they review with their supervisor.

Within the WCHS, the NC Office of Disability and Health has a strong partnership with SERT and NCEM. They work together to improve preparedness efforts for children and adults with disabilities through involvement in statewide workgroups including C-MIST (Communication, Maintaining health, Independence, Support and Safety, and Transportation) Advisory Committee, Shelter Accessibility Workgroup, and Functional Assessment Support Team (FAST) Workgroup. They scheduled the May 2020 Disaster Preparedness for Children and Youth with Special Needs: Creating Inclusive Strategies Summit which had to be cancelled due to the COVID-19 pandemic, but virtual webinar presentations were provided instead.

NCDHHS is working to build upon our strengths and the lessons learned from the pandemic to craft an even stronger, more integrated Department and is establishing an Office of Emergency Preparedness, Response, and Recovery to bring together teams from across the Department to prepare for, respond to, and recover from disasters and health emergencies affecting North Carolina. This new office will strengthen and streamline our coordination and partnership with the Division of Emergency Management at the Department of Public Safety. Our ongoing COVID-19 pandemic response will be led by this office.

III.E.2.b.v. Health Care Delivery System

III.E.2.b.v.a. Public and Private Partnerships

As the NC Title V Program is housed in the WCHS and the WCHS Chief is responsible for administering both the Title V Program and the other federal and state programs currently located in the five Branches, the Title V Program's relationship with other MCHB investments (e.g., SSDI, MIECHV, ECCS, etc.) and other Federal investments (e.g., PREP, WIC, Immunizations, etc.) is very strong. Through the SMT weekly meetings and other opportunities, the Title V Director and Branches discuss plans and activities to work with partners. The weekly DMT meetings provide an avenue for the Section Chief to partner with administrators of other HRSA programs and other programs within the NC DPH (e.g., chronic disease, vital records, injury prevention, etc.). The NC Association of Local Health Directors (NCALHD) meets monthly, and, on the day prior to each of these meetings, committee meetings are held which include staff members from WCHS and other DPH Sections which enable the Title V Program to work collaboratively with NCALHD on matters that pertain to all LHDs. WCHS staff members, particularly the Regional Nurse, Social Work, Immunization, and Nutrition Services Consultants, also visit the LHDs regularly to perform monitoring and consulting duties and to provide technical assistance.

As highlighted in the 2020 Five-Year Needs Assessment, WCHS strives to align Title V activities with strategic plans, programs, and projects that are already in place in NC to serve the MCH population across the life course. These include, but are not limited to, the following:

- NC Early Childhood Action Plan
- NC Opioid Action Plan
- Maternal Mortality Review Committee
- NCIOM Perinatal System of Care Task Force
- NCIOM Maternal Health Task Force
- NC Public Health Genomics Plan
- Home Visiting Parent Education Collaborative
- Healthy NC 2030
- NC State Health Improvement Plan
- Integrated Care for Kids (InCK)
- Perinatal Health Strategic Plan
- NC Infant-Toddler Program State Systemic Improvement Plan (SSIP)
- NC Child Fatality Task Force
- Pathways to Grade Level Reading
- Think Babies™ NC
- Children & Youth Branch Strategic Plan
- Children & Youth with Special Health Care Needs Strategic Plan
- NCIOM Essential for Childhood Task Force Recommendations

The NCDHHS houses the state's Medicaid, Social Services/Child Welfare programs, so within the management structure of the Department, interagency coordination is expected and facilitated between the Title V Program and those programs. A copy of the current Inter-Agency Agreement between the state's Medicaid agency and the Title V program is included in this application. As highlighted in other sections of this application, NC is in the midst of transitioning from a predominantly fee-for-service Medicaid delivery system to managed care, and the WCHS has been in partnership, and will continue to be in partnership, with NC Medicaid throughout that transition. NCDHHS anticipates an evolving agreement as we more fully transition to Medicaid managed care.

Additionally, the DPH is signatory to a formal written agreement with the Division of Vocational Rehabilitation

(assumes responsibility for Supplemental Security Income eligibility determination). Programs within the WCHS also collaborate with the Division of Public Instruction (DPI); ORHCC (works with federally qualified health centers and other primary care providers); and Division of Child Development and Early Education (DCDEE). The WCHS also collaborates with the Department of Insurance closely on ACA and the Department of Corrections around incarcerated parents and other issues.

There are fourteen accredited schools of public health in NC and WCHS maintains close working relationships with many of them, particularly the UNC-Chapel Hill Gillings School of Global Public Health with its Department of MCH, but also with the Departments of Public Health at UNC-Greensboro and East Carolina University and the Department of Public Health Education at NC Central University. Division staff members serve as adjunct faculty members and are frequent lecturers, in addition to serving on advisory committees. Faculty members are asked to participate in DPH and WCHS planning activities to provide review and critique from an academic and practice perspective. The Title V Director also serves on the Residency Advisory Committee for the UNC Preventive Medicine Residency at the UNC School of Medicine, facilitating networking and public health rotations.

WCHS also collaborates on a number of activities with several professional organizations in the state including: NC Medical Society: NCPS; NC Obstetrical and Gynecological Society; Midwives of NC; NC Friends of Midwives; and the NC Academy of Family Physicians. WCHS partners with the NC Institute of Medicine, the NC Healthcare Association, and the NC Area Health Education Centers. The Section works closely with the NC Partnership for Children (SmartStart), Prevent Child Abuse NC, NC Child, the NC Chapter of the March of Dimes, SHIFT (Sexual Health Initiatives For Teens) NC, CCNC, and the Perinatal Quality Collaborative of North Carolina (PQCNC), along with many other organizations.

DPH has a Quality Improvement Council that provides guidance to Continuous Quality Improvement (CQI) efforts across the division, and WCHS staff members have been involved in various projects to improve customer service and business office processes. Individual programs have also used CQI tools at different times to improve services to LHDs, providers, and clients. While there is a long way to meeting the longer-term vision for QI at DPH to achieve a culture of quality, the WCHS strives to continually evaluate if the work that is being done is meeting the needs of women, infants, children, and families in NC. HNC 2030 and the accompanying 2020 NC State Health Improvement Plan both incorporate the principles of results-base accountability which should also help drive quality improvement. Examples of specific quality improvement and innovation efforts by the WCHS are provided in the State Action Plan narratives.

III.E.2.b.v.b. Title V MCH – Title XIX Medicaid Inter-Agency Agreement (IAA)

DPH and WCHS have a long history of partnering with NC Medicaid to ensure quality services and programs. WCHS staff members serve on a number of different interagency NC Medicaid committees and work teams to plan, coordinate, and evaluate Medicaid services. The current Title XIX Medicaid Inter-Agency Agreement (IAA)/Memorandum of Agreement (MOA) which is included as an attachment to this application details the specifics of areas of coordination and collaboration between NC Medicaid and DPH. A full revision to this IAA/MOA is underway, so the current IAA/MOA will be extended by NC Medicaid for a couple of months in order to finalize the revisions.

The NC Division of Health Benefits' enrollment dashboard for Medicaid and NC Health Choice (https://medicaid.ncdhhs.gov/reports/dashboards#enroll) reflects the number of people by county and program aid category who are authorized to receive Medicaid or Health Choice services for each report month. According to the NC Medicaid and NC Health Choice Annual Report for State Fiscal Year 2020, in SFY20, NC Medicaid provided access to care and services to 2.2. million people in the state. Many of these people were served through outreach and enrollment efforts of Title V programs and partners. NC Medicaid beneficiaries account for more than 55% of all deliveries which is up from 38% of births in 2006. Through Health Check (Early and Periodic Screening, Diagnostic and Treatment), more than 96% of children under one year of age received all recommended preventive check-ups and more than 59% of all eligible children received periodic screenings on the schedule recommended by the American Academy of Pediatrics.

WCHS and NC Medicaid staff members work together to coordinate outreach efforts for NC Medicaid care management programs serving high-risk pregnant women and at-risk children ages zero-to-five as well as for other programs serving the MCH population such as the NC "Be Smart" Family Planning Medicaid Program. In addition, the C&Y Branch has an outreach team consisting of the Minority Outreach Coordinator, CYSHCN Help Line Coordinator, and CYSHCN Access to Care Coordinator who are committed to increasing the number of children who have health insurance and to enroll eligible children into NC Medicaid/Health Choice (the Children's Health Insurance Program). A description of their work is found in the Cross-Cutting/Systems Building Annual Report. With the transition to managed care, the WCHS will also participate in the Pediatric Advisory Group and the Maternal Health Advisory Group convened by the Perinatal Quality Collaborative of NC (PQCNC) to provide direct input to the Division of Health Benefits on current projects and ensure quality MCH programs.

Legislation to transform and reorganize NC's Medicaid and NC Health Choice programs from fee-to-service to managed care was passed in September 2015. NCDHHS was on track to go live with Medicaid transformation on February 1, 2020. However, in November 2019, the NC General Assembly adjourned without providing the required new funding and program authority for the transition to managed care, thus enrollment and implementation for the transition to managed care was suspended on November 19, 2019. With Medicaid Managed Care suspended, NC Medicaid continued to operate under the current fee-for-service model administered by NCDHHS, although providers continued to negotiate contracts with the Medicaid Managed Care health plan which also continued to prepare reporting data and update systems. In June 2020, the NC General Assembly passed legislation that was signed into law by Governor Cooper in July 2020 that mandated that Medicaid transformation happen by July 1, 2021. Despite the suspension and the additional burden placed on NCDHHS and provider to respond to the COVID-9 pandemic, NC Medicaid Managed Care launched on schedule. The goal of the state's transition to managed care is to improve the health of North Carolinians through an innovative, whole-person centered, and well-coordinated system of care and measurement of quality, which addresses both medical and non-medical drivers of health. NCDHHS created the NC Medicaid Managed Care Quality Strategy which details the aims, goals, and objectives for quality management and improvement and details priority QI initiatives, incorporating the quality activities of all managed care plans, including the Behavioral Health Intellectual/Developmental Disability (I/DD) Tailored Plans, the

Eastern Band of Cherokee Indians (ECBI) Tribal Option, and Community Care of NC.

All beneficiaries moving to NC Medicaid Managed Care were enrolled in one of five health plans or the EBCI Tribal Option. All health plans offer the same basic benefits and services, although some health plans offer added services, and some plans may require a copay. The five plans are AmeriHealth Caritas, Carolina Complete Health, Healthy Blue, UnitedHealthcare Community Plan, and WellCare. Beneficiaries had the option of selecting a health plan during open enrollment which ran from March 15 to May 18, 2021. They could enroll by calling the NC Medicaid Enrollment Broker Call Center, going to www.ncmedicaidplans.gov, or using the free NC Medicaid Managed Care mobile app. Those beneficiaries who did not choose a health plan by May 21 were automatically enrolled in a health plan by NC Medicaid, and the auto-enrollment process prioritized existing relationships between beneficiaries and their primary care provider. Federally recognized tribal members living in the Tribal service are who did not choose a health plan were enrolled into the EBCI Tribal Option which is primarily offered in five counties: Cherokee, Graham, Haywood, Jackson, and Swain to federally recognized tribal members and others eligible for services through Indian Health Service (IHS).

All pregnant women enrolled in NC Medicaid Managed Care through a health plan will continue to receive a coordinated set of high-quality clinical maternity services through the Pregnancy Management Program (Pregnancy Medical Home). This program will be administered as a partnership between the health plans and local maternity care service providers. A key feature of the program will be the continued use of the standardized screening tool to identify and refer women at risk for an adverse birth outcome to the Care Management for High-Risk Pregnant Women (CMHRP) program, a more intense set of care management services that will be coordinated and provided by LHDs. Together, these two programs will work to improve the overall health of women and newborns across the state. The Care Management for At-Risk Children (CMARC) program, provided by LHDs for at-risk children ages zero-to-five, promotes use of the medical home, links children and families to community resources, and provides education and family support.

The Behavioral Health and Intellectual/Developmental Disability (BH I/DD) Tailored Plan is scheduled to be launched July 1, 2022. The BH I/DD Tailored Plan will serve individuals with more serious behavioral health disorders (serious mental illness, serious emotional disturbance, and/or substance use disorders), I/DDs, and traumatic brain injuries. NCDHHS is investing in the Tailored Care Management model in which Behavioral Health I/DD Tailored Plan beneficiaries will have a single designated care manager supported by a multidisciplinary care team to provide integrated care management that addresses all of their needs including physical health, behavioral health, I/DD, traumatic brain injuries, pharmacy, and long-term services and supports along with addressing their unmet health-related resource needs.

As part of the transition to Medicaid Managed Care, NC plans to launch Healthy Opportunity Pilots in spring 2022. Up to $650 million in state and federal Medicaid funding has been authorized for these pilots. In May 2021, NCDHHS announced the selection of three organizations to serve three regions of the state. Access East Inc. and Community Care of the Lower Cape Fear are in eastern NC, and Dogwood Health Trust is in western NC. The goals of the pilots are to:

- Evaluate the effectiveness of select, evidence-based, non-medical interventions and the role of the Network Leads in improving health outcomes and reducing health care costs for high-risk NC Medicaid Managed Care members.
- Leverage evaluation findings to embed cost-effective interventions that improve health outcomes into the Medicaid program statewide, furthering the department's goals for a sustainable Medicaid program.
- Support the sustainability of delivering non-medical services identified as effective through the evaluation, including by strengthening the capabilities of Human Service Organizations and partnerships with health care

payers and providers.

III.E.2.c State Action Plan Narrative by Domain

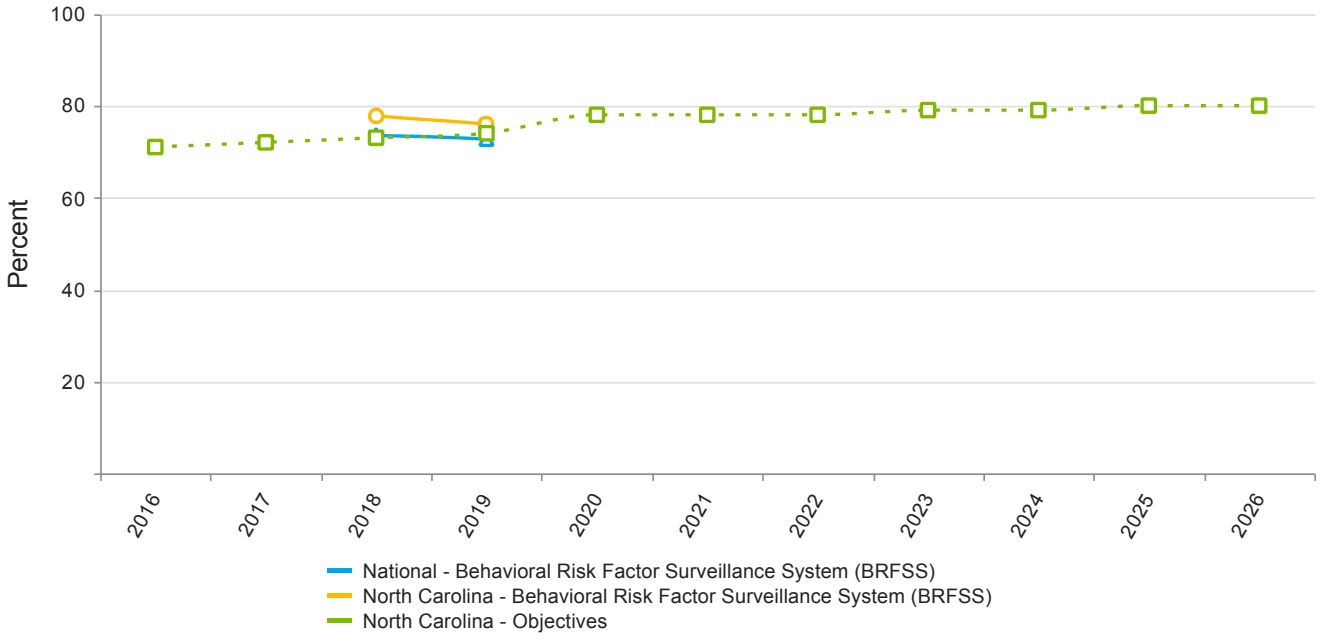
Women/Maternal Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations	SID-2018	74.0	NPM 1 NPM 14.1
NOM 3 - Maternal mortality rate per 100,000 live births	NVSS-2015_2019	18.2	NPM 1 NPM 14.1
NOM 4 - Percent of low birth weight deliveries (<2,500 grams)	NVSS-2019	9.3 %	NPM 1 NPM 14.1
NOM 5 - Percent of preterm births (<37 weeks)	NVSS-2019	10.7 %	NPM 1 NPM 14.1
NOM 6 - Percent of early term births (37, 38 weeks)	NVSS-2019	27.3 %	NPM 1 NPM 14.1
NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths	NVSS-2018	6.9	NPM 1 NPM 14.1
NOM 9.1 - Infant mortality rate per 1,000 live births	NVSS-2018	6.8	NPM 1 NPM 14.1
NOM 9.2 - Neonatal mortality rate per 1,000 live births	NVSS-2018	4.3	NPM 1 NPM 14.1
NOM 9.3 - Post neonatal mortality rate per 1,000 live births	NVSS-2018	2.5	NPM 1 NPM 14.1
NOM 9.4 - Preterm-related mortality rate per 100,000 live births	NVSS-2018	239.6	NPM 1 NPM 14.1
NOM 9.5 - Sudden Unexpected Infant Death (SUID) rate per 100,000 live births	NVSS-2018	111.8	NPM 14.1
NOM 10 - Percent of women who drink alcohol in the last 3 months of pregnancy	PRAMS-2019	7.9 %	NPM 1
NOM 11 - Rate of neonatal abstinence syndrome per 1,000 birth hospitalizations	SID-2018	10.2	NPM 1
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH-2018_2019	91.1 %	NPM 14.1
NOM 23 - Teen birth rate, ages 15 through 19, per 1,000 females	NVSS-2019	18.2	NPM 1
NOM 24 - Percent of women who experience postpartum depressive symptoms following a recent live birth	PRAMS-2019	10.7 %	NPM 1

National Performance Measures

NPM 1 - Percent of women, ages 18 through 44, with a preventive medical visit in the past year
Indicators and Annual Objectives



Federally Available Data					
Data Source: Behavioral Risk Factor Surveillance System (BRFSS)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective					78
Annual Indicator				77.6	76.1
Numerator				1,412,575	1,386,809
Denominator				1,820,993	1,823,266
Data Source				BRFSS	BRFSS
Data Source Year				2018	2019

Previous NPM-1 BRFSS data for survey years 2015, 2016 and 2017 that was pre-populated under the 2016, 2017 and 2018 Annual Report Years is no longer displayed since it is not comparable with 2018 survey data.

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	78.0	78.0	79.0	79.0	80.0	80.0

Evidence-Based or –Informed Strategy Measures

ESM 1.1 - Number of LHDs that offer extended hours for FP services.

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	15	
Numerator		
Denominator		
Data Source	NC Family Planning Program Service Site Informatio	
Data Source Year	2020	
Provisional or Final ?	Final	

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	15.0	15.5	16.0	16.5	17.0	17.0

ESM 1.2 - Percent of WHB programs that utilize the PCH Outreach and Education Toolkit

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	0.0	5.0	10.0	15.0	20.0	20.0

ESM 1.3 - Percent of LHDs who had staff complete training on reproductive justice framework, contraceptive methods, and reproductive life planning (RLP).

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	30.0	40.0	50.0	60.0	75.0	75.0

ESM 1.4 - Percent of LHDs offering same day insertion of both contraceptive implants and intrauterine devices (IUDs)

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	74.0	74.5	75.0	75.5	76.0	76.0

State Performance Measures

SPM 1 - Percent of PRAMS respondents who reported that their pregnancy was intended

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	55.8	
Numerator		
Denominator		
Data Source	NC Pregnancy Risk Assessment Monitoring System	
Data Source Year	2019	
Provisional or Final ?	Final	

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	59.7	60.0	60.3	60.6	61.0	61.0

State Action Plan Table

State Action Plan Table (North Carolina) - Women/Maternal Health - Entry 1
Priority Need
Improve access to high quality integrated health care services
NPM
NPM 1 - Percent of women, ages 18 through 44, with a preventive medical visit in the past year
Objectives
WMH 1A. By 2025, increase by 10% from 15 (Baseline May 2018) to 17 the number of LHDs that offer extended hours for FP services.
WMH 1B.1 Create the PCH Outreach and Education Toolkit by June 30, 2021.
WMH 1.B.2. By 2025, increase by 2% the number of individuals who receive preconception health services through LHDs.
Strategies
WMH 1A.1 Provide guidance and support to LHDs to offer family friendly clinical services in a manner that meets the varying needs of their community.
WMH 1A.2. Work with LHDs to increase awareness of their extended hours within their community.
WMH 1A.3. Develop a lesson learned document/compendium from existing LHDs that offer extended hours to share with potential new sites.
WMH 1B.1 Develop outreach and education toolkit for LHDs related preconception health services.
WMH 1B.2. Increase awareness of LHDs PCH services and provider type through social media and other outreach efforts.
WMH 1B.3. Provide education to other programs that serve similar populations such as of WIC, MIECHV, Healthy Start, Work First, and CMHRP.

ESMs	Status
ESM 1.1 - Number of LHDs that offer extended hours for FP services.	Active
ESM 1.2 - Percent of WHB programs that utilize the PCH Outreach and Education Toolkit	Active
ESM 1.3 - Percent of LHDs who had staff complete training on reproductive justice framework, contraceptive methods, and reproductive life planning (RLP).	Active
ESM 1.4 - Percent of LHDs offering same day insertion of both contraceptive implants and intrauterine devices (IUDs)	Active

NOMs

NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations

NOM 3 - Maternal mortality rate per 100,000 live births

NOM 4 - Percent of low birth weight deliveries (<2,500 grams)

NOM 5 - Percent of preterm births (<37 weeks)

NOM 6 - Percent of early term births (37, 38 weeks)

NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths

NOM 9.1 - Infant mortality rate per 1,000 live births

NOM 9.2 - Neonatal mortality rate per 1,000 live births

NOM 9.3 - Post neonatal mortality rate per 1,000 live births

NOM 9.4 - Preterm-related mortality rate per 100,000 live births

NOM 10 - Percent of women who drink alcohol in the last 3 months of pregnancy

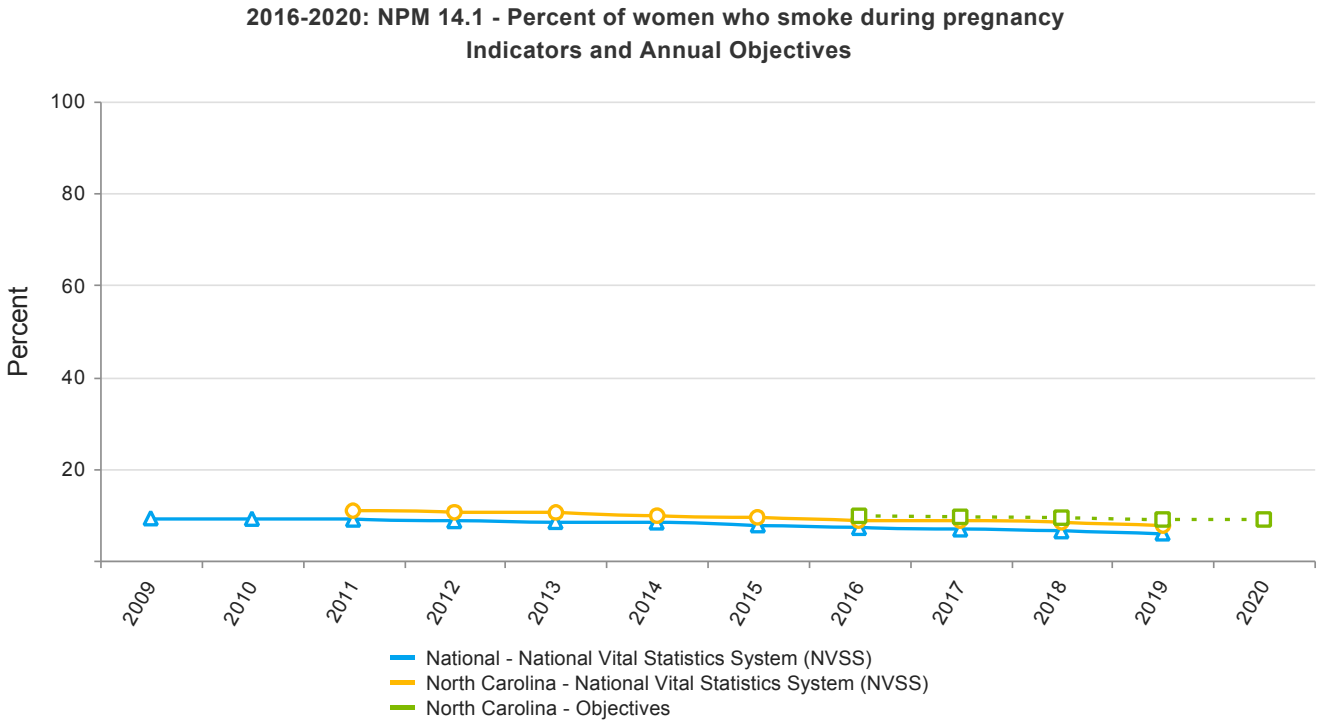
NOM 11 - Rate of neonatal abstinence syndrome per 1,000 birth hospitalizations

NOM 23 - Teen birth rate, ages 15 through 19, per 1,000 females

NOM 24 - Percent of women who experience postpartum depressive symptoms following a recent live birth

State Action Plan Table (North Carolina) - Women/Maternal Health - Entry 2
Priority Need
Increase pregnancy intendedness within reproductive justice framework
SPM
SPM 1 - Percent of PRAMS respondents who reported that their pregnancy was intended
Objectives
WMH 2A. By 2025, increase by 2.3% from 88% (Baseline May 2020) to 90% the percent of LHDs that provide access to highly effective comprehensive (all methods) contraceptive methods for women.
WMH 2B. By 2025, at least 76% of LHDs will have polices to implement same day insertion of contraceptive implants and intrauterine devices (IUDs) (Baseline December 2019 – 74% offer same day insertion).
WMH 2C. By 2025, reduce the rate of births to girls aged 15-19 per 1,000 population to 14 (Baseline 2018 N.C. teen birth rate 18.7/1,000).
Strategies
WMH 2A.1. Provide training for LHDs including the importance of offering all methods of contraceptives, reproductive justice framework, reproductive life planning (RLP).
WMH 2A.2. Partner with public health professional societies/organizations to provide information on latest evidence related to all contraceptive methods.
WMH 2A.3 Develop peer mentoring program between LHDs on the importance of offering all methods of contraceptives.
WMH 2B.1. Partner with Upstream to promote same-day access to the full range of contraceptive methods at low or no cost.
WMH 2B.2. Develop sample policies and clinic flows for LHDs related to same day insertion.
WMH 2B.3.Provide contraceptive education utilizing telehealth services prior to the clinical appointment.
WMH 2B.4. Provide consultation and technical support in addressing identified barriers for same day insertion.
WMH 2C.1. Provide training for Teen Pregnancy Prevention Initiatives (TPPI) agencies on applying a racial equity/reproductive justice/inclusivity lens to teen pregnancy prevention.
WMH 2C.2. Develop at least 4 workgroups across the TPPI network addressing topics including inclusivity, consent, virtual program implementation and reproductive justice/equity.
WMH 2C.3.Provide opportunities for youth to raise their voice in reducing teen pregnancy prevention through a statewide youth leadership council.

2016-2020: National Performance Measures



Federally Available Data					
Data Source: National Vital Statistics System (NVSS)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective	9.8	9.6	9.4	9	9
Annual Indicator	9.4	8.9	8.7	8.4	7.6
Numerator	11,300	10,780	10,403	9,936	8,991
Denominator	120,769	120,735	120,100	118,920	118,682
Data Source	NVSS	NVSS	NVSS	NVSS	NVSS
Data Source Year	2015	2016	2017	2018	2019

2016-2020: Evidence-Based or –Informed Strategy Measures

2016-2020: ESM 14.1.1 - Number of women of reproductive age (15 to 44 years) who received at least one counseling session from the tobacco QuitlineNC in the prior 12 months

Measure Status:				**Active**	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		2,500	3,200	3,000	3,000
Annual Indicator	2,060	3,167	2,740	1,652	1,569
Numerator					
Denominator					
Data Source	QuitlineNC Data Report	QuitlineNC Data Report	QuitlineNC Data Report	QuitlineNC Data Report	QuitlineNC Data Report
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

The WHB develops and promotes programs and services that protect the health and well-being of reproductive age women and men, along with infants and families. The WHB's goal is to improve the overall health of women and men, reduce infant sickness and death, and strengthen families and communities. The WHB also offers guidance, consultation and training for entities that provide health services for individuals of reproductive age.

NPM#1 – Percent of women, ages 18 through 44, with a preventive medical visit in the past year

Increasing the percentage of women with a past year preventive medical visit (NPM#1) is a critical piece of the work of the WHB. Per data from the 2019 BRFSS, 76.1%% of women ages 18 to 44 surveyed had received such a service which is higher than the national rate (72.8%), but is a bit lower than the 2018 NC rate of 77.6% (although confidence intervals overlap for the two years). Of the women who responded to the 2019 survey, those with higher income, higher educational attainment, and higher rates of health insurance coverage were more likely than other women to receive a preventive medical visit. Non-Hispanic Black women (86.4%) were more likely to have had a visit than Hispanic women (69.6%) or non-Hispanic white women (74.6%), and the confidence intervals for the non-Hispanic Black population group did not overlap with those of the other population groups. The Affordable Care Act (ACA) has ensured that the majority of health plans offer women coverage for well-woman visits without cost-sharing, but many women and/or their providers are not aware of this coverage. The ESM for NPM#1 is the following: Percentage of women enrolled in Medicaid who deliver and receive a primary care visit within 12 months of delivery. This measure is also a core indicator for Point 1 of the NC Perinatal Health Strategic Plan (PHSP): Provide interconception care to women with prior adverse pregnancy outcomes. With Medicaid paying for 54% of deliveries in 2019, an increase in this ESM will definitely affect NPM#1. For women giving birth in 2014, 21.6% of women continuously enrolled in Medicaid for twelve months after delivery received a primary care visit within twelve months of delivery; however, this percentage dropped to 16.8% for women giving birth in 2019. Data for 2019 indicate that non-Hispanic White women were less likely to receive a primary care visit within 12 months (14.7%) than Black non-Hispanic women (18.4%), American Indian non-Hispanic women (17.9%), and Hispanic women (19.1%).

To increase the percent of women with a past year preventive medical visit, local health departments (LHDs) provide family planning core services that include contraceptive services, pregnancy testing and counseling, achieving pregnancy services, basic infertility services, sexually transmitted disease services, preconception health services, and related preventive health services. LHD maternity clinics also provide maternal health services inclusive of clinical care, referral for Medicaid and WIC services, provision of tobacco cessation counseling, screening for intimate partner violence, depression screening, and provision or referral for nutrition consultation. In addition, maternal care skilled nurse home visits are provided for women with high risk pregnancies. Home visits for newborn/postpartum and newborn assessment and follow-up care home visits are also provided by nurses. LHDs are also able to provide childbirth education services.

Pregnancy Medical Home Program and Care Management for High Risk Pregnancies (CMHRP) Services

DPH continued its partnership with NC Medicaid and CCNC in implementing the statewide Pregnancy Medical Home (PMH) program aimed at improving the quality of maternity care, improving maternal and infant outcomes, and reducing health care costs. Approximately 90% of all obstetrical care providers (public and private) in NC are PMHs who provide prenatal care services to the state's Medicaid population. All LHDs that provide maternal health services in the state are PMHs. The PMH program is an outcome-driven initiative monitored for specific performance indicators, such as the rate of low birth weight and the primary cesarean delivery rate. Participating providers receive financial incentives from Medicaid for risk screening and postpartum visit completion, ongoing collaboration with and support of a CMHRP Care Manager, local CCNC network support, data and analytics, and

clinical guidance materials and resources. In turn, practices agree to work toward quality improvement goals, such as eliminating elective deliveries before 39 weeks, using 17P to prevent recurrent preterm birth where indicated, reducing primary C-section rates, and improving the postpartum visit rate. The postpartum visit must include a depression screen, reproductive life planning counseling, and completed referral for ongoing primary care. PMH Care Pathways have been developed to assist providers and care managers to follow standardized protocols of best practice. The *Postpartum Care and the Transition to Well Woman Care* pathway provides a thorough overview of appropriate timing of postpartum care, components of the comprehensive postpartum visit, and specific guidance for women with various complications. Other PMH pathways include: *Management of Substance Use in Pregnancy*, *Perinatal Tobacco Use*, *Induction of Labor in Nulliparous Patients*, *Progesterone Treatment and Cervical Length Screening*, *Management of Obesity in Pregnancy*, *Multifetal Pregnancy*, and *Management of Hypertensive Disorders in Pregnancy*. These pathways can be downloaded from CCNC's PMH Care Pathways website.

CMHRP services were also available to pregnant and postpartum women enrolled in Medicaid statewide and to a limited number of low-income, pregnant women ineligible for Medicaid in some counties. CMHRP Care Managers are registered nurses or social workers. Care managers work in direct partnership with public and private prenatal care providers statewide in a collaborative team approach to patient-centered care, including supporting effective and prompt use of Medicaid eligibility determination processes and facilitating early access to prenatal care. The primary mechanism for identifying Medicaid-eligible women with priority risk factors is the completion of a pregnancy risk screening form by a PMH prenatal care provider. However, many women are identified and engaged in CMHRP via the LHDs before contacting a prenatal care provider. This gives the care manager an opportunity to assist women in applying for Medicaid coverage and selecting a prenatal care provider earlier. Using risk screening and care management data, CCNC has identified women for whom care management can be shown to make a difference in their risk of low birth weight. CCNC used this data to create the Maternal-Infant "Impactability" Score (MIIS), based on risk factors found on the risk screening form and other data sources including pregnancy assessment documentation, risk screens and pregnancy assessments from prior pregnancies, claims data that identifies various health conditions, and birth certificate data from prior pregnancies. A higher score indicates that the patient is more likely to benefit from CMHRP services. Scores range from 0-1,000, and scores ≥200 are considered priority. Based on CCNC data collected over time in the legacy Case Management Information System (CMIS), it has been determined that to be effective, most care management interventions with priority patients need to be face-to-face. The previous system of "priority risk factors" identified too many women for care management services to be effective and it gave them all equal priority, regardless of risk factor. The current system identifies fewer women to receive care management, about 30% of the total pregnant Medicaid population; however, the reduced caseload does not equate to reduced services. The priority population requires eight to ten face-to-face interventions throughout the course of the pregnancy. This equates to approximately one face to face contact every month. The non-Medicaid CMHRP program served 492 women during FY20. The non-Medicaid version of these services implements the same "Impactability" model as the Medicaid funded services which identifies fewer women and provides for higher intensity of services with those women.

Preconception Health Efforts

The WHB also works to develop and enhance preconception efforts within NC using the NC Preconception Health Strategic Plan Supplement for 2014-2019 as a guide. In partnership with the national Office of Minority Health Resource Center, the WHB implements the Preconception Peer Educator (PPE) program. Initially the PPE program focused on Historically Black Colleges and Universities (HBCUs), but the program has now expanded to other colleges and universities including community colleges. With a focus on preconception health, college students are trained on reproductive life planning, HIV/STIs, tobacco use, healthy weight, and other wellness areas. The PPEs in turn share this information on their college campuses and in surrounding communities. There are 20 two and four-year colleges on the NC PPE roster. The WHB hosted three PPE trainings during this reporting period at which

students from six universities participated (,Bennet College, East Carolina University, Elizabeth City State University, Fayetteville State University, Johnson C. Smith University, and NC Central University). Students at these universities and at the other participating universities conducted a range of activities highlighting preconception health and wellness on their campuses and in the abutting communities.

NC continued to be one of four states participating in the Preconception Collaborative Improvement and Innovation Network on Infant Mortality (PCH CoIIN) led by the UNC Center for Maternal and Infant Health (CMIH) during FY20. The overall aim of the PCH CoIIN is to develop, implement, and disseminate a woman-centered, clinician-engaged, community-involved approach to the well woman visit to improve the preconception health status of women of reproductive age, particularly low-income women and women of color. The NC PCH CoIIN consists of staff members from the WHB and the NC Chapter of the March of Dimes working in partnership with staff members from the two NC Healthy Start programs (Robeson Healthcare Corporation and Forsyth County Department of Public Health) along with Mountain Area Health Education Center (MAHEC). The metrics chosen for the project to determine if the goal/aim is met is the following: By September 2020, four states, in collaboration with the core CoIIN team and clinic partners, will develop an adaptable model to effectively integrate preconception care (PCC) into the well woman visit by: 1) working with clinics to implement validated screening tool(s) and response strategies, 2) enhancing state-level capacity to support effective implementation, 3) disseminating the model statewide and nationally. An integral part of the work of this CoIIN is to use human-centered design involving the end-users in the process of problem-solving and developing the approach to the well-woman visit. During FY20, the three NC PCH CoIIN projects, using a human-centered design approach, continued piloting their preconception health screening tool specific to the needs of their clinic and population served. The current projects include the assessment of an existing patient screening tool, along with a newly produced training video for health care providers, a dummy code embedded into the electronic medical record to prompt and record preconception health screening, and a prototype (for a tool to be developed) for women to bring to their well-woman visit.

In conjunction with other preconception health efforts, another objective of the WCHS is to promote healthy behaviors for women prior to pregnancy, including increasing the percent of women of childbearing age taking folic acid regularly. According to 2018 BRFSS, 42.8% of women responded that they took a multivitamin daily. Sub-group estimates by age and race/ethnicity are not available for that year because they did not meet statistical reliability standards. Due to changes in the weighting methodology and other factors such as the incorporation of interviews being done via cell phones, results from 2018 BRFSS are not comparable to previous years. In partnership with the NC March of Dimes (MOD) Preconception Health Campaign, during FY20, the WHB provided folic acid education to 965 public and private health care providers via in-office trainings and webinars; 1,119 health care providers during presentations at professional health care conferences and meetings; and 122 health educators and/or health care providers during an educational forum. MOD staff also trained 56 Community Ambassadors (lay health educators) about preconception health and folic acid who educated 458 peers; coordinated and conducted 25 community-based trainings – 23 in-person and 2 virtually – and educated 400 consumers in-person and 9,343 virtually about preconception health and folic acid; and conducted the *Healthy Before Pregnancy* curriculum in 10 high school classrooms and educated 64 students A total of 432 women were educated via the Spanish language promotora program about folic acid and preconception health, and 28,764 bottles of multivitamins were provided to low income women of reproductive age through the statewide multivitamin distribution program, which includes an online training program for health care professionals, continued to promote the folic acid message for women of childbearing age and encourage the new or continued behavior of daily folic acid consumption. The EveryWoman NC website was maintained to address folic acid and preconception health education. Also, EveryWoman NC Facebook and Twitter accounts posted press releases and electronic newsletters.

Efforts to Increase Quality Prenatal Care

In 2010, the state rolled out the 2003 Revised Birth Certificate. This update included the capturing of the actual date prenatal care was initiated as compared to the prior certificate only asking for the month. Because of this change, any data regarding prenatal care initiation prior to 2011 are not comparable. During 2011-2013, approximately 70% of infants were born to women who initiated care in the beginning of the first trimester of pregnancy. In 2018, data reflected that this percentage was at 68%, leaving opportunities for growth. Almost 75% of White, non-Hispanic women received prenatal care in the first trimester in 2018, while only 61% of Black, non-Hispanic women and 58% of Hispanic women did. In an effort to increase these rates and support improvement, LHDs continues to offer or assure access to high quality, evidence-based Maternal Health Services to all women in the state. In FY19, per reports LHD-HSA, these services were provided to 16,969 unduplicated patients. The state program team continued to explore potential mechanisms to facilitate earlier entry to prenatal care, with a particular focus on opportunities for improvements with Medicaid eligibility determination. LHDs are also required to provide Sudden Infant Death Syndrome (SIDS) Counseling to families who have experienced an infant loss.

The primary focus of Healthy Beginnings, the state's minority infant mortality reduction program, is to improve birth outcomes specifically among communities of color. Through partnerships with LHDs, community-based organizations, and faith-based entities, Healthy Beginnings serves minority women and their families in the preconception, prenatal, and interconception periods. During FY20, the ten Healthy Beginnings program sites provided services in the preconception, prenatal and interconception periods to 481 pregnant women and women up to two years postpartum in 12 counties.

Appropriate Weight Gain During Pregnancy

Improving appropriate weight gain during pregnancy and decreasing the amount of overweight and obesity among women of reproductive age remain important to the WHB as they work to improve the health of all women. Birth certificate data for the 2015-2019 time period show that on average, 28% of pregnant women gained within the Institute of Medicine Recommended Weight Gain Ranges and 48% gained excessive amounts. In 2019, 55.2% of women giving birth were overweight or obese (BMI≥25) prior to pregnancy. In partnership with the MOD Preconception Health Campaign, healthy weight education and training continued to be offered to health care providers and consumers in offices, communities, and online. During the pandemic, the work continued virtually. The providers in North Carolina's LHD maternity clinics continued to assess gestational weight gain for all pregnant women and provided guidance as necessary in FY20, and this is actually an action step in the Perinatal Health Strategic Plan 2016-2020.

As per state mandate, North Carolina LHD family planning clinics continued to record BMI and provide education for all patients and made referrals as needed for patients who were not at a healthy weight. The Healthy Beginnings program provides education on the recommended healthy weight gain range during pregnancy based on the program participant's pre-pregnancy body mass index (BMI). Education and support on nutrition and physical activity is provided during the prenatal and interconception period. The NC Baby Love Plus (NC BLP) program offers quarterly education/support group sessions to participants and their families on the importance of achieving and maintaining a healthy weight during the preconception, pregnancy and interconception periods. NC BLP program also provides individualized case management to participants needing additional support to achieve healthy weight goals. Due to the COVID-19 pandemic, many of the group sessions for the later part of the fiscal year had to be cancelled. Individualized support continued either via phone or virtually.

Maternal Mortality Review

North Carolina continues to conduct a formal review of maternal deaths. The focus of the review is to identify deaths

determined to be pregnancy-related as well as those that are pregnancy-associated. The support of state legislation (§130A-33.52) and the cooperation of healthcare systems and professionals made the retrieval of protected health information possible to perform this mandated work. The focus of the review aligns with the recommendations of the Centers for Disease Control and Prevention (CDC) to identify potential preventable and contributing factors on the patient/family, community, provider, facility, and system levels. The overarching goal is to improve maternal health outcomes. The Committee initially met three times per year. There are nine appointed members to the Maternal Mortality Review Committee (MMRC), with additional specialty consultants in attendance by invitation, along with select staff from DPH. The Committee developed four subcommittees (1. deaths ≤42 days; 2. deaths ≥43 days; 3. substance use; and 4. trauma [suicide, homicide, motor vehicle accidents, etc.]) in order to review the cases prior to the full MMRC to ensure needed documentation was included and preliminary questions answered. The Committee reviews both pregnancy-related and pregnancy-associated deaths. The SCHS provides identified cases that meet established criteria for abstraction. During FY20, 45 cases were reviewed from 2016.

Family Planning Services and Efforts to Reduce Unintended Pregnancies

In Phase 7 of the Pregnancy Risk Assessment Monitoring System (PRAMS) survey, the question regarding pregnancy intendedness (Thinking back to just before you got pregnant with your new baby, how did you feel about becoming pregnant?) was modified to include a choice of “I wasn’t sure what I wanted” to go along with the responses that the person wanted to be pregnant later, sooner, then, or not then or at any time in the future. With this change, data prior to 2012 are not comparable to data from more recent years. Low participation has been a substantial problem for NC PRAMS from 2012 to 2019, with overall weighted response rates ranging from 50% to 57%. The 2019 PRAMS responses were similar to previous years, as 19.2% of respondents wanted to be pregnant later, 15.5% wanted to pregnant sooner, 40.3% wanted to be pregnant then, 5.8% did not want to be pregnant then or any time, and 19.2% were not sure what they wanted.

Title V funding, along with Title X, TANF, state, and local funding, was allocated to 84 LHDs for the delivery of family planning services in FY20. According to the 2019 Family Planning Annual Report, 80,337 female patients were seen in these LHDs. Female patients were able to choose an appropriate method of birth control from among a range of options. During CY19, it is estimated that 21% of female patients chose a LARC method. These methods help women to create more optimal birth spacing between pregnancies, potentially resulting in healthier birth outcomes for their children. In addition, the C&Y Branch used Title V funds to support adolescent reproductive health services as part of their increased emphasis on adolescent health.

North Carolina continued to work with Upstream USA in FY20. The nonprofit is working in North Carolina over the next several years to provide sustainable training and technical assistance to health centers to ensure same-day access to birth control methods at low or no cost. To date, eleven LHDs have signed on to work with Upstream, and they are in communication with at least four additional agencies. Upstream has been working to move their trainings to a virtual platform and have completed a training with at least one LHD. NCDHHS is partnering with Upstream and providing support and guidance around the great work already happening and aiding in the expansion of more partnerships throughout the state.

The NCDHHS also helps lead a collaborative team, the Statewide Reproductive Life Planning (RLP) Stakeholders Workgroup. The workgroup has representation from 17 different agencies all focused on Reproductive Life Planning for all North Carolinians. Agencies represent: State government, local health departments, Federally Qualified Health Centers, nonprofits, private funders, hospital systems, universities, consumers, Medicaid, and substance use disorder treatment programs. This group meets at least three times per year to discuss critical issues affecting men, women, and adolescents in their reproductive years and how to improve health outcomes for this group, while ultimately improving health outcomes for future generations as well.

Through Title X funding, the WHB continued to partner with the NC DMH/DD/SAS to provide ongoing technical assistance for staff working at substance use treatment facilities and for LHD staff working in family planning clinics around RLP. Staff that were previously trained in FY19 were provided opportunities to learn more about interacting with clients and learn from other agencies on how they discuss RLP with substance use treatment clients. The technical assistance was provided through monthly virtual meetings, until the COVID-19 pandemic required staff attention. The monthly meetings were postponed in Spring 2020 with the plan to restart in Fall 2020, as well as to conduct three virtual trainings for opioid treatment programs and the LHDs in the same communities.

Teen Pregnancy Prevention Initiatives

The state teen birth rate for females 15-17 years of age reached a low of 7.7 per 1,000 women in this age group in 2019. That same year, the teen birth rate for girls 15 to 19 years old in North Carolina decreased by 22.5% from the rate in 2015 to 18.2 per 1,000, leaving North Carolina with the 29th highest teen birth rate in the nation, with the national rate being 16.6 per 1,000. The Teen Pregnancy Prevention Initiatives (TPPI) support communities across North Carolina with programs that prevent teen pregnancy and support teen parents. The Adolescent Parenting Program (APP) helps teen parents prevent a repeat pregnancy, graduate from high school, keep themselves and their babies healthy, and build skills that will help them support themselves and their babies. The Adolescent Pregnancy Prevention Program (APPP) prevents teen pregnancy by providing young people with essential education, supporting academic achievement, encouraging parent/teen communication, promoting responsible citizenship, and building self confidence among their participants. The Personal Responsibility Education Program (PREP) is designed to educate teens on abstinence and contraception to prevent pregnancy and sexually transmitted infections (STIs). PREP also addresses adulthood preparation subjects such as parent-child communication, healthy life skills, positive adolescent development, financial literacy, and educational/career preparation. TPPI also received funding from the Office of Adolescent Health (OAH) in 2015 to work with three counties (two counties in FY20) around implementation of evidence-based teen pregnancy prevention programs to scale, called Project REACH (Redefining & Empowering Adolescents & Community Health). The expected number of youth to be served in these counties is 1500 youth per year. The program provides key educational interventions to improve NC adolescents' knowledge, attitudes, and beliefs regarding sexual health, which will impact adolescent birth rates in these counties as well as increase the number of youth seeking services at local family planning clinics.

In FY20 through Title V, TPPI funded SHIFT NC (Sexual Health Initiatives for Teens) to provide information, education, resources, consultation and training to professionals and stakeholders working to reduce teen pregnancy in the state. SHIFT NC usually holds a statewide teen pregnancy prevention conference in May, but was unable to with the COVID-19 pandemic. SHIFT NC did create a statewide youth engagement plan with the goal of creating a statewide youth advisory group to start in FY21. Through Title V, TPPI also funded the North Carolina School Health Training Center that is housed at East Carolina University. The Training Center provided professional development and skill-building for program facilitators funded through other TPPI programs. This included: a networking conference held for primary and secondary education programs around Youth Engagement, Reproductive Justice, as well as contraceptive and STI updates; training on Racial Equity; training on making curricula observations of facilitators meaningful; training for facilitators in the evidence-based programs – Making Proud Choices! (21 facilitators trained), Reducing the Risk (18 facilitators trained), and Be Proud! Be Responsible! Be Protective! (17 facilitators trained); and training was held on high quality facilitation. The networking conference was held in March 2020 with 75 attendees.

In addition to the teen pregnancy prevention work funded through Title V in FY20, TPPI funded 55 agencies to implement adolescent pregnancy prevention programs or adolescent parenting programs. Through the 29 primary

prevention programs funded in 26 counties, 8,393 youth participated in an evidence-based or evidence-informed teen pregnancy prevention program. TPPI funded 25 secondary prevention programs in 24 counties. A total of 612 participants were served with monthly home visits using the *Parents as Teachers* program and offered a minimum of a quarterly peer to peer group instruction. Of the 582 female participants, 1% had a repeat pregnancy and 45% reported using a LARC. Of the 612 total participants, 2.3% reported dropping out of school that year.

Be Smart Family Planning Medicaid Program

The NC Be Smart Family Planning Medicaid Program (Be Smart) is designed to reduce unintended pregnancies and improve the well-being of children and families in the state. Family planning/reproductive health services are provided to eligible men and women whose income is ≤195% of the federal poverty level. The Be Smart program covers annual exams and physicals, laboratory procedures, FDA-approved contraceptive methods, STI testing and treatment, and family planning counseling. One Be Smart program manager is housed in the WHB and works collaboratively with staff in Division of Health Benefits.

The *North Carolina "Be Smart" Family Planning Medicaid Program Strategic Plan* was developed as a five-year (2018 – 2023) internal guide for the DPH and NC Medicaid. It guides the implementation of the "Be Smart" Program by identifying and addressing six key strategies/goals that assist DPH and its partners in implementing changes that will have the greatest impact on NC residents and program participants. The six key strategies are:

1. Expand agency and stakeholder partnerships that offer program services.
2. Increase training opportunities for all agencies implementing the program.
3. Provide training and outreach opportunities to program enrollees and potential recipients.
4. Improve and clarify the process of determining eligibility for current and future beneficiaries.
5. Create an easy access and enrollment process for consumers.
6. Provide automatic transitions from existing Medicaid programs for beneficiaries, caseworkers, and providers.

In August 2019, the Be Smart Family Planning Medicaid Program Manager and Family Planning Program Consultant within DPH hosted a Family Planning Education & Outreach Training. It was a one-day event that was created to bring together family planning health education professionals across NC. The training was designed to enhance, educate, and engage staff that are working in settings that provide family planning outreach. It was a forum for health professionals to exchange ideas that work in their communities. Training highlights included: the latest information on contraceptive methods; family planning educational resources; family planning education and outreach panel of local agencies; and family planning data and priorities in NC. The audience in attendance included: health educators; outreach workers; prevention staff; and community workers.

In April 2020, the Be Smart Family Planning Medicaid Program Manager conducted a Reproductive Life Planning webinar with the March of Dimes with 95 participants. The webinar gave an overview of the Medicaid program and allowed open discussion among participants for creating innovative ways to market family planning during the COVID-19 pandemic.

Focusing on the second strategy of the Be Smart Family Planning Medicaid Strategic Plan, a Train the Trainer Toolkit Committee was created to develop and market a toolkit to assist local agencies in promoting the Be Smart Family Planning Medicaid program within their local communities. The toolkit will include provider scenarios, educational resource lists, outreach and education strategy examples, and marketing ideas. The committee started this work and plans to have the toolkit completed in 2021.

Women/Maternal Health - Application Year

Priority Need 1 – Improve Access to High Quality Integrated Health Care Services

The WCHS is committed to assuring that people in NC are able to have access to high quality integrated health care services across the life course. For individuals of reproductive age, much of this work is operationalized within the WHB. The WHB develops and funds programs and services that protect the health and well-being of individuals during and beyond their child-bearing years. This includes programs for before, during and after delivery of their baby, and for the infants as well. Strategies directly related to the work of Title V within the Women/Maternal Health Domain are included here, and others can be found in the Perinatal/Infant Health Domain section.

Extended Hours for FP Services

Over the next year, NC will implement strategies to increase the number of LHDs that offer extended hours for family planning services to provide an opportunity for more individuals to access a preventive medical visit outside regular business hours. LHDs will be provided guidance and support to evaluate the needs of their communities and the best methods to communicate extended hours and other changes to increase access to services. A communication plan is critical to the success of extending hours by ensuring that the community is aware of this change. The plan will incorporate social media, community announcements, and partnering with community agencies to ensure all sectors of the community are aware of changes. The WHB will also connect LHDs that have successfully modified their hours to meet community need with agencies that are working through challenges to offer lessons learned from the process. The extended hours may not be available daily or weekly in every location and will be determined by each individual health department depending on their community and staffing plan.

Improving Preconception Health and Creation of Outreach and Education Toolkit

The Preconception Health Team (PCH Team), which includes the Preconception Health and Family Support Unit Manager, the Nutrition Consultant, and the Preconception Health and Wellness Program Manager, in collaboration with at least one Regional Nurse Consultant, will create the Preconception Health Outreach and Education Toolkit to be used with LHDs, other providers, and community-based organizations to increase knowledge about preconception health. While the exact elements of the Toolkit are still being finalized, at a minimum it will include a webinar on preconception health services; educational materials, including a brochure and a webinar on birth spacing; and information on the Ready, Set, Plan! (RSP) training materials.

The preconception health webinar will define preconception health and explain its importance to women's health, maternal health, and family planning services. The priority audience for the webinar will be newly hired and seasoned nurses, social workers, community health workers, and health educators who work in LHD settings. Once created, the webinar will be presented live, recorded, and posted on the WHB website, and will be integrated into new staff orientation and annual training. The PCH Team will work with key WHB staff members to develop educational materials focused on birth spacing messages for pregnant and postpartum women receiving care management services under the CMHRP program. In addition, to promote the use of the brochure, a webinar defining birth spacing and related messages will be created and hosted for CMHRP care managers to increase their understanding and awareness around this topic. The RSP Toolkit, which has been used by the WHB for many years, contains preconception and interconception health and reproductive life planning materials, activities, and family planning flash cards that can be used in one-on-one patient contacts or small group settings.

The Preconception Health Outreach and Education Toolkit will be posted on the WHB website by December 31, 2021. Once it is posted, the PCH team will engage and collaborate with other WHB programs including Healthy Start

BLP, ICO4MCH, Adolescent Pregnancy Prevention, Adolescent Parenting, and Healthy Beginnings to make them aware of it and provide technical assistance and training on its use.

Additional Activities to Improve Access to High Quality Integrated Health Care Services

Additional FY21 efforts supporting this priority need, NPM#2, and ESM#2 include that two out of the five funded ICO4MCH sites will implement a strategy focused on improving preconception and interconception health among women and men. They will develop a community-based health education and outreach program for individuals of reproductive age and/or individuals during the interconception period designed to build social support, learn health information, adopt healthy life skills, become knowledgeable of resources, and increase motivation to adopt health improving behaviors. They will also promote increased utilization of pre-pregnancy services by individuals of reproductive age, including under- and uninsured, to reinforce the importance of pregnancy planning and preparedness among individuals in the LHD Family Planning clinic or within other primary care practices.

Another funded ICO4MCH site will partner with a local community college, university or agency that serves individuals of reproductive age to implement the Preconception Peer Educator (PPE) program. This program was initiated by the U.S. DHHS Office of Minority Health to train and raise awareness among college students or young adults about healthy behaviors that can impact birth outcomes and the social determinants of health that impact health disparities. The PPE program will train college students as peer educators and provide them with materials, activities, and exercises to train their peers in their college setting and in the community at large.

The federally funded Healthy Start program, NC BLP, will provide case management services using evidence-based tools for risk assessment and screening, provide education on pregnancy intendedness using the RSP toolkit, and facilitate access to health services for preconception women. The Family Outreach Workers (FOWs) in NC BLP are the primary source of engagement in preconception outreach. They will conduct outreach and recruit program participants through health department family planning clinics and sponsored events as well as local community events, such as health fairs and festivals or presentations at community colleges and faith-based organizations. These presentations will take place in-person and/or virtually. During these events, the FOW will promote the importance of primary care, establishing a medical home, and creating a reproductive life plan. The NC BLP program also will engage participants through social media (Facebook and Instagram) posts with tips on achieving and maintaining optimal health and determining next steps whether or not a baby is in their future. Topics will include the importance of a medical home, reproductive life planning, healthy weight, nutrition, and mental health and wellness. Empowerment support group sessions will be held virtually to assist participants in reaching their preconception goals. The program will continue to partner with the March of Dimes' Preconception Health Community Ambassador program to support participant knowledge of reproductive life planning and folic acid consumption.

Priority 2 – Increase Pregnancy Intendedness Within a Reproductive Justice Framework

Another WCHS priority is to increase pregnancy intendedness within a reproductive justice framework. In order for local partners, including LHDs, to provide services within a reproductive justice framework, they need to have a full understanding of the framework and the implications on the services provided. Over the next year, trainings will be offered to all LHDs around the importance of the availability of all contraceptive methods., The WHB will partner with Upstream NC to ensure the trainings provided are based on evidence and allow for health department clinical staff to learn how to best meet the needs of their communities while respecting their decisions about having children and, when desired, how they choose to prevent pregnancies.

The reproductive justice framework is also critical to the work happening around teen pregnancy prevention. In FY22,

TPPI plans to continue at least two workgroups of staff from local funded agencies to focus on specific topics. The workgroups will discuss and explore ideas around virtual program implementation (continuing due to COVID 19), and reproductive justice/equity. The workgroups allow for local and state staff to explore these topics and discuss how youth programming can incorporate and provide space for young people to understand and address pregnancy intendedness. The discussions from the workgroups will help frame a training planned for next year for local agencies on how to apply a racial equity/reproductive justice lens to the programming offered to youth. This work is critical to continuing the decline of teen pregnancy rates in our state. As many curricula utilized were developed decades ago, the work needs to capture the needs and wishes of the youth today. To further advance teen pregnancy prevention, the WHB will continue to partner with SHIFT NC as they nurture a youth leadership council for North Carolina. This council provides an opportunity to raise youth voices and ensure they are included in the discussion on addressing teen pregnancy prevention.

Another objective is to increase access to highly effective contraceptive methods. Over the next year, the WHB will partner with professional societies, including the NC Obstetrical & Gynecological Society, NC Chapter of Academy of Certified Nurse Midwives, and the NC Academy of Family Physicians, to provide information on the latest evidence around all contraceptive methods and the value of offering all to patients. At the LHD level, agencies will serve as mentors to other LHDs that are working towards this goal. The LHDs that currently do offer the full array of methods will share their lessons learned and provide advice and guidance to assist agencies that do not. The WCHS will leverage this work through the involvement of the Statewide Reproductive Life Planning Stakeholders Workgroup. The goals and objectives of this group align with the MCHBG action plan around increasing access to reproductive life planning, access to highly effective contraceptive methods and same day insertion, within a reproductive justice framework which allows for further advancement of objectives and activities by spreading work and knowledge through the Stakeholders network. The Workgroup has representation from seventeen different agencies including state government agencies, Title X subrecipients, FQHCs, nonprofits, private funders, hospital systems, universities, consumers, and substance use disorder treatment programs.

An innovation aspect NC is pursuing through the HRSA Maternal Health Innovation (MHI) Program funding is to provide contraceptive education to patients through telehealth prior to their clinical appointment. The goal is to provide ample time for patients to learn and ask questions about contraceptive methods. Patients can learn about contraception and prioritize methods that will help them achieve their life goals without feeling rushed and reducing the amount of time needed at the clinical appointment in the office. As part of the MHI Program, two sites will pilot contraceptive counseling using a cell phone application and telehealth follow-up.

Perinatal/Infant Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths	NVSS-2018	6.9	NPM 3
NOM 9.1 - Infant mortality rate per 1,000 live births	NVSS-2018	6.8	NPM 3 NPM 4
NOM 9.2 - Neonatal mortality rate per 1,000 live births	NVSS-2018	4.3	NPM 3
NOM 9.3 - Post neonatal mortality rate per 1,000 live births	NVSS-2018	2.5	NPM 4
NOM 9.4 - Preterm-related mortality rate per 100,000 live births	NVSS-2018	239.6	NPM 3
NOM 9.5 - Sudden Unexpected Infant Death (SUID) rate per 100,000 live births	NVSS-2018	111.8	NPM 4

National Performance Measures

NPM 3 - Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)
Indicators and Annual Objectives

Federally available Data (FAD) for this measure is not available/reportable.

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective	90	90	90	90	90
Annual Indicator	77.5	76.1	77.3	76.7	77.3
Numerator	1,626	1,502	1,560	1,269	1,560
Denominator	2,097	1,974	2,017	1,654	2,017
Data Source	NC Vital Statistics	NC Vital Statistics	NC Vital Statistics	NC Vital Statistics	NC Vital Statistics
Data Source Year	2015	2016	2017	2018	2019
Provisional or Final ?	Provisional	Provisional	Provisional	Provisional	Provisional

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	90.0	90.0	90.0	90.0	90.0	90.0

Evidence-Based or –Informed Strategy Measures

ESM 3.1 - Percent of birth facilities with level of care documented using the CDC LOCATe tool.

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator		70.9
Numerator		61
Denominator		86
Data Source		WHB Internal Log
Data Source Year		FY19-20
Provisional or Final ?		Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	50.0	75.0	100.0	100.0	100.0	100.0

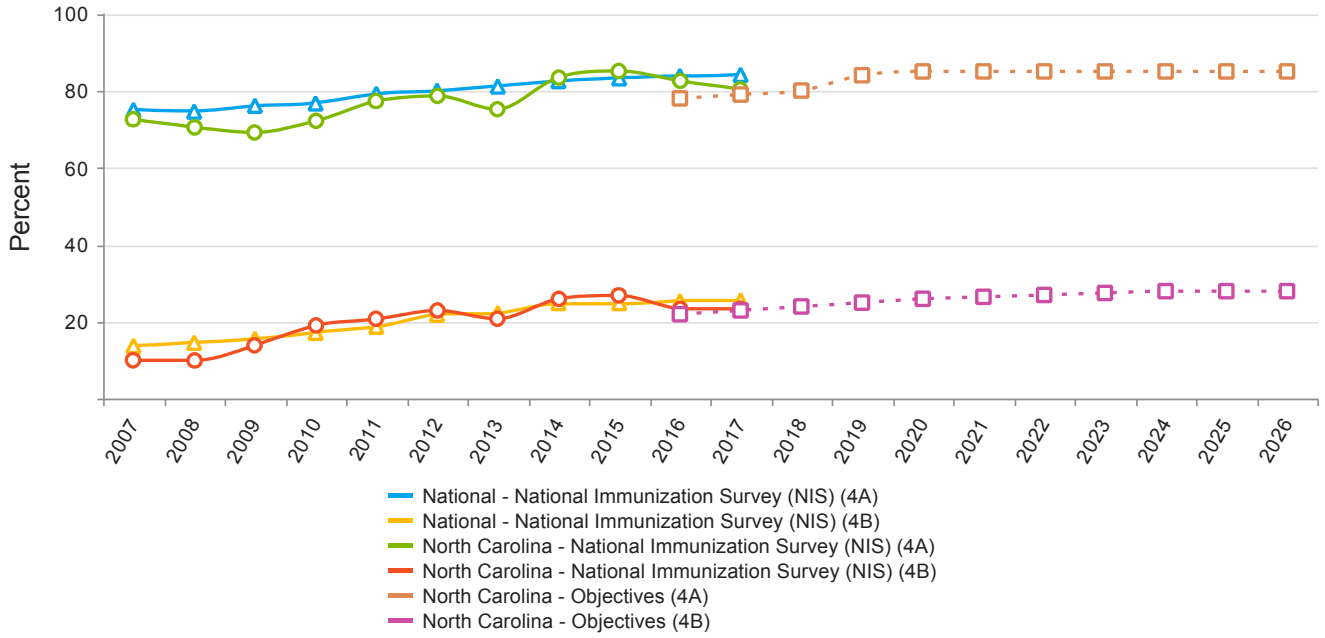
ESM 3.2 - Percent of LHDs who are utilizing the NC Psychiatry Access Line (NC-PAL)

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator		1.2
Numerator		1
Denominator		85
Data Source		WHB Internal Log
Data Source Year		2020
Provisional or Final ?		Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	25.0	35.0	50.0	60.0	75.0	75.0

NPM 4 - A) Percent of infants who are ever breastfed B) Percent of infants breastfed exclusively through 6 months Indicators and Annual Objectives



NPM 4A - Percent of infants who are ever breastfed

Federally Available Data					
Data Source: National Immunization Survey (NIS)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective	78	79	80	84	85
Annual Indicator	75.3	83.5	84.9	82.5	80.3
Numerator	92,299	90,633	103,683	88,249	90,222
Denominator	122,600	108,563	122,165	106,953	112,365
Data Source	NIS	NIS	NIS	NIS	NIS
Data Source Year	2013	2014	2015	2016	2017

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	85.0	85.0	85.0	85.0	85.0	85.0

NPM 4B - Percent of infants breastfed exclusively through 6 months

Federally Available Data					
Data Source: National Immunization Survey (NIS)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective	22	23	24	25	26
Annual Indicator	20.8	26.1	27.0	23.4	23.3
Numerator	24,773	27,283	31,775	24,051	25,865
Denominator	119,114	104,660	117,705	102,887	111,143
Data Source	NIS	NIS	NIS	NIS	NIS
Data Source Year	2013	2014	2015	2016	2017

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	26.5	27.0	27.5	28.0	28.0	28.0

Evidence-Based or –Informed Strategy Measures

ESM 4.1 - Number of eligible WIC participants who receive breastfeeding peer counselor services

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	27,587	25,020
Numerator		
Denominator		
Data Source	NC Crossroads WIC System	NC Crossroads WIC System
Data Source Year	2019	2020
Provisional or Final ?	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	28,350.0	29,120.0	29,900.0	30,660.0	31,425.0	31,425.0

State Performance Measures

SPM 2 - Percent of women who smoke during pregnancy

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	7.6	
Numerator	8,991	
Denominator	118,725	
Data Source	NC Vital Statistics/SCHS	
Data Source Year	2019	
Provisional or Final ?	Final	

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	8.1	7.9	7.8	7.7	7.5	7.5

State Action Plan Table

State Action Plan Table (North Carolina) - Perinatal/Infant Health - Entry 1
Priority Need
Improve access to high quality integrated health care services
NPM
NPM 3 - Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)
Objectives
PIH 1A. By June 30, 2023, all birth facilities will have a designation based on the national maternal and infant risk-appropriate level of care standards.
PIH 1B. Staff from 75% of LHDs will participate in the LHDs/LMEs annual trainings during FY21 to FY25.
PIH 1C. Each year, 99% of newborn infants in NC will be screened for genetic/metabolic disorders and will receive necessary follow-up.
Strategies
PIH 1A.1. Partner with the Maternal Health Task Force to prioritize levels of care within the state's Maternal Health Strategic Plan.
PIH 1A.2. Partner with Division of Health Services Regulations to update existing neonatal rules and develop maternal health rules.
PIH 1A.3. Implement the LOCATe tool within all birthing facilities in collaboration with the MHI Provider Support Network inclusive of the Perinatal Nurse Champions.
PIH 1B.1. Provide two maternal health and behavioral health combined trainings for LHDs/LMEs annually.
PIH 1B.2. Conduct orientation on the NC-PAL for all LHDs/LMEs (hold 2-3 webinars).
PIH 1B.3. Develop/strengthen relationships with LMEs.
PIH 1B.4. Expand the MATTERS Leadership Team to include local LMEs.
PIH 1B.5. WHB RNC will provide orientation and TA for LHDs inclusive of behavioral health.
PIH 1B.6. WHB RSWC will provide support for the Pregnancy Care Managers inclusive of behavioral health.
PIH 1B.7. WHB LCSW will develop webinars related to behavioral health that will be archived for repeat viewing.
PIH 1C.1. The Newborn Screening Follow-Up Team will continue to ensure that all newborns who screen positive for a particular genetic diagnosis receive timely follow up to definitive diagnosis and are referred to clinical management for their condition.

ESMs	Status
ESM 3.1 - Percent of birth facilities with level of care documented using the CDC LOCATe tool.	Active
ESM 3.2 - Percent of LHDs who are utilizing the NC Psychiatry Access Line (NC-PAL)	Active

NOMs
NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths
NOM 9.1 - Infant mortality rate per 1,000 live births
NOM 9.2 - Neonatal mortality rate per 1,000 live births
NOM 9.4 - Preterm-related mortality rate per 100,000 live births

State Action Plan Table (North Carolina) - Perinatal/Infant Health - Entry 2

Priority Need

Prevent infant/fetal deaths and premature births

NPM

NPM 4 - A) Percent of infants who are ever breastfed B) Percent of infants breastfed exclusively through 6 months

Objectives

PIH 3A.1. By 2025, increase the percent of NC resident live births who are breastfed at hospital discharge as reported on birth certificate from 80.9% (Baseline 2018) by 2% to 82.5%.

PIH 3A.2. By 2025, increase the percent of women participating in WIC who initiate breastfeeding from 72.5% (SFY2019 baseline) by 2% to 74%.

PIH 3A.3. By 2025, increase by 14% from 44% (Baseline Fall 2019) to 50% of NC maternity centers that have implemented two or more steps of the World Health Organization's evidenced based Ten Steps to Successful Breastfeeding.

PIH 3A.4. By 2025, increase the number of eligible WIC participants who receive breastfeeding peer counselor support by 15% from 27,587 (FY19 baseline) to 31,725.

PIH 3A.5. By 2025, increase the number of NC Child Care Centers who are designated as Breastfeeding Friendly Child Care Center by 50% from 28 (Baseline May 2020) to 42.

PIH 3A.6. By 2025, increase the number of LHDs who are awarded the NC Breastfeeding Coalition's Mother- Baby Award for outpatient healthcare clinics by 100% from 5 (Baseline May 2019) to 10.

PIH 3A.7 By 2025, increase the percent of women participating in WIC, Healthy Beginnings and/or MIECHV who report any breastfeeding through 6 months by 1% (FY19 Baseline: WIC 26.6%; Healthy Beginnings 13.7%; and MIECHV 23%/Non-MIECHV funded 38.6%)

Strategies

PIH 3A.1. Support activities in the following strategic plans/task force to reduce the infant mortality disparity ratio: - NC Perinatal Health Strategic Plan - NC Early Childhood Action Plan - NC Child Fatality Task Force

PIH 3A.2. Support strategies in the following strategic plans to improve breastfeeding rates: - NC Perinatal Health Strategic Plan - NC Early Childhood Action Plan - North Carolina's Plan to Address Overweight and Obesity-- Eat Smart, Move More North Carolina. 2020.

PIH 3A.3. Support work of maternity centers to obtain the North Carolina Maternity Center Breastfeeding Friendly Designation from the North Carolina Division of Public Health or full Baby-Friendly Designation from Baby-Friendly, USA.

PIH 3A.4. Support the work of child care providers to obtain the NC Breastfeeding Friendly Child Care Designation through application development and revisions, promotion, and training for external partners.

PIH 3A.5. Support the work of LHDs who are working toward or awarded the NC Breastfeeding Coalition's Mother- Baby Award for outpatient healthcare clinics.

PIH 3A.6. Optimize breastfeeding training to Maternal and Child Health care managers, local health department employees, home visitors, etc., though coordination with the Regional Lactation Training Centers through the State Breastfeeding Coordinator.

PIH 3A.7. WCHS will work with the Office of Rural Health to ensure that breastfeeding information is included as part of the Knowledge Base Core Competency for NC Community Health Workers.

PIH 3A.8. The Pediatric Nutrition Consultant will provide breastfeeding training to Child Health Program staff at local health departments through virtual, regional, and statewide meetings.

PIH 3A.9. Support dissemination and use of the newly revised NC Making It Work Tool Kit created by the CDIS Community and Clinical Connections for Prevention and Health (CCCPH) to help breastfeeding mothers return to work.

PIH 3A.10. Promote the WIC Breastfeeding Peer Counselor Program to all women receiving services in local health departments/WIC clinics and increase the number of women who sign the Breastfeeding Peer Counselor Program Letter of Agreement to begin services.

ESMs	Status
ESM 4.1 - Number of eligible WIC participants who receive breastfeeding peer counselor services	Active

NOMs

NOM 9.1 - Infant mortality rate per 1,000 live births

NOM 9.3 - Post neonatal mortality rate per 1,000 live births

NOM 9.5 - Sudden Unexpected Infant Death (SUID) rate per 100,000 live births

State Action Plan Table (North Carolina) - Perinatal/Infant Health - Entry 3

Priority Need

Prevent infant/fetal deaths and premature births

SPM

SPM 2 - Percent of women who smoke during pregnancy

Objectives

PIH 3B. By June 30, 2025, reduce the percent of women who smoke during pregnancy by 10.7% from 8.4% (Baseline 2019) to 7.5%.

Strategies

PIH 3B.1. Revitalize the work of the Women and Tobacco Coalition for Health as a leader in women's health and tobacco use.

PIH 3B.2. Partner with WATCH to update the "Guide for Helping to Eliminate Tobacco Use and Exposure for Women"

PIH 3B.3. Smoking cessation counseling will be provided in all WHB and C&Y Branch direct service programs.

PIH 3B.4. Provide annual training for at least two WHB programs on women's health and tobacco use, inclusive of QuitlineNC and e-cigarettes.

Perinatal/Infant Health - Annual Report

The Perinatal Health Strategic Plan (PHSP) and the Early Childhood Action Plan (Healthy Babies) is the driving force for the WHB's and WCHS's work in this particular domain. The PHSP is making an impact by identifying how collaborative partner organizations' scope of work align with the PHSP using an environmental scan survey. The PHSP has continued to support and foster new partnerships. For example, the intersection of substance use and tobacco, as well as perinatal incarceration, has created the opportunity to work with new partners. Regular PHSP meetings now highlight speakers/organizations from various domains to increase awareness of organizations working on different social determinants, but there is still more work to do in branching beyond the public health space to engage more deeply with new partners. The PHSP provides a foundation for coordinated strategy throughout North Carolina and identifies varying organizations' roles in that strategy. When working on proposals or thinking through our larger approach, PHSP partners can turn to the plan to ensure that the work we are doing addresses the larger goals:

Goal 1 – Improving Health Care for Women and Men
Goal 2 – Strengthening Families and Communities
Goal 3 – Addressing Social and Economic Inequities

NPM#3 – Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)

One of the strategies in the PHSP is to: Ensure that all pregnant women and high-risk infants have access to the appropriate level of care through a well-established regional perinatal system with one of the action steps under that strategy being to define levels of neonatal and maternity care services for hospitals. While each birthing hospital completes an Annual Hospital Renewal Application through the NC Division of Health Services Regulation, the information currently collected is not enough to determine whether a hospital meets the most recent American Academy of Pediatrics (AAP) and American College of Obstetricians and Gynecologist/Society for Maternal-Fetal Medicine (ACOG/SMFM) criteria for neonatal and maternal levels of care. The ultimate goal is for all the hospitals to follow the latest AAP/ACOG/SMFM guidelines. Until this goal is reached, the state data for NPM#3 are based on the current self-designated levels of care which do not align with the AAP guidelines. Data for 2019 show that 80.1% of VLBW infants received care at currently designated Level III+ NICUs, which is similar to data for the past five years.

Also connected to this effort was NC Legislation (Session Law 2018-93) requiring NCDHHS to study the Perinatal System of Care in our state. DPH partnered with the NC Institute of Medicine to convene a Task Force on the Perinatal System of Care. Using a 4-chair approach inclusive of the State Title V Director, a person with lived experience, a Certified Nurse Midwife, and the OB lead for the state's Pregnancy Medical Home Program, this Task Force met monthly throughout FY20. A full Perinatal Systems of Care Task Force report was released in April 2020. Recommendations were categorized under the following themes: Inpatient Care, Labor & Deliver; Preconception, Prenatal & Postpartum Care; Support for Pregnant Women, Infants & their Families; and Postpartum Care. The Task Force members recognized and acknowledged the significant differences in outcomes in the above areas for women and infants of color, so the full report includes recommendations to explore strategies that have shown to decrease these inequities.

In FY20 two funded sites, UNC Center for Maternal and Infant Health (CMIH) and Vidant Health Foundation, participated in the third year of the Perinatal/Neonatal Outreach Coordination project implementation. The sites assessed 32 birthing facilities in Perinatal Care Regions (PCR) IV & VI using the CDC Level of Care Assessment Tool (LOCATe) for maternal and neonatal care. The sites continued work with birthing facilities to develop and implement policies that support immediate postpartum insertion of highly effective, long-acting reversible contraceptive (LARC) methods. The sites completed their policy development work with four hospitals in PCR IV and

five hospitals in PCR VI. Collectively, the sites provided training on immediate postpartum insertion of LARC methods to 461 maternal health providers, which included a mixture of physicians, residents, nurse practitioners, registered nurses and midwives.

NC has limited state funding for the provision of High-Risk Maternity services. The High Risk Maternity Clinic program funded eleven prenatal clinics within LHDs along with East Carolina University in FY20 utilizing state dollars. The services are provided to help ensure that low-income women with medically complicated pregnancies have access to risk-appropriate perinatal services. High risk pregnancies can be identified at the onset or during the course of care due to maternal and/or fetal factors. Once identified, a provider may make the recommendation to the patient to transfer care to a clinic that specializes in managing such issues. Each funded site is required to provide clinical services along with access to licensed clinical social worker and a nutritionist. The High Risk Maternity Clinic program served 8,092 women during FY20.

NPM#4A-B – Percent of infants who are ever breastfed and B) Percent of infants breastfed exclusively through 6 months

Increasing the percent of infants who are ever breastfed or are breastfed exclusively through six months is a goal not only of the WCHS but also part of the state Early Childhood Action Plan. The most recent data available from the National Immunization Survey (NIS) data for NC births occurring in 2018 reported that 85% of infants were ever breastfed, yet by 6 months of age only 20.2% of infants were exclusively breastfed, below the national average of 25.8%. Additionally, breastfeeding initiation data obtained from birth certificates for infants born in 2019 indicate that 80.8% of all infants were breastfed at hospital discharge. However, this data reflects national trends of breastfeeding disparities, with Hispanic infants (87.5%) and non-Hispanic white (83.7%) more likely to initiate breastfeeding than non-Hispanic Black (70.1%) or non-Hispanic American Indian (51.7%) infants.

The onset of the COVID-19 pandemic further exacerbated the existing gaps in breastfeeding support in NC. Prior to March 2020, NC maternity centers were reporting a decrease in staff position and/or hours for lactation staff and the closure of maternity centers particularly in hospitals serving rural communities. The NC Breastfeeding Coalition's (NCBC) statewide database for breastfeeding support further highlights the limited resources available to breastfeeding women in both rural as well as urban communities. This inequitable access to and availability of resources and support is a known contributor to racial and ethnic disparities. In August 2020, the CDC published a report documenting the impact of the COVID-19 pandemic on breastfeeding support. The report states that one in five hospitals reported reduced in-person lactation support and nearly 75% of hospitals discharged new mothers less than 48 hours to decrease risk of exposure to COVID-19. The CDC report also states the disconnect in messaging around breastfeeding and COVID-19 because of conflicting recommendations among professional organizations leading to guidance that negatively impacted the breastfeeding dyad. All actions conflicted with the recommendations issued by the World Health Organization who emphasized the importance and benefit of breastfeeding, importance of continuous skin to skin contact, access to skilled lactation care, and follow-up care.

During this turbulent period, NC took steps to address misinformation and ensure consistent messaging among our health care providers. In April 2020, the Regional Breastfeeding Coordinators pivoted to virtual trainings and developed and presented breastfeeding presentations for state and LHD staff to disseminate the most up to date evidence on breastfeeding and dispel myths. This education helped to elevate the concerns surrounding COVID-19 pandemic's impact on breastfeeding to state policy makers and allowed state and LHD staff to provide a consistent message on breastfeeding. This resulted in the publication of two briefs on maternity care services including lactation support including the publication of the *North Carolina Pregnancy & Continuity of Care During COVID-19 Task Force Recommendations*, which the NC IOM provided their support and platform for distribution through the NC Maternal Health Taskforce, and the development of NCDHHS developed guidance resources on COVID-19

infections and vaccine and breastfeeding. NSB also collaborated with the Carolina Global Breastfeeding Institute to implement virtual prenatal education classes utilizing the *Ready, Set, Baby* curriculum. The curriculum was updated to include COVID-19 guidance.

The WCHS works in partnership with the NSB who operates the NC WIC Program to maintain and expand the state's breastfeeding infrastructure. This collaborative approach within the WCHS including the NSB, WHB and C&Y Branch (along with the CDIS) prevents the duplication of activities and allows an integration of services with shared populations served and objectives. The expectation of a collaborative approach and the maximization of resources starts within the DPH with the DPH Breastfeeding Coordination Team, where quarterly, multidisciplinary staff who operate state programs with breastfeeding objectives meet for information sharing, needs assessment, and projects. The success of the coordination team is evidenced through inclusion of one ESM (the percentage of LHD whose Maternal Health staff members are trained on breastfeeding promotion and support through the NC WIC Program funded Regional Lactation Training Centers) chosen for this NPM as recommended by the 2011 Surgeon General's Call to Action to Support Breastfeeding. The baseline established by the previous State Breastfeeding Peer Counselor Program Coordinator on July 1, 2015, was 55%. During FY20, there were 77 LHDs who had staff trained which is 100% of the LHDs currently providing direct services. Maternal Health staff members have been trained at 84 LHDs between 2015 and 2019 which is an increase from the 2015 baseline of 43. This measure is updated annually from the contractor reports provided by the Regional Lactation Training Centers' Regional Breastfeeding Coordinator. The NSB continued its efforts to expand the implementation of the Breastfeeding Peer Counselor (BFPC) Program. In FY2020, all but one of the 85 WIC agencies in North Carolina accepted funding for the BFPC Program, surpassing the goal of 90% of the agencies.

Breastfeeding Support Efforts

The NC WIC Program operated through NSB is federally mandated to provide breastfeeding promotion and support to their participants through the anticipatory guidance, counseling, and breastfeeding educational materials, a greater quantity and variety of foods for breastfeeding dyads, longer participation in the program for breastfeeding mothers, access to breastfeeding aids such as breast pumps, and all staff trained in breastfeeding promotion and support. The NC WIC Program established the Regional Lactation Training Center to train breastfeeding peer counselors, breastfeeding peer counselor managers, public health agency staff and other medical professionals serving the WIC eligible population with accurate, standardized, evidence-based lactation management training and continuing education for in the respective perinatal region.

The NC WIC Program also contributed to the development and maintenance of the NC Lactation Educator Training Program operated by Northwest Area Health Education Center to provide a statewide program to train hospital and health department staff members. The objective is to support breastfeeding women across the entire state in a consistent and standardized manner. Since its implementation in 1996, the course has trained over 1,500 healthcare staff members in all 100 counties in NC. Five percent of total participants have become credentialed as an International Board Certified Lactation Consultant (IBCLC) as a result of course completion, leading to 70 new IBCLCs in North Carolina. In FY20, 116 healthcare staff members completed training.

Another ESM added in FY17 is the number of LHDs who are working toward or awarded the NCBC's Mother-Baby Friendly Clinic Award for outpatient healthcare clinics including child health or maternity clinics. Criteria for the award were informed by Baby Friendly USA Guidelines and Evaluation Criteria and the Academy of Breastfeeding Medicine's Clinical Protocol #14: Breastfeeding-Friendly Physician's Office: Optimizing Care for Infants and Children. Criteria include, but are not limited to, the following:

- education on breastfeeding support in accordance with the level of competency required for their applicable role;

- provision of high quality prenatal and postpartum patient lactation education to ensure that mothers achieve their infant feeding goals;
- elimination of all advertising from infant formula manufacturers; and
- assurance that patients have access to breastfeeding support in their healthcare clinic and/or the community.

According to the NCBC website, the benefits to those LHDs receiving the award include public recognition of breastfeeding-friendly care, free marketing to the public about their success, increased patient satisfaction, and improved support for breastfeeding initiation, duration, and exclusivity. By 2020 a total of seven local health departments have received the award, and others are known to be working toward it. Additionally, the Child Health 351 Agreement Addenda (AA) added as evidenced based strategy as an optional activity to encourage and support LHDs to implemented breastfeeding friendly practices within their clinic. Two LHDs (Nash and Halifax) chose this strategy for FY19, and one chose it for FY20 (Swain).

Title V MCH Block Grant funds continue to support a Pediatric Nutrition Consultant (PNC) who works in the C&Y Branch that also helps promote breastfeeding efforts. The PNC engineered the inclusion of the evidenced strategy for the Mother-Baby Friendly Clinic award in the Child Health 351 AA as an optimal strategy. Additionally, the PNC serves the lead coordinator for the NC DPH Breastfeeding Coordination Team.

During the FY20, the PNC, in partnership with the NC DPH Breastfeeding Coordination Team members, contributed to efforts to enhance breastfeeding resources and practices statewide such as the following:

- The PNC served as a lead reviewer and writer in updating the *NC Making It Work Tool Kit*, a breastfeeding support tool kit which consists of five different tools targeted to breastfeeding moms, employers, family members, and advocates. These materials were originally adopted in NC with permission from the New York Department of Health several years ago and updated in FY20 and FY21.
- The PNC worked with the NSB staff to promote the NC WIC Program's annual World Breastfeeding Activity. The activity aimed to encourage all local WIC agencies and their larger health departments/organizations to apply for and receive the NCBC's Breastfeeding-Friendly Employers & Community Partners Award. The PNC provided feedback on the development and execution of the activity. Additionally, the PNC and C&Y Branch staff contributed to the promotion through dissemination within the public health nursing listserv.

The PNC also continued to integrate breastfeeding education, family engagement and Life Course Nutrition into the Child Health program through trainings conducted as part of the CHERRN course and through other Child Health programs, including work with programs that specifically target CYSHCNs.

NC DPH uses Preventive Health and Health Services (PHHS) Block Grant funding to administer the Healthy Communities Program through the CDIS. The aim of this program is to reduce the burden of chronic disease and injury in North Carolina. Funding goes out through the LHD AA process (886 Healthy Communities). As part of this AA, LHD's can choose from a variety of evidence-based and promising strategies focused on Policy, Systems and Environmental (PSE) change. Many of these strategies are supportive of MCHBG priorities including breastfeeding-friendly facilities, opportunities for physical activity, policies and guidelines promoting healthier food options, promoting tobacco-free facilities and programs, and promoting evidence-based injury and violence prevention in communities. One specific example includes the NC Breastfeeding Mother-Baby Friendly Clinic Award. Staff from WCHS and CDIS work together to coordinate and share information across programs to help focus TA and training, reduce duplication of effort and increase outcomes.

In FY19, the CDIS's Community and Clinical Connections for Prevention and Health (CCCPH) Branch received a five-year competitive CDC State Physical Activity and Nutrition (SPAN) Grant. CCCPH's Physical Activity and

Nutrition (PAN) Connections Initiative supports state and local efforts to address physical activity and nutrition, specifically focusing on the following strategies:

- Food Service Guidelines
- Interventions Supportive of Breastfeeding
- Activity-Friendly Routes to Connect Everyday Destinations
- Early Care and Education Nutrition and Physical Activity Standards

One NC SPAN Grant activity was the creation of the NC Breastfeeding Advisory Group (BAG) whose purpose is to be a sharing forum for North Carolina breastfeeding stakeholders to explore challenges and opportunities, share expertise, provide guidance and identify potential collaborations to increase breastfeeding among families in North Carolina. The PNC is a member of the group along with staff members from DPH, the NCBC, Mom's Rising, and the Carolina Global Breastfeeding Institute. The NCDHHS Senior Early Childhood Policy Advisor is also a member.

CCCPH is also providing direct technical assistance and support to local community organizations awarded funding through RFA #A359 (PAN Funding). Part of the funding supports the WCHS's work to increase breastfeeding initiation and duration. Nutrition staff from WCHS and CDIS work together as part of the NC DPH Breastfeeding Coordination Team to coordinate and share information across programs to help focus TA and training, reduce duplication of effort and increase outcomes.

LHD maternity clinics provided prenatal care, which is inclusive of breastfeeding promotion, through counseling and education.

Care Managers for the CMHRP program assessed each of their patients prenatally and in the postpartum period for breastfeeding support needs and provided on-going education and information during FY20 as part of their care management services. If the patient indicated a need for breastfeeding support at any time, the CMHRP Care Manager made an appropriate referral to the needed support services and documented these findings and interventions in the patient's Comprehensive Needs Assessment in the Virtual Health documentation record system.

Healthy Beginnings

The Healthy Beginnings program serves women of color to ensure initiation and continuation of prenatal and primary care. The program continued to work with women in the interconception period on reproductive life planning, healthy weight, and referral for ongoing primary care. During FY20, the Healthy Beginnings program served 481 participants. Of the 372 babies who were born, 12.9% were born low birth weight. There was one infant death to a participant in the Healthy Beginnings program during this time period.

Healthy Start NC Baby Love Plus

The Healthy Start NC Baby Love Plus (BLP) Initiative is a federally supported program funded through MCHB. The aim of this program is to improve birth outcomes and the health of women of childbearing age (15-44 years) through the strengthening of perinatal systems of care, promoting quality services, promoting family resilience, and building community capacity to address perinatal health disparities. In FY20, BLP was focused in four counties with higher infant mortality rates within the state. BLP program services included outreach, health care coordination for women during the preconception, prenatal, and interconception periods, promotion of fatherhood involvement, perinatal depression screening and referral, and health education and training. Over the course of FY20, BLP services were provided to 79 pregnant women, 63 women in the preconception and interconception periods, and 35 infants and children under the age of 18 months. No fathers were enrolled during this time period; however, efforts to improve

father enrollment are underway. Approximately 2,900 participants and community members received education on various health topics including healthy weight, importance of prenatal and postpartum care, depression, reproductive life planning, insurance, and the importance of having a medical home.

BLP has a strong focus to not only increase initiation of breastfeeding but improve the duration rate of breastfeeding to at least 6 months. BLP staff have close connections with breastfeeding support in the community to assist with this goal. Some BLP staff were trained to provide basic breastfeeding support while encouraged to refer to local professionals to assist participants. In FY20, BLP staff made 22 referrals to local WIC agencies who employ peer counselors for breastfeeding assistance. Unfortunately, none of our participants continued breastfeeding until at least 6 months of age. The BLP Evaluation Team is looking into determining barriers to duration and focusing on involving the program's Local Action Networks to strategize methods to remove those barriers for program families. Family Care Coordinators and Family Outreach Workers are trained in using *Partners for a Healthy Baby*, an evidence-based home visiting curriculum specifically tailored to pregnant and postpartum families. This curriculum incorporates the benefits of breastfeeding and the importance of building in support mechanisms throughout a family's breastfeeding experience. In addition to education provided during home visits, the Family Care Coordinators and Family Outreach Workers hosted group support events to increase awareness and benefits of breastfeeding initiation and duration. During FY20, one of the group support sessions focused on breastfeeding. Ten participants attended.

The Fatherhood Services component of BLP provides education, support, and outreach to expectant and parenting fathers and/or male partners, with priority given to those fathers/partners of BLP program participants. Enrollment into the Fatherhood program is primarily achieved through referrals from the Family Care Coordinators and Family Outreach Workers who currently work with mothers enrolled as BLP participants; however, fathers/partners can also be referred by other community partners. Male program participants receive support through home visits or in-community contacts and group sessions as well as information and referrals to resources for health care, job training, education, mental and behavioral health, reproductive health, and transportation. The program also provides educational sessions through evidence-based parenting curricula (*24/7 Dad* and *Doctor Dad*) and the *Fathering in 15* app designed to equip fathers with self-awareness, compassion, and sense of responsibility. BLP staff are trained in engaging fathers in the breastfeeding decision-making process and offers support tips to fathers as a part of the breastfeeding team. Opportunities for fathers/male partners to interact with children are also provided.

Infant Mortality Reduction and Reproductive Life Planning Initiatives

An infant mortality reduction initiative included in the 2015 state budget was to re-allocate $1.575 million in Title V funding to be distributed to LHDs with high infant mortality rates to implement evidence-based strategies that are proven to lower infant mortality rates. Counties received funding at three funding levels ranging from $38,500 to $113,750. Each LHD was required to implement or expand at least one evidence-based strategy. The choices of evidence-based strategies in FY20 included: 17P (alpha hydroxy progesterone); Centering Pregnancy; Doula Services Program; Nurse-Family Partnership (NFP) expansion; Reproductive Life Planning (RLP) Services (includes increased access to long acting reversible contraception); Infant Safe Sleep Practices; and Tobacco Cessation and Prevention. Funding was distributed to 22 counties in FY20 with 15 of the sites selecting RLP Services as one of their evidenced-based strategies for implementation.

CenteringPregnancy® is an evidenced-based approach to delivering prenatal care in a group setting that has increased in popularity across the state both in LHDs and in private practices. It follows the ACOG traditional course of care averaging 90 minutes to two hours in length that includes educational discussions among participants led by specially trained group facilitators. Women are encouraged to engage in their care by taking an active role during visits. Opportunities to self-document vital signs and weight are just a few of the components that contribute to more

meaningful participation and understanding of their care. This helps to promote greater adherence to recommendations given throughout the course of care, attendance to visits, and a more supported, prepared woman. Representatives from the LHDs implementing Centering Pregnancy as well as DPH staff participate in the statewide Centering Consortium. This group continues to provide training, technical assistance, and support for new sites.

The Improving Community Outcomes for Maternal and Child Health (ICO4MCH) initiative continued in FY20. After a competitive application process in FY18, funding was re-awarded for two more years (FY19 and FY20) to the initial five grantee LHD sites, increasing coverage from thirteen to fourteen counties. ICO4MCH was a result of new legislation in 2015 allocating $2.5 million in state funding to DPH to implement evidence-based strategies that are proven to lower infant mortality rates, improve birth outcomes, and improve the overall health status of children ages birth to five. ICO4MCH uses a Collective Impact Framework, the principles of Implementation Science, and a Health Equity approach. The evidence-based strategies (EBS) chosen by the project sites to meet the three aims of the initiative included RLP (includes increase access of LARCs), Ten Steps for Successful Breastfeeding, Smoking Cessation and Prevention, Triple P (Positive Parenting Program), Family Connects Home Visiting, and CEASE (Clinical Effort Against Secondhand Smoke Exposure.

ICO4MCH's RLP focus includes encouragement for women and men to reflect on their reproductive intentions and select family planning strategies that work for them. Outreach was conducted and trainings were held to focus on RLP. A total of 186 educational and outreach events were held in FY20 reaching over 6,053 people. In addition, 391 health care providers and staff were trained in RLP, and 3,405 LARCs were provided among 27,028 family planning clients served. ICO4MCH collaborative sites also increased the number of businesses, worksites, schools, and organizations that accommodate breastfeeding women (patrons and employees). In FY20, ICO4MCH sites provided 73 breastfeeding trainings, which reached 623 staff. In addition, ICO4MCH engaged women in discussions about plans to breastfeed during prenatal care visits using patient decision aids. An additional 39 providers in five clinics began using these aids and served 1,591 women in FY20. The COVID-19 pandemic caused grantees to adapt how they were implementing their EBS and doing overall collective impact work. Sites overcame a number of challenges as they continued to provide high quality maternal and child health care and programming.

Health Equity

As part of the work done by NC's Social Determinants of Health (SDoH) CoIIN, the collaborative #impactEQUITYNC, made up of members from the WCHS, NC Office of Minority Health and Health Disparities, March of Dimes, and NC Child (a statewide child advocacy organization) was formed. One goal of the collaborative is to develop, test, and disseminate a tool to empower public health agencies and communities to evaluate and proactively address the health implications of state and local policies, practices, and programs. The NC Health Equity Impact Assessment (HEIA) is based on a tool originally developed in Washington state, which uses data and community involvement to address health inequities and facilitate systems change. The HEIA uses data and community involvement to evaluate the impact of public policies, programs, and administrative practices on health inequities in NC and to promote systems change. Along with some pre-work steps of recruiting the right participants and compiling a data profile, there are four steps to the assessment which are done with the implementation team: 1) describe the policy/program 2) analyze and interpret the data profile, 3) identify modifications, and 4) develop a monitoring plan. The WHB has incorporated the use of HEIA into its Perinatal Health Strategic Plan, and the assessment has been adopted by ICO4MCH. During FY20, ICO4MCH grantees completed assessments RLP, breastfeeding, and Family Connects.

Another goal of the SDoH CoIIN Team is to develop a racial equity foundational training for all DPH employees, and work on this training continued in FY20. The SDoH CoIIN is co-led by staff members from the WHB and March of

Dimes and meets monthly as a large group with additional subcommittee meetings held as necessary. During the report period, NC SDoH CoIIN team members drafted the *Advancing Health Equity in North Carolina* (AHENC) foundational training. AHENC training modules are presently under review by WCHS leadership. Once finalized and approved, the training will be incorporated into the Learning Management System (LMS) which is NCDHHS' web-based training platform. The goal is that this will be a required annual training taken by all NCDHHS employees. As a complement to the AHENC training, a debriefing framework consisting of facilitated discussions about training content, available resources, and suggested strategies to connect the training to employee job duties will occur 30-60 days after training roll-out. In addition, the NC SDoH CoIIN co-leads met with internal and external health equity champions to share a status update about the work of the SDoH CoIIN.

Center for Maternal and Infant Health

The WHB provides funding to the UNC CMIH to implement the statewide 17P program to help women with a history of preterm birth to reduce the risk of reoccurrence. The program focuses on increasing access to this medication for pregnant women in NC who meet the clinical criteria for its use. CMIH, working in partnership with WHB, CCNC, and NC Medicaid, focuses on consumer education, technical assistance to providers and partnering with providers to enhance outreach and education to women of reproductive age. During FY20, CMIH conducted outreach at 11 conferences throughout NC where they provided patient education resources to healthcare providers and community members. CMIH has successfully expanded outreach through social media campaigns for both patients and providers; the campaign ads were viewed by over 220,000 social media users in NC. The 17P project has been able to provide technical assistance to private and public providers throughout the state via phone and email consultation as well as aided agencies ordering 17P patient educational materials.

Limited funds are provided to the UNC CMIH to implement the Infant Safe Sleep Campaign. This Campaign addresses infant health by reducing the risk of Sudden Infant Death Syndrome (SIDS) and preventing accidental infant strangulation and asphyxiation deaths. Evidence-based messages focus on infant safe sleep practices such as correct infant positioning and safe sleep environments. Dangers of co-sleeping and exposure to secondhand smoke are addressed as well as the protection offered by breastfeeding. In FY20, CMIH conducted six in-person and one virtual safe sleep trainings and exhibited at 11 conferences and professional events throughout North Carolina. Due to COVID-19 restrictions, four trainings and five exhibiting opportunities were canceled. At the events staff were able to attend, they advertised and provided copies of the literature-informed patient education materials developed in the previous year and available at no cost to NC agencies through the WHB's publications warehouse. CMIH trained 224North Carolinian healthcare providers through their free, internet-based training resource. Most participants were employed at local health departments and post-training evaluation data showed the training was positively received by participants. The Safe Sleep Campaign continued a robust social media presence engaging with over 109,306 users across multiple social media platforms.

Prenatal and Newborn Screening

The C&Y Branch administers contracts with UNC-Chapel Hill and Wake Forest University to provide maternal serum prenatal screening in order to detect neural tube defects, Down syndrome, and other chromosomal anomalies in order to improve health outcomes. This screening was provided for 2,784 pregnant women with low-income in FY20.

Universal newborn screening genetic services have been available in NC since 1966. In 1991, provision of such services became a legislative mandate with the passage of House Bill 890 "An Act to Establish a Newborn Screening Program." The NC State Laboratory of Public Health (SLPH) began its program screening all infants born in NC for phenylketonuria, then added tests for congenital hypothyroidism and later for galactosemia, congenital adrenal hyperplasia, and hemoglobinopathy disease (e.g., sickle cell). Beginning in July 1997, screening was

expanded to include a broader array of metabolic disorders using tandem mass spectrometry technology. Screening for biotinidase deficiency was added in 2004, and screening for Cystic Fibrosis was added in 2009. Legislation was passed in May 2013 requiring newborn screening for critical congenital heart disease (CCHD) using pulse oximetry screening. Screening for Severe Combined Immunodeficiency Disorder (SCID) was added to the panel of screening in 2017. SL 2018-5 amended NCGS 130A-125, which allowed for NBS expansion to include Pompe disease, Mucopolysaccharidosis Type I (MPS I), and X-Linked Adrenoleukodystrophy (X-ALD), and for the Commission for Public Health to "amend the rules as necessary to ensure that each condition listed on the Recommended Uniform Screening Panel…is included in the Newborn Screening Program."

The Newborn Screening (NBS) Follow-Up Team, housed in the C&Y Branch and funded by Title V, ensures that all newborns who screen positive for a particular genetic diagnosis receive timely follow up to definitive diagnosis and are referred to clinical management for their condition. In FY20, the C&Y Branch Follow-Up Team provided services for 810 infants with abnormal NBS results for CH, CAH, galactosemia, biotinidase deficiency, and CF, 112 of whom were confirmed to be affected and are receiving treatment as determined by the appropriate subspecialist. Additionally, active follow-up was provided to 322 out of range SCID results, which identified 2 confirmed cases of SCID, and 15 infants were identified with and treated for other conditions detected by a low T-cell count. With the addition of three NBS follow-up Social Workers, the follow-up team was able to expand to report Unsatisfactory Specimens to the items reported directly to primary care providers, decreasing the number of days to repeat specimen collection. The Newborn Screening Health Educator assisted in the creation and delivery of the electronic Early Hearing Detection and Intervention (EHDI) newsletter and 2019 EHDI Annual Report to stakeholders. In honor of NC EHDI's twentieth year celebration, the educator created an infographic highlighting accomplishments. Prior to COVID-19, the educator was planning a video project to capture twenty stories from families that have benefited from the NC EHDI program since its launch. The Newborn Screening Health Educator also served as a member of the Opioid Action Team. Ongoing projects include the development of education materials for the new conditions added to the NBS panel.

The NBS Unit at NCSLPH has steadily been making continuous improvements to enhance the NBS Program throughout NC. The first major accomplishment that Cystic Fibrosis mutational analysis was validated and brought back to the NC NBS Molecular Lab after being outsourced due to the previous vendor's inability to continue their service. This greatly reduced the turnaround time for cystic fibrosis screening in NC. Beginning in January of 2020, CF DNA testing includes a panel of 139 mutations for all specimens with elevated immunoreactive trypsinogen values. The NBS Follow-Up Team continued to collaborate with CF Center staff and local providers to facilitate prompt and successful sweat tests and provided education to providers regarding the CF screening process and follow-up recommendations. Additionally, the NBS Follow-Up Team worked with the CF Centers to accommodate sweat testing access and availability which was temporarily altered in response to the COVID-19 pandemic.

In FY20, the NBS Unit worked diligently to lay the groundwork for the transition of MS/MS testing for metabolic disorders from a derivatized Lab Developed Test (LDT) to an FDA cleared non-derivatized assay, NeoBase 2. NeoBase 2 allows for the detection of X-Linked Adrenoleukodystrophy (X-ALD) marker, C26:0-LPC. Preparation for this switch required an extensive review of analyte algorithms that had been historically implemented for reporting. Based on updated Clinical Laboratory Standards Institute (CLSI) guidelines, analyte combinations for 40+ metabolic disorders were reviewed with Subject Matter Experts and updated to be in accordance with the most recent guidance for Newborn Screening by Tandem Mass Spectrometry. These updates created the foundation for a comprehensive enhancement of the NBS MS/MS Lab and improvement to the NBS report. Further, the NBS MS/MS Lab space underwent renovation to install a new Fume Hood and desk space for additional laboratory method preparation and staffing to accommodate testing for X-ALD. To date, the new method has been validated and implemented. The validation included a first tier test for X-ALD that will roll-out at a later date due to the need of a

second-tier testing strategy. New instrumentation has been acquired and performance qualifications for the second tier CDC assay are underway.

The infrastructure to onboard screening for Spinal Muscular Atrophy (SMA) was also created in FY20. This included the hiring of testing personnel to perform testing for a multiplexed method that detects markers for Severe Combined Immunodeficiency (SCID) and SMA. A Molecular Public Health Scientist was among the increased staffing. This position is responsible for validating new laboratory methods and providing training in the Molecular Lab.

Lastly, the procurement of an FDA-cleared assays for 1st-tier screening of MPS-1 and Pompe and the outsourcing of a 2nd-tier test for each of these conditions, was impacted by the COVID-19 pandemic. However, a Request for Proposal (RFP # 30-21140-DPH) was issued and has closed, and proposals are currently in the review process. The SLPH plans implementation of MPS-1 and Pompe screening in early 2022.

The C&Y Branch maintains a contract with UNC-Chapel Hill for follow-up and management of infants identified by MS/MS. Discussions are in progress for the final phases of implementing universal NBS for X-ALD and MPS1 with follow-up coordination, which is in addition to the existing MS/MS contract in FY20. The UNC Newborn Metabolic Screening Program provides comprehensive coordination and care through a multi-disciplinary team available 24/7. The team at UNC offers prompt consultation and management for newborns, infants, and children who are at high-risk for metabolic decompensation and who require immediate care to prevent long-term consequences – the primary goal for all NBS programs. Newborns with potentially life-threatening metabolic disorders are typically seen within 24 hours by the metabolic consultant. UNC confirms the diagnosis by second-tier metabolic testing, educates families about the metabolic disorder, initiates appropriate dietary changes using special metabolic formulas, and discusses long-term management and follow-up.
They provide all the necessary long-term management and follow up for all disorders identified through the newborn screening. UNC also provides consultation for interpretation of all abnormal MS/MS newborn screening results sent by the SLPH to primary care physicians and arranges for follow-up testing and evaluation of these infants six days a week.

In collaboration with RTI International and UNC-Chapel Hill, the pilot study screening for X-ALD using an HPLC/MS/MS methodology was completed through which three babies with X-ALD were identified and treated. Pilot studies in NC for MPS1 and X-ALD suggest a detection rate of 1:4,166 cases.

UNC is also part of an integral team involved in discussions to provide care for newborns who will be identified with the potential implementation of newborn screening for spinal muscular atrophy (SMA) in NC. UNC has a multidisciplinary team that includes a MD geneticist, genetic counselors, neurologists, and social worker. They have been involved with a pilot study through RTI and will be well equipped to do second tier testing to confirm the diagnosis and offer state of the art current treatment options.

During FY20, there were 2,728 out of range MS/MS NBS, of which 466 required complex actions. There were 29 newborn diagnoses made during that period. In addition to the new cases reported above, metabolic dietitians have documented close to 5,885 contacts with the existing patient cohort outside of clinic visits to help and coordinate the management of their inborn error of metabolism (IEM).

The NC Birth Defects Monitoring Program (NCBDMP) continued with its case reviews of CCHD identified through the system and compared them with the screening results to determine if there were false positive or false negative results. The NCBDMP also periodically reviewed the CCHD database for reports of screening. As a part of the ongoing follow-up, a weakness was identified in that many facilities were either not reporting completely or accurately. BDMP staff followed up with facilities when possible to improve reporting.

NC Sickle Cell Program

The NC Sickle Cell Syndrome Program (NCSCSP) provided testing, counseling, care coordination and education to individuals and families living with sickle cell disease during FY20. Funded primarily with state and Medicaid resources, services were provided to individuals with sickle cell disease throughout the life cycle. Services are provided using a team model approach that includes DPH Sickle Cell Educator Counselors (SC ECs), a contracted community- based organization and six major medical centers. The state funded medical centers focus on specialized clinical care for clients with sickle cell disease. In addition, the NCSCSP provides counseling and educational services to individuals with trait and therefore at risk for having children with sickle cell disease.

During FY20, the Sickle Cell Education Consultant, in collaboration with the Sickle Cell Trait Counseling Work Group formed in FY17, developed a guidance document (*Protocol for Local Health Departments for Education, Screening and Trait Counseling*) for sickle cell services focusing on screening and counseling for LHDs. This protocol details how LHDs can support the work of SC ECs throughout the state in an effort to educate parents of newborns identified with sickle cell trait or related trait through the newborn screening program as well as individuals screened through the LHDs and identified with trait.

SC ECs participated in five trainings during FY20. A community engagement forum was held to provide sickle cell education to local agencies, leaders and health professionals (non-profits, sororities/fraternities, medical providers, faith-based organizations) in select southeastern North Carolina counties. This event was sponsored by Piedmont Health Services and Sickle Cell Agency that serves 19 counties in the state. In addition, a Sickle Cell care coordination follow up training was conducted to review the Client Strengths Needs Assessment (CSNA) that includes evidence-based tools such as the CAGE-AD (substance use screening tool) and the Personal Health Questionnaire 9 (PHQ-9-depression screening). The Sickle Cell CBO partner hosted an “Advocation” training to empower clients with sickle cell disease to become more knowledgeable about and offer strategies to help them successfully navigate the health care delivery system. The SC Data Manager conducted a training on the Community Care of North Carolina’s (CCNC) Virtual Health Provider portal, an online tool used to pull down referral information and follow up on sickle cell clients seen in hospital emergency departments and referred to the NCSCSP by CCNC care managers. Also, a training was held for SC Educator Counselors and medical center partners who provide clinical care for sickle cell clients during the COVID-19 pandemic. The training focused on providing comprehensive care to clients using telemedicine, virtual technology and telephone visits. In addition, the Sickle Cell Data Manager continued to provide technical assistance and support to staff on the WCS-Web database (data system for newborn hearing screening and sickle cell programs).

SC ECs provided care coordination services including genetic counseling and education to 113 newborns identified with sickle cell disease in FY20. These newborns were linked to pediatricians for completion of confirmatory testing for sickle cell disease and receipt of well care. Newborns were also referred to hematologists for specialized care and treatment of sickle cell disease including prescribing penicillin prophylaxis to prevent streptococcus pneumoniae infection which could lead to early death in young children.

Staff at the six comprehensive sickle cell medical centers continued required data entry in the WCS-Web database to document the total number of clients served and the number and types of services provided to each client. Initial training and technical assistance were provided to medical center staff in FY20 to ensure understanding of data entry requirements, especially for newly hired staff, and to promote timely, accurate submission of sickle cell client information. Enhancements and modifications continued to be made to the WCS-Web database in FY20.

Early Hearing Detection and Intervention Program

The Early Hearing Detection and Intervention (EHDI) program is primarily funded through other federal grants but housed in the C&Y Branch. All 86 hospitals/birthing facilities in NC provide newborn hearing screening. Newborn hearing screening data are collected through the state's web-based data tracking and surveillance system for newborn hearing screening, WCSWeb Hearing Link. WCSWeb Hearing Link is used to provide data to birthing facilities, audiologists, and interventionists for compliance with reporting requirements and the number of infants meeting EHDI 1-3-6 (screen by one month of age, diagnosis by three months of age, enrollment in intervention by six months of age) goals. The EHDI data system will continue to be enhanced with a long-term goal of integration with other Health Information Technology (HIT) or electronic medical record systems. The EHDI program works to empower and utilize families as partners in the development or improvement of a statewide family support system designed to address the needs of families of newborns and infants diagnosed as deaf or hard of hearing (D/HH).

EHDI has a parent consultant on staff that acts as a liaison with families across the state. In FY20, sixty parents participated in a *Parents as Collaborative Leaders: Improving Outcomes for Children with Disabilities* (PACL) Training. Parents completing PACL trainings are invited to participate in EHDI activities. During FY20, parents of children who are D/HH have:1) co-chaired and participated on the EHDI Advisory Committee; 2) presented in-person PACL trainings at family support programs and virtual during the pandemic; 3) co-presented with EHDI staff at the 2020 National EHDI conference; 4) participated on the Pediatric Audiologist and Early Interventionist Sensitivity Training Development Committees; 5) participated on numerous committees/workgroups (Common Ground, CMV, Parent-Professional Collaborative, Deaf Mentor, C&Y Branch Family Partner and e-Update); 6) developed a parent support team; 7) acted as webmaster for the HitchUp.org family support locator website; 8) reviewed new program materials; and, 9) shared their hearing loss journey for inclusion in trainings.

EHDI Regional Consultants and administrative staff provide tracking and surveillance through the three stages of the EHDI process (screening/re-screening, diagnostic evaluation, and enrollment in early intervention) for all children born in NC. Operational support for this team is through Title V. The EHDI Regional Consultants provide ongoing technical assistance, consultation, education, and support to birthing facilities, physicians, audiologists, interventionists, and families.

The EHDI staff members continued to collaborate with the DPH WHB to disseminate EHDI educational materials. The NC-EHDI Program Materials Order Form continues to be shared with stakeholders so they can easily request materials directly from the storage warehouse. These new dissemination strategies have greatly increased the amount of program materials being shared with our partners.

EHDI also continued to collaborate with C&Y program partners including Maternal, Infant and Early Childhood Home Visiting (MIECHV), Minority Outreach Coordinator, CYSHCN Helpline Coordinator and the C&Y PMC) to share EHDI resources at statewide meetings, conference and events, as well as the NC Infant-Toddler Program.

In 2019, WCSWeb Hearing Link collected hearing screening data on a total of 120,638 live births. A total of 119,709 (99.2% of live births) were screened for hearing, with 117,290 (97.2% of live births) screened by 1 month of age. One SPM was selected to identify progress to address the WCHS's priority need to "increase the number of newborns screened for genetic and hearing disorders and prevent birth defects." SPM #1 is the percentage of infants with confirmed hearing loss who are enrolled for intervention services no later than age 6 months. In 2013, this percentage was 51.7 and dropped to 41.1% in 2015, but has risen back to 43.6% in 2019. Part of the reason for the earlier decrease can be explained by a change in how children are enrolled in the Infant Toddler Program (ITP). Prior to August 2012, children with hearing loss could receive services specific to their hearing loss at the CDSAs without being enrolled in ITP, but now they must be enrolled in ITP to receive hearing services which has decreased

enrollment. Efforts to modify this change in enrollment practices are ongoing. The CDC also clarified the definition of "enrolled" to be the date of the signed Individualized Family Service Plan (IFSP). The EHDI program's eleven regional audiology and speech language consultants tracked all 4,643 infants who did not pass their initial hearing screening identified in 2019. The regional consultants partnered with birthing facilities, pediatric audiologists, medical home providers, early intervention providers, LHDs, parents, and other stakeholders to ensure that infants received the appropriate follow-up care they needed in a timely manner and aligned with the Joint Committee on Infant Hearing (JCIH) best practice guidelines.

Perinatal/Infant Health - Application Year

Priority Need 1 – Improve Access to High Quality Integrated Health Care Services

One way of improving access to high quality integrated health care services is to ensure that infants and mothers are receiving care in a risk-appropriate level of care facility. In FY21, a state-focused Maternal Health Task Force will lead the work and development of a Maternal Health Strategic Plan with the goal of addressing disparities in maternal health and improving maternal health outcomes, inclusive of preventing maternal mortality and reducing severe maternal morbidities. The development of the Maternal Health Strategic Plan will be informed by the work of the Perinatal Nurse Champion program with support from the Obstetric and Family Medicine Champions, which will work with birthing facilities across NC to determine the neonatal and maternal levels of care through the completion of the CDC LOCATe tool.

NC does not currently have a level of care system for assessing birthing facilities' capabilities to care for pregnant and birthing women.

Adopting Uniform and Nationally Recognized Neonatal and Maternal Levels of Care Standards

NC birthing facilities do have the required capabilities for neonatal care articulated as "levels of care." Unfortunately, the neonatal levels of care guidelines for NC have not been updated since 1996 and are not consistent with the current best practice guidelines. In January 2019, the PSOC Task Force was convened to address barriers to achieving optimal clinical care for women and infants and to make recommendations on what could be done to improve outcomes by improving access to, and quality of, clinical care. The POSC Task Force recommended that the state should adopt the uniform and nationally recognized standards for neonatal and maternal levels of care developed by the AAP and ACOG/SMFM. To achieve this recommendation, DPH will partner with the NC Division of Health Services Regulation (DSHR) to review and update the NC Administrative Code 10A NCAC 13B .4301-04 (maternal services) to reflect the uniform, nationally recognized, and evidence-based guidelines for regionalized and risk-appropriate maternal levels of care offered by ACOG/SMFM and the NC Administrative Code 10A NCAC 13B .4305-08 (neonatal services) to reflect the uniform, nationally recognized, and evidence-based guidelines for regionalized and risk-appropriate neonatal levels of care offered by the AAP. If the adoption and/or update of the above mentioned Administrative Codes occurs, DSHR would need to update the hospital licensure form to include a section that will allow for all facilities submitting the form to indicate their highest level of maternal care services available. This reporting update will coincide the work of the Perinatal Nurse Champion program.

The mission of the Perinatal Nurse Champion Program, formerly the Perinatal/Neonatal Outreach Coordination Program, is to improve the state's maternal and neonatal morbidity and mortality rates by ensuring that all pregnant women and high-risk infants have access to the appropriate level of care through a well-established regional perinatal system. To achieve this mission, along with provision of training and TA, birthing facilities were engaged to complete the CDC LOCATe to determine risk appropriate levels of maternal and neonatal care. The Perinatal Nurse Champion program was first implemented in FY18 in Perinatal Care Regions (PCR) 4 and 6. Over the past three years, 61 birthing facilities (71%) have completed the LOCATe tool. By FY23, the remaining birthing facilities will complete the LOCATe tool through work by the Perinatal Nurse Champion program which has been expanded to include all six PCRs with a combination of MCHBG and Maternal Health Innovation funding. In two of the regions, the Perinatal Nurse Champion will continue to engage birth facilities to initially complete the LOCATe tool and work with facilities to re-assess if it has been greater than two years since the initial assessment. The work of these programs will ensure that all birthing facilities will have completed the LOCATe tool at least once by June 2023. The Division of Health Services Regulations will be convening a meeting in August/September 2021 to begin gathering feedback from interested parties.

Providing Behavioral Health Support to Maternal Health Providers

The NC Maternal Mental Health MATTERS (Making Access to Treatment, Evaluation, Resources, Screening Better) program exists to support providers in screening, assessing, and treating behavioral health concerns in pregnant and postpartum patients. A strategy to help improve access to high quality integrated health care services is to increase awareness and to promote the services available through the NC MATTERS program. One component of the NC MATTERS program is the NC Psychiatry Access Line (NC-PAL), a provider-to-provider telephone consultation service where providers can receive real-time psychiatric consultation and case discussion with a Perinatal Psychiatrist or providers can consult with a Perinatal Mental Health Specialist and/or Care Coordinator to ask questions around diagnoses, medication management therapy, community resources and counseling.

To increase awareness of the NC MATTERS program and NC-PAL, staff members will offer informational and educational webinars to NC LHDs and Local Management Entities/Managed Care Organizations (LME/MCOs). The NC MATTTERS program has perinatal psychiatrists and perinatal mental health specialists who will serve as the subject matter experts for the educational webinars.

By FY23, the MATTERS program will aim to enroll fifteen pilot LHDs to establish protocols that include integration of the NC-PAL consultation services into the agency's clinic flow. Upon enrollment, each LHD will receive: (1) continuing education resources on Perinatal Mood and Anxiety Disorders via online learning services around substance use, mental health care planning and community based resources, (2) clinical guidance on mental health care plans algorithms for routine screening using MATTERS clinical and mental health wellness plan toolkits, and (3) provider efficacy training opportunities. After services are established, the perinatal telepsychiatry clinic will be accessible for each enrolled LHD to receive special psychiatry care for their patients. While working with the pilot counties is the main emphasis of the MATTERS program, providers from any county in NC can call NC-PAL, and WHB staff members will be encouraging all LHDs to do so.

NC currently has seven LME/MCOs, which are public managed care organizations that manage Medicaid, federal, state and local funding for services and supports related to mental health, substance use and intellectual/developmental disabilities. The NC MATTERS program plans to strengthen its relationship with the LME/MCOs, to include inviting a representative to serve on the Implementation Team. It is anticipated that LME/MCOs can be instrumental in advising the NC MATTERS Implementation Team on ways to best integrate health care/maternal mental health services via resource sharing, provider trainings and other coordinated efforts. Now that Medicaid Transformation has been restarted, discussions with the Prepaid Health Plans will also be critical.

The WHB LCSW will develop and present a series of behavioral health webinars for LHD staff, including Pregnancy Care Managers, on screening, triaging, and referring patients with behavioral health concerns. These webinars will include, but are not limited to: how to talk with patients regarding their behavioral health; appropriate screening tools and how to use them; and how to make linkages for patients with behavioral health needs and needed follow-up to ensure connection with services. These webinars will be developed utilizing best practice standards and archived for review. Frequent reviews of webinar content will occur to ensure that best behavioral health practice methods presented are up-to-date and incorporate appropriate ACOG recommendations.

The State and Regional Social Work Consultants (RSWC) provide support to LHD Care Managers on the Care Management for High Risk Pregnancies (CMHRP) Program. RSWCs provide statewide leadership and program policy development for CMHRP in addition to local training, consultation and technical assistance to LHDs. They provide new hire program orientation training to new staff as well as on-going policy consultation and care management best practices, including that of behavioral health. New Hire Orientation has traditionally been done in

face-to-face format by the RSWC team and consultation and technical assistance done during face-to-face site visits, phone calls, and email. They provide guidance to program supervisors on data review and reporting as well as program quality improvement and assurance. They regularly support the care managers by providing training and on-going consultation on documentation and patient best practice. Best practice consultation includes such areas as patient outreach, referral and follow up and behavioral health assessment and linkage. They interpret data to assist care managers and supervisors in assuring program effectiveness and metric deliverables.

The Women's Health State and Regional Nurse Consultants (RNCs) maintain close contact with LHDs through regional meetings with Nurse Administrators, emails, and phone calls. The Nurse Administrators rely on their RNCs to provide technical assistance and training for their agencies' Women's Health staff. When staff turnover occurs, the Nurse Administrator informs the RNC of the staff change and requests a face-to-face or virtual orientation for the new Women's Health staff member. The RNC will schedule the orientation at the convenience of the local staff, reviewing information appropriate to the staff person's role within the agency. For Maternal Health Nurse Administrators, Maternal Health Program Coordinators, and Maternal Health Providers, this includes a review of required behavioral health screenings and referrals.

Newborn Screening Follow-Up Team

In FY22, the NBS Follow-Up Team will continue to report NBSs with abnormal results in a timely manner, monitor follow-up testing, document final outcomes, provide technical assistance to LHDs and private providers about individual NBS results, and provide information for patients and their families. The NBS Follow-Up Team will work to develop follow-up protocols, educational and outreach materials relevant to new conditions being added to the NC Newborn Screening Panel in FY22 (MPS-1, X-ALD, and Pompe).

The NC MAPS project, a CDC funded collaboration between the NCSLPH and RTI, started in September 2020 and will extend through 2022. It is primarily designed to support laboratory and follow-up activities in the onboarding processes for the four new conditions recently added to NC NBS panel: Mucopolysaccharidosis – Type I (MPS-I), X-Linked Adrenoleukodystrophy (X-ALD), Pompe Disease, and Spinal Muscular Atrophy (SMA). To date this initiative has worked to enhance the Laboratory Information Management System at the SLPH, improve the Case Management Information System for the NBS follow-up program, and to develop and implement standard operating procedures, educational materials, and project management tools to map our progress towards reaching our onboarding goals.

Late in 2020, the NBS Unit began validation of a CDC multiplex assay that allowed for the simultaneous identification of severe combined immunodeficiency (SCID) and SMA. The assay was launched in May 2021 and two SMA cases have been detected and confirmed. In addition, the NBS Unit has worked diligently to transition MS/MS testing for metabolic disorders to an FDA cleared non-derivatized assay, NeoBase 2. Validation was completed, and NeoBase 2 went live in July 2021. The validation included a first tier test for X-ALD that will roll-out at a later date due to the need of a second-tier testing strategy. New instrumentation has been acquired and performance qualifications for the second tier CDC assay are underway. The NCSLPH anticipates launching X-ALD screening in the fourth quarter of 2021.

The team at UNC will continue to provide clinical genetic services, genetic counseling services, and genetic testing for approximately 2,400 unduplicated patients from a variety of referral sources with highly complex needs and their families regardless of their ability to pay. Services conducted at medical facilities and outreach satellite clinics include clinical evaluations/services, laboratory studies, genetic counseling, follow-up, and management. Metabolic services will be provided to at least 4000 newborns and patients with a potential diagnosis for an inborn error of

metabolism identified through MS/MS through the NCDHHS. UNC will continue to provide expertise and consultation to the SLPH on follow-up care for infants identified through NBS and consultation to referring healthcare providers regarding patient diagnosis, care, and management.

The NCBDMP continues to work with the NC Healthcare Association and other partners to improve reporting of CCHD data into the statewide WCSWeb database by birthing hospitals, free-standing birthing centers, and other health care providers attending deliveries of newborns. NCBDMP staff will also continue to review screening results and compare them to cases identified within the registry to determine false positive and false negative results. C&Y Branch EHDI consultants will do outreach with staff while working with birthing hospitals about the CCHD reporting requirements. Branch staff will continue to disseminate a newly developed prenatal information sheet, *North Carolina's Newborn Screening Program*, to help with increasing awareness about several newborn screenings. The sheet contains information about CCHD screening, metabolic screening, and hearing screening.

The EHDI program will continue its activities in FY22. All 86 hospitals/birthing facilities in NC will continue to provide newborn hearing screening and submit screening through WCSWeb Hearing Link. The EHDI Regional Consultants will continue to provide ongoing technical assistance, consultation, education, and support to birthing facilities, physicians, audiologists, interventionists, and families and will improve service delivery by reaching out to more families of D/HH children across the state to improve early identification and quality intervention. The EHDI program will also continue quality improvement work with the goals of increasing the percentage of infants rescreened by 1 month of age, increasing the percentage of children who receive a diagnostic evaluation by age 3 months and increasing the percentage of infants enrolled in early intervention services by age 6 months.

Priority Need 3 – Prevent Infant/Fetal Deaths and Premature Births

Work to reduce the infant mortality disparity ratio, which is Goal 1 of the NC Early Childhood Action Plan and the underlying framework of the PHSP, will continue in FY21 through a variety of methods. The PHSP's adapted framework is designed to focus on equity and social determinants of health to address infant mortality, maternal health, and the health status of individuals of reproductive age. A new 2021-2025 PHSP will be released in early 2021 which will be aligned with the NC ECAP and the PSOC Task Force recommendations with a continued focus on equity.

In addition, work to support the NC CFTF will continue. As historically, about two-thirds of all child deaths in NC are infant deaths (810 of the 1,265 total child deaths in 2019 were infant deaths – 64%), the WCHS works closely with the NC CFTF. Specific priorities for FY21 include continuing to work on legislation to strengthen the statewide Child Fatality Prevention System, youth suicide prevention, firearm safety, nicotine use prevention, infant safe sleep, and motor vehicle safety. A new set of recommendations for 2021 includes "Passage of pregnancy and lactation accommodations legislation as well as a kin care and safe days bill that would strengthen the health and safety of infants and their families." (NC CFTF Annual Report, February 2021).

Strategic Plans Prioritizing Breast/Chest and Human Milk Feeding

Multiple state strategic plans in NC have prioritized breastfeeding objectives, strategies, and action. These include the NC PHSP; NC ECAP; NC's Plan to Address Overweight and Obesity – Eat Smart, Move More NC; and Promoting, Protecting, and Supporting Breastfeeding: A NC Blueprint for Action. Within DPH, the WCHS and CDIS house a variety of health professionals and programs that directly work to increase breastfeeding initiation, duration, and exclusivity. The DPH Breastfeeding Coordination Team, a multidisciplinary team comprised of many of these individuals, continues to meet on a quarterly basis to ensure integration, communication, and coordination of breast/chest and human milk feeding activities across DPH. Funding for these positions comes from Title V, Title X,

WIC, Preventive Health Services Block Grant, and CDC, plus other agencies. With the creation of this FY20-25 MCHBG State Action Plan, the DPH Breastfeeding Coordination Team will be more engaged in the monitoring of the included objectives, strategies and measures and preparing the annual MCHBG application.

The initiation and continuation of breastfeeding is a well-researched intervention for the reduction of maternal and child morbidity and mortality. The NCDHHS perinatal and child health strategic plans recognize the public health imperative to support interventions that improve the initiation and continuation of breastfeeding for NC citizens. While a decision to breastfeed is personal, its success is dependent on the mesosystem and exosystem sources of influence on families. Families continue to experience barriers that negatively impact their breastfeeding goals. The NCDHHS strategic plans have focused on the implementation activities that reduce the barriers of breast/chest and human milk feeding success.

Breastfeeding Friendly Designations

NCDHHS developed the first state designation to recognize incremental implementation for the World Health Organization's *Ten Steps to Successful Breastfeeding* through the NC Maternity Center Breastfeeding Friendly Designation (NC MCBFD). The NC MCBFD awards maternity centers one star for every two steps implemented. The NC MCBFD is led by the NSB and supported by WCHS staff members who contribute to application review. Since its implementation in 2010, over 64% of NC maternity centers have achieved at least one or more stars and currently over 40% of NC maternity centers are designated. Additionally, in 2010 one maternity center was designated as a Baby-Friendly Hospital from Baby Friendly USA for the implementation of all *Ten Steps to Successful Breastfeeding*. Today, there are 17 hospitals in NC who have achieved the Baby-Friendly designation from Baby Friendly USA. As WHO updated the *Ten Steps to Successful Breastfeeding* in 2018, the application must be revised to align with current programmatic requirements to align with the implementation timeline of 2023.

The NSB updated and released the NC Breastfeeding Friendly Child Care Designation application, which was originally implemented in January 2015. The designation requires the implementation of five standards in accordance with the *Ten Steps to a Breastfeeding Friendly Child Care* developed by the Carolina Global Breastfeeding Institute. The emphasis on this designation is to increase the continuum of breastfeeding support when families reenter the workforce during the postpartum period. NSB staff members will work with NC Child Care Resource and Referral Council and CCHC staff members to provide resources, trainings, and technical assistance for the implementation of the five standards. The PNC and CCHCs also help to promote the NC Breastfeeding-Friendly Child Care Designation (coordinated by a nutritionist in the NSB), designed to recognize child care facilities on a statewide basis that have taken steps to promote, protect, and support breastfeeding.

Regional Lactation Training Centers

NCDHHS, through the NSB, launched the Regional Lactation Training Centers (RLTCs) in 2005 to enhance the statewide infrastructure to support breastfeeding across the state. The RLTCs provide routine and ready access to accurate, standardized, evidence-informed lactation management training, and continuing education for health care providers. Since implementation, the centers have provided over 1,000 in-services in lactation to over 10,000 different public health agency staff and health care providers. For FY22, additional coordination and communication will occur between DPH breastfeeding team members to enhance access to these training opportunities.

WIC Breastfeeding Peer Counselor Program

Since the Breastfeeding Peer Counselor (BFPC) Program funds were made available to local agencies in 2005, the

program has grown from four local WIC agencies to 84 local WIC agencies. In FY19, BFPCs provided their services to 27,587 pregnant and breastfeeding participants enrolled in the WIC Program; however, there were more than 52,000 clients who were eligible for those services, so increasing this number by 15% by 2025 seems like an achievable goal for ESM#7. In FY20, however, the number of participants receiving BFPC services decreased to 25,020 as many local WIC agencies were forced to suspend BFPC Program services at the onset of the pandemic due to staffing shortages or limited resources (computers, cellphone, VPN access). Since March 2020, WIC Program services have been virtual, which has caused challenges in program enrollment and establishing rapport with participants. Since the implementation of the BFPC Program, the WIC Program has increased their state-wide breastfeeding initiation rates from 57.6% in 2005 to 72.9% in 2020.

ICO4MCH, Healthy Beginnings, and Home Visiting Programs

ICO4MCH grantees focus on Steps 3 and 10 of the Ten Steps for Successful Breastfeeding to "inform all pregnant women about the benefits of and management of breastfeeding" and to "foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or birth center." In FY20, ICO4MCH grantees provided 73 trainings to 623 staff on breastfeeding. Additional trainings were interrupted due to the pandemic and COVID related response. Forty-nine businesses became breastfeeding friendly. Current year plans include establishing relationships with additional businesses, organizations, local schools, universities, and community colleges to become breastfeeding friendly establishments. Collaborative efforts will include advocating and requesting to set up Mamava (modular breastfeeding) pods in appropriate designated locations. Breastfeeding evidence-based sites will also work toward extending their collaborative start-up movement for grandmothers advocating breastfeeding as well as providing basic breastfeeding education within faith-based entities. In addition, plans to strengthen focus on black maternal health to include increasing the reach and awareness of breastfeeding education and support. Prenatal and postnatal breastfeeding support with the assistance of CHWs who are certified to provide breastfeeding support will continue. Participating in breastfeeding support activities within the local ICO4MCH community site counties such as health fairs and sponsored events that are focused on women and men of childbearing age will continue.

Healthy Beginnings, NC's minority infant mortality reduction program, serves women during pregnancy, birth and up to two years during the interconception period as well as their children. Breastfeeding education and support is one intervention provided to program participants by Healthy Beginnings staff members. They provide breastfeeding education and conduct an assessment on the participants' plan to breastfeed, then follow through with more education to support the participants' ability to carry out their plan. Healthy Beginnings staff also provide education and resources to fathers/partners and family members on breastfeeding and ways to support breastfeeding mothers. In FY20, 19.4% of Healthy Beginnings participants reported breastfeeding at 6 months. Healthy Beginnings staff completed the WIC Breastfeeding Peer Counselor training program to build their knowledge and skills to support program participants with breastfeeding.

The MIECHV Program implements Healthy Families America (HFA) and NFP models in NC. These home visiting programs serve women prenatally through children up to five years of age. NFP only enrolls first-time mothers prenatally and HFA enrolls mothers prenatally and those with children up to three months of age. When analyzing MIECHV breastfeeding data the numbers may be lower than data from non-MIECHV NFP home visiting programs due to some mothers in HFA being enrolled after giving birth. In FY20, 28.9% of MIECHV participants reported any breastfeeding at 6 months of age, while non-MIECHV NFP sites were at 31.5%.

Both NFP and HFA programs practice a number of strategies to promote breastfeeding. Almost all sites have at least one trained lactation consultant or counselor. When mothers are enrolled prenatally, breastfeeding discussions start early and continue throughout the pregnancy. Other strategies include incentives for breastfeeding, developing a

breastfeeding success plan, disseminating breastfeeding educational materials, and ongoing trainings for the home visitors throughout the year. One MIECHV site developed a curriculum to share with male partners educating them about the benefits of breastfeeding, how to support mothers with their decision to breastfeed, and how to participate in breastfeeding.

ICO4MCH, Healthy Beginnings, and MIECHV and non-MIECHV home visiting programs will continue to support the strategies in the State Action Plan in FY22.

Additional WCHS Strategies to Increase Breastfeeding Rates

Additional WCHS strategies to increase breastfeeding rates that will be carried over from NC's FY16-20 MCHBG State Action Plan include:

- Supporting the work of LHDs who are working toward or awarded the NC Breastfeeding Coalition's Mother Baby Friendly Clinic Award for outpatient healthcare clinics. This is primarily accomplished through the Child Health Agreement Addenda 351 as an optional activity for LHDs to choose and through CDC funding received by the CDIS for work in two branches that also focuses on increasing breastfeeding rates and improving other lifestyle behaviors. Continued promotion, technical assistance, and coordination with the DPH Breastfeeding Coordination Team will help to increase the total number of LHDs receiving this award.
- Training provided by the PNC in coordination with DPH Breastfeeding Coordination Team members for programs administered through the C&Y Branch. As interest and need is determined, additional trainings will be developed, administered, and evaluated.

Other new strategies for FY22 include:

- Working with the Office of Rural Health to ensure that breastfeeding information is included as part of the Knowledge Base Core Competency for NC Community Health Workers. NC Community Health Workers (CHWs) currently hold both formal and informal roles within the healthcare system. NC's program officially launched in 2018 after four years of stakeholder meetings, surveys, listening sessions, and a summit. In spring 2021, the NC CHW Initiative will offer coursework at educational institutions in the NC Community College System which will provide individuals with the required knowledge, tools, and resources to become recognized as a certified CHW in NC. The curriculum has been specifically designed to cover the nine core competencies recommended by the NC CHW Initiative stakeholders including communication, capacity building, service coordination, interpersonal advocacy, outreach, and personal/professional skills. DPH is unsure whether any breastfeeding content is included in the Core Competency curriculum and will use established and new relationships with the Office of Rural Health to address this strategy.
- Support dissemination and use of the newly revised NC Making It Work Tool Kit coordinated by the CDIS CCCPH Branch in partnership with WCHS and external partners to help breastfeeding mothers return to work. In FY18, NC received permission from the New York Department of Health to adapt their Making It Work Tool Kit. In FY20, DPH updated and refreshed these five breastfeeding support tools for NC employers, working moms, families and advocates. In FY21, DPH along with NCBC, CGBI, and MomsRising developed a dissemination, training, and use plan for these materials. Spanish versions of most of these materials are also now available. In FY22, the DPH Breastfeeding Coordination Team is conducting a webinar titled *North Carolina Worksite Breastfeeding Support in Action Webinar* for any interested state agency personnel and LHD staff members. The focus of the training will be to share more about NC's Making It Work Tool Kit and other breastfeeding-friendly worksite initiatives and to hear from LHDs working on community/worksite breastfeeding support as part of the ICO4MCH initiative. Also, in FY22, NSB will be working with CCHCs and other child care partners to develop a Making It Work tool that will be specific to early care and education

settings. Once developed, trainings that complement the new tool and the NC Breastfeeding Friendly Child Care Designations will be developed and implemented.

- NC Baby Love Plus is planning a QI project around increasing breastfeeding among participants. The project will focus on protective factors and barriers, and, as part of the project, focus groups and surveys with pregnant and interconception people along with fathers/male partners will be conducted.
- The WHB Nutrition Consultant is planning to release four newsletters for breastfeeding promotion in August 2021 that will go out weekly to the WHB staff members and will also be used by other DPH Breastfeeding Coordination Team members to share within their Branches and programs as appropriate.
- WCHS and CDIS staff will continue to work with the NCIOM Maternal Health Task Force to ensure breastfeeding strategies and resources are highlighted.

Preconception Health and Tobacco Cessation Activities

In concert with the Preconception Health and Family Support Unit Manager and the WHB Nutrition Consultant, the Preconception Health and Wellness Program Manager provides leadership and guidance for the Preconception Health Advisory Council. This Council is responsible for updating the existing preconception health strategic plan and moving it into implementation. The current plan includes a focus on pregnancy intendedness, mental health, obesity, access to care, and substance use. This position also is responsible for implementing the state's Preconception Peer Education (PPE) Program. With tobacco use being a critical focus area for preconception health, the Preconception Health and Wellness Program Manager also manages this effort within the WHB.

The Preconception Health and Wellness Program Manager manages the Women and Tobacco Coalition for Health (WATCH). This position, previously vacant for more than a year due to staff retirement, was filled in April 2021. In collaboration with the Preconception Health and Family Support Unit Manager, the Preconception Health and Wellness Program Manager will initiate efforts to revitalize WATCH during FY22. Action steps to be completed include reviewing and updating the WATCH listserv as needed, identifying and recruiting prospective members to fill vacancies among constituency groups previously represented or new to WATCH, and developing and launching a brief survey to assess member level of interest, determine availability and meeting frequency as well as identifying potential priority areas for WATCH to address. Feedback will be used to create a schedule and begin to convene WATCH meetings starting Fall 2021. Also, a subset of WATCH members will be recruited to begin the review of the *Guide for Helping to Eliminate Tobacco Use and Exposure for Women*. This position will continue to collaborate with the Tobacco Prevention and Control Branch to conduct statewide trainings to address individual tobacco use along with broader community policy implications. The Preconception Health and Wellness Program Manager will connect with WHB and C&Y Branch leadership to confirm that all direct service programs are providing smoking cessation counseling to enrolled participants. Trainings will be arranged and provided to WHB and C&Y Branch staff at least annually on the 5 As of tobacco cessation, women's health, QuitlineNC, and e-cigarettes.

Child Health

Linked National Outcome Measures

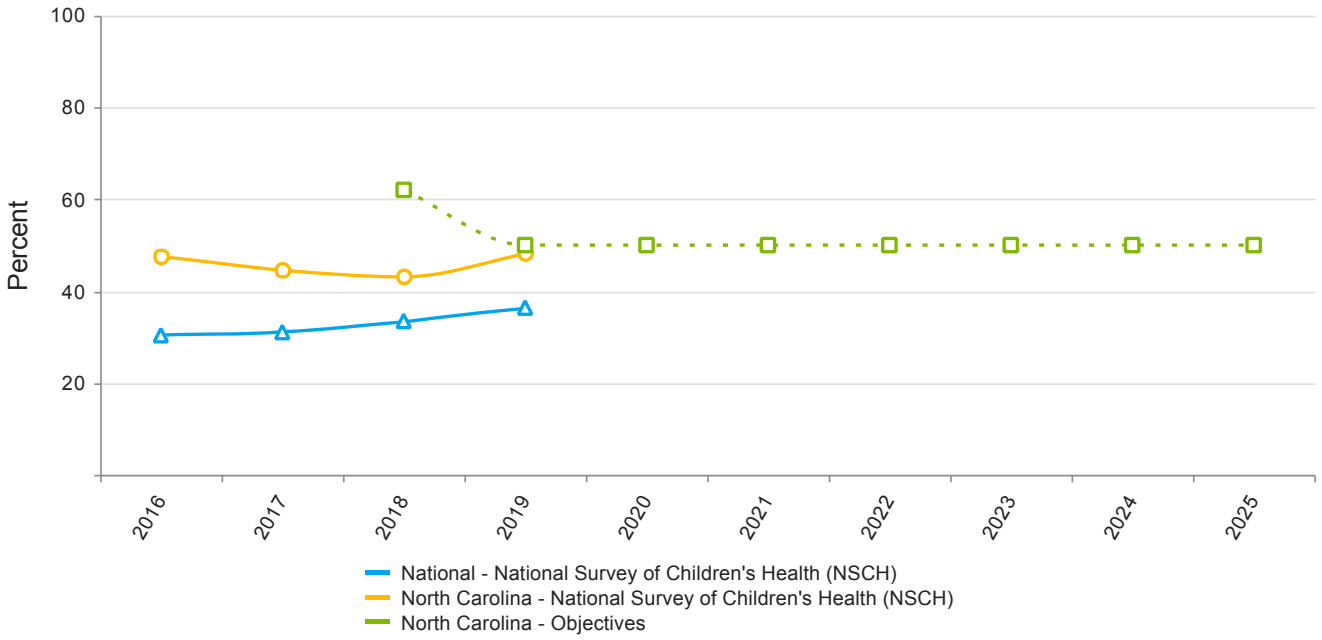
National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations	SID-2018	74.0	NPM 14.2
NOM 3 - Maternal mortality rate per 100,000 live births	NVSS-2015_2019	18.2	NPM 14.2
NOM 4 - Percent of low birth weight deliveries (<2,500 grams)	NVSS-2019	9.3 %	NPM 14.2
NOM 5 - Percent of preterm births (<37 weeks)	NVSS-2019	10.7 %	NPM 14.2
NOM 6 - Percent of early term births (37, 38 weeks)	NVSS-2019	27.3 %	NPM 14.2
NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths	NVSS-2018	6.9	NPM 14.2
NOM 9.1 - Infant mortality rate per 1,000 live births	NVSS-2018	6.8	NPM 14.2
NOM 9.2 - Neonatal mortality rate per 1,000 live births	NVSS-2018	4.3	NPM 14.2
NOM 9.3 - Post neonatal mortality rate per 1,000 live births	NVSS-2018	2.5	NPM 14.2
NOM 9.4 - Preterm-related mortality rate per 100,000 live births	NVSS-2018	239.6	NPM 14.2
NOM 9.5 - Sudden Unexpected Infant Death (SUID) rate per 100,000 live births	NVSS-2018	111.8	NPM 14.2
NOM 13 - Percent of children meeting the criteria developed for school readiness (DEVELOPMENTAL)	NSCH	Data Not Available or Not Reportable	NPM 6
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	NSCH-2018_2019	18.1 %	NPM 15
NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling	NSCH-2018_2019	52.7 %	NPM 15
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH-2018_2019	91.1 %	NPM 6 NPM 14.2 NPM 15

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 22.1 - Percent of children who have completed the combined 7-vaccine series (4:3:1:3*:3:1:4) by age 24 months	NIS-2016	77.9 %	NPM 15
NOM 22.2 - Percent of children, ages 6 months through 17 years, who are vaccinated annually against seasonal influenza	NIS-2019_2020	64.4 %	NPM 15
NOM 22.3 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine	NIS-2019	71.3 %	NPM 15
NOM 22.4 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the Tdap vaccine	NIS-2019	92.0 %	NPM 15
NOM 22.5 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the meningococcal conjugate vaccine	NIS-2019	93.2 %	NPM 15
NOM 25 - Percent of children, ages 0 through 17, who were unable to obtain needed health care in the past year	NSCH-2018_2019	3.1 %	NPM 15

National Performance Measures

NPM 6 - Percent of children, ages 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year

Indicators and Annual Objectives



Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			62	50	50
Annual Indicator		47.6	44.4	43.0	48.1
Numerator		132,477	120,289	112,720	119,658
Denominator		278,073	270,809	261,906	249,001
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2017_2018	2018_2019

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	50.0	50.0	50.0	50.0	50.0	50.0

Evidence-Based or –Informed Strategy Measures

ESM 6.1 - Percent of LHDs whose child health staff receive training on appropriate use of valid and reliable developmental, psychosocial, social determinants of health, and behavioral health screening tools for children during state fiscal year

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator		75
Numerator		51
Denominator		68
Data Source		C and Y Branch staff internal log
Data Source Year		FY19-20
Provisional or Final ?		Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	80.0	85.0	90.0	95.0	100.0	100.0

State Performance Measures

SPM 3 - Percent of children with two or more Adverse Childhood Experiences (ACEs)

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	15.3	
Numerator		
Denominator		
Data Source	2018-19 NSCH	
Data Source Year	2018-19	
Provisional or Final ?	Final	

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	15.0	15.0	14.0	14.0	13.0	13.0

SPM 4 - Percent of NC children, ages 19 through 35 months, who have completed the combined 7-vaccine series (4:3:1:3*:3:1:4)

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	80.1	
Numerator		
Denominator		
Data Source	2017-19 National Immunization Survey	
Data Source Year	2019	
Provisional or Final ?	Final	

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	90.0	90.0	90.0	90.0	90.0	90.0

State Action Plan Table

State Action Plan Table (North Carolina) - Child Health - Entry 1	
Priority Need	
Promote safe, stable, and nurturing relationships	
NPM	
NPM 6 - Percent of children, ages 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year	
Objectives	
CH 4A. By 2025, increase the percentage of children that are screened for developmental, psychosocial, and behavioral health concerns by 5 percent.	
Strategies	
CH 4A.1. Carry out the activities in the NC Essentials for Childhood Initiative, including those that overlap with the NC Early Childhood Action plan and Pathways for Grade Level Reading.	
CH 4A.2. C&Y Branch staff members will provide statewide trainings on developmental, psychosocial, and behavioral health screening identification, management, and referral to LHD child health clinical staff, child care providers (through CCHCs), CMARC and MIECHV home visitors, Innovative Approaches, Triple P trained providers, and private providers.	
CH 4A.3. C&Y Branch staff members will provide statewide trainings on preventive, screening, assessment, diagnostic and treatment health and well-being services that impact infant, children, youth and their families to LHD child health clinical staff, child care providers (through CCHCs), CMARC and MIECHV home visitors, Innovative Approaches, Triple P trained providers, and private providers	
ESMs	**Status**
ESM 6.1 - Percent of LHDs whose child health staff receive training on appropriate use of valid and reliable developmental, psychosocial, social determinants of health, and behavioral health screening tools for children during state fiscal year	Active
NOMs	
NOM 13 - Percent of children meeting the criteria developed for school readiness (DEVELOPMENTAL)	
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	

State Action Plan Table (North Carolina) - Child Health - Entry 2

Priority Need

Promote safe, stable, and nurturing relationships

SPM

SPM 3 - Percent of children with two or more Adverse Childhood Experiences (ACEs)

Objectives

CH 4B. By 2025, reduce the percentage of children with two or more Adverse Childhood Experiences to 18%.

Strategies

CH 4B.1. Continue to support the Learn the Signs Act Early and Reach Out and Read campaign and resources among child care providers (through CCHCs), CMARC and MIECHV home visitors, Innovative Approaches, Triple P, and LHD child health clinical staff and private providers.

CH 4B.2. Continue to allow Title V funding to be used to offer a variety of evidence-based and informed strategies as part of the Child Health 351 Agreement Addenda – Attachment C, including non-medical drivers of health such as food insecurity.

CH 4B.3. Continue to participate in the Home Visiting and Parenting Education Advisory Coalition to strengthen the system of care through home visiting and family support services.

CH 4B.4. Support and participate in several initiatives to align efforts, including, but not limited to, the following: - New Initiative on Young Child Social-Emotional Health (with NC Child) - NC Telehealth Program for Child and Adolescent Psychiatric access (NCTP-CAPA) - Navigating Pathways to Coordinated Care for Children with Autism Spectrum Disorder and Developmental Disabilities (with Carolina Institute for Developmental Disabilities)

CH 4.B.5. Continue to support the implementation and use of NCCARE360 care management to support children, birth to five years, needing community-based supports to address health and social determinants of health issues.

CH 4B.6. Continue to collaborate with external partners to improve safe, stable and nurturing environments for children, birth to 21 years (ECAC, B-3, NC Partnership for Children, Prevent Child Abuse NC, NC Child, NC Pediatric Society, NC Academy of Family Physicians, NC DMH/DD/SAS, NC DSS, NC DECEE, NC DPI, CFTF, Prevent Blindness NC, and Commission on CSHCN).

State Action Plan Table (North Carolina) - Child Health - Entry 3

Priority Need

Improve immunization rates to prevent vaccine-preventable diseases

SPM

SPM 4 - Percent of NC children, ages 19 through 35 months, who have completed the combined 7-vaccine series (4:3:1:3*:3:1:4)

Objectives

CH 5A.1. By 2025, 90% of children, ages 19 through 35 months, who have completed the combined 7-vaccine series (4:3:1:3*:3:1:4). (Baseline for 2018 NIS is 75.2%.)

CH 5A.2a. By 2025, 80% of adolescents aged 13-15 years will have received one or more doses of Tdap vaccine (2018 Baseline – 88.9%)

CH 5A.2b. By 2025, 80% of adolescents aged 13-15 years will have received one or more doses of MenACWY vaccine (2018 Baseline – 87.4%)

CH 5A.2c. By 2025, 80% of female adolescents aged 13-15 years will have received 2 or 3 doses of HPV vaccine as recommended (2018 Baseline – 45.9%)

CH 5A.2d. By 2025, 80% of male adolescents aged 13-15 years will have received 2 or 3 doses of HPV vaccine as recommended (2018 Baseline – 47%)

Strategies

CH 5A.1. NC Immunization Program (NCIP) will recruit and maintain a network of public and private providers to administer: 1) VFC vaccines to program-eligible populations and 2) Section 317-and state-funded vaccines to eligible adult and pediatric populations.

CH 5A.2. NCIP will be actively engaged with various provider organizations and agencies (including the NC Pediatric Society and NC Medicaid) that potentially serve VFC eligible children through attendance at meetings, phone calls, and emails at least twice a year.

CH 5A.3. WCHS will work across branches and throughout DPH to promote childhood immunizations within all its direct service programs.

CH 5A.4. Maintain an up-to-date web site containing information regarding the Standards for Child and Adolescent Immunization Practices, Standards for Adult Immunization Practice and ACIP.

CH 5A.5. NCIP will actively partner with the NC Immunization Coalition (NCIC), and the North Carolina Immunization Advisory Committee (IAC) on efforts to reduce morbidity and mortality associated with vaccine-preventable diseases.

CH 5A.6. NC's Immunization Program will assess vaccination coverage using NIS, NC IIS data and school-level survey data annually to identify geographic areas with low vaccination coverage.

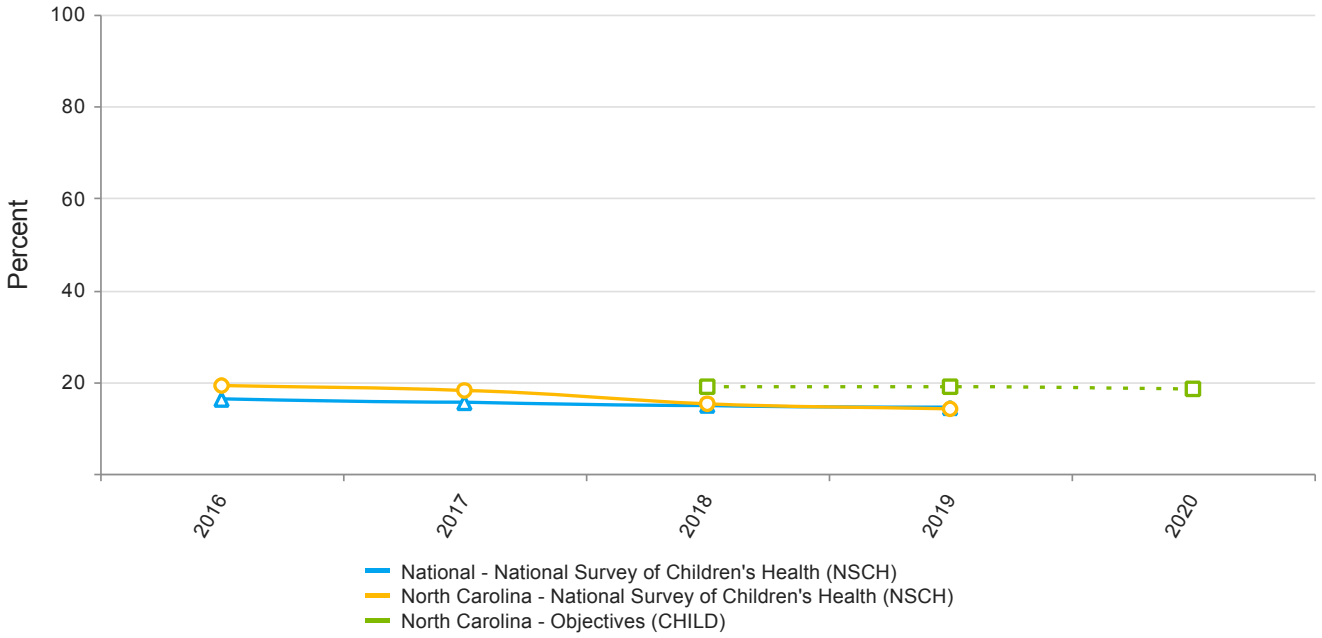
CH 5A.7. NCIP will implement communication strategies to increase coverage for recommended vaccines in priority populations and to address current immunization barriers with healthcare providers and stakeholders.

CH 5A.8. NCIP will provide training opportunities and/or resources to assist immunization providers in communicating with patients and/or parents.

CH 5A.9. NCIP will initiate the Immunization Quality Improvement for Providers (IQIP) process according to CDC requirements with 25% of CDC-defined IQIP candidate providers and follow-up activities with those VFC providers who received IQIP site visit in budget year one according to the IQIP timelines.

2016-2020: National Performance Measures

2016-2020: NPM 14.2 - Percent of children, ages 0 through 17, who live in households where someone smokes Indicators and Annual Objectives



2016-2020: NPM 14.2 - Child Health

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			19	19	18.5
Annual Indicator		19.2	18.3	15.4	14.1
Numerator		427,229	413,153	346,362	312,548
Denominator		2,225,253	2,257,225	2,253,664	2,213,403
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2017_2018	2018_2019

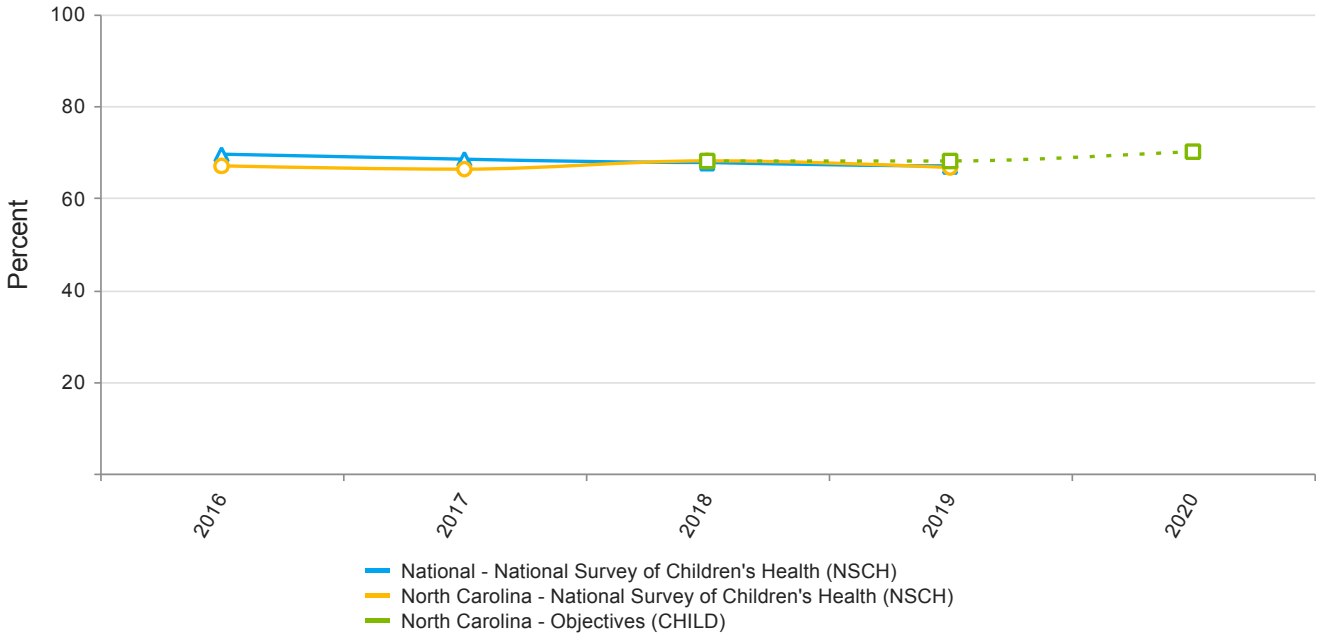
Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

2016-2020: Evidence-Based or –Informed Strategy Measures

2016-2020: ESM 14.2.1 - Number of women who receive tobacco cessation counseling by care managers and/or home visitors

Measure Status:			**Active**	
State Provided Data				
	2017	**2018**	**2019**	**2020**
Annual Objective			60,000	60,000
Annual Indicator			64,600	35,936
Numerator				
Denominator				
Data Source			CC4C and Home Visiting program databases	CC4C and Home Visiting program databases
Data Source Year			2019	2020
Provisional or Final ?			Final	Final

2016-2020: NPM 15 - Percent of children, ages 0 through 17, who are continuously and adequately insured
Indicators and Annual Objectives



2016-2020: NPM 15 - Child Health

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			66	66	70
Annual Indicator		66.8	66.2	68.2	66.6
Numerator		1,504,417	1,503,878	1,562,073	1,523,858
Denominator		2,253,063	2,272,294	2,289,632	2,288,827
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2017_2018	2018_2019

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

2016-2020: Evidence-Based or –Informed Strategy Measures

2016-2020: ESM 15.1 - Number of outreach activities to promote access to health insurance done annually by the Children and Youth Branch's Minority Outreach Coordinator, CYSHCN HelpLine Coordinator, and YSHCN Access to Care Coordinator

Measure Status:				**Active**	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		200	200	200	200
Annual Indicator	167	191	187	186	88
Numerator					
Denominator					
Data Source	CSHCN Quarterly Outreach Report	CSHCN Quarterly Outreach Report	CSHCN Quarterly Outreach Report	CSHCN Quarterly Outreach Report	CSHCN Quarterly Outreach Report
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

2016-2020: State Performance Measures

2016-2020: SPM 2 - Number of substantiated reports of child abuse and/or neglect

Measure Status:				**Active**	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		10,000	9,500	8,000	7,500
Annual Indicator	9,358	8,737	9,640	9,167	7,446
Numerator					
Denominator					
Data Source	UNC Jordan Institute for Families	UNC Jordan Institute for Families	UNC Jordan Institute for Families	UNC Jordan Institute for Families	UNC Jordan Institute for Families
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

An early childhood system of care ensures comprehensive, coordinated, individualized, family-driven services and supports for young children and families. The WCHS promotes the integration and coordination of discrete child and parent services across all service sectors into a comprehensive system that "connects the dots" within the service community by participating in or facilitating many collaborative activities at the state, regional, and local levels. Through multiple collaborative opportunities, the WCHS convenes internal and external partners in planning and implementation of programs, including those supported by Title V funds. The WCHS supports a system of care that uses a public health model to provide a continuum of care, promoting positive well-being, preventing problems in high-risk populations, and intervening/treating in a comprehensive manner when problems do arise. It is the collaborative relationships among the provider agencies, parents, human services agencies, schools, child care, and other stakeholders and a common set of values and goals that enables providers to see the broader needs of families, set aside turf issues, and utilize existing or build community services to benefit the health and well-being of infants, children, adolescents, and their families.

NPM#6 – Percent of children, ages 9 through 35 months, receiving a developmental screening using a parent-completed tool in the past year

Working within this comprehensive system of care, the WCHS, and in particular, the C&Y Branch, is focused on collaborative strategies to increase the percent of children, ages 9 through 35 months, receiving a developmental screening using a parent-completed tool in the past year (NPM#6), increasing discussions with parents and caregivers about development, and accessing appropriate care. Per the 2018-19 NSCH, 48.1% of children in NC between 9-35 months had received appropriate developmental screening which is an increase from 43% in the 2017-18 NSCH and higher than the national average of 36.4%. While this makes NC the fifth leading state in the nation, there is still much room for improvement. It should be noted that the percentage for NC should be interpreted with caution as the estimate has a 95% confidence interval width exceeding 20 percentage points and may not be reliable.

The C&Y Branch helps support the provision of preventive health services to children from birth to 21 years of age primarily through LHD clinics which incorporate multiple types of screenings including developmental screenings. The ESM selected for this NPM is the number of training opportunities offered to LHD providers on appropriate use of valid and reliable developmental, psychosocial, social determinants of health, and behavioral screening tools for children during a state fiscal year. LHD providers include child health providers in the clinic providing direct clinical care as well as Care Management for At Risk Children (CMARC – formerly known as Care Coordination for Children [CC4C]) care managers providing service to clients in their homes or other locations. Screenings that are required at age-appropriate times for visits continued to be required at 6, 12, and 18 or 24 months and then at 3, 4 and 5 years of age in LHDs during well child visits. The schedule of recommended visits and screenings are based on Bright Futures guidelines which are described in detail in the most current NC Medicaid Health Check Program Guide (HCPG). Due to the impacts of the COVID-19 pandemic response, training opportunities were postponed until September 2020 to LHD providers through the Child Health Training Program (CHTP). Four training opportunities were presented during the CHTP which included information on developmental, psychosocial, and behavioral screening and were provided by utilizing the Microsoft Teams Virtual platform. A statewide webinar was also planned and held in July 2020 for all LHD child health clinical staff and CMARC care managers. This webinar was provided in partnership with the two developmental and behavioral pediatricians who were authors of the 2019 AAP policy statement titled *Promoting Optimal Development: Identifying Infants and Young Children with Developmental Disorders Through Developmental Surveillance and Screening*.
Training opportunities were provided by a mix of live and archived webinars. Consultation and technical assistance were provided to several new LHD providers and current providers who presented questions regarding well child

visit components. Guidance was provided regarding developmental, behavioral and maternal depression screening as well as links to past webinars on these topics. The Pediatric Medical Consultant (PMC) revised and continued to use a self-assessment tool for new providers. The self-assessment tool was shared with providers so that they could rate their knowledge, skills and abilities related to all of the well child preventive visit components which include developmental, behavioral and maternal depression screening. This self-assessment tool has assisted the PMC with providing specific technical assistance to meet the needs of the individual providers.

The ability to screen and address issues regarding SDOH such as food insecurity, housing, interpersonal violence, etc., is also important to improving the lives of children. The Branch promoted the use of the NC SCHS's SDOH by Regions website to LHDs. Screening for non-medical drivers of health and connecting individuals to resources has been a focus of Medicaid Transformation and the state's efforts to have all payors screen for and address SDOH using the statewide resource platform NCCARE 360. NCCARE 360 was launched statewide in all counties at the end of June 2020 to assist providers with addressing community resources for food, transportation, interpersonal violence, and housing. All LHDs are currently screening for food insecurity, and many are screening for several other SDOH. In FY20, the PMC continued to work with the NC Medical Society Leadership College to provide an interactive session with panelists including the State Health Director regarding SDOH. This session has occurred for the last five years. The PMC has participated on the Technical Assistance Project Advisory Committee (TAPAC) of the AAP Screening Technical Assistance Resource (STAR) Center for the last four years with pediatricians, family and other professionals from across the country. In her role on the TAPAC for the STAR Center, she has continued to develop and review resources related to maternal depression and SDOH which she has specifically promoted to LHDs and child health providers in NC. The PMC participated in an interview about relational health with another pediatric colleague for the AAP STAR newsletter and an AAP STAR Center podcast about social drivers of health and COVID-19. The PMC also participated as faculty for a 9-month learning collaborative for several state teams which included Title V members about screening for SDOH with CYSHCN. She also participated in a nationwide webinar from the National Medical Home Implementation Center about addressing SDOH in CYSHCN.

Child Health Systems of Care

The WCHS continues to focus on ensuring quality and accessible health services for children, including the following: parenting education, nutrition, breastfeeding, well child care, school health, genetic services, newborn metabolic and hearing screening, child care health consultation, developmental screening, early intervention, health care transition, care management to improve linkages with medical homes with more focus on developing plans of safe care for substance affected infants with DSS, screening and treatment clinics, resource line for children with special health care needs, Health Check/NC Health Choice outreach, and support for children/youth/families with special health care needs. The following specific services and programs, while described separately, represent the components of a system of care for young children supported by Title V funding in FY20 to improve the health of all children and decrease child deaths and morbidity.

Child Health Program Educational and Technical Assistance Opportunities

The Child Health Program planned a series of live and archived statewide webinars from July through December 2019 to provide programmatic updates and continuing education for child health clinical staff in LHDs in lieu of holding another statewide conference. The topic of the July 2019 webinar was the NCCARE360 platform. LHDs learned from the NCCARE360 program community engagement coordinator how this joint vision influences health outcomes and improves the health of health department clients. There were 52 participants that completed the live webinar while 92 participants viewed the archived webinar. The August 2019 webinar was on Child Health Enhanced Role Registered Nurse Legal Issues and included information about scope of practice, nursing standing orders, critical thinking skills, documentation, consultation, appropriate ICD-10 codes, and QI processes related to the

delivery of well child preventive health visits from birth through 20 years of age. There were 38 participants that completed the live webinar while 48 participants viewed the archived webinar. The topic of the November 2019 webinar was refugee health and was presented by the DPH State Refugee Health Coordinator with the PMC. The webinar helped child health clinic staff in LHDs understand how to recognize and address special considerations for children who are refugees or asylees. Health benefits and the AAP Immigrant Health Tool Kit were reviewed. Additional resources were shared with providers and clinical staff. Conversational strategies and information from the clinical perspectives were provided. The concept of immigrant health status as a SDOH for refugees and asylees were discussed. There were 72 participants that completed the live webinar while 59 participants viewed the archived webinar. The December 2019 webinar addressed the role of child health clinic providers related to vaccine hesitancy and was delivered by staff from the NC Immunization Branch and NC Communicable Disease Branch. The webinar presented current NC exemption data, evidence-based approaches and appropriate resources related to vaccine hesitancy to LHD staff. There were 73 participants that completed the live webinar while 56 participants viewed the archived webinar.

The June 2020 webinar, *Making a Difference: Supporting Breastfeeding Families*, was conducted by the Pediatric Nutrition Consultant, WIC Peer Counselor Breastfeeding Coordinator, and a Regional Child Health Nurse Consultant, focused on providing guidance to child health clinical staff on the role that staff can have in supporting breastfeeding families. This training assisted clinical staff in identifying barriers that keep families from continuing to breastfeed and discussed ways to create a breastfeeding friendly clinic and community environment. There were 65 participants that completed the live webinar while 42 participants viewed the archived webinar.

Due to the COVID-19 pandemic response, the PMC and the State Child Health Nurse Consultant (SCHNC) provided weekly thirty-minute live webinars during the months of April, May, and June 2020 to discuss strategies and recommendations to assist with the delivery of child health services during the COVID-19 pandemic. The webinars were archived and made available to staff who were not able to participate in the live presentations.

The C&Y Branch continues to support the Early Childhood Matrix Team, originally convened with support from a SAMSHA Linking Actions for Unmet Needs in Children's Health (LAUNCH) grant that included staff from across the State Title V agency. The Matrix Team provided a forum for sharing information, working on collaborative projects, and getting updates on trending topics, including overview of the NC ECAP, workforce development strategies, and infant mortality reduction.

The SCHNC, Best Practices Child Health Nurse Consultant (BPNC), and PMC continued to work on several activities related to updating audit tools for well child visits based on the most current HCPG by NC Medicaid. LHDs were interested in clarification of the Child Health AA and the updated Child Health Program Well Child and Primary Care Audit Tools and Instructions which includes detailed guidance about screening and coding for maternal depression, developmental screening, autism screening, psychosocial/emotional screening, and developmental surveillance in adolescents as well as oral health assessment, dyslipidemia and anemia risk screening.

Child Health Training Program for Child Health Enhanced Role Registered Nurses

The Child Health Training Program (CHTP) is held annually to train and officially roster RNs as Child Health Enhanced Role Registered Nurses (CHERRNs). Once rostered as CHERRNs, they are considered billing providers through NC Medicaid and can provide well child visits to children from birth through 20 years of age including CYSHCN in the LHDs. The focus is to help CHERRNs improve access to preventative health care for underserved and high-risk children. CHERRNs learned to help LHDs serve as medical homes to children or partner with medical homes to serve children including CYSHCN. A total of five RNs from LHDs participated in the 2020 CHTP and

successfully completed the course in order to become rostered as a CHERRN. The CHTP covers issues that come up for children during the well visit at the LHD which may require consultation with supervising advanced practice providers or physicians. Topics covered during week one of the CHTP included how to complete a comprehensive pediatric history, pediatric physical assessment skills, critical thinking skills, and Problem Oriented Health Record (POHR) and Bright Futures documentation requirements. Topics covered during week two of the CHTP included: Bright Futures services; required and recommended developmental and behavioral screenings including maternal depression, and substance use screening in adolescents; screening tools; adolescent health; immunizations; use of gender-neutral language; adolescent confidentiality; developing resiliency in adolescents; and addressing health care transition. Additional topics included nutrition assessment, food insecurity, and breastfeeding, critical thinking skills, programmatic and HCPG requirements, documentation, and CHERRN legal issues including CHERRN rostering requirements. The PMC and SCHNC continued to update several presentations for this cohort of students. Trainings by the PMC were devoted to developmental screening and surveillance and behavioral health and social emotional screening. Another presentation focused on adolescents and the importance of motivational interviewing to address social-emotional health and screening for SDOH.

The 2020 CHTP began in January 2020 with an orientation for RN students, Nurse Supervisors, and Preceptors. Pre-Training assignments were scheduled from January 26 through February 14, 2020. Week One training was held face to face in Chapel Hill, NC during the week of February 17-21, 2020. The CHTP also includes a lengthy clinical practicum and Week Two classroom instruction which was originally scheduled to be completed by June 2020. Due to the impacts of the COVID-19 pandemic response, the 2020 CHTP was extended an additional three months so that the clinical practicum was held from February 24 - September 18, 2020. Week Two was held virtually over a two-week period utilizing the Microsoft Teams platform. The Week Two Virtual classroom training was held September 21 – October 2, 2020.

Care Management for At-Risk Children

The Care Management for At-Risk Children (CMARC) program, formally known as Care Coordination for Children (CC4C), is an at-risk population management model which has been provided in partnership with CCNC and NC Medicaid. Medicaid funds children enrolled in this program and Title V funds are used to support non-Medicaid children. CMARC staff serve children from birth to five years of age who meet the following priority risk factors: 1) CSHCN (per Title V definition); 2) children exposed to toxic stress in early childhood including, but not limited to, extreme poverty in conjunction with continuous family chaos, recurrent physical or emotional abuse, chronic neglect, severe and enduring maternal depression, persistent parental substance abuse or repeated exposure to violence in the community or within the family, and children in foster care; and 3) children admitted to the NICU. Referrals to the CMARC program are made from medical homes, hospitals, community organizations and agencies, or families. CCNC-identified Medicaid claims trigger referrals based on the CMARC priority populations. In addition, the C&Y Branch provides funding to LHDs to replicate this service for the birth to five non-Medicaid population.

The CMARC program continued to promote developmental screening in children birth to five years of age and the use of SWYC (Survey of Well-being of Young Children) during FY20. The SWYC includes a general developmental screening tool, a social emotional screening tool for young children, a psychosocial screening tool for family risks (depression, interpersonal violence, substance use, food insecurity, and tobacco use) and parental concerns. Additional trainings for CMARC care managers in FY20 included ongoing quarterly updates on the Program Manual, Plan of Safe Care for infants exposed to substance use by the mom during pregnancy, and child development. All of the webinars were recorded and were available as refreshers to current staff and orientation for new staff.

In addition, program staff continued to meet with the Division of Health Benefits (NC Medicaid) on the transition of Medicaid from a fee-for-service program to NC Medicaid Managed Care. This will include a transition for CMARC to

a new relationship with Medicaid which includes contracting with all of the PHPs as Care Management beginning July 1, 2021. The services will remain the same for children and families. The PMC and the CMARC program manager both continued to participate in the Fostering Health NC Initiative to ensure that services for children in foster care are coordinated between the medical home, the DSS worker, and the care manager. More details are in the CYSHCN Domain.

During FY20, the CMARC program continued to make available five trainings as part of the Basic Care Management series and five training topics as part of the Priority Populations series, two of which were presented or co-presented by family members. A third training series continued to be promoted to supervisors to assist them in assuring quality service delivery. An electronic case review tool continued to be used to assist supervisors in assessing service delivery. All local CMARCs continued to be required to complete an annual performance assessment using CQI techniques to identify needs and root causes and then develop effective action plans to address the identified needs. Also, an annual assessment of performance conducted by the state program resulted in five local agencies being identified for a structured performance improvement process. The number of agencies identified decreased by 62% from the previous year.

A “key messages” guidance document for families and community partners and WIC collaboration best practices document continued to be used by CMARC care managers These documents were based on recent gaps and best practices identified from a questionnaire sent out to CMARC care managers in FY18.

The NC Act Early Ambassador presented during one of the bi-monthly webinars in a previous fiscal year to introduce the CDC’s *Learn the Signs. Act Early* (LTSAE). During FY20, these materials continued to be used by CMARC staff to educate families. The AAP’s *Books Build Connections* Toolkit also continued to be used by CMARC care managers. The CMARC program electronic resource directory continued to be promoted and updated to help care managers meet the needs of children and their families.

The CMARC care managers continued to use claims data to identify children in the CMARC target populations during FY20. The CMARC program documentation system was transitioned from the Care Management Information System to a new system called Virtual Health to better serve children and families in coordination with CCNC and medical homes. This resulted in a new extensive training for CMARC program staff across the state. This also resulted in some blackout periods when data could not be accessed. The CMARC program and its care managers continued to strengthen their relationships with medical homes to ensure children in the target populations are identified and referred. Care managers continued to coordinate services with each individual child’s medical home to ensure improved health outcomes.

School health assessments (SHA) for all children new to NC public schools continue to occur. The C&Y Branch promotes best practice recommendations for doing a complete well child exam appropriate to the age of the child for the SHA which includes developmental screening and/or developmental surveillance.

SPM#2 – Number of substantiated reports of child abuse and/or neglect

In line with one of the WCHS’s priority needs to decrease child deaths and the Early Childhood Action Plan goal for safe and nurturing relationships, WCHS has selected to continue using one of its former SPMs – number of substantiated reports of child abuse and/or neglect. This is a point in time count and report-based. Thus, one report may include multiple children. In instances where different children have different finding types, only the most severe finding is counted – including abuse/neglect, abuse, neglect, and dependency. Data over the past five years (July 2015 to June 2020) show an average of about 8357 reports per year with a slight trend downward. It is too early to

know if the decrease in FY20 was in part due to COVID.

NC Child Fatality Prevention System

The WCHS continued to play a key role in the implementation of the NC Child Fatality Prevention System (CFP System) that serves to prevent child deaths and child maltreatment. The original legislation creating the CFP System was passed in 1991. Three main components of the CFP System include: the NC Child Fatality Task Force (CFTF); the state Child Fatality Prevention Team; and local child death review teams in each county, called Child Fatality Prevention Teams (CFPTs) and Community Child Protection Teams (CCPTs).

The CFTF is a legislative study commission that makes recommendations to the Governor and NC General Assembly focused on laws and policies to prevent child deaths as well as child maltreatment and to promote child safety and well-being.
Although the Task Force is not part of NCDHHS and is not funded by Title V, the position of the Executive Director of the CFTF is in the NCDHHS Office of the Secretary, and several section employees serve on the Task Force, one of its three committees, or have participated in various CFTF efforts. In particular, the NC Title V Director serves as a statutory member of the Task Force, and the WHB Head co-chairs the Perinatal Committee of the Task Force as a subject matter expert. Two other committees of the CFTF are the Intentional Death Prevention Committee and the Unintentional Death Prevention Committee. The CFTF provides a unique forum that brings together agency officials, lawmakers, experts in child health and safety, and community volunteers to perform the important work of understanding what causes child fatalities and determining what can be done to prevent them. Aided by the work of three committees, the Task Force meets to study data, hear from experts, and prepare policy recommendations for consideration. The Executive Director of the Task Force and other WCHS staff work closely with the staff of the Injury and Violence Prevention Branch (IVPB) and also work with additional partners including other state agencies and non-profit agencies such as North Carolina Safe Kids, the University of North Carolina Injury Prevention Center, NC Child, and the Governor's Highway Safety Program. The CFTF reports annually to the Governor and NC General Assembly. These annual reports, as well as other reports, presentations, meeting schedules, and membership lists can be found at the following link: http://www.ncleg.net/DocumentSites/Committees/NCCFTF/Homepage/.

During its 2019-2020 study cycle, the CFTF had a total of nine meetings, including seven committee meetings and two full CFTF meetings where attendees heard more than 50 presentations. Experts and leaders presenting to the Task Force and its committees represented academic institutions and state and local agencies, as well as state and community programs. The CFTF was successful in 2019 in partially advancing two of its recommendations. In 2019, the Task Force recommendations for a strengthened CFP System and a new state initiative for firearm safe storage were addressed in the 2019 Appropriations Act, but due to an unusual legislative session in which the state's comprehensive budget bill did not become law, these initiatives did not become law. Even so, progress was made through efforts within NCDHHS to plan for a strengthened CFP System through formation of a work group, consultation with state and national experts, research, and convening of stakeholders. In addition, Governor Cooper signed a gun safety Executive Directive which set in motion the development and compilation of firearm safety tools and resources by the DPH, using elements of the Task Force's recommendations to inform this work. A webpage on the DPH website now provides information on firearm safety. In 2020, a multi-year CFTF recommendation to require suicide prevention training and a risk referral protocol in schools finally became law.

The state CFPT Coordinator, who is a member of the C&Y Branch, supports all 100 local CFPTs through Title V funds and ongoing technical assistance. The state CFPT Coordinator and PMC serve as members of the State CFPT Team. The State CFPT Team is a multi-disciplinary team with law enforcement, social services, mental health, health care providers, education, and public representation responsible for in-depth reviews of all deaths of children younger than eighteen years old reported to the NC Medical Examiner System, including deaths due to abuse and

neglect.

All NC counties have one or more local teams who review the county's child fatalities. CCPTs review all cases in which a child died because of suspected or confirmed abuse or neglect and a report of abuse or neglect was made to DSS within the previous twelve months or the child or child's family was a recipient of child protective services within the previous twelve months. All additional child fatality cases are reviewed either by the CCPT or, if the CCPT does not review additional child fatality cases, a CFPT reviews them. Approximately eighty percent of local CFPTs and CCPTs are blended. Each quarter, local CFPTs are provided data on the number of child deaths for each county which include the child's name, date of birth, date, and cause of death, among other information. These data are provided through the SCHS and the Office of the Chief Medical Examiner (OCME). Local CFPTs identify system problems and make recommendations for prevention of future fatalities and how to act on those recommendations. The local CFPTs provide education to their communities on ways to keep children alive and safe. The state CFPT Coordinator monitors the activities of the local teams to ensure compliance with the NC CFP System's statutory requirements. The CFPT Coordinator makes site visits to local CFPTs and provides statewide webinars to increase the local teams' knowledge about current health, data, and child safety issues. The state CFPT Coordinator conducted consultation and technical assistance via telephone monitoring (due to COVID-19 travel restrictions) to 15 local CFPTs in FY20.

The state CFPT Coordinator created and implemented three virtual trainings in May and June 2020. The topics were chosen based on a needs assessment survey of the planning committee members and training needs identified at the statewide Child Fatality Prevention Summit in Spring 2018. Topics covered were: Youth Suicide Prevention, Data Collection, and an Overview of the CFPT Review Process. The trainings were conducted virtually due to Covid-19 restrictions and could accommodate up to 145 people for each session. The webinars were to be posted on the CFPT Resource page for review by counties as needed.

NC Essentials for Childhood Initiative

NC is one of seven states awarded a cooperative agreement from the CDC for *State Essentials for Childhood Initiative: Implementation of strategies and Approaches for Child Abuse and Neglect Prevention.* The NC Essentials for Childhood (NCE4C) Initiative is funded for five years (2018-2023). The CDC also provided supplemental funding to this award for Opioid Misuse/Over and Adverse Childhood Experiences (ACEs) prevention. While the NC DPH is the grantee, NCE4C is a shared initiative across multiple NCDHHS divisions and NGO partners. Results from the 2018-19 NSCH for the new SPM#2 (Percent of children with two or more ACEs as reported in the NCHS) indicate that 15.3% of children experienced ≥2 ACEs which is down from 19.2% in the 2017-18 survey, but with overlapping confidence intervals this is not a significant change. It is less than the 18.2% national rate, but again, probably not significantly different.

NCE4C is focusing on policies which promote economic mobility for families and norms change regarding support for positive parenting. The current focus is on policy, practice and norms change related to family friendly workplace policies with an emphasis on paid family leave in addition to building community resilience as an ACE prevention strategy. These strategies support the North Carolina ECAP and the NC Opioid Action Plan 2.0. Approaches and strategies include:

- Work with the business community to increase employer-based family friendly workplace policies with an emphasis on industries where employers are less likely to have access to family friendly policies/benefits;
- Build public awareness at the state and local levels about the benefits of family friendly workplace policies, including paid family leave and the impact of ACEs on the health and development of young children, which may lead to norms change;

- Increase community capacity to implement paid family leave policies at the local government level;
- Focus on racial equity and the disparate ways economic policies, including family friendly workplace policies, may impact families;
- Exploration of alternative strategies for implementation of paid family leave (e.g., insurance);
- Alignment of local plan development or implementation; and
- Build community capacity to address/prevent adverse childhood experiences and adverse community environments (the "pair of ACEs).

Obesity Prevention and Other Evidence-Based Nutrition Strategies

Preventing obesity during childhood is critical as habits formed in the early stages of life most often carry into adulthood. To best achieve obesity prevention outcomes, research indicates that obesity prevention messages and strategies should be targeted to all families, starting before child's birth. Identification and early intervention of overweight and obesity is critical in preventing or delaying the onset of chronic diseases. During 2001–2010, the overall prevalence of overweight or obesity (combined) among young low-income children participating in NC WIC increased significantly, from 26% in 2001 to 32% in 2010. During 2010–2015, the overall prevalence decreased steadily to 29% in 2015 from 2010. In 2019, the prevalence remained steady at 30.4%. Children diagnosed with obesity may be enrolled in the school nurse case management program and receive services to improve their BMI.

Title V MCH Block Grant funds continue to support a Pediatric Nutrition Consultant (PNC) position who supports and complements the C&Y Branch's mission of building, maintaining, and assuring access to systems of care that will optimize the health, social and emotional development for all children and youth. This includes a focus on improving and incorporating evidence-based nutrition and physical activity strategies throughout the C&Y Branch in school-based health centers, LHDs, school systems, childcare settings, and with other private providers through training, technical assistance, and consultation. This Registered Dietitian/Nutritionist (RDN) collaborates across the WCHS and with other sections of the Division, other agencies, and organizations to enhance interventions with infants, children, and youth. She shares nutrition resources with and provides nutrition consultation for C&Y Branch programs. One particular assignment of the PNC is to monitor a special nutrition project Agreement Addendum for the Durham County Department of Public Health that furnishes medical nutrition therapy and nutrition consultation services for children referred to the LHD with no other funding source.

Specific activities that the PNC was involved in during FY20 included updating nutrition sections for the 2020 NC School Nurse Manual; collaborating with Branch colleagues to put together a proposal *Planning for the Care of the Whole Student* which was accepted and presented at the 2019 School Nurse Conference in December (facilitated by four DPH staff and four BFPs) and conference summaries from both sessions showed Very Good to Excellent ratings; planning and presenting *Whole Child Nutrition* training and webinar for 30 Charter School Nurses (March 2020); leading breastfeeding activities planning for the FY21 Perinatal/Infant Health Domain of the MCH Block Grant State Action Plan; and continuing to be actively involved in the DPH Breastfeeding Coordination team whose activities are highlighted elsewhere.

In addition, the PNC researched multiple COVID nutrition and food insecurity resources and shared with a variety of external and internal partners, especially focused on infants to 21-year-olds. She participated in NCCARE360 statewide convenings focused on food insecurity and connected NCCARE 330 staff with nutrition program administrators at NCDPI and NSB. She also met with NC211 staff to ensure food insecurity and federal nutrition programs were included as part of NC211 and NCCARE360. She was asked to present on the GoNAPSACC National TA Providers webinar focused on food insecurity resources for TA and child care providers in May 2020 which attracted about 50 attendees. She also provided TA and resources to NC Partnership for Children staff

members for their food insecurity and breastfeeding focus for infants and toddlers. The PNC also provided nutrition expert review of *Families Eating Smart and Moving More* curriculum for NC Cooperative Extension for continued national dissemination and use of this resource.

The PNC also provided training and technical assistance in cooperation with breastfeeding partners and regional Child Health Nurse Consultants to local child health nurses implementing the Child Health Agreement Addenda strategies on supporting *Mother-Baby Breastfeeding Friendly Outpatient Healthcare Clinics*, *Local Nutrition and Physical Activity Coalitions* and *Addressing Food Insecurity and/or Healthier Food Access*. She continued to integrate work with Farm to Childcare/Early Care and Education into Branch and Division programs along with other statewide partners including the NC Farm to Preschool Network, the WK Kellogg NC Farm to Childcare Initiative, the Farm to School Coalition of NC and the Integrating Healthy Opportunities for Play and Eating (I-HOPE) Advisory Committee for Early Care and Education. She also strengthened and engaged in new partnerships aimed at creating policy and environmental change to make the healthy choice the easy choice for nutrition and physical activity especially for women, children/adolescents, and families (also with a focus on CYSHCN). Examples include the 807 CDC State Physical Activity and Nutrition grant received by CDIS; the CDC 1801 grant received by the NCDPI Healthy Schools program; Eat Smart, Move More NC; WIC; the Child and Adult Care Food Program; Supplemental Nutrition Assistance Program Education (SNAP-Ed) and the State Nutrition Action Coalition (SNAC). She continued to be actively involved in the ASPHN MCH Nutrition Council, MCH Nutrition Council Steering Committee, Fruit and Vegetable Nutrition Council, and the ASPHN Farm to ECE Advisory Committee. Lastly, she served as one of two first-line reviewers for *Eat Smart, Move More North Carolina. 2020. North Carolina's Plan to Address Overweight and Obesity.*

In addition, the NSB provided educational resources in English and Spanish for local WIC agency staff to use to promote healthy weight to families and children. The Pediatric Nutrition Course was offered online to state public health nutritionists.

Nurse-Family Partnership

Nurse-Family Partnership (NFP) sites are in a total of 25 counties. These sites include three funded through Title V, ten funded through MIECHV, and twelve funded through state and local funds and by private foundations. Additionally, NFP is available to the Eastern Band of Tribal Indians which serves the Qualla boundaries in western North Carolina. Staff members in the three Title V NFP sites (Foothills Health District, Buncombe, and Wake) completed 7,771 home visits, received 592 referrals into the program, enrolled 214 families, and graduated 89 families in FY20. All NFP sites transitioned to providing services via telehealth in spring 2020 due to COVID-19. The C&Y Branch continues to be the lead agency for NFP for the state and participates in the NC NFP Funders Group, the NC Home Visiting (HV) Consortium, and the NC Home Visiting Parent Education (HVPE) Collaborative.

The Branch continues to host meetings with the HV Consortium on a quarterly basis, with recent presentations given on NC Integrated Care for Kids, Families First, and Reach Out and Read. External Consortium members include representatives from Attachment and Biobehavioral Catch-Up, Book Babies, Child First, Early Head Start-Home Based Option, Family Connects International, Healthy Families America, Home Instruction for Parents of Preschool Youngsters, NFP, Parents as Teachers, ParentChild+, and SafeCare.

Care Ring NFP participated in a multiparous pilot research project during FY19. This research was conducted through the NFP's Prevention Research Center in Denver, Colorado. The multiparous project allows the site to enroll all pregnant women without giving restriction to parity. The pilot has ended, and Care Ring will continue serving multiparous clients with additional support provided by the NFP National Service Office. To date, Care Ring NFP has enrolled approximately 60 multiparous women into their program. The site also receives specific research

consultation through the NFP National Service Office.

Triple P – Positive Parenting Program®

Triple P – Positive Parenting Program® (Triple P) is an internationally acclaimed multi-tiered system of parenting interventions (education and support for parents and caregivers of children and adolescents) that has the following overarching goals:

1. promote the independence and health of families through the enhancement of parents' knowledge, skills, confidence, and self-sufficiency;
2. promote the development of non-violent, protective, and nurturing environments for children;
3. promote the development, growth, health, and social competence of young children; and
4. reduce the incidence of child maltreatment and behavioral/emotional problems in childhood and adolescence.

The C&Y Branch continued to support all 100 NC counties for the implementation of Triple P in FY20. There were 1,236 practitioners trained in FY20, with 14,430 caregivers being served in which impacted 18,706 children. NC continues to be recognized by Triple P America for developing a Triple P State Learning Collaborative consisting of all the local Triple P coordinators, C&Y Branch Triple P central office staff, Triple P America implementation specialists, and internal and external stakeholders. The Learning Collaborative provided quarterly opportunities for training, program planning, continuous quality improvement initiatives, peer-to-peer support and trend information for best practices for the local coordinators, and identification of efficiencies in purchasing materials and media buys in bulk. The Learning Collaborative has established a strategic planning process that provides efficient organizational efforts for supporting NC Triple P and developing networks with the funder's group which is referred to as the Partnership for Strategy and Governance (PSG). Select facilitators of the Learning Collaborative serve as members of the PSG to inform, recommend, and provide guidance regarding challenges and successes at the local implementation level. Triple P Stay Positive Campaign, which includes print materials and a parent/provider website in English and Spanish, was purchased for the entire state Triple P Online (TPOL) program. At the end of FY20, TPOL had 21,156 access codes available for potential TPOL users statewide. Codes are purchased from Triple P America (TPA) and are available for potential TPOL users statewide. Parents and caregivers statewide in North Carolina request codes and are issued individual codes to access the modules through an automated distribution system. These access codes, which are available to any NC family, allow families to work through Triple P in eight online modules for children and six online modules for teens. This online access is also available in Spanish. A trained Triple P practitioner continues to manage the TPOL program, providing support services to parents and managing the state outreach program. NC is the first state to develop a statewide data collection and reporting system. Data points include the number of practitioners trained and the levels of Triple P in which they have been certified, the number of families served, the number of children impacted, and a pre/post-survey of the parents' assessment of their ability to manage their child's behavior. Data are reported quarterly and are used at the state and local implementing site levels to monitor the progress of the program and to drive continuous quality improvement strategies to improve the program. A Triple P Data team of local and state data specialists, state data managers, the TPOL manager, and a Triple P America Implementation Specialist meet weekly to secure NC Triple P data and provided continuous quality improvements.

Triple P successfully piloted the Positive Early Childhood Education (PECE) program in one county in FY19. Based on the success of this pilot, NC will launch the PECE program in FY20. PECE is another evidence-based program that Triple P International offers to early childhood education programs that presents tailored solutions for early education directors, consultants, teachers, and caregivers and potentially impacts whole communities. PECE helps build confidence in all those involved and increase their ability to deal with childhood behaviors with the result of helping develop children's full potential. Early childhood directors and consultants are trained to offer coaching to

teachers and support for caregivers through attending a Triple P level three training and an online skills training course. Early childhood teachers receive the online skills training to build new skills for classroom management, and directors or consultants offer level three training or TPOL to caregivers. One NC site (Mecklenburg County Health Department) piloted the program and there are plans to replicate this program in other target county/regions as well.

The Triple P Program continues to experience several challenges in rural counties including: 1) establishing peer-to-peer support networks across multiple sectors; 2) reaching families with Triple P services because of distance and lack of transportation; 3) assisting families with finding the appropriate trained practitioner to meet their level of need; and 4) engaging trained practitioners in delivering Triple P to parents. In FY20, sites continued to offer additional specialized workshops (refresher courses for practitioners) to help reengage them in delivering Triple P and participating in peer-to-peer support networks. These workshops were provided to strengthen implementation and encourage creative initiatives to bolster provider participation in peer-assisted supervision and support. To further strengthen practitioner re-engagement, sites participated in a practitioner assessment survey, referred to as the "Practitioner Round-Up," to offer re-engagement strategy planning as a part of the implementation planning team activities to develop opportunities to build relationships with practitioners to keep them engaged in delivering Triple P. The Practitioner Round-Up process informs both the local level and state leaders about the service potential of practitioners who have been trained in Triple P implementation across the state. Data Specialist continue to enhance data collection across all service regions of the state, assisting with data collection and evaluation tools that are consistently revised to offer stronger analysis for the Triple P Program and offering additional support to coordinators to assist them with sharing data reports with practitioners and stakeholders. Data reporting, collection, and continuous quality improvement training are offered to assist local data specialists in areas that often create challenges relative to data collection.

NC Child Care Health Consultation Resources

The State Child Care Nurse Consultant (SCCNC) position supported by Title V funding collaborated with programs within the C&Y Branch as well as other state partners addressing early childhood efforts. The SCCNC worked closely with the NC Child Care Health and Safety Resource Center (CCHSRC) to support the health and safety of children ages zero to five attending early education settings through child care health consultation. The Resource Center is jointly funded through Title V and the Child Care and Development Block Grant. The Resource Center and the SCCNC offers training, technical assistance, and coaching services supporting 55 Child Care Health Consultants (CCHCs) providing local and regional coverage. In early FY20, the Resource Center offered training to one cohort. Four participants completed the course and received qualification. The Resource Center in collaboration with the SCCNC began working on a redesign and update of the NC CCHC Training Course. The Resource Center worked with The Carolina Office for Online Learning (UNC COOL) to build online content, updating with new resources, content and interactive components. The course content was developed to align with the National CCHC Competencies issued by the National Center on Early Childhood Health and Wellness in May 2019. The Resource Center maintained a website (www.healthychildcare.unc.edu). The NC Child Care Health and Safety E-Newsletter was distributed four times during the year to local child care health consultants, NC Division of Child Development and Early Education (DCDEE), and other external partners for widespread distribution to early educators via email list serves. The E-Newsletter was also made available on the Resource Center website. Topics for FY20 included communicable diseases, infant and toddler care, injury prevention, and COVID-19. The Resource Center also maintained an online CCHC Resource Library that included materials on health and safety issues, Medication Administration, Emergency Preparedness and Response, Infant/Toddler Safe Sleep and SIDS Risk Reduction, and Child Care and Development Block Grant Health and Safety Overview trainings for early educators to complete every 5 years, as required by the NC child care rules. Through a toll-free phone line and online request form, the Resource Center supports local CCHCs, child care providers, and families across the state by providing technical assistance and resources, including posters which are required by NC child care regulations. These services are

available to more than 5,746 licensed child care centers and family child care homes in NC.

The Resource Center staff and SCCNC completed updates to the CCHC Service Model. The Service Model was originally developed in FY15 in collaboration with the NC Partnership for Children and the Resource Center under the Race to the Top – Early Learning Challenge. The Model is used to standardize the practice of child care health consultation across the state and also aligns with the National CCHC Competencies. The Service Model is available on the CCHC Resource Library. The Resource Center provided ongoing support for Health and Safety Assessment tool and the implementation through a "coaching" framework by CCHCs.

The SCCNC and Resource Center staff members collaborated to create the Stay Healthy, Stay Clean training, which includes modules on handwashing, diapering/toileting, cleaning, sanitizing and disinfection in child care. Additionally, health and safety posters were updated and reprinted for use, including *Assisting Children with Handwashing*.

The Resource Center, in collaboration with the SCCNC, the North Carolina Partnership for Children (NCPC), DCDEE, and the NC CCHC Association, participated in the CCHC System Building Technical Assistance Pilot led by the National Center on Early Childhood Health and Wellness. NC participated with 6 other states in the nine-month pilot which consisted of monthly meetings, collaborating, networking and learning from other states. The pilot included completing a state self-assessment of our current CCHC system; as well as looking at regulations and standards, funding and sustainability, the role of the CCHC, and workforce supports such as professional development. The NC group convened an additional monthly meeting to discuss and prepare for each large group meeting.

The SCCNC participated on the NC DPH Breastfeeding Coordination team representing breastfeeding promotion, education and support in the child care setting, through the Breastfeeding Friendly Child Care Initiative. She also worked collaboratively with the Carolina Global Breastfeeding Institute (CGBI) at UNC Chapel Hill Gillings School of Global Public Health and the Resource Center to begin providing the Breastfeeding Friendly Child Care Train the Trainer course for CCHC and other technical assistance providers working with child care facilities. In FY20 the SCCNC provided one train the trainer course to nine child care health consultants and one technical assistance provider.

The PMC and SCCNC continued to partner with Our Children's Place and other early childhood education stakeholders to work on developing a toolkit for child care facilities addressing Supporting Children of Incarcerated and Returning Parents. The toolkit will include a training and resources offered by child care health consultants or healthy social behavior specialists providing support to early educators. The goals of this workgroup include addressing the social emotional development of young children and the impact of incarceration, trauma and toxic stress. The toolkit will serve to identify strategies early educators can use to assist children and families who have parents who are incarcerated or returning to the community after being incarcerated.

In response to the COVID-19 pandemic, beginning on March 16, 2019, the SCCNC and Resource Center began providing CCHC coverage to all counties in NC without a local CCHC (27 counties) with the Resource Center staff covering 15 counties and the SCCNC covering 12 counties. This limited coverage included the provision of health and safety guidance relate to COVID-19. It also included working with local Smart Start Partnerships and Child Care Resource and Referral agency staff to meet the comprehensive needs of child care facilities.

Additionally, the Resource Center and SCCNC collaborated with DCDEE and NCDHHS to develop the initial draft of the *Interim -19 COVID Health Guidance for Child Care Settings*, now referred to as the ChildCareStrongNC Public Health Toolkit. A sample door sign, Cloth Face Coverings and COVID-19 Frequently Asked Questions documents

were developed by the Resource Center and the SCCNC for CCHCs to use in supporting child care facilities. The Resource Center and SCCNC partnered with the DCDEE to provide four COVID-19 related Health and Safety webinars offered to child care providers across the state and also held six special COVID-19 webinars for CCHC to discuss NC guidance as well as other documents created as COVID-19 resources developed by the Resource Center and SCCNC.

The SCCNC collaborated with the PMC and the SCHNC to join and share information about child care at two webinars for child health clinics at LHDs as part of a weekly and then monthly webinars focused on strategies and recommendations to help with delivery of child health services during COVID-19. The SCCNC presented information related to COVID-19 health and safety guidance specifically related to child care.

Vision Screening

Vision screening was carried out in the schools for children in grades K-6 by certified vision screeners through state funding. The C&Y Branch contracts with Prevent Blindness North Carolina (PBNC) to train and certify a cadre of 3,000 vision screeners on an ongoing basis. This cadre, which includes volunteers, school nurses, and school staff, is available to screen at least 65% of the school population in grades K-6 statewide. More than 434,218 school age children had their vision screened in 2020 with 8% referred for further care. The PBNC contract also provides photo-refractive screening for children in Pre-K classrooms and regulated child care. In FY20, 28,112 children were screened prior to the pandemic shutdowns, and 12% were referred for further care. School nurses work with children and their families to secure appropriate follow-up care.

C&Y Branch Data Dashboard

The C&Y Branch staff include in their workplans the use of data to make programmatic decisions and communicating data to internal and external partners. The Branch collects a wide variety of data points, including both qualitative (text) and quantitative (numeric) data. Data comes from within the C&Y Branch as well as from external sites, including LHD data and data from the SCHS. Additionally, both process and outcomes data are collected for monitoring, evaluation, and continuous quality improvement purposes. Recently, infographics and maps (brief handouts with visuals) have become popular methods of sharing data. Data for C&Y programs is typically reported on a monthly, quarterly, biannual and/or annual basis, and reports reach a variety of audiences; some reports are for internal, branch staff, whereas others are shared with others throughout the WCHS, family partners, and other state partners/agencies. The C&Y Branch has created a Data Dashboard to display some of the main process and outcome measures, as well as to highlight other notable achievements that are not measured (for instance, trainings and webinars offered). The Data Dashboard can help increase an understanding of some of the branch's activities, as well as highlight areas of success and areas where there is room for improvement.

Child Health - Application Year

Priority Need 4 – Promote Safe, Stable, and Nurturing Relationships

As reported in the Child Health Domain Annual Report, the WCHS is continuing work on its five-year NCE4C Initiative with its multiple NCDHHS divisions and NGO partners in one of the largest efforts to promote safe, stable, and nurturing relationships for children. In FY22, NCE4C will continue to focus efforts on policy, practice, and social norms change related to family friendly workplace policies with an emphasis on paid family leave. Specific examples of strategies that will support the implementation of the NCECAP include:

- Work with the business community to increase employer-based family friendly workplace policies with an emphasis on industries where employers are less likely to have access to family friendly policies and benefits;
- Build public awareness at the state and local levels about the benefits of family friendly workplace policies, including paid family leave and the impact of ACEs on the health and development of young children, which may lead to norms change;
- Increase community capacity to implement paid family leave policies at the local government level;
- Focus on racial equity and the disparate ways economic policies, including family friendly workplace policies, may impact families;
- Exploration of alternative strategies for implementation of paid family leave (e.g., insurance); and
- Alignment of local plan development or implementation.

The Interim Title V CYSHCN Director and other WCHS staff will continue to participate on committees to help with the implementation of strategies developed and supported by many early childhood leaders as part of the Pathways to Grade-Level Reading efforts which helped to form the NC Early Childhood Action Plan (ECAP). NC ECAP goals include healthy babies (infant mortality and especially disparities), preventive health services, safe and nurturing relationships, food security, safe and secure housing, and social emotional health and resilience. Pathways to Grade-Level Reading committees continue to work on gathering information about shared, whole child, birth-to-age-eight measures that put children on a pathway to grade-level reading; identifying and coordinating strategies to support children's optimal development beginning at birth through efforts such as development of a statewide Pathways Action Map; and aligning policies and practices that are rooted in how children develop.

In addition, there will continue to be participation of the Interim Title V CYSHCN director and other WCHS staff in the EarlyWell Initiative advisory committee and to help review the products from twelve work groups on strategies that use an equity lens, acknowledge the impact of racism and poverty, suggest changes in how providers and systems engage families and provide TA to medical homes. The EarlyWell Initiative began in Fall 2019 as the NC Initiative on Young Children's Social Emotional Health. This initiative is led by NC Child, in collaboration with early childhood leaders including the NC Early Childhood Foundation, to enact recommendations from the Pathways to Grade-Level Reading Action Framework and to build a robust, evidence-based, and accessible early childhood social-emotional health system in NC. The goal of Pathways was modified to be more inclusive of children with all abilities and is not that NC children, regardless of race, ethnicity or socioeconomic status, are reading on grade level by the endo of third grade, and all children with disabilities achieve expressive and receptive communication skills commensurate with their developmental ages to that they have the greatest opportunity for life success.

Due to priorities having to shift because of COVID-19 needs, during FY21, the Early Childhood Matrix Team, which was previously convened as part of the Early Childhood Comprehensive Systems grant and comprised of program staff across the WCHS, was not able to meet. During FY22, the Early Childhood Matrix Team plans to reform and meet quarterly to share ideas, sponsor training events, align with the other early childhood efforts such as NC ECAP, Think Babies, IHOPE (Integrating Healthy Opportunities for Play and Eating), and coordinate work to support child well-being, making sure the structure supports ongoing partnership with the proposed reorganization. Program

topics for FY22 will align with priorities of DPH and NCDHHS related to and/or impacting early childhood. Potential topics include Medicaid Transformation, NCCARE360, impact of COVID-19, engaging in the Perinatal Health Strategic Plan, updates from other early childhood efforts across the state, and supporting implementation of the ECAP.

One measure of the WCHS' success at promoting safe, stable, and nurturing relationships will be the new SPM#2 (Percent of children with two or more Adverse Childhood Experiences (ACEs) as measured through the NSCH). This indicator was also selected as one of the Healthy North Carolina 2030 indicators and is part of the Early Childhood Action Plan. In FY22, programs providing direct services to clients will regularly assess infants, children, and youth for two or more ACEs. Programs and services supported by Title V and implemented at the local level include CMARC, the Child Health Program in LHDs, Title V and MIECHV supported home visiting, child care health consultation, Triple P, SHCs, the EHDI program, and school health services.

Efforts to Increase Screening for Developmental, Psychosocial, and Behavioral Health Concerns

The WCHS has chosen to continue to use NPM#6 (Percent of children, ages 9 through 35 months, receiving a developmental screening using a parent-completed tool in the past year) and the corresponding ESM#9 (Number of training opportunities to LHD providers on appropriate use of valid and reliable developmental, psychosocial, social determinants of health, and behavioral health screening tools for children during state fiscal year) to monitor its success at increasing appropriate developmental screenings for children.

The C&Y Branch Regional Child Health Nurse Consultants (RCHNCs) and the PMC will continue to provide at least quarterly updates and/or trainings for child health clinical staff in LHDs. The conference planned for fall 2021 was not able to be provided due to COVID-19. During FY21 almost monthly trainings were provided related to care of children related to COVID-19 with additional topics related to child health. These included technical assistance on new Medicaid requirements for well visits and newborn home visits allowed via telehealth, child care and school health and safety issues, and the need for use of developmental, psychological, social determinants of health and behavioral health assessments especially during COVID-19, based on recommendations from CDC, HRSA, and AAP.

C&Y Branch RCHNCs will routinely conduct individual site visits to review child health services and provide technical assistance and education about best practices to LHD staff. The PMC will continue to use a self-assessment tool for new advance practice providers and physicians to determine resources to support delivery of well child visits in LHDs based on Bright Futures. Branch RCHNCs will continue to review charts and electronic health records of clients seen in LHDs on the Medicaid requirement to provide, document, and discuss the results of developmental and behavioral health screenings with families as well as review the charts for other items. Nurse consultants, along with the PMC, will continue to train and update LHDs on content from and changes to the Medicaid requirements and reinforce the need for ongoing developmental screenings. WCHS staff will also continue to work with the Pediatric Program at CCNC/CCPN, Clinically Integrated Network, and the EarlyWell Initiative to increase awareness about developmental, behavioral health and social-emotional screenings.

Several staff will continue to serve on the state stakeholder advisory committee of the EarlyWell Initiative with a focus on increasing screening, identification and management of social emotional health. The PMC will continue to serve on the Medical Home Work Group to address how to best increase the knowledge, skills and abilities of medical homes to promote relational health and screen, identify, and manage social emotional concerns and social drivers (include structural racism) using a family-centered equity lens. Additionally, the NC ITP will be implementing the ASQ-SE statewide.

Efforts to Improve Preventive, Screening, Assessment, Diagnostic, and Treatment Health and Well-Being Services

The state and regional nurse consultants, along with assistance from the PMC, will coordinate the annual CHTP which is planned to run from August 2021 to March 2022. The PMC and state and regional child health nurse consultants plan to hold statewide webinars to provide child health programmatic updates as well as address additional topics such as ACEs/toxic stress, opioid/substance abuse related to children/adolescents, foster care transition, motivational interviewing, and family engagement. A statewide Child Health Conference was not and continues not to be possible due to ongoing commitments and requirements from local health departments due to COVID-19 testing, contact tracing, and vaccination. Although a statewide Annual Child Health Conference will not be scheduled, the PMC and the state and regional child health nurse consultants will continue to provide Child Health Provider webinars with the opportunity to earn nursing continuing professional development (NCPD) contact and Certified in Public Health (CPH) recertification hours.

The PMC and SCHNC in partnership with other WCHS staff and outside stakeholders will hold a minimum of three live webinars from June 2021 – November 2021 to provide additional CH Program Updates on topics such as food insecurity, interpersonal/domestic violence and its impacts on children & adolescents, housing, transportation, child care health consultation, as well as other topics of interest. Child health provider web-based trainings and updates will continue to be held monthly. To assist with delivery of appropriate screenings based on the most current HCPG requirements and recommendations, the PMC and the state and regional child health consultants, in partnership with the NC Public Health Nurse and Professional Developmental Unit consultants, will explore providing one training to all child health staff and continue providing one training for the CHERRN CHTP program participants. In addition, they will provide ongoing technical assistance to CHERRNs, physicians, and advance practice practitioners in LHDs as needed.

The SWYC, which was first required for use as a screening tool with all CMARC-engaged families in April 2018, will continue to be used as a required screening tool. Additional technical assistance will be provided to CMARC staff and health care providers in LHDs and private practice on the use of the SWYC tool and on linking with resources to address concerns in the community. CMARC care managers will continue to conduct general developmental screenings using the Life Skills Progression Assessment and share the results with the appropriate medical home practitioners and facilitate EI referrals. The CMARC staff will continue to provide LTSAE, Triple P, and the Small Moments, Big Impact materials to promote child development and strong parent-child relationships. The NC ITP also promotes the LTSAE campaign both on its website and by sharing it with families seen at the CDSAs.

The CMARC program will continue collaboration with other agencies and programs, such as EI and Pregnancy Care Managers, to ensure an effective system of care. The CMARC program in conjunction with the Prepaid Health Plans will continue to require staff to collaborate with medical homes in their communities, both at the system level for effective identification of children in the CMARC target population and at the individual child level for those children engaged in CMARC services, as collaboration with the medical home will ensure the healthiest outcomes for the child. CMARC staff will also continue to support the work of NCDHHS' Plan of Safe Care Interagency Collaborative. The CMARC program will continue to support staff in the transition to Virtual Health/Care Impact documentation platform system. The program will continue to provide technical assistance and training per the *NC Medicaid Program Guide for Management of High-Risk Pregnancies and At-Risk Children in Managed Care* to enhance performance assessment and improvement processes to ensure program expectations are met.

With the launch of NC Medicaid Managed Care occurring on July 1, 2021, CMARC state staff will continue to work with NC Medicaid Division of Health Benefits to assure that care management services are maintained and enhanced for children ages zero to five that meeting the program population criteria

Triple P

The Triple P System in NC consists of the NC State Partnership for Strategy and Governance (PSG), the NC Triple P Support System (Triple P America, The Impact Center at UNC at Chapel Hill, and Prevent Child Abuse NC), the Design Team (The Impact Center and Triple P America), the State Triple P Partners Coalition, and the Lead Implementing Agencies (LIAs). In FY20, a five-year Scale-Up Plan was developed by the Design Team to support the work of the PSG and the LIAs.

The C&Y Branch is continuing to offer maintenance (or base funding) of the program with a Triple P LIA Regional Coordinator who will lead the ten LIA regional sites. In FY22, the LIAs will begin implementation of their Year One Plan as part of the Model Scale-Up Five-Year Plan. The Support Team will be working with each LIA to assess the training and support needs of local practitioners to deliver Triple P as part of their work.

The Triple P State Learning Collaborative, consisting of all the coordinators at the LIAs, will continue to provide a learning environment in which coordinators can meet to learn, share, and plan to implement best practices, offer collective problem solving and efficiencies, determine sustainability needs, and encourage model fidelity based on the Triple P Implementation Framework.

The C&Y Branch will continue to support the Triple P System in NC through Title V funding by employing a State Triple P Coordinator, funding the LIAs for infrastructure and training support with Title V funding, and providing a part-time data specialist to work in conjunction with the C&Y Data Manager to support state-wide data collection and reporting and using data for local CQI projects.

The C&Y Branch will continue partnering with the NC DSS to support Incredible Years and Strengthening Families cohorts in local communities and integrate those evidence-based family strengthening programs with Triple P as those initiatives are very compatible and integrate well with the Triple P program. The C&Y Branch will also receive funds from DSS to provide additional funding for the LIAs and provide a co-chair for the PSG.

DSS has added Triple P to their menu of approved family strengthening programs that can be supported by local DSS funds. In addition, DSS has applied for grant funding to expand Triple P into local DSS agencies. In FY22, funds will continue to be used to hire a Level IV trained practitioner in up to 20 local DSSs, plus train all the CPS case workers in Level III. CPS case workers will deliver Triple P in the home and then refer high need cases to the Level IV practitioner. This same strategy will be incorporated into DSS's application for Family First funding.

With the addition of state appropriations transferred from DSS, the DPH has been able to expand coverage to all 100 counties in NC. The focus for FY22 will be to connect with all the practitioners trained in the Triple P model to determine their status for continuing to provide Triple P services to families of children and teens. This process is commonly referred to as the "Practitioner Round-up." In addition, local Triple P coordinators will be reaching out to local DSS directors to determine how Triple P can best be used by DSS staff. Title V funds will continue to provide support to the LIAs, along with additional support from DSS, to maintain regional coordinators, support additional training for practitioners, and purchase outreach and media materials to promote Triple P in their service area. The partnership between DPH, DSS and The Duke Endowment has continued to support the state-wide implementation of Triple P.

Demonstrating ongoing strength of the Triple P program, it is important to note that two ICO4MCH project sites (covering seven counties) will continue to implement Triple P as one of their evidence-based strategies to improve health among children ages zero to five for FY22. An additional site chose to expand their Family Connects Home

Visiting Program.

Child Care Health Consultants

The C&Y Branch SCCNC will continue to work collaboratively with programs within the C&Y Branch, as well as local and state partners, to establish and maintain links to promote health and safety in early learning environments. Specifically, the SCCNC will continue to partner closely with the NC CCHSRC to support child care health consultation across NC, supporting both local and regional based CCHCs. The CCHC Resource Library offered through the CCHSRC website will be maintained and enhanced to include training resources and materials, information on current health and safety requirements, including recommendations for meeting best practice standards for child care facilities. The Resource Center, in collaboration with the SCCNC, will continue to offer the NC CCHC Course for new CCHCs and affiliates online and in person twice a year, fall and spring.

In addition to the C&Y SCCNC, the NC CCHSRC, with funding from the Child Development Block Grant and Title V, employees three Regional Child Care Nurse Consultants that serve as coaches for the north central, south central and western parts of NC. Together with the SCCNC providing coaching services to the eastern part of the state, these CCHC coaches provide ongoing support to local CCHCs, helping them to maintain model fidelity to the NC CCHC Service Model. The SCCNC and the Regional Child Care Nurse Consultants provide the medication administration train the trainer course, as well as serve as instructors for the NC CCHC Course.

Beginning in FY21 and continuing in FY22, a statewide work group consisting of representatives from the NC CCHSRC, DPH, DCDEE, NCPC, LHDs and local Smart Start agencies are developing a governance structure for CCHC in NC, as well as a strategic plan with short term and long term vision and goals to ensure sustainability of child care health consultation. Additionally, through Child Development Block Grant funding, DCDEE has committed to fund CCHC expansion to all 100 counties. The goal is to have a local or regional CCHC assigned to support every county in NC with sustainable funding and infrastructure support. As these local CCHCs are hired, the NC CCHSRC will add additional training sessions to assure that local CCHCs are equipped to provide appropriate consultation and technical assistance related to health and safety per NC Administrative Rules and NC Star Rating System. In FY22, the PNC will work with the SCCNC and the NC CCHSRC to enhance training and resources for CCHC's addressing enhanced nutrition for infants and toddlers (children aged birth – three).

Child Health Agreement Addenda

The C&Y Branch will continue to refine the Child Health Agreement Addenda with LHDs to require that: 1) all services supported by Title V funding will be evidence-based; 2) services will support the MCHBG domains and reflect the needs of the community; and 3) priorities established by the local communities will be data driven. The Child Health Program has: 1. Created an online process for LHDs to self-report at mid-year and end of year on the measures for the services delivered by the LHD; 2. Standardized the measures and improved the reporting mechanisms to increase accountability; and 3. Increased technical assistance to LHDs to support the use of additional evidence-based services and resources for children.

The FY22 Child Health Agreement Addenda with LHDs for child health services will continue to support a variety of services for low-income families which can include but are not limited to: 1. Access to dental services and optometrists; 2. Access to asthma inhalers and spacers; 3. Direct preventive and sick visit services; 4. Reach Out and Read program support; 5. Interpreter services such as in-person interpreters and language line services; 6. Car seat and bicycle helmet purchases based on financial eligibility; 7. Classes for families in LHD and in school settings on nutrition and physical activity to reduce the risk for obesity; 8. Reproductive health services for teens based on a

sliding fee scale; 9. Funding for school nurses; 10. Funding for family strengthening initiatives; 11. Accommodations to improve access to care for children with disabilities after site surveys for wheelchair scales and accessible examination tables; 12. Training related to skill development related to evidence-based services; 13. Mother-Baby Breastfeeding Friendly Outpatient Healthcare Clinics; 14. Funding for Child Care Health Consultants; 15. Nutrition and Physical Activity Coalitions; 16. Addressing Food Insecurity and/or Healthier Food Access; and 17. Gun Safety Locks and Lock Boxes.

NC Child Fatality Prevention System

The CFTF Executive Director position, formerly in the C&Y Branch, has been moved to NCDHHS for better coordination of policy activities. The C&Y Branch through Title V continues to support the CFTF and local CFPTs as well as the state CFPT Coordinator.

In FY22, the state CFPT Coordinator will continue to:

1. Provide live and archived webinars with partners to local CFPTs on topics such as safe sleep, recruitment of new members and meeting facilitation.
2. Conduct training needs assessments with all 100 local CFPTs.
3. Accept quarterly reports from local CFPT and submit an annual report to the State Child Fatality Prevent Team and the CFTF.
4. Provide individualized trainings to new CFPT Chairpersons and support staff.
5. Conduct monitoring activities for 33 local teams via telephone conferencing and site visits.
6. Collaborate with local partners such as the OCME and UNC CMIH to provide training on safe sleep.
7. Update the Local CFPT Review Guide.

Home Visiting Parenting Education (HVPE) Collaborative

Given the complexities of the current home visiting and parenting education landscape and the multiple invested stakeholders and funding, an inclusive, structured planning process was needed to develop a comprehensive, statewide system encompassing both home visiting and parent education in NC. In FY20, a Home Visiting and Parenting Education (HVPE) Collaborative was convened to assess the current system, identify and coordinate funding sources, establish a governance system, and standardize data collection and reporting with the goal to create a family-centered, coordinated system that uses current resources effectively and includes planning and activities ensuring high quality services can be scaled up to be accessible and offered in an equitable manner. In FY22, these system planning efforts will move towards implementation with the expected hiring of a HVPE System Director. The Title V Director co-chairs the effort and the Title V CYSHCN Director are members of this coalition. The C&Y Branch uses a combination of Title V, MIECHV, and state appropriations to fund NFP and HFA home visiting and Triple P.

In FY22, the C&Y Branch will continue working with the NFP sites to strengthen their CABs. The CABs have focused on referrals for the NFP program in past years. Having developed good referral systems in each county, Branch staff will provide technical assistance to local CABs to focus on marketing the NFP program in the community to increase awareness, interest, and ownership within the community and developing sustainability plans that include applications for local and philanthropic funding. In addition, CABs will be encouraged to include more parents, especially parents who have graduated from the NFP program. Families have been engaged with the planning and implementation of the NFP program at the state and local levels. Families serve on the state stakeholders' group and are represented on local NFP CABs. Many of the parents who become involved at the local level as mentors to parents and members of local CABs are graduates of their NFP home visiting program.

Retention continues to be a focus of NFP, and it is tracked monthly. Sites are now challenged to keep their early attrition (clients who received 3 or fewer visits before disenrolling) to below 7%. NFP is working as a program to initiate what is called the First 5 Home Visits approach. This allows for the Nurse Home Visitor to develop a rapport with the client/family and deep dive into what the client is needing out of the program during those first five home visits.

The NFP National Service Office (NSO) has hired a Government Affairs Manager to work at the state level to identify sustainability opportunities at existing sites. All NFP sites in NC are now documenting on standardized assessment forms. This was developed in collaboration with the State Nurse Consultants and the NFP NSO.
One MIECHV funded NFP site will expand its reach by adding another county to their multi-county site.

MIECHV staff members will continue working to integrate MIECHV data in the NC Early Childhood Integrated Data System (ECIDS). A monthly email is sent out to home visitors with professional development opportunities which include webinars, journal articles, and local conferences/ trainings. Partnering agencies are in the process of adopting a set of core competencies for home visitors and parenting educators in NC.

Additional Strategies to Promote Child Health

The C&Y Branch and the EIB will continue their enduring partnerships with agencies and organizations such as NC Child, the NCPS, the NC Academy of Family Physicians, ECAC, NC Partnership for Children, Family Support Network, Carolina Institute for Developmental Disabilities, and Prevent Child Abuse NC. In FY22, they will also support and participate in initiatives such as the EarlyWell Initiative and Navigating Pathways to Coordinated Care for Children with Autism Spectrum Disorder and Developmental Disabilities. In addition, they will support the use of NCCARE360 care management to support children, birth to five years, needing community-based supports to address health and social determinants of health issues. The WCHS will also continue to work with Duke and other partners to expand the NC Telehealth Partnership for Child and Adolescent Psychiatry (NCTP-CAPA) and the use of NC-PAL to support primary care providers with private practices and child health clinics in LHDs with the timely identification, diagnosis, management, treatment and referral as appropriate for children with mental or behavioral health concerns.

The Title V Director participated on the time-limited NC Child Well-Being Transformation Council established by the NCGA which presented its final report in July 2020. The purpose of the NC Child Well-Being Transformation Council was to serve as a means for coordination, collaboration, and communication among agencies and organizations providing public services to children. The Council made seventeen recommendations of changes in law, policy, or practice necessary to remedy gaps or problems in the report, and the WCHS will follow how these recommendations are received by the NCGA and support next steps as appropriate.

In FY22, funding through Title V and state appropriations will continue to support coverage of vision screening for both school-age and preschool age children with Title V funding preschool services through a contract with Prevent Blindness North Carolina. Educational materials will be provided statewide on eye and vision health. Vouchers for services and eyeglasses for children who do not qualify for other assistance through public or private insurances will also be provided. The CHTP will continue to include training on vision system assessment and will share the archived webinar with child health clinic staff in LHDs.

In FY22, the WCHS will continue to collaborate with the NC Childhood Lead Poisoning Prevention Program to help eliminate childhood lead poisoning. Strategies to promote elimination include the testing of water in schools and child care facilities statewide; a renewed emphasis on current testing and surveillance of children exposed to lead

paint; and regulatory requirements for lead-free certification to be part of house transfers and apartment rentals. The CHTP will continue to include updated training on lead screening and prevention for students and share the archived webinar with LHDs.

As with previous action plans, the PNC will continue in FY22 to integrate breastfeeding education, family engagement and Life Course Nutrition into the Child Health program through trainings conducted as part of the CHERRN course and through other Child Health programs, including work with programs that specifically target CYSHCNs. The PNC will also continue her active involvement in the Association of State Public Health Nutritionists (ASPHN) through the MCH Nutrition Council and the Fruit and Vegetable Nutrition Council. In FY21, the PNC and other Steering Workgroup members of the NC Farm to Preschool Network, applied for and were awarded a 1 year $91K ASPHN/CDC Farm to ECE Implementation Grant (FIG) that began Nov. 1, 2020 and will end of October 31, 2021 https://asphn.org/farm-to-ece-grantees-programs/. The Network has local and state level Policy, Systems and Environmental (PSE) changes included in the FIG grant along with a racial equity focus. For FY22, the PNC and Network partners will wrap up their grant deliverables, complete end of grant year reports, generate success stories and investigate other funding opportunities to expand their work. The PNC also serves on the Farm to School Coalition of NC Steering Committee, a statewide Coalition she helped form in 2014. In FY22, the PNC will serve on the interview team for hiring a full-time Coalition assistant (with funding from BCBSNC); lead or serve on workgroups to expand FTS in NC and continue to promote the accomplishments of the Coalition.

The PNC will also continue collaborative partnerships with the NC Partnership for Children, GoNAPSACC, the CDIS SPAN grant staff, the State Child Care Health Consultant, the NSB (WIC and CACFP), the State Nutrition Action Coalition, Eat Smart, Move More NC and other internal and external partners in addressing similar nutrition and physical activity strategies by routinely communicating and partnering in a more coordinated way and pooling resources for greater impact. This could include consistent messaging related to breastfeeding & healthy eating that partners could use, especially with a diversity, equity and inclusion lens. Another activity continuing in FY22 and beyond is that the PNC monitors a special nutrition project Agreement Addendum for the Durham County Department of Public Health that furnishes medical nutrition therapy and nutrition consultation services for children referred to the LHD with no other funding source.

Other worked planned by the PNC for FY22 is an emphasis on nutrition and dietary aspects directly linked with Oral Health (promotion of breastfeeding, decreasing sugar-sweetened beverages, etc.). This work will focus on providing resources and possibly ensuring referrals for nutrition needs identified during preventive dental visits.

Priority Need 5 – Improve Immunization Rates to Prevent Vaccine-Preventable Diseases

Vaccines for Children Program Strategies

The federal Vaccines for Children Program (VFC) was established after a measles epidemic in the United States and became operational in the fall of 1994 under section 1928 of the Social Security Act. VFC is an entitlement program for eligible children, age 18 and younger. Provider recruitment to maintain a strong public health infrastructure helps assure high immunization coverage levels and low incidence of vaccine-preventable diseases. The IB distributes vaccines at no charge to private and public VFC enrolled providers to vaccinate children whose parents or guardians may not be able to afford them. This helps ensure that children have a better chance of getting all the recommended vaccinations on schedule. Collaborative efforts include community engagement with existing and new partnerships are essential for increasing vaccination coverage and improving vaccine acceptance. The IB provides accurate and consistent focused training to its stakeholders about vaccination of infants, children, and adults.

The IB uses vaccine ordering data from VFC providers to determine which providers are high-volume and order both adolescent and childhood vaccines. At the state level, providers who have low coverage and high patient volume, and who see both children and adolescents, will be selected to receive Immunization Quality Improvement for Providers (IQIP) visits. Providers located in geographically underserved areas or in areas where outbreaks of vaccine preventable disease occur are prioritized and will be seen first. Immunization data from the NC Immunization Registry (NCIR), a web-based statewide-computerized immunization information system that maintains and consolidates immunization records, is used to assess provider-level vaccination coverage. Regional immunization consultants run an initial assessment report to evaluate coverage and work with providers to identify practice strengths and weaknesses and implement strategies to increase vaccine uptake to improve immunization coverage. Providers are trained to use the NCIR reports to track children who are overdue for immunizations, confirm data accuracy and completeness of records, and make any needed corrections in the NCIR. The regional immunization consultants will run assessment reports a second time after corrections are made to re-evaluate coverage. Providers are asked to monitor data quality on an ongoing basis. The IB completes a centralized statewide immunization assessment annually for all children 24 through 35 months of age from the NCIR. Immunization coverage assessment results are provided to each LHD. Quality improvement strategies are discussed to improve coverage and compliance with NC immunization laws.

National Immunization Survey

At the national level, CDC uses the National Immunization Survey (NIS) to monitor vaccination coverage among children 19-35 months and teens 13-17 years, and flu vaccinations for children 6 months to 17 years. The surveys are sponsored and conducted by the National Center for Immunization and Respiratory Diseases (NCIRD) of the CDC and authorized by the Public Health Service Act [Sections 306]. Data collection for the first survey began in April 1994 to check vaccination coverage after measles outbreaks in the early 1990s. The NIS provides current, population-based, state and local area estimates of vaccination coverage among children and teens using a standard survey methodology. Estimates of vaccination coverage are determined for child and teen vaccinations recommended by the Advisory Committee on Immunization Practices (ACIP), and children and teens are classified as being up to date based on the ACIP-recommended numbers of doses for each vaccine.

Additional WCHS Immunization Activities

The Child Health Program will promote immunizations for children and youth according to AAP/Bright Futures schedule as part of the well-child visit. Information and updates will be shared with LHD staff through provider webinar updates, child health clinical staff webinar updates, and through the annual CHTP. In addition, the Best Practice Nurse Consultant will review clinical charts to assure that program and clinical guidelines are met.

The CMARC Program will encourage parents to adhere to the AAP/Bright Futures guidelines for well-child visits, including receiving appropriate immunizations. CMARC care managers are often embedded in pediatrician or family practice settings or work in close collaboration with the child’s medical home.

In addition, well visits with the medical home that follow AAP/Bright Futures guidelines will be encouraged by nurse home visitors. Often the nurse home visitor goes with the parent to the medical appointments to assure coordination between the provider and community-based services. Nurse home visitors will often go to the medical appointment with the family to reassure the family and to discuss needed community-based services.

Among the many impacts of COVID-19 on North Carolina is a marked decrease in the rates of well child visits and childhood vaccinations. In FY22, WCHS will continue to monitor vaccination rates closely and work with partners on

outreach and sharing of best practices to increase vaccination rates. WCHS worked with NC Medicaid, NC AHEC and Community Care of North Carolina (CCNC) on the *Keeping Kids Well* initiative to work with practices experiencing greater care gaps to increase well child visits and immunization rates across the state. NCDHHS is working again on an expanded influenza media campaign to ensure maximum coverage this year during the COVID-19 pandemic and leverage COVID-19 messaging and the importance of COVID-19 and influenza vaccines. NCDHS will also continue to engage with diverse state and community partners to implement COVID-19 vaccination in NC, ensuring fast and fair vaccination that is easy and everywhere, especially in anticipation of the availability of booster doses.

The PMC will continue to do outreach and presentations to child health providers at LHDs and in other practice settings and to agency representatives about the need to address decreased rates of well child visits and vaccinations as well as about COVID-19 vaccination.

Adolescent Health

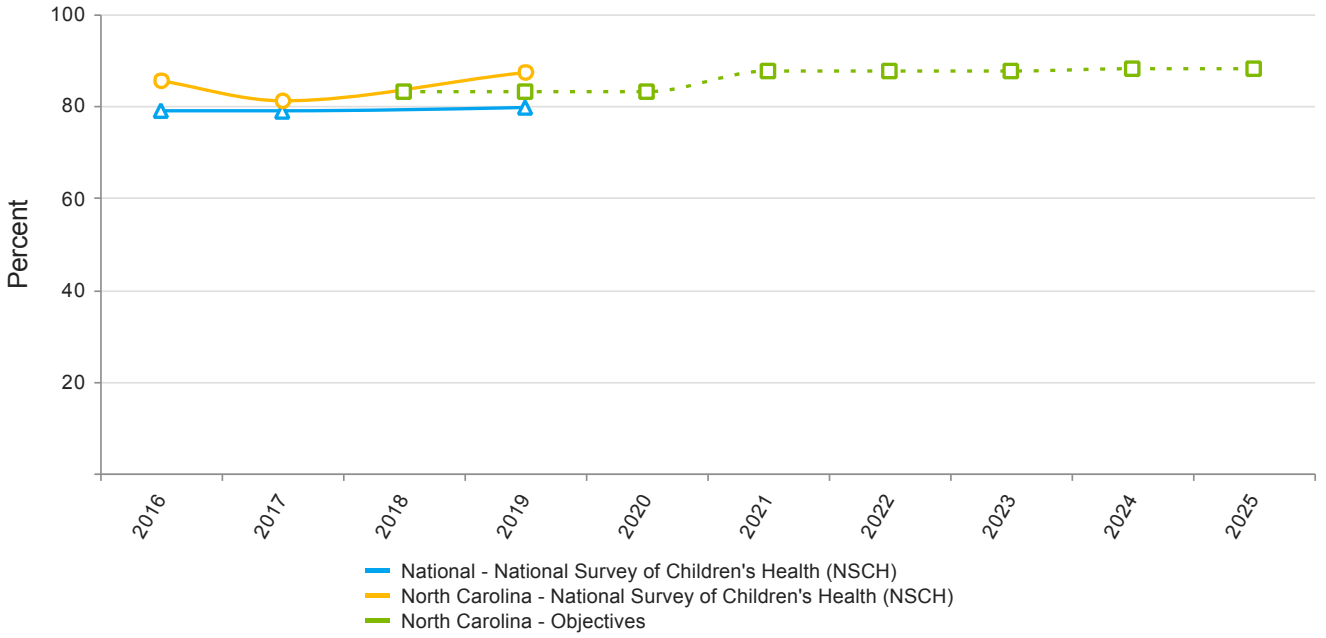
Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 16.1 - Adolescent mortality rate ages 10 through 19, per 100,000	NVSS-2019	34.3	NPM 10
NOM 16.2 - Adolescent motor vehicle mortality rate, ages 15 through 19, per 100,000	NVSS-2017_2019	13.3	NPM 10
NOM 16.3 - Adolescent suicide rate, ages 15 through 19, per 100,000	NVSS-2017_2019	8.9	NPM 10
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	NSCH-2018_2019	18.1 %	NPM 10 NPM 15
NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling	NSCH-2018_2019	52.7 %	NPM 10 NPM 15
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH-2018_2019	91.1 %	NPM 10 NPM 15
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	NSCH-2018_2019	16.1 %	NPM 10
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	WIC-2018	15.0 %	NPM 10
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	YRBSS-2019	15.4 %	NPM 10
NOM 22.1 - Percent of children who have completed the combined 7-vaccine series (4:3:1:3*:3:1:4) by age 24 months	NIS-2016	77.9 %	NPM 15
NOM 22.2 - Percent of children, ages 6 months through 17 years, who are vaccinated annually against seasonal influenza	NIS-2019_2020	64.4 %	NPM 10 NPM 15
NOM 22.3 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine	NIS-2019	71.3 %	NPM 10 NPM 15
NOM 22.4 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the Tdap vaccine	NIS-2019	92.0 %	NPM 10 NPM 15

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 22.5 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the meningococcal conjugate vaccine	NIS-2019	93.2 %	NPM 10 NPM 15
NOM 23 - Teen birth rate, ages 15 through 19, per 1,000 females	NVSS-2019	18.2	NPM 10
NOM 25 - Percent of children, ages 0 through 17, who were unable to obtain needed health care in the past year	NSCH-2018_2019	3.1 %	NPM 15

National Performance Measures

NPM 10 - Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year.
Indicators and Annual Objectives



Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			83	83	83
Annual Indicator		85.5	81.0	81.0	87.3
Numerator		643,711	638,902	638,902	786,182
Denominator		752,936	788,733	788,733	900,582
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2016_2017	2019

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	87.5	87.5	87.5	88.0	88.0	88.0

Evidence-Based or –Informed Strategy Measures

ESM 10.1 - Number of adolescents receiving a preventive medical visit in the past year at a local health department or school health center

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator		16,676
Numerator		
Denominator		
Data Source		LHD/HSA and NC SHC Annual Report
Data Source Year		2020
Provisional or Final ?		Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	24,225.0	24,709.0	25,203.0	25,707.0	26,222.0	26,222.0

ESM 10.2 - Percent of adolescents who had a behavioral health screening at time of preventive care visit

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	66.3	67.6	68.9	70.4	71.8	71.8

State Action Plan Table

State Action Plan Table (North Carolina) - Adolescent Health - Entry 1

Priority Need

Improve access to mental/behavioral health services

NPM

NPM 10 - Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year.

Objectives

AH 6. By 2025, increase the percent of adolescents with a preventive medical visit inclusive of behavioral health risk assessment in the last year by 5% from 81% (Baseline 2016-17 NSCH) to 85%.

Strategies

AH 6A.1. Encourage development of teen clinics and outreach to teens by LHDs using Title V funding (351 Child Health Agreement Addendum Attachment C).

AH 6A.2. Provide education and technical assistance to LHDs about the importance and required components of the annual well adolescent visit with an emphasis on confidentiality, emotional wellness and social connectedness.

AH 6A.3. Continue Child Health Enhanced Role Registered Nurses training to include a focus on quality adolescent health services.

AH 6A.4. Provide training on adolescent health needs and provision of services at the Annual School Nurse Conference.

AH 6A.5. School Health Centers will continue to be credentialed to assure they are providing primary & preventive adolescent health services in line with national SHC performance measures including behavioral health when BH services are offered locally.

AH 6A.6. Partner with youth statewide through the Youth Public Health Advisor program to promote youth voice within programs and promote positive public health messaging to adolescents across the state.

AH 6A.7. Continue to work with the Division of Health Benefits and Prepaid Health Plans to expand outreach to increase both the number of visits and the quality of the care provided during the adolescent preventative visits provided to Medicaid and Health Choice enrollees.

AH 6A.8. Convene the NC Telehealth Partnership for Child and Adolescent Psychiatric Access (NCTP-CAPA) Implementation Team in support of grant objectives.

AH 6A.9. Partner with NC DPI and other collaborators on statewide mental health initiatives including the School Mental Health Initiative and Social Emotional Learning in schools.

AH 6A.10. Promote the importance of adolescent preventive care through the Triple P Learning Collaborative.

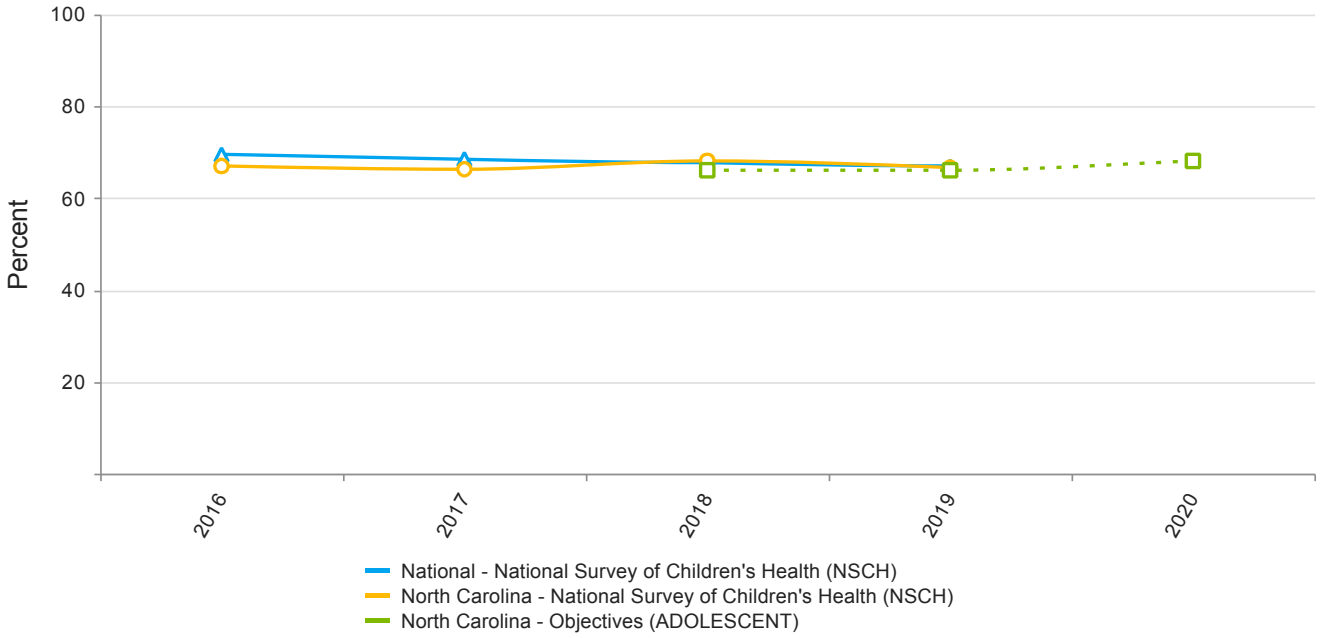
AH 6A.11. Educate statewide stakeholders on the importance of adolescent preventive care and all components including behavioral health risk assessment through outreach education.

ESMs	Status
ESM 10.1 - Number of adolescents receiving a preventive medical visit in the past year at a local health department or school health center	Active
ESM 10.2 - Percent of adolescents who had a behavioral health screening at time of preventive care visit	Active

NOMs
NOM 16.1 - Adolescent mortality rate ages 10 through 19, per 100,000
NOM 16.2 - Adolescent motor vehicle mortality rate, ages 15 through 19, per 100,000
NOM 16.3 - Adolescent suicide rate, ages 15 through 19, per 100,000
NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)
NOM 22.2 - Percent of children, ages 6 months through 17 years, who are vaccinated annually against seasonal influenza
NOM 22.3 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine
NOM 22.4 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the Tdap vaccine
NOM 22.5 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the meningococcal conjugate vaccine
NOM 23 - Teen birth rate, ages 15 through 19, per 1,000 females
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system

2016-2020: National Performance Measures

2016-2020: NPM 15 - Percent of children, ages 0 through 17, who are continuously and adequately insured
Indicators and Annual Objectives



2016-2020: NPM 15 - Adolescent Health

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			66	66	68
Annual Indicator		66.8	66.2	68.2	66.6
Numerator		1,504,417	1,503,878	1,562,073	1,523,858
Denominator		2,253,063	2,272,294	2,289,632	2,288,827
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2017_2018	2018_2019

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

2016-2020: Evidence-Based or –Informed Strategy Measures

2016-2020: ESM 15.1 - Number of outreach activities to promote access to health insurance done annually by the Children and Youth Branch's Minority Outreach Coordinator, CYSHCN HelpLine Coordinator, and YSHCN Access to Care Coordinator

Measure Status:				**Active**	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		200	200	200	200
Annual Indicator	167	191	187	186	88
Numerator					
Denominator					
Data Source	CSHCN Quarterly Outreach Report	CSHCN Quarterly Outreach Report	CSHCN Quarterly Outreach Report	CSHCN Quarterly Outreach Report	CSHCN Quarterly Outreach Report
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

2016-2020: State Performance Measures

2016-2020: SPM 4 - The ratio of school health nurses to the public school student population

Measure Status:				**Active**	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		1,067	750	750	750
Annual Indicator	1,086	1,073	1,055	1,021	1,007
Numerator					
Denominator					
Data Source	NC Annual School Health Services Report	NC Annual School Health Services Report	NC Annual School Health Services Report	NC Annual School Health Services Report	NC Annual School Health Services Report
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Adolescent Health - Annual Report

While there is not currently a stand-alone Adolescent Health Program in the WCHS, those services and attention to adolescents are present in many programs in the C&Y Branch and especially the School Health Unit (SHU). The C&Y Branch supports adolescent health around the state by coordinating health initiatives, expanding the use of evidence-based programs, practices, and policies, and providing adolescent health resources for youth, parents, and providers through multiple programs across the Branch. Adolescents are served across the C&Y Branch in all programs and represent almost half of the school age population. NC is fortunate that providing comprehensive school health services remains a priority of both DPI and NCDHHS. The C&Y Branch houses the State, Regional and Charter School Health Nurse Consultants who are responsible for planning, training, and consulting for all the school nurse positions located in LHDs, schools, and hospitals throughout the state, and also houses support for school health centers. Although the school health nurse consultants are paid for by a variety of funding types, six of the school health nurse consultants are supported through Title V funding.

Adolescent health resources are found on the C&Y Branch website under School Health. In January 2019, the SHU launched the NC DPH Adolescent Health Resource Center (AHRC), an online repository of state and national resources provided to users of various audiences including youth-serving professionals, parents/primary caregivers, and teens. The creation of the website fulfills a longtime recommendation from the NCIOM suggesting the creation of this content on the NC DPH website. The web page continues to be a resource for information and updates on adolescent health including updates on emerging adolescent health issues, print and web-based resources, links to training opportunities, and a presence for sharing and promoting evidence-based programs and practices.

Youth and family voice were also obtained through an online survey for parents of adolescents and two focus groups of adolescent youth. The primary purpose of these focus groups was to obtain general health opinions from parents and youth as well as identify potential barriers to adolescent preventive care. Qualitative data collected through the focus groups were incorporated into the 2020 Title V Needs Assessment. The Branch also works to promote youth voice in public health through the establishment of a youth advisory council. In May 2019, the C&Y Branch began its first youth advisory council, the NC Youth Public Health Advisor Team (YPHAT). The program has continued to provide youth ages 12 to 18 the opportunity to develop leadership skills, gain knowledge of various health topics, and engage in meaningful ways to provide youth voice and opinion in matters that impact youth health. During the final months of FY20, the group contributed to the NCDHHS COVID pandemic response with the creation of videos featuring the teen members of the YPHAT encouraging students to wear masks, wash hands, and distance themselves from others in public spaces. The video was shared by the Department and also nationally by AMCHP. During FY20, this group also created and administered a survey to measure teens' responses to the pandemic and this was analyzed and reported in video and written format. It will be posted for wide access when completed.

The C&Y Branch Journal Club continued to be offered to staff to promote ongoing professional development and opportunities for staff to feature issues important to programs across the Branch. Several Branch Journal club sessions were led by the Adolescent Health Coordinator. Topics were discussed, and then staff members shared current or potential efforts in programs related to suicide prevention, substance use, youth mental health, and bullying, among other risk factors as well as protective factors for adolescents.

NPM#10 – Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year

DPH funds 31 of the state's 90 plus School Health Centers (SHCs) in order to increase access to primary and preventive health care for older children and adolescents, ages 10 to 19 years old, living in underserved and high-risk communities across the state. For many SHCs, this includes nutrition and mental health services. SHCs are considered to be one of the most effective and efficient ways to provide preventive health care to adolescents. Few

programs are as successful in delivering health care to adolescents at low or no cost to the patient, particularly on-site or near school campuses. These centers provide primary and preventive care for the purpose of improving adolescents' and pre-adolescents' health and academic success, which directly contribute to the C&Y Branch's effort to meet NPM #10: Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year. During FY20, due to the pandemic, many school health centers were closed as the schools in which they were located were closed. Staff continued to provide virtual support, many switching to telehealth methods for reaching teens who were virtually attending their classes. School Health Centers assisted their host schools in planning and managing activities dealing with students' returning to school during the pandemic.

Because of a wording change in the NSCH question in 2018, only single year data are available for this performance measure. Data show that there was a slight increase in the percent of adolescents with a preventive medical visit in the last year for NC survey respondents in 2019 (87.3%) as compared with 2016 (85.5%), but this probably isn't a significant difference. NC did have a higher percentage that the nation (79.6%) in both the 2016 and 2019 surveys, although the confidence intervals overlap, so there is probably not a significant difference. Of the NC survey respondents in 2019, those parents with private insurance, higher income, and more education were more likely to have reported that their adolescent received a visit, and YSHCN were less likely to have received a visit than those youth without a special health care need (YSCHN – 84.2% v. non-YSHCN – 88.5%).

In one effort to help increase this percentage, the WCHS chose the following ESM for this NPM: number of adolescents age 12 to 17 receiving a preventive medical visit in the past year at an LHD child health clinic. The number of adolescents receiving a preventive medical visit in LHDs in FY20 was 7,332 which is a 41% decrease from the number receiving visits in FY19 (12,521). The decrease in the number of adolescents that received a preventative visit is correlated with the impacts of the COVID-19 Pandemic. Both in NC and nationally, it was noted that preventative visits for children and adolescents overall in NC decreased by approximately 40% during the March – June 2020 time period. In addition, North Carolina SHC data for school year 2019-2020 indicate that 9,344 unduplicated student enrollees received preventive and medical procedures during their 28,931 visits to the SHC which is a huge drop from the almost 11,000 students and over 50,000 visits reported for school year 2018-2019.

SPM#4 – Ratio of school health nurses to the public school student population

In addition to the ESM, the WCHS had retained former SPM#4: Ratio of school health nurses to the public school student population as a SPM since it is an important measure of health services for school age children and adolescents. This ratio was 1:1,007 for school year 2019-2020, thus a very slight drop from the 2018-2019 ratio of 1:1,021 but nowhere near the goal of 1:750 students. While this SPM is not included in the 2021-25 State Action Plan, the C&Y Branch is committed to working toward having one nurse for every school building. All districts face budgetary challenges that require decisions related to staffing. North Carolina was fortunate to maintain continued legislative budgetary support for the 235.75 state funded School Nurse Funding Initiative (SNFI) positions. The presence of these positions in most districts fosters the maintenance of local school nurse positions since SNFI position agreements carry a requirement for continued support of local positions.

Child Health Program

The C&Y Branch helps support the provision of preventive health services to children from birth to 21 years of age primarily through LHD clinics which follow the most current Bright Futures national recommendations for preventive pediatric health care. The Bright Futures recommendations have been incorporated into the most current version of the Health Check Program Guide which is used by the Medicaid program as the standard for preventive health care for children up to 21 years of age. During FY20, the PMC and regional child health nurse consultants provided ongoing technical assistance to LHDs about adolescent preventive health care. Nine new LHD providers and several

current providers, directors of nursing, and other LHD staff from several counties asked questions about adolescent well child visit components. LHD staff were provided information and articles about mental health, substance use, and behavioral health/psychosocial screening for adolescents as well as links to past webinars on motivational interviewing and use of the HEEADSSS (Home, Education/Employment, Eating, Activities, Drugs, Sexuality, Suicide/Depression, and Safety) interview tool and the CRAFFT substance use screening tool. The PMC has a self-assessment for new providers about their knowledge, skills, and abilities related to all of the well child preventive visit components but specifically asks about these skills in relation to adolescents and skills with use of specific adolescent screening tools. This self-assessment tool assists the PMC with providing targeted technical assistance to meet the needs of the individual providers.

Child Health Training Program

The Child Health Training Program held during FY20 for CHERRNs included several sessions that focused on adolescents or adolescent related issues such as: Bright Futures services for adolescents; required and recommended adolescent screenings; adolescent psychosocial/behavioral health/substance use screening tools; immunizations; use of gender neutral language; and confidentiality issues for adolescents. These trainings also included information about developing resiliency in adolescents and addressing health care transition.

To further enhance quality health services for adolescents, LHDs continued to use Bright Futures standards, screening tools, patient/parent education handouts, and forms to support evidence-based adolescent care as part of annual adolescent preventive medical visits. Child Health Program audits of LHDs were completed by the Best Practice Nurse Consultant and technical assistance was provided by the State Child Health Nurse Consultant and Regional Child Health Nurse Consultants to continue to monitor compliance with current HCPG age appropriate requirements, billing and coding requirements and scope of practice. All of the requirements for an adolescent visit continued to be included in the most current NC Health Check Billing Guide. These requirements apply to all adolescents served by the LHDs in addition to adolescents enrolled in Medicaid who were cared for in other practice settings.

Youth Suicide Prevention Efforts

As youth suicide remains a critical concern, activity within NC around suicide prevention has increased. Trend data show that the suicide death rate (deaths per 100,000 residents/children ages 0-17) dropped from 2.0 in 2014 to 1.5 in 2015 but was back up to 2.3 in 2018 and rose to 2.8 in 2019. Data from the 2019 NC High School Youth Risk Behavior Survey (CDC Youth Online) show that 18.9% of NC high school students reported seriously considering suicide. This figure included 15.8% of heterosexual students and 44.1% of gay, lesbian, or bisexual students. Data from the NC Annual School Health Services Report were largely unavailable as all schools shut down due to the pandemic in the early spring of 2020. Data are collected at the end of the school year, but schools were not able to submit their data in June 2020. The Annual School Health Services Report was published with limited data available at mid-year only. School nurses were utilized in the COVID pandemic treatment and prevention efforts during the remainder of the school year.

The lead agency for injury prevention, including suicide prevention, is the IVPB located in the CDIS. To coordinate youth suicide prevention, Title V funding established a position in the early 2000s in the IVPB, which was a recommendation of the NC Child Fatality Task Force. C&Y Branch staff members partner with IVPB on many activities, including the development of the 2015 NC Suicide Prevention Plan. Two branch staff members participate as members of the State Child Fatality Prevention Team (SCFPT) to review child deaths which involve the NC Office of the Chief Medical Examiner. The SCFPT reviews youth suicides and homicides and presents specific findings

and recommendations about youth suicides to both the Intentional Death Committee of the NC CFTF and the NC CFTF as a whole. One recommendation from the SCFPT to the CFTF has continued to be to ask for student school supports in several areas: nationally recommended staffing ratios for school mental health professionals; evidence-based training for all school personnel in recognizing the risks for suicide effective strategies for safety planning, reducing access to lethal means, and promoting student resilience for all school personnel; and effective strategies for students in recognizing anxiety, depression and suicide risk in self, peers, others and ways to get help. The NC CFTF has continued to include recommendations in its annual action agenda for 2019 and 2020 related to youth suicide and access to lethal means, all of which were developed through the study of data and input from experts and stakeholders which include several staff from Title V in the WCHS. In addition, Local Child Fatality Prevention Teams (CFPTs) are mandated by state statute to review the deaths of children ages 0-17 in order to identify system problems or issues that may have contributed to a child's death, make recommendations for prevention of future fatalities, and act on those recommendations.

School Health Centers

The state supported NC SHC Program reported that during the 2019-2020 school year, there were 9,344 unduplicated students served who received the following number of services by type: medical – 19,032; preventive – 9,899; behavioral/mental health – 15,078; and nutrition – 1,822. SHCs generally do not turn patients away for lack of insurance or ability to pay for services. Of youth served in SHCs, 64% were covered by public Medicaid/Health Check/Health Choice insurance, 23% had private insurance, and 16% were uninsured. SHCs which are funded by DPH and the NC SHC Program are required to collaborate with the child's primary care physician and medical home within 48 hours of the initial visit to the SHC. SHC Program contract language stipulates that "results of all visits to the SHC and recommendations for follow-up shall be shared with students' medical home within 24 to 48 hours of the visit to the SHC and documented in the medical record (pursuant to appropriate release of information permissions as required by FERPA/HIPAA)." This ensures a collaborative approach to health care for adolescents who are seeking medical attention at school and enhances a continuum of care from home to school to achieve the best health outcomes. The greatest challenge experienced by SHCs is sustainability due to funding challenges and reimbursement issues.

SHCs are credentialed through an agreement with NC Medicaid and DPH to improve and ensure the quality of services to adolescents and to facilitate efficient Medicaid billing. The SHU maintained the credentialing/re-credentialing processes based on best practices guidelines in FY19. The re-credentialing process is implemented every three years and provides SHCs a minimum of 90 days written notice of any impending change in their credentialed status. SHCs that were due a credentialing site visit saw those visits delayed due to the pandemic.

Parents and teens participate in the planning and implementation of policies for SHCs through their membership in the NC School Based Health Alliance, of which the C&Y Branch program is an important part. For many underserved children in NC, SHCs are their first and only access to health care. With a parent's consent for services, preventive, medical, mental health, and nutrition issues are addressed in the school setting. This proactive approach prevents health issues from becoming acute concerns in the home, emergency room, or community. As a result, students miss fewer school days, school systems increase "seat time," and parents miss fewer days at work. SHCs are deeply committed to providing low-cost, effective mental health services, often addressing such issues as: suicidal ideation, depression, self-injury, bi-polar syndrome, bullying, family/home anxieties, academic performance anxieties, substance abuse, eating disorders, and hopelessness. When the student's problems are beyond the capacity of on-site clinical services, a prompt referral is made to address the problems presented by the students.

The NC SHC Advisory Council includes one participant from each of the sponsoring agencies that receive state funds for the SHCs. The Council's primary purpose is collaboration with the North Carolina School Health Center

Program in order to address, advise and respond to the Program's policies, procedures and proposals and provide input into and feedback about Program decisions affecting state funded School Health Centers. The Advisory Council Throughout FY19, this Council continued to meet via webinars focusing on school health center quality assurance, credentialing, data, and other emerging trends in health care delivery.

School Health Nurse Consultant Team

The School Health Nurse Consultant (SHNC) Team, made up of State, Charter and Regional School Health Nurse Consultants, works closely with many school health related work groups and task forces that impact adolescent health. These efforts foster work on common programs and goals. Examples of collaborative groups include SHCs, North Carolina Collaborative for Children and Youth, NC DPI Regional Support Service Teams, School Health Advisory Councils, NC Asthma Alliance, Diabetes Advisory Council, NC Immunization Coalition, and others. Parents and teens are important contributing members in many of these collaborative groups.

Services delivered to public school students that are impacted by the work of the SHNC Team are reported in the North Carolina Annual School Health Services Report Survey data released annually in the fall. These survey results are used to influence policy and resource use at the state level and to identify local needs for service at the local school district level related to adolescent health and school health in general. A continued emphasis on parent and student involvement in the planning and implementation of school health services will ensure the effectiveness of these services, programs, and trainings in future years.

The 2019-2020 North Carolina public school population of 1,409,068 students included 61% of students in grades 5 through 12 (estimated adolescent ages of 10 to 18). Services that were delivered to these students were reported through the North Carolina Annual School Health Services Report Survey, with 100% participation by public schools until schools were closed due to the pandemic in early Spring 2020.

During FY20 the SHNC Team worked to promote and improve health for adolescents at both the individual student and program level in all schools including public, charter, independent, and resource schools. This was completed through technical assistance for school nurses and school staff that provided direct care to adolescent students with health care needs and through assistance with school health programs and activities that fostered and addressed adolescent health and health issues. The utilization of the consultant team services is particularly high for the many NC school districts that do not provide nursing supervision or leadership positions for program oversight. In addition, the team provided continuing education opportunities related to adolescent health concerns and collaborated with associated work groups. The planning and provision of adolescent related continuing education is a core function of the Annual School Nurse Conference and regional updates. Topics covered in 2019-2020 included Building Resiliency in School-Aged Youth; Evaluate Not Escalate a Mental Health Crisis; Recognizing the Indicators of Human Trafficking; LGBTQ Youth: Affirming Health Policy in School Nursing to Build Resilience and Reduce Violence; More than Smoke and Mirrors: Tobacco, Nicotine, Flavors and What Else?; and Understanding the CDC's Shared Risk and Protective Factors Framework. Consultant team members also provided individual district continuing education on request related to emerging local adolescent needs and issues. Successes of note included the continued increase in the number and variety of educational sessions requested related to adolescents with very positive participant evaluations of those provided and use of the lessons learned at the local and student level.

During the 2019-2020 school year, technical assistance was provided to NC Charter Schools by the Charter School Health Consultant. Data reporting requirements were waived by DPI's Office of Charter Schools in the Spring of 2020 due to the pandemic. Because NC Charter Schools are not required to provide access to school nursing services, and only 24.4% of them actually had school nurses available, they need the services of the School Health

Nurse Consultants and the Charter School Health Consultant to successfully comply with health statutes.

Teen Triple P

Triple P has an adolescent component to help families manage behavioral problems which has been implemented in selected areas of the state and is now available on-line for free for all NC residents. The adolescent component includes: Teen Triple P, which is provided in one or two sessions individually with parents; Group Teen Triple P, an eight-week course made up of four two-hour group sessions with up to twelve parents, three telephone call sessions, and a final group session; and Standard Teen Triple P, which has ten weekly individual family sessions.

While families of the 0-12 population for NC Triple P have received more interventions than the families of teens, work to increase the number of teens receiving services continues. In FY20, there was an average of 58 participating practitioners each quarter that served families of teens, and there were 57 practitioners trained in Level 3 Primary Care Teen and two in Level 3 Discussion Group Teen which solely serve families of teens. These averages are identical to those in FY19 which indicates that there is a support base for adolescent appropriate services in the communities across NC. For Teen TPOL, a total of 413 families of teens were served, which is a decrease from the 526 families served in FY19, but that may be due to the COVID-19 pandemic. As families continue to have access to Triple P, families statewide can learn and receive support for positive parenting of teens.

Additional Adolescent Health Promotion Efforts

The C&Y Branch uses a combination of MIECHV, Title V and State appropriations to fund Nurse-Family Partnership in 26 NC counties. The program serves first-time, low-income mothers and their newborn up to two years of age. NC MIECHV's NFP sites had a total program capacity of 467 for FY20. Of those participants, 74 (16%) were teenage mothers. The non-MIECHV NFP sites had a total program capacity of 1,225 for FY20. Of those participants, 188 (15%) were teenage mothers. Nurse home visitors serve families in a number of capacities – public health nursing, targeted case management, and health education.

The PNC shares regular nutrition and physical activity resources with the Adolescent Health Coordinator. In partnership with the DSS Independent Living Services for Foster Children (NC LINKS) Program, the PNC and a Case Western Reserve University Dietetic Intern conducted a virtual training for about 25 local DSS LINKS Coordinators titled *Healthy Eating on a Budget* in FY20.

Adolescent Health - Application Year

Priority Need 6 – Improve Access to Mental/Behavioral Health Services

The WCHS chose to continue to use NPM#10 (percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year) to monitor improvement with regard to Priority Need 6 (Improve access to mental/behavioral health services). Behavioral health screening is an important part of a preventive medical visit. Training has been provided to LHDs and school health centers on the use of behavioral health screening tools. Technical assistance has been provided by the state and regional nurse consultants to connect adolescents with community-based services when needed. In addition, the C&Y Branch is partnering with DPI to increase support to adolescents through the Support Teams in each school, which includes a behavioral health specialist.

Supporting the Development of Teen Friendly Clinics

LHDs can choose to allocate Title V/351 Child Health Agreement Addenda funds to support the development of teen friendly clinics. A sample Attachment C template has been developed to assist LHDs in choosing evidence-based strategies to improve adolescent preventative care. The state and regional child health consultants and the PMC will share these strategies with LHDs as part of providing technical assistance to LHDs. The following are examples of strategies that can be used to provide more adolescent-focused preventive care:

- Implement improvements in youth accessibility through hosting adolescent-friendly hours (later afternoon or evening hours), walk-in appointments, longer appointments, web-accessible information, and/or office space/check in space for adolescents.
- Provide information and counseling through telephone, text messaging, or email hotline(s) to increase access and engagement.
- Engage providers and staff in professional development opportunities to further support their expertise and skillset in serving the adolescent population. Suggested trainings include:
  - Positive Youth Development
  - Motivational interviewing
  - Minors consent and confidentiality
  - Screening, Brief Intervention, and Referral to Treatment (SBIRT)
  - Adolescent Health Initiative Spark Trainings
  - Implicit Bias
  - Social Determinants of Health
  - LGBTQ-friendly care
  - Trauma-informed screening and assessment
  - Wellness Recovery Action Plan (WRAP)
  - Youth Mental Health First Aid
- Evaluate policies and procedures for adolescent confidentiality; review may include suggestions/modifications to the Electronic Medical Record that improve adolescent confidentiality, procedures for informing adolescents and guardians of confidentiality practices and more.
- Engage in an adolescent-friendly clinic review process and develop an improvement plan based on the findings:
  - Youth Friendly Services Assessment Tool and Guide (free)
  - Youth-Led Assessment Tool (Free)
  - Adolescent Champion Model (Fee-based)
- Complete an organizational assessment tool to evaluate behavioral health integration readiness.
- Implement behavioral health service integration through universal or targeted behavioral health screening

practices.

- Develop and engage with a new or existing youth advisory group with an emphasis on raising awareness of the value of preventive care. Promote evidence-based clinical preventive services for adolescents among providers in the community.
- Develop a community-based strategy/strategy to promote adolescent preventive care visits via web/electronic resources, social media, meetings and events, and/or traditional media.
    - Well-Visit Marketing Tools and Templates
    - Marketing the Adolescent and Young Adult Visit

Technical Assistance and Training on the Components of the Annual Well Adolescent Visit and Quality Adolescent Health Services

Health Check Program Guide (HCPG) archived webinar trainings will continue to be required training components for LHD Public Health RNs who are enrolled in the CHTP to become CHERRNs. An onsite or virtual training regarding the current HCPG requirements/recommendations will continue to be presented to the students during the CHTP. This training reviews the current HCPG requirements and recommendations that are based on the Bright Futures National Guidelines. Information about HCPG updates will also be provided using statewide live webinars when changes are made to the HCPG to keep Child Health clinical staff abreast of the current HCPG requirements.

The Branch Child Health Nurse Consultants (state and regional) and the PMC will continue to provide TA and training as needed to new LHD providers about the annual well adolescent visit. The Consultants and PMC will continue to provide specific TA with LHDs to improve confidentiality and share best practice strategies for interactions with adolescents and with use of LHD electronic health records (EHRs).

The CHTP is held once per year over a period of six months. The purpose of the CHTP is to train Public Health RNs to become CHERRNs. Once RNS are officially rostered as CHERRNs, they are considered billing providers with NC Medicaid and can provide well child preventative visits for clients from birth to twenty-one years of age. The role of the CHERRN is to improve access to care and to link children & adolescents with a medical home, if the LHD does not serve as a medical home.

The CHTP is an intense course that teaches RNs how to obtain a pediatric health history and perform a physical assessment for clients from birth to twenty-one years of age. Course content also includes CHERRN legal issues, confidentiality related to minor's consent, adolescent health, behavioral health, nutrition assessment, and current HCPG requirements/recommendations.

One of the quarterly webinars offered to LHD staff will include an adolescent health topic. COVID-19 related webinars offered to LHDs by the Branch will include information related to adolescent emotional wellness and social connectedness. NCPD contact and CPH recertification hours will be offered for some of the Child Health Provider webinars to assist CHERRNs with staying abreast of child health program requirements and to earn required continuing education hours to remain rostered.

Annual School Nurse Conference

The Annual School Nurse Conference has been provided for the past 36 years and is attended by at least 50% of the state's more than 1,300 school nurses. Participant evaluations and input from adolescents and parents support the planning and topics to be covered at the next year's conference. The next conference will be held in late fall of 2022 depending on COVID-19 status at that time. Topics related to adolescent health are regularly included each

conference year. Planning for the 2022 conference will begin in fall 2021. In addition to the Regional School Health Nurse Consultants, local school nurses and representatives from the NC Youth Health Advisory Council will participate on the planning committee.

School Health Center Credentialing

The SHU will continue to maintain credentialing/re-Credentialing processes with SHCs based on best practice guidelines. All documents submitted by SHCs scheduled for re-credentialing are reviewed by an interdisciplinary team (Behavior Health, Nutrition Services, Medical, and Preventive) within the SHU. Applicable and appropriate action is taken to evaluate SHCs for a credentialing status via a review of compliance with "Quality Assurance Standards" and a Medical Record Review of a minimum of ten random de-identified patient records for all applicable medical services provided. During FY22, SHCs will receive support/technical assistance as they plan and implement an appropriate COVID-19 prevention response with the schools where they are located.

NC Youth Public Health Advisor Team (YPHAT)

The YPHAT will continue to meet bimonthly to provide support to programs in the C&Y Branch that serve adolescents in FY22. Youth Advisors will continue to work with planning teams that are developing or revising program policies and procedures. A Youth Advisor will participate on the C&Y Branch Health Equity Quality Improvement Team to make recommendations about strategies to include in C&Y Branch programs to reduce health inequities in marginalized communities. In addition, the YPHAT will continue to use social media networking platforms to feature the Youth Advisors sharing pertinent and timely messages for teens such as the recent COVID-19 prevention video on YouTube and various and frequent alerts on Twitter. The YPHAT will continue the process of the participatory action research design project from FY21 in which the team surveyed peers statewide on the impact of COVID-19 on the experiences of young people and work to develop state and local-level recommendations to address youth needs. The PNC will work with the Adolescent Health Coordinator and YPHAT to ensure trainings for health professionals include appropriate messaging to promote Health at Every Size® principles in order to reduce weight bias especially for kids in larger bodies who can be at greater risk for bullying and other trauma that can affect their mental health. The PNC will also continue to share nutrition and physical activity resources with the Adolescent Health Coordinator, Regional School Nurse Consultants, and the SHC Coordinator

Outreach Efforts to Medicaid and Health Choice Enrollees

Through our partnerships with the Division of Health Benefits (NC Medicaid), the Prepaid Health Plans for NC Medicaid Managed Care, LHDs, and SHCs, the C&Y Branch staff will continue to provide quarterly training events for clinical staff in promoting well care for adolescents, including use of screening tools for social emotional assessments to expand outreach to increase both the number of visits and the quality of the care provided during the adolescent preventative visits provided to Medicaid and Health Choice enrollees.

NC Telehealth Partnership for Child and Adolescent Psychiatric Access

WCHS will participate with the NC Telehealth Partnership for Child and Adolescent Psychiatric Access (NCTP-CAPA) implementation work during FY22. The purpose of the NCTP-CAPA is to support pediatric primary care providers with the timely identification, diagnosis, management, treatment, and referral as appropriate of children and youth with behavioral health concerns and conditions, with an emphasis on rural and underserved areas of the state. The four key objectives of the NCTP-CAPA are 1) Develop a multidisciplinary statewide network capable of providing mental health and telehealth support to pediatric primary care sites; 2) Enable pediatric primary care sites in every NC county access to timely and relevant mental health consultation; 3) Enable pediatric primary care

providers in every NC county access to specialty care, community and/or behavioral health resources; and 4) Enable pediatric primary care sites in every NC county access to timely and relevant mental health education and training. During FY21, the project expanded to all North Carolina's 100 counties due to needs during COVID-19. NCTP-CAPA will continue to work across the state in partnership with the NC Pediatric Society, NC Academy of Family Physicians, family medicine residency programs and other agencies to increase use in all counties to utilize the NC Psychiatric Access Line (NC-PAL). Branch staff will also continue to promote the use of the NC PAL with child health clinic staff at local health departments, school health centers and school nurses. NCTP-CAPA began providing telehealth consultation supports to local CDSAs during FY21, and, with rising concerns of student mental health post COVID-19, the partnership will explore providing support to the schools by piloting consultation services for school support staff and/or developing pediatric mental health training for low-resources counties in the state.

School Mental Health Initiative and Social Emotional Learning

The C&Y Branch will continue to work with DPI and DMH/DD/SAS on mental health access and school mental health for adolescents as well as participating with DPI's mental health initiatives for planning and implementation at the local level. In FY22, regional school nurse consultants will continue to support local school nurses as part of the School Resource Team to address behavioral issues, suicide and bullying in schools.

Triple P (Positive Parenting Program)

Triple P has been implemented in all 100 counties in NC, and an adolescent component to help families manage behavioral problems is now available on-line for free for all NC residents. There is also a face-to-face adolescent component as described in the annual report. WCHS is working in partnership with other internal and external partners through the NC Triple P Partnership for Strategy and Governance (PSG) to support the continued implementation of Triple P which includes a focus on adolescents. Additionally, the PSG is convening the NC Triple P State Partners Coalition. The Coalition represents all the internal and external partners who either support and/or have a vested interest in the success of Triple P in North Carolina.

Children with Special Health Care Needs

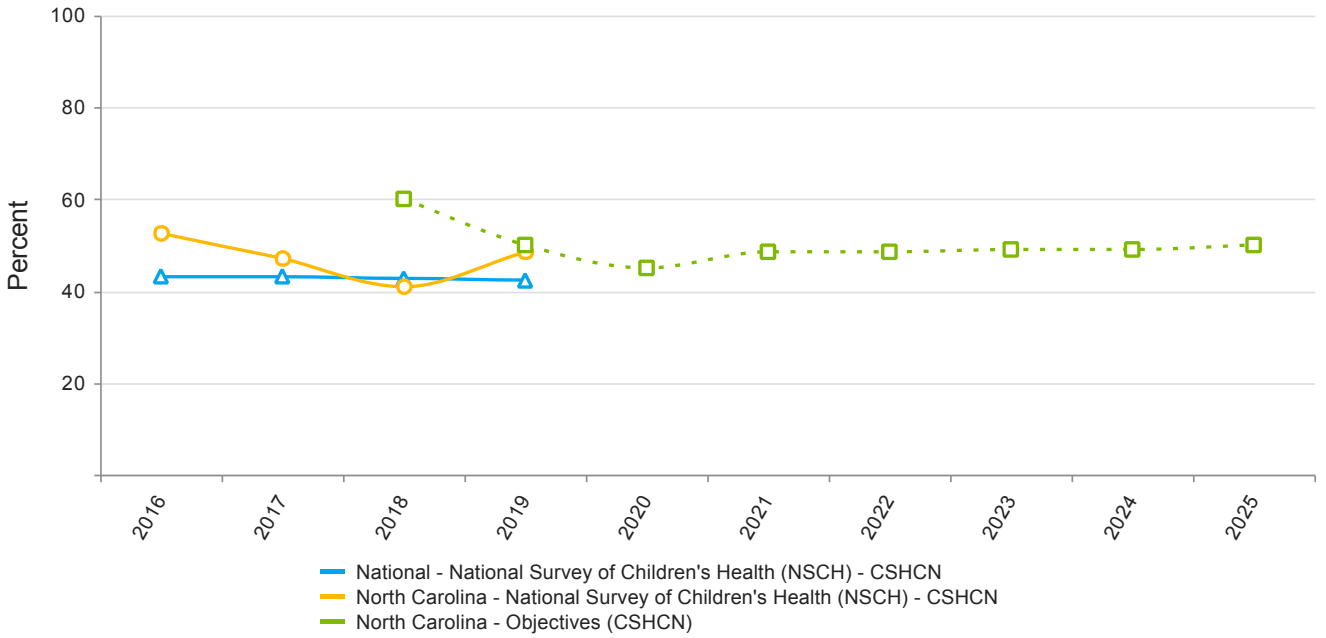
Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	NSCH-2018_2019	18.1 %	NPM 11 NPM 15
NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling	NSCH-2018_2019	52.7 %	NPM 11 NPM 15
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH-2018_2019	91.1 %	NPM 11 NPM 15
NOM 22.1 - Percent of children who have completed the combined 7-vaccine series (4:3:1:3*:3:1:4) by age 24 months	NIS-2016	77.9 %	NPM 15
NOM 22.2 - Percent of children, ages 6 months through 17 years, who are vaccinated annually against seasonal influenza	NIS-2019_2020	64.4 %	NPM 15
NOM 22.3 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine	NIS-2019	71.3 %	NPM 15
NOM 22.4 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the Tdap vaccine	NIS-2019	92.0 %	NPM 15
NOM 22.5 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the meningococcal conjugate vaccine	NIS-2019	93.2 %	NPM 15
NOM 25 - Percent of children, ages 0 through 17, who were unable to obtain needed health care in the past year	NSCH-2018_2019	3.1 %	NPM 11 NPM 15

National Performance Measures

NPM 11 - Percent of children with and without special health care needs, ages 0 through 17, who have a medical home

Indicators and Annual Objectives



NPM 11 - Children with Special Health Care Needs

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH) - CSHCN					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			60	50	45
Annual Indicator		52.6	46.9	41.0	48.4
Numerator		257,575	225,282	199,181	241,421
Denominator		489,644	480,138	485,743	498,468
Data Source		NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN
Data Source Year		2016	2016_2017	2017_2018	2018_2019

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	48.5	48.5	49.0	49.0	50.0	50.0

Evidence-Based or –Informed Strategy Measures

ESM 11.1 - Percent of children with special health care needs who received family-centered care

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	85	
Numerator		
Denominator		
Data Source	2018-19 NSCH	
Data Source Year	2018-19	
Provisional or Final ?	Final	

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	88.7	89.2	89.6	90.1	90.5	90.5

ESM 11.2 - Number of Medicaid, Managed Care Organization, or other stakeholder meetings attended by WCHS staff members with an agenda item related to medical home promotion

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator		8
Numerator		
Denominator		
Data Source		C and Y Branch Internal Staff Log
Data Source Year		2020
Provisional or Final ?		Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	10.0	12.0	12.0	14.0	16.0	16.0

State Action Plan Table

State Action Plan Table (North Carolina) - Children with Special Health Care Needs - Entry 1	
Priority Need	
Improve access to coordinated, comprehensive, ongoing medical care for CYSHCN	
NPM	
NPM 11 - Percent of children with and without special health care needs, ages 0 through 17, who have a medical home	
Objectives	
CYSHCN 6A. By 2025, increase the percent of CYSHCN having a medical home by 9% from 41% (NSCH 2017-18 baseline) to 45%.	
Strategies	
CYSHCN 7A.1. Provide education, training and support to providers on delivering a medical home approach to care: 1) Collaborate with the NC Chapter of American Academy of Pediatrics to promote PCMH and educate and train providers; 2) CMARC care managers and Home Visitors will do outreach to primary care providers.	
CYSHCN 7A.2. Provide education, training and support to families on medical home approach to care. Provide information and resources to families through a variety of methods including fact sheets, an enhanced website, CYSHCN Help Line, Branch Family Partnership, and trainings.	
CYSHCN 7A.3. Engage parents of CYSHCN in C&Y Branch program planning, implementation and evaluation, and in training opportunities to be collaborative leaders at the community, state and national level.	
CYSHCN 7A.4. C&Y Branch outreach staff will continue to provide outreach for insurance enrollment and assistance in navigating children's health insurance programs, with an emphasis on minority and underserved populations as well as CYSHCN.	
CYSHCN 7A.5. Continue the Innovative Approaches (IA) Initiative and replicate best practices.	
CYSHCN 7A.6 . Continue to train parents and dentists in best oral health practices in serving CYSHCN.	
CYSHCN 7A.7. Continue to partner with internal and external stakeholders to assure a supportive system of care for CSHCN in child care facilities, receiving genetic counseling services, and for children and youth with hearing loss, including parent choice in communication modes for their child.	
ESMs	**Status**
ESM 11.1 - Percent of children with special health care needs who received family-centered care	Active
ESM 11.2 - Number of Medicaid, Managed Care Organization, or other stakeholder meetings attended by WCHS staff members with an agenda item related to medical home promotion	Active

NOMs

NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system

NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling

NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health

NOM 25 - Percent of children, ages 0 through 17, who were unable to obtain needed health care in the past year

State Action Plan Table (North Carolina) - Children with Special Health Care Needs - Entry 2

Priority Need

Improve access to coordinated, comprehensive, ongoing medical care for CYSHCN

NPM

NPM 11 - Percent of children with and without special health care needs, ages 0 through 17, who have a medical home

Objectives

CYSHCN 7B. By 2025, increase the percentage of adolescents with special health care needs, ages 12 through 17, who received services necessary to make transitions to adult health care by 10% from 24.1% (NSCH 2017-18 baseline) to 26.5%.

Strategies

CYSHCN 7B.1 Continue a transition work group to prioritize recommendations related to health care transition from the C&Y Branch CYSHCN Strategic Plan.

CYSHCN 7B.2 Utilize pilot projects from IA sites to expand adolescent to adulthood transition activities (i.e., Educational materials; replication of Adolescents Transition to Leadership and Success (ATLAS), etc.).

CYSHCN 7B.3 Collaborate with DSS to support health care transition for youth in foster care.

CYSHCN 7B.4 Explore modifying language in the agreement addenda for LHDs and school health centers to include a requirement to implement a strategy to support health care transition.

CYSHCN 7B.5 Explore development of sample language for Transition of Care Policy for youth and young adults.

ESMs	Status
ESM 11.1 - Percent of children with special health care needs who received family-centered care	Active
ESM 11.2 - Number of Medicaid, Managed Care Organization, or other stakeholder meetings attended by WCHS staff members with an agenda item related to medical home promotion	Active

NOMs

NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system

NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling

NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health

NOM 25 - Percent of children, ages 0 through 17, who were unable to obtain needed health care in the past year

State Action Plan Table (North Carolina) - Children with Special Health Care Needs - Entry 3

Priority Need

Improve access to coordinated, comprehensive, ongoing medical care for CYSHCN

NPM

NPM 11 - Percent of children with and without special health care needs, ages 0 through 17, who have a medical home

Objectives

CYSHCN 7C. By 2025, increase the percentage of children ages 4 months to 5 years with sickle cell disease who are placed on prophylactic antibiotics by 4% from 73% (2019 baseline) to 76%.

Strategies

CYSHCN 7C.1. Provide education to parents on the importance of prophylactic antibiotics during Educator Counselors initial contact.

CYSHCN 7C.2. Provide webinar for providers on the importance of prophylactic antibiotics.

ESMs	Status
ESM 11.1 - Percent of children with special health care needs who received family-centered care	Active
ESM 11.2 - Number of Medicaid, Managed Care Organization, or other stakeholder meetings attended by WCHS staff members with an agenda item related to medical home promotion	Active

NOMs

NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system

NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling

NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health

NOM 25 - Percent of children, ages 0 through 17, who were unable to obtain needed health care in the past year

State Action Plan Table (North Carolina) - Children with Special Health Care Needs - Entry 4

Priority Need

Improve access to coordinated, comprehensive, ongoing medical care for CYSHCN

NPM

NPM 11 - Percent of children with and without special health care needs, ages 0 through 17, who have a medical home

Objectives

CYSHCN 7D. By 2025, the percent of children enrolled in the Infant-Toddler Program who increased their rate of growth in Positive Social-Emotional skill will increase from 74.3% (FFY19 baseline) to 85%.(This represents the average score needed to reach the top 10% of all states and territories for this indicator using nation-wide data from FFY14 through FFY18).

Strategies

CYSHCN 7D.1. NC ITP will implement universal social-emotional screening statewide utilizing the ASQ-SE.

CYSHCN 7D.2. NC ITP will implement Alliance for Infant Mental Health Association Competency Guidelines, including crosswalk with the Pyramid Model for Supporting Social Emotional Competence in Infants and Young Children (Pyramid Model).

CYSHCN 7D.3. NC ITP will enhance and expand use of evidence-based social-emotional assessment tools and interventions.

CYSHCN 7D.4. NC ITP will enhance the capacity of the program to provide targeted social-emotional interventions by increasing the number of Infant Mental Health Specialists available as staff and contract providers.

ESMs	Status
ESM 11.1 - Percent of children with special health care needs who received family-centered care	Active
ESM 11.2 - Number of Medicaid, Managed Care Organization, or other stakeholder meetings attended by WCHS staff members with an agenda item related to medical home promotion	Active

NOMs

NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system

NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling

NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health

NOM 25 - Percent of children, ages 0 through 17, who were unable to obtain needed health care in the past year

State Action Plan Table (North Carolina) - Children with Special Health Care Needs - Entry 5

Priority Need

Improve access to coordinated, comprehensive, ongoing medical care for CYSHCN

NPM

NPM 11 - Percent of children with and without special health care needs, ages 0 through 17, who have a medical home

Objectives

CYSHCN 7E.1 By 2025, NC ITP will achieve statewide implementation of Coaching and Natural Learning Environment Practices. Staff and providers will receive training and attain proficiency using the Coaching and Natural Learning Environment Practices approach.

CYSHCN 7E.2. By 2025, NC ITP staff and providers will receive training in Pyramid Model implementation.

Strategies

CYSHCN 7E.1 NC ITP will provide training and follow-up support for program staff and contract providers to achieve and maintain proficiency with Coaching and Natural Learning Environment Practices as outlined in the NC ITP Coaching and Natural Learning Environment Practices Toolkit.

CYSHCN 7E.2. NC ITP will maintain a cadre of certified Master Coaches and establish and maintain a cadre of certified Fidelity Coaches to ensure capacity to support full statewide implementation and proficiency with Coaching and Natural Learning Environment Practices.

CYSHCN 7E.3. NC ITP will partner with the Family Infant and Preschool Program to provide training and certification opportunities for staff and providers while building internal program capacity to sustain Coaching and Natural Learning Environment Practices statewide.

CYSHCN 7E.4. NC ITP will develop a plan, utilizing the principles of implementation science, for staff and provider Pyramid Model training and implementation.

CYSHCN 7E.5. NC ITP will access resources and apply for technical assistance opportunities from the National Center for Pyramid Model Innovations and other TA partners.

CYSHCN 7E.6. NC ITP will establish a cadre of trainers for Pyramid Model implementation, leveraging and building upon Master Coach and Fidelity Coach capacity within the program.

ESMs	Status
ESM 11.1 - Percent of children with special health care needs who received family-centered care	Active
ESM 11.2 - Number of Medicaid, Managed Care Organization, or other stakeholder meetings attended by WCHS staff members with an agenda item related to medical home promotion	Active

NOMs

NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system

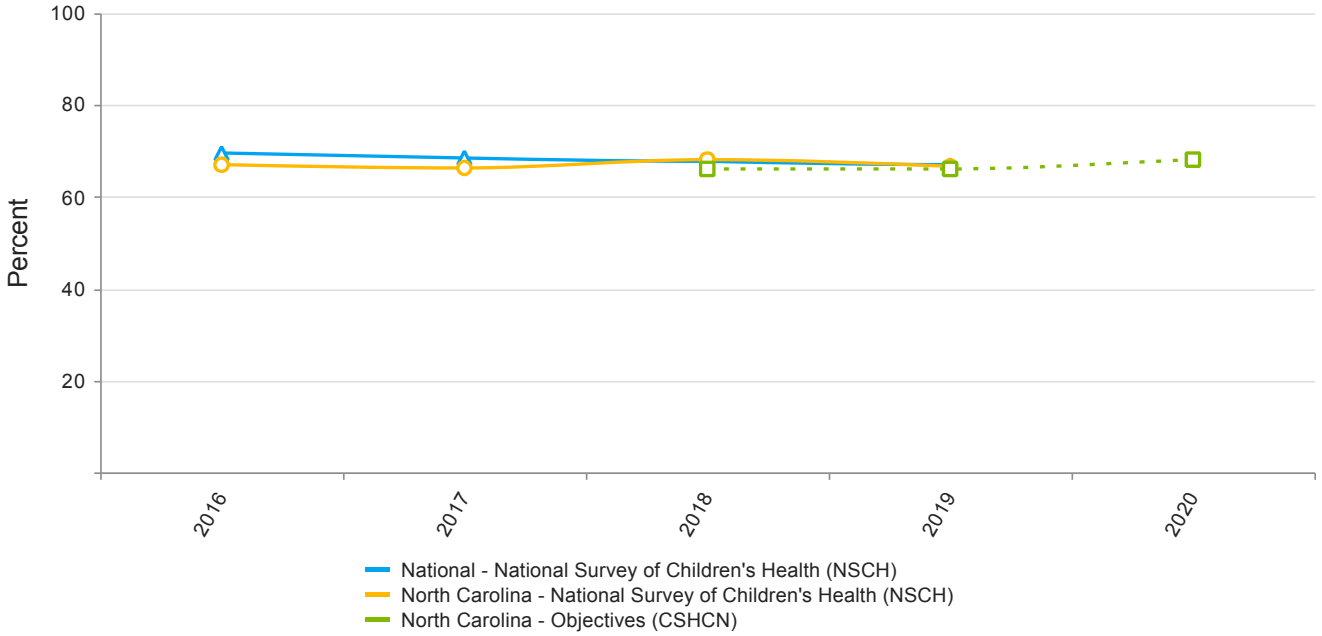
NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling

NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health

NOM 25 - Percent of children, ages 0 through 17, who were unable to obtain needed health care in the past year

2016-2020: National Performance Measures

2016-2020: NPM 15 - Percent of children, ages 0 through 17, who are continuously and adequately insured
Indicators and Annual Objectives



2016-2020: NPM 15 - Children with Special Health Care Needs

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			66	66	68
Annual Indicator		66.8	66.2	68.2	66.6
Numerator		1,504,417	1,503,878	1,562,073	1,523,858
Denominator		2,253,063	2,272,294	2,289,632	2,288,827
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2017_2018	2018_2019

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

2016-2020: Evidence-Based or –Informed Strategy Measures

2016-2020: ESM 15.1 - Number of outreach activities to promote access to health insurance done annually by the Children and Youth Branch's Minority Outreach Coordinator, CYSHCN HelpLine Coordinator, and YSHCN Access to Care Coordinator

Measure Status:				**Active**	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		200	200	200	200
Annual Indicator	167	191	187	186	88
Numerator					
Denominator					
Data Source	CSHCN Quarterly Outreach Report	CSHCN Quarterly Outreach Report	CSHCN Quarterly Outreach Report	CSHCN Quarterly Outreach Report	CSHCN Quarterly Outreach Report
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

2016-2020: State Performance Measures

2016-2020: SPM 3 - Percent of infants and toddlers with Individualized Family Services Plans (IFSPs) who receive the early intervention services on their IFSPs in a timely manner (within 30 days)

Measure Status:				**Active**	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		100	100	100	100
Annual Indicator	99.1	97.9	99.3	99.5	98.4
Numerator					
Denominator					
Data Source	NC Health Information System	NC Health Information System	NC Health Information System	NC Health Information System	NC Health Information System
Data Source Year	2015	2016	2017	2018	2019
Provisional or Final ?	Final	Final	Final	Final	Final

As detailed in the Child Health Domain, the WCHS supports a comprehensive, coordinated, family-centered system of care for all children regardless of whether they are CYSHCN or not. Many years ago, the C&Y Branch intentionally restructured personnel so that services and supports for CYSHCN are better integrated into all aspects of C&Y Branch programs and initiatives. The following specific services and programs, while described separately, represent the components of a system of care for CYSHCN supported by Title V funding in FY20 to improve the health of all children and decrease child deaths and morbidity.

CYSHCN Strategic Plan

The C&Y Branch continued its strategic planning process (which started in the summer of 2017) to work toward improving systems of care for CYSHCN. Short and long-term recommendations were created to address seven of the eight core domains in the AMCHP Standards for Systems of Care for CYSHCN Version 2.0 released in June 2017: identification, screening, assessment and referral; eligibility and enrollment in health coverage; access to care; medical home; community-based services and supports; transition to adulthood; and quality assurance and improvement.

Throughout the strategic planning process, a key recommendation made by family members and partners was the development of a central location where information about CYSHCN would be easily found by families and professionals. The CYSHCN web page was launched as part of the DPH website in late 2019. The web page contents were based on the results of three focus groups of families of CYSHCN. Stories and photographs of the C&Y Branch Family Partners (BFPs) are featured throughout the webpage, and materials related to COVID-19 for CYSHCN and their families were added to this page as well as to the NCDHHS site.

Another priority was to ensure that all C&Y Branch staff members fully understood the significance of their work and its impact on CYSHCN. This priority took on even more importance during the COVID-19 pandemic. The PMC, NC Office of Disability and Health (NCODH) Director, Family Liaison Specialist (FLS), and Minority Health Check Outreach Coordinator have each been involved in several efforts to share resources for youth and families of CYSHCN during the pandemic to help understand COVID-19.

The connection between the C&Y Branch and the HRSA funded Family to Family (F2F) grantee, the Family Resource Center (FRC) of the South Atlantic, deepened in FY20. Key staff from each organization continued to meet quarterly to share information and discuss opportunities for collaboration. The C&Y Branch FLS served on their advisory board, while their advisory board chair participated on the Branch Family Partners Steering Committee meetings. The Branch PMC, Access to Care Specialist for CYSHCN, and CMARC program manager participated in the NC Family Navigation Model & Guide Steering Committee led by the Carolina Institute for Developmental Disabilities, Family Support Network of NC and the FRC. This initiative is ongoing and will continue into the new fiscal year.

School Nurses work with CYSHCN to ensure continuity of medical care that enables success, health, and safety in school. School nurses are part of Student Instructional Support Personnel (SISP) teams involved with planning, provision, and oversight of health care needed for implementation of individual education plans and individual health care plans for children who need them, providing a clinical link that supports educational access. School nurses also work closely with the privately hired nurses who provide one-on-one nursing care for students who need these intensive services in schools, ensuring that the private nurse has an advocate and guidance for working in the educational setting.

NPM#11 – Number of children with and without special health care needs, ages 0 through 17, who meet the criteria for having a medical home

Promoting the medical home approach using team-based care is a core message within all C&Y Branch programs. Much work is being done to improve NPM#11 (Number of children with and without special health care needs, ages 0 through 17, who meet the criteria for having a medical home). Data for NC from the 2018-19 NSCH indicate that 48.4% of CYSHCN had a medical home as compared to 49.4% of children and youth without special health care needs (non-CYSHCN). National rates for this measure are 42.3% for CYSHCN and 49% for non-CYSHCN. State rates for both CYSHCN and non-CSHCN have decreased from the 2016 rates of 52.6% and 54.4%, and while the percent of CYSCHN with a medical home rose between 2017-18 and 2018-19, the non-CYSHCN percentage continued to decrease.

In FY20, the importance of the medical home approach and strategies for partnering with and linking all children (especially CYSHCN) to medical homes continued to be shared via the statewide live and archived Child Health Provider webinars. The Child Health Provider webinars, which were described in the CH Annual Report, touched on several issues for CYSHCN including: NCCARE360, CHERRN legal issues, refugee health, vaccine hesitancy, and supporting breastfeeding families.

Due to the COVID-19 pandemic response, the PMC and the State Child Health Nurse Consultant (SCHNC) provided weekly thirty-minute live webinars during the months of April, May, and June 2020. The purpose of the weekly webinars was to discuss strategies and recommendations to assist with the delivery of child health services to all children and especially for CYSHCN during the COVID-19 pandemic. The webinars were archived and made available to staff who were not able to participate in the live presentations.

The Child Health Training Program (CHTP) is held annually to train and officially roster RNs as CHERRNs. Once rostered as CHERRNs, they are considered billing providers through NC Medicaid and can provide well child visits to children from birth through 20 years of age including CYSHCN in the LHDs. The focus is to help CHERRNs improve access to preventative health care for underserved and high-risk children. CHERRNs learned to help LHDs serve as medical homes to children or partner with medical homes to serve children including CYSHCN. The CHTP curriculum covers issues that come up for CYSHCN during the well visit at the LHD which may require consultation with supervising advanced practice providers or physicians. The CHTP began in January 2020 and was supposed to finish in June 2020. However, due to the local COVID-19 pandemic responsibilities for health department staff who were enrolled as students and precepting, there was an extension of the course by three months until October 2020 to allow for additional time for the clinical practicum experience. Several trainings were provided for LHD staff participating in the CHTP on various topics applicable to the CHERRN role including developmental, psychosocial, and behavioral health screening.

Another major effort is the CC4C program, a population management program for children ages 0-5 years. The name of the program was renamed Care Management for At Risk Children (CMARC) in March 2020. The CMARC program goals focus on reducing the negative impact and improving health outcomes for newborns, infants, and young children with a variety of congenital or acquired conditions, developmental or social-emotional delays, exposure to adverse childhood experiences and toxic stress such as being in foster care, and a variety of other special health care needs that may or may not qualify a child for Early Intervention Part C. An underlying strength of this program is its commitment to engage families in both program planning, training, and implementation. Another strength of this program is that it promotes the medical home approach. Care managers are required to develop relationships with medical homes in their communities in order to identify children for CMARC program services. Once a child is identified and engaged in CMARC services, the care manager is required to involve the medical home in the care planning process for that child and family. The CMARC Program Manager is an active participant in

the Fostering Health NC Advisory Team, an interagency group working to ensure that all children in foster care are well linked to a medical home. Bimonthly conference calls with WCHS, DSS, and CCNC staff representation are held to discuss systems issues and challenges of working with medical homes to provide care for children in foster care. One big effort for the CMARC program has been to implement and monitor Plans of Safe Care initiated by Child Protective Services (CPS) as part of the response to the Comprehensive Addiction and Recovery Act (CARA) and the Child Abuse Prevention and Treatment Act (CAPTA) for infants affected by substance use, experiencing withdrawal, or with suspected or diagnosed Fetal Alcohol Spectrum Disorder (FASD). Webinars and care pathways were developed and made available for CMARC care managers to help them partner with medical homes to care for children with a variety of conditions such as asthma, sickle cell, foster care, and neonatal abstinence syndrome. Pathways about how to provide trauma informed care for a variety of children at risk for trauma have been developed with additional training opportunities. These have been archived and are available to all staff. In FY20, approximately 21,703 Medicaid children and 11,568 non-Medicaid children were served in CMARC using Title V funds.

Key CYSCHN Partnerships

C&Y staff members continued to provide support to the NC Commission on CSHCN and its workgroups (Oral Health and Behavioral Health). The Commission's nine members were appointed by the Governor and met bimonthly to review and make recommendations related to issues affecting CYSCHN. In FY20 the Commission monitored numerous issues surrounding COVID-19 and its implications for CYSHCN. The Commission shared its positive feedback on the rapid response at the onset of the COVID-19 pandemic by NCDHHS through the provision of physical and behavioral health services via telehealth for CYSHCN. Telehealth services enabled children and their families access to care that would have been otherwise unavailable to them during this crucial and unanticipated time. The Commission also noted, however, that telehealth was not without challenges. While it may seem ideal for rural families who have limited access to local health care services, it also poses challenges as technology and bandwidth are limited. In addition, telehealth is not always ideal for individuals with disabilities who may experience additional challenges in accessing telehealth. It is important that providers follow the Americans with Disabilities Act standards for effective communication when utilizing telehealth. The Commission will continue to monitor the use of telehealth post-COVID. While effective in meeting needs that otherwise may not have been met during this time, it is important that telehealth not become the default standard of care moving forward.

The merger of Medicaid and NC Health Choice (CHIP) was another Commission priority. Over the years, the Commission has noted similarities between NC Medicaid and Health Choice such as the reimbursement rates and the benefits packages, which have developed over time. In contrast, one major difference in the two programs is that Medicaid includes the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefit which grants access for children to any medically necessary treatment, while Health Choice does not offer this component. EPSDT services are primarily accessed by CSHCN. Having separate programs has been a significant administrative burden for NCDHHS, enrollment brokers, and providers. Additionally, families are often faced with confusion and hardships as they move children from one program to another. Some families even have children in separate programs. Combining the two programs at this time would be a step in the right direction to an effective implementation of the Medicaid Transformation initiative. To best serve the CSHCN in NC, the Commission encouraged and will continue to encourage the General Assembly to consider merging Health Choice with Medicaid.

The Commission continued to share its research and concerns about the Innovations Waiver with key partners who joined Commission meetings throughout 2020. Representatives from NC Medicaid, Disability Rights NC, and the NC Council on Developmental Disabilities listened to the Commission's concerns, which included the extensive wait list and the small percentage of children who are receiving services through the waiver. The Commission will continue to research and share their recommendations with key leaders.

For FY20, CMARC continued to expand their training plans to include training for care managers serving special populations including children exposed to substances and safe sleep environments. Additionally, care managers were supported in any technical issues for the Virtual Health documentation platform that includes patient centered care plans. CMARC continued to offer statewide webinars during FY20 which covered the following topics: Keeping Kids Well Initiative that assisted CCNC and AHEC on improving well child visits and immunization rates; safe sleep; how to engage patients and families; motivational interviewing; and engaging with other community resources such as increasing family participation in WIC services. Safe sleep education was provided by the NC Safe Sleep Campaign. Linking families to needed services, including evidenced-based home visiting programs such as MIECHV-funded home visiting models, has also served to support social/emotional health resources through an effective referral process. CMARC provided the following updates to the electronic resource spreadsheet that assists CMARC care managers in linking families to needed resources: parenting education; parenting support; housing; food assistance; and support of the parent-child dyad. Additional consultation and efforts to increase comfort in working with families of substance affected infants and promote referrals were provided via direct technical assistance to LHDs and local social service agencies as part of the plan of safe care efforts. CMARC received direct referrals for providers and assisted families' needs during the COVID-19 pandemic.

Branch Family Partners (BFPs)_

Cultivating family and youth engagement between state Title V programs is a continuous journey. The C&Y Branch maintains the commitment of authentic involvement and engagement amid its Title V work. Fostering family and youth partner engagement involves developing genuine relationships with family partners, recognizing the contributions of their "lived vs. learned" knowledge and skills, along with nurturing their natural desire and drive to give back and make a difference for other families or youth. The C&Y Branch maintains a multi-faceted engagement framework that offers family and youth partners a variety of opportunities to intersect with and contribute to program planning, implementation and evaluation. During FY20, 139 BFPs, (a 51% increase over last FY) contributed 641 documented hours towards C&Y Branch program and activity development, implementation, and evaluation efforts. The C&Y Branch continued to employ a staff FLS who worked to support staff and families in a broad array of C&Y Branch family engagement efforts. In addition, the C&Y Branch continued to employ a part-time Parent Consultant who served the EHDI Program. The Access to Care Specialist for CYSHCN provided technical assistance to the BFPs in addition to managing the BFP reimbursement system.

The C&Y Branch BFP Steering Committee, which represents nine family partners with extensive experience in NC's System of Care and C&Y activities continued to play a major role in program development within Branch supported activities for both family partners and C&Y staff members.

The C&Y Branch's Parent Leadership Training cadre reflects a peer-to-peer empowerment training model implementing evidenced informed/based curricula. The nationally recognized *Parents as Collaborative Leaders* (PACL) curriculum continues as a cornerstone leadership training. The PACL trainings are provided in English and Spanish at no cost to parents, either as a series or as individual modules according to the parents' needs. The PACL training was offered in both a direct, face-to-face delivery and a virtual format. The virtual format delivery was piloted with significant reception, especially during COVID-19, as travel was highly restricted. As a result of these combined delivery approaches, twenty training modules were presented to 129 parents and caregivers of CYSHCN across the state during FY20, a 16% increase in attendees over the prior FY. Ninety-seven percent of attendees felt the training contributed to their knowledge and skills for leadership. Participants reported: "that everything starts small and if we are persistent [we] can become something big and reach many families," "what I learned today made me think about who I am, what are my strengths, my skills and my fears," among other positive comments. Ninety percent reported they felt better equipped to work on issues related to CYSHCN. Comments included: "I feel more confident to identify

a problem and look for a solution quickly before it becomes something bigger," "becoming a better advocate for my children with special needs and sharing what I have learned with others in my community," and " I plan on working on building the bench, cultivating new parent leaders." Participants further validate how this peer learning environment supports confidence in skills and empowerment based on reported post-training comments including: "Great ideas from other parents about how to advocate in the community" and "learning new perspectives or similar perspectives articulated in ways I hadn't thought of before."

A second training curriculum was added to the C&Y Branch's Parent Leadership Training cadre addressing how a dental home has equal importance as a medical home. A planning team of BFPs, C&Y Branch staff members, and a contract dental hygienist developed a presentation to discuss practical accommodations and strategies that can be used in the dental care setting, in addition to ways families can partner with their dental providers so CYSHCN have positive dental experiences. The presentation also used the *Finding the Right Dental Home for Your Child or Youth With Special Needs* checklist to categorize strategies via anxiety, communication, sensory, and mobility concerns (https://publichealth.nc.gov/wch/doc/families/DentalHomeChecklist-102119-WEB.pdf). Eight family partners were trained to co-present with the contract dental hygienist/program consultant. Ninety-two percent of attending family partners reported that their knowledge regarding oral health for CYSCHN and strategies for working with dental providers had increased as a result of the information learned in this training. The evaluation also uses a 10-point scale to assess participants' confidence levels regarding the topic prior to and after the training. Sixty-seven percent reported more confidence in advocating for accommodations to be made for their child in an oral health setting as compared to 33% prior to training. Fifty-eight percent report more confidence in sharing [dental home] information, resources and ideas for accommodations with other families of CYSHCN as compared to 16% before the training.

The C&Y Branch continued to invest in Title V family leadership development by sponsoring family partners to attend national conferences, specifically AMCHP and the National EHDI conferences. These conferences allowed families to expand their existing family partnerships internal and external to NC and to broaden their comprehension of Title V programmatic opportunities. The attending family partners report back to either the BFP Steering Committee or the C&Y Branch EHDI Advisory Committee on what they learned and how they plan to use the information to improve the lives of CYSHCN on a local or state level. It is further expected that they also participate in additional Branch committees, workgroups or activities to promote and apply information gained through attending the conferences. The Branch supports up to seven attendees [one EHDI, up to six AMCHP]. AMCHP scholarships represent two categories of attendees: AMCHP *Ambassadors* are family partners who have direct experience in NC's state system of care, including C&Y Branch sponsored local activities/initiatives, have documented local leadership experiences, and are interested in further developing their leadership potential. AMCHP *Scholars* are those family partners who have maintained ongoing leadership commitments by serving on the C&Y BFP Steering Committee, the Parent Leadership Training cadre, or other C&Y sponsored committee representation to further their state level leadership opportunities. Additionally, selected AMCHP scholars serve as a resource to help the *Ambassadors* navigate the conference.

Other C&Y Branch sponsored BFP engagement opportunities during FY20 included:

- State planning team for initial 2019 NC Home Visitation/MIECHV conference;
- Panel participants for NC Home Visitation/MIECHV conference where family members candidly shared their personal experiences with select, evidence-based home visitation programs (e.g., Nurse Family Partnership, Healthy Families, Parents as Teachers);
- State planning team for 2019 NC School Nurses Annual Conference;
- Co-facilitators with C&Y staff for breakout session entitled *Planning for the Care of the Whole Student* at the 2019 NC School Nurses Annual Conference. Five family partners used their children's experiences to facilitate small group discussions on ways to garner input from other professionals to develop a whole child

focused plan to include nutrition, social-emotional, and physical health goals;

- State planning team for 2020 Disaster Preparedness for Children and Youth with Special Needs: Creating Inclusive Strategies Summit. The state planning team was comprised of C&Y staff members, BFPs, and state/local Emergency Medical Services staff who developed a statewide survey to solicit targeted and relevant conference content. The survey was distributed to stakeholders including local emergency planning/first responder personnel, state/local disability advocates and family members. The Summit, scheduled for May, was to invite applicable state and local stakeholders/family partners to focus on identifying and prioritizing Preparedness, Response and Recovery strategies. Due to the state COVID19 quarantine and social distancing requirements, the conference was cancelled; however, conference elements were re-configured for a virtual presentation conducted in July.
- Family partners participated in planning the two-day 2019 Fall C&Y Branch Staff/Family Partner meeting which focused on adolescent health. Additionally, thirteen family partners attended the meeting, including five youth who presented on promoting effective, meaningful engagement opportunities with youth partners.
- Regular family partner presence and voice at the Behavioral Health and Oral Health subcommittees of the NC Commission on CSHCN. Their lived experience with these systems of care offered relevant input through the committees' role in supporting the Commission work.
- Family partner co-chair for the NC Genetics Steering Committee whose purpose was to develop the leadership structure and guiding organizational framework for the State Genetics Advisory Council
- Family partner participation in monthly C&Y Branch CQI committee.

In addition, C&Y Branch EHDI staff provided technical assistance to the F2F's hearing awareness campaigns targeting families of PreK/K age children, along with hearing loss prevention for older youth (ages 13-21). The state Family Voices affiliate collaborated with the C&Y Branch for targeted educational opportunities (e.g., UNC School of Dentistry) to improve understanding and accommodations value in service provision to CYSHCN.

CYSCHN website

In late 2019, the C&Y Branch unveiled its statewide CYSHCN website (https://publichealth.nc.gov/wch/families/cyshcn.htm). The website was a direct strategy that resulted from the Branch CYSHCN Strategic Plan. Statewide surveys of stakeholders and family partners, in addition to family partner focus groups, helped formulate the content. The website is promoted via C&Y Branch outreach materials and presentations. To date, there have been over 1,800 reported views to the website.

CYSHCN Help Line

The C&Y Branch continued to maintain a state toll-free Help Line (available Monday through Friday) and email account to assist families and providers with services for CYSHCN. The Help Line continued to be staffed by a 1.0 FTE with backup provided by the CYSHCN Access to Care Specialist. The CYSHCN Help Line call volume for FY20 was 458 calls and emails – a 57% increase over FY19. Families/caregivers of CYSHCN reflect 71% of the call/email volume. While callers can use the email link (CYSHCN.helpline@dhhs.nc.gov), 89% of callers utilized the direct phone contact which does allow callers to talk directly with staff. Calls/emails originated from 65 of NC's 100 counties. Ninety-four percent of callers reported English as their primary language. Seventy-three percent of callers reported Medicaid (Health Check) or Health Choice (CHIP) as their child's primary insurance which was consistent with FY19 reporting. The number of private insurance callers was 21%; however, the number of callers without any insurance increased by 100% over last FY to over 8% of all calls/email. Sixty-five percent of the calls were for children birth to age eleven, while 24% were for ages 12-18. Sixty percent of calls/emails requested assistance in accessing specific community services and resources which included: accessing public school's Exceptional Children Services, financial assistance,

relocation to NC, and Social Security Disability Insurance. Additionally, 19% of call categories reflected health insurance specific inquiries. In July 2019, NC began its initial statewide enrollment in Medicaid managed care so Help Line staff were helping to direct callers to the state call center for technical assistance. Further implementation of Medicaid managed care was paused in late 2019 due to budget implications. Callers to the Help Line indicated they learned about the Help Line via various methods: 42% via the website (a 62% increase over FY19), 11% via the Supplemental Security Income (SSI) letter; 12% via informational flyer; and 10% via State/Local Agency referral.

The Help Line continued to employ a CQI approach regarding its service provision to families and professionals. Help Line callers were sent a weblink for a services satisfaction survey. The Help Line services continually receive ratings between 90-100% on service indicators including: timeliness of response from the Help Line Consultant, how well questions/concerns were addressed, and respect shown for caller's opinions/feelings. Help Line survey respondents' comments reinforce the Help Line's purpose and value to families and the professionals caring for CYSHCN via the following quotes:

- "I called 6 different agencies regarding my daughter's insurance and services. All phone calls [were] insufficient, overwhelming and ultimately frustrating. My 7th call was to the help line. [The Help Line Coordinator] was kind, patient, knowledgeable and provided me with a specific path to ensure my daughter received proper therapy. So thankful for her time during a stressful day!"
- "[The Help Line Coordinator] was incredibly helpful! She was able to provide me with exactly the information I was looking for to assist my client. Keep up the wonderful work."

Outreach efforts to promote the awareness and access of the Help Line utilized several strategies. SSI applicants, ages birth to 18 years, receive direct notification about the Help Line as a resource which in FY20, reflected 4,304 families. Promotional materials are available electronically and in hard copy. The Help Line info card is available in English and Spanish (https://publichealth.nc.gov/wch/doc/families/HelpLineInformationalCard-WEB-120219-ENGLISH.pdf). A total of 3,823 Help Line info cards were distributed in FY20. A second brochure outlines the various system referral "pathways" in NC based on a child's condition and age group (https://publichealth.nc.gov/wch/doc/families/Helpline-ReferralFlowchart-14x6.25-010620-WEB.pdf).

A third outreach strategy involves direct promotion via collaborative opportunities (e.g., networking with or attending State or local stakeholder meetings), presentations to potential beneficiaries or professionals who work with these beneficiaries, or exhibits at professional conferences or local community events. In FY20, staff members participated in 88 outreach events. The activity decline over prior years is due to a staff vacancy for six months (Minority Outreach Coordinator) and the COVID pandemic imposed quarantine, travel, and social distancing requirements. Between mid-March through the end of June, another nineteen direct outreach events were cancelled as a result of the COVID pandemic. During this time, the outreach staff members, consisting of the CYSHCN Help Line Coordinator, CYSHCN Access to Care Coordinator, and newly hired Minority Outreach Coordinator, developed revised strategies to promote the value of the Help Line, in addition to promoting NC children's public health insurance options. Staff members participated in more collaborative opportunities (e.g., stakeholder meetings to share and promote NC Medicaid/Health Choice information) and reached out to various stakeholder organizations or agencies to participate and present in their virtual community meetings. Additionally, outreach staff members also prepared information packets which were mailed to site contacts for inclusion in their distribution efforts (e.g., food distribution to rural or Latino populations and back to school events).

Improving Educational Opportunities for CYSHCN

Several WCHS staff members, including the Title V Director, continued to participate in the Pathways to Grade-Level Reading initiative of the NC Early Childhood Foundation. The vision of the initiative is that all children in NC are

reading at grade level by the end of third grade. The goal includes that children with disabilities achieve expressive and receptive communication skills commensurate with their developmental ages so that they have the greatest opportunity for life success. This also includes promoting developmental screening, assessment, and early intervention. Racial equity continued as a key piece addressed in this process as well as addressing equity related to disabilities. The Title V Director served on the NC Early Childhood Data Advisory Council to create an early childhood data development strategy for the state. The Pathways Data Dashboard (https://www.ncpathwaysdata.org/) was released in June 2020. This is an interactive dashboard that shares disaggregated data on more than 60 whole child, birth to eight measures that matter for third grade reading proficiency. This Pathways work continued to complement and collaborate with efforts for implementation of the NC ECAP.

Several Branch programs supported efforts in early childhood education settings which presented opportunities for young children, including those with special health care needs, to experience early learning and development. The State Child Care Nurse Consultant (SCCNC) and the NC Child Care Health and Safety Resource Center (Resource Center) provided training and coaching services to local and regional based child care health consultants (CCHCs). Trainings and technical assistance were also provided by the CCHCs to child care providers to support the inclusion of CSHCNs into the early learning setting and help to ensure a safe environment for the child. This support also included reviewing medical action plans and medications forms and providing technical assistance and training on how to give and safely store medications. The CCHCs served as liaisons between the child and family, the child care provider, the medical home, and other community resources. The CCHCs promoted early identification of the need for referral and early screening for developmental delays using the Learn the Signs, Act Early resources.

The SCCHC and the Resource Center provided resources and guidance regarding special needs including allergies, asthma, seizures, diabetes, and G tube management and feeding. In FY20 the SCCNC, in collaboration with the Resource Center, revised the *Administration of Medication in Child Care* train the trainer course. The course was offered one time to newly trained CCHCs. The SCCNC worked with the PMC to begin the development of a G tube management module as a component of a *Caring for Children with Special Health Care Needs in Child Care* training.

Schools can be a source of strength when there are positive partnerships between parents, youth, and health care providers inside and outside of schools. The C&Y Branch has several school health programs that support the health and social emotional development for all children, including CYSHCN, to be successful academically. State funded SHCs are required to report the number of adolescents aged 10 to 19 seen who have medical and dental homes and assist families in obtaining access if they are not currently receiving services. SHC staff members share information with a student's medical home or identify one if an enrolled student does not have a medical home. Pediatric and prenatal medical home checklists are shared with families with CYSHCN to improve their ability to identify the characteristics of an optimal medical home for children with genetic conditions.

Health care providers and school nurses can collaborate with families to monitor changes in health status, develop plans of care, ensure supports from other school staff, and support the development self-management of care skills if possible, during the school day. School Nurses work with CYSHCN to ensure continuity of medical care that enables success, health and safety in school. School nurses are part of the Individualized Education Program (IEP) teams planning for individual education plans for children who need them, providing a clinical link that supports the child's experience in school. School nurses also work closely with the privately hired RN's who provide one-on-one nursing care for students who need these intensive services in schools, ensuring that the private nurse has an advocate and guidance for working in the educational setting.

Innovative Approaches (IA) Initiative

Child care settings and schools represent the early learning and education system which makes up just one of the systems that impact and influence the health and well-being of CYSHCN. Results from the 2018-19 NSCH indicate that only 18.1% (C.I. 13.5%-23.9%) of families of CYSHCN ages 0 to 17 in NC report that their children receive care in a well-functioning system as compared to 16% (C.I. 13.2%-19.3%) of families with non-CYSHCN. National rates were 14.1% (C.I. 13.1%-15.1%) for CSHNC and 18.8% (C.I. 18.1%-19.6%) for non-CYSHCN. A well-functioning system is defined by the following five age-relevant core measures for CYSHCN age 0-11 years:

1. Families of CYSHCN needs will partner in decision making at all levels and will be satisfied with the services they receive.
2. All CYSHCN will receive coordinated ongoing comprehensive care within a medical home.
3. Families of CYSHCN needs have adequate health insurance and financing to pay for needed services.
4. All children will be screened early and continuously for special health care needs.
5. Services for CYSHCN and their families will be organized in ways that families can use them easily.

One additional core measure used to define well-functioning for CYSHCN age 12-17 is that all CYSHCN will receive the services necessary to make appropriate transitions.

The mission of the C&Y Branch is to build, maintain and assure access to systems of care that optimize the health, social and emotional development for all children, which includes CYSHCN. During FY20, the Branch's IA initiative continued to support the development of community-based and family-focused systems of care for families of CYSHCN. Based on data from the CYSHCN Help Line and other data sources, the C&Y Branch developed the IA Initiative as a community approach to help families of CYSHCN. The purpose of the IA initiative is threefold: 1. to thoroughly examine the community system of care for CYSHCN; 2. to facilitate community identification of sustainable system changes and promising practices; and 3. to coordinate the implementation of these practices with agencies, providers, and families in the community.

The goals of the IA Initiative are based on NOM 17.2, as IA focuses on the six components of a well-functioning system to ensure access to needed and continuous systems of care for CYSHCN. IA uses a system change approach rather than a program-based approach to address community improvements for families of CYSHCN. IA requires strong collaborative partnerships between LHDs, parents and families of CYSHCN, local CMARC networks, medical providers, schools, social services, mental health services, advocacy and support agencies, and other community stakeholders. Collectively, these partners work together to identify, address, and improve the system of care for CYSHCN. The C&Y Branch and the IA counties are partners in finding and sharing the innovative solutions to reduce the complexity and improve health outcomes for CYSHCN.

The IA Initiative was launched in 2010 in four pilot counties. The initial pilot counties (cohort 1) were funded from 2010-2013. IA has expanded its reach to ten counties in cohort 4 (grant cycle 2019-2022). Collectively, 22 counties (one-fifth of the state) have participated in IA since its inception. Counties in all geographic regions of the state are represented in cohort 4 with the Mountain region having three IA sites (Henderson county), the Piedmont region having six IA sites Gaston, Rowan, Union, Granville, Vance and Warren counties), and the Coastal Plains region having three IA sites (Bladen, Columbus, and Robeson, counties). Counties were selected for participation based on a competitive RFA process open to all LHDs. Remaining funds are being used to partner with UNC-Chapel Hill to develop a comprehensive evaluation of the IA Initiative. As a result, the WCH Section chose as its ESM for this NPM to monitor the following: number of policies, practices, and resources changed to support improved outcomes for CYSHCN by counties implementing IA strategies. The recommendations from this evaluation will guide the future direction of IA.

Data for this measure are provided by the state IA Director collected via the IA Strategic Results Framework. Since

FY16, IA staff have utilized the Rensselaerville Institute's (formerly The Center for What Works) Strategic Results Framework that defines and verifies project results, tracks success, and matches to metrics with a collaborative impact project design and strategy for all IA projects. Scorecard data for systems of care for FY20 showed that there were 32 policy, practice, resource and/or cultural changes achieved by the IA projects. Expansion counties included Columbus County and Union County. Columbus County is an expansion county served by the Robeson Health Department and Union County is an expansion county served by the Cabarrus Health Alliance for the 2019-2022 funding cycle. These system changes impacted 1,899 stakeholders including 317 Families of CYSHCN, 60 CYSHCN, 5 Early Childhood Professionals and Specialists, 32 Healthcare Professionals/Providers, 32 IA Members, 17 Institutional Leaders, 1,385 Community Leaders, and 51 School-Based Staff.

In close partnership with families of CYSHCN, in FY20 all ten IA counties continued to address community level systems of care issues including building strong medical homes for families. During FY20, a variety of successful community-based and family driven systems changes (practice, policy, procedure, and/or resource changes) were implemented to ensure families of CYSHCN partnered in decision making at all levels and would be satisfied with the services they receive. For example, Cabarrus Health Alliance (CHA) IA (Cabarrus, Gaston, Rowan, and Union Counties) identified several areas of concern on the daily struggles and obstacles that families of CYSHCN experience which impact all aspects of their lives. In addition to the increased need for a strong support system, the physical and emotional health of parents and caregivers are impacted, as well as that of siblings. There is also an increased need for connection to resources. Family support organizations integrated the *Powerful Tools for Caregivers* curriculum into training for families to address the impact on caregivers of CSHCN or children with disabilities, and they had success with the adoption of policy and resource changes that addressed these concerns. *Powerful Tools for Caregivers* classes help caregivers take better care of themselves while caring for CSHCN at home or in a care facility. Eight parents/caregivers attended the initial 6 week online course. All of the parents/caregivers completing an evaluation survey reported that the training provided them with helpful information regarding community resources and that they are a more confident caregiver as a result of the class Three community partner organizations (Amazing Grace Advocacy, Family Support Network of the Southern Piedmont, and Cannon Health), have integrated this training into their work with parents/caregivers of CYSHCN. These organizations continue to offer the training on an ongoing basis. They are also currently finalizing adopted written polices or procedures to address impacts on family when caring for a CYSHCN beyond the traditional support services offered by utilizing a "whole family" approach.

Additionally, Gaston, Rowan, and Union counties produced the following systems changes:

- In collaboration with Family Support Network of Southern Piedmont and the Arc of Rowan, nine Latino parents of CYSHCN participated in leadership training to build capacity to mentor and support other Latino parents of CYSHCN. These practice and cultural changes resulted in Latino parents having a voice and actively participating in decision making regarding CYSHCN.
- In collaboration with a Doctoral Student at the Department of Special Education and Child Development at UNCC, a resource page was developed on the Resource CAFÉ website for teachers to increase capacity to serve CYSHCN. This resulted in 51 EC teachers and General Education teachers receiving information needed to effectively serve CYSHCN in their classroom.
- Four Healthcare professionals and six families of CYSHCN developed a Health Care & Financing Guide for Families of CYSHCN that will be incorporated by Health Care Providers into their work with families. These practice and resource changes resulted in almost 200 families of CYSHCN having access to information about insurance and financing to access services when needed for their children.

The other IA counties also reported many successful initiatives to improve the organization of services in their communities and at the state level in FY20. For example, two Bladen County parents that serve on the Bladen County

IA Parent Advisory Council were introduced to the concept of Applied Behavior Analysis Therapy (ABA). Both of the parents have children with autism and realized how this therapy could greatly benefit their children and others with autism. They inquired about ABA providers in their county and learned that they did not exist, so posted an interest survey on their local Bladen County Autism Chapter page to determine the amount of interest. The parents connected with their local mental health entity MCO Eastpointe about offering ABA. The first meeting in February 2018 was a meet and greet for the parents to discuss with MCO Eastpointe about ABA and provide them an overview. The parents wrote an opinion letter to their local newspaper about the lack of services in their county for individuals with disabilities and this letter captured the attention of one of the local county commissioners. He then facilitated a meeting with the parents and MCO Eastpointe and they began the implementation process with the ABA service provider which would entail months of paperwork, etc. The actual services began in 2019 after a year-long process of bringing awareness about this new service opportunity. Due to ABA therapy, one child has begun to speak more frequently and is interacting with others more often. The number of children impacted is expected to increase as more families become aware of the availability of this service.

Families of CYSHCN frequently have inadequate insurance or financing to pay for services their child needs. Granville-Vance and Warren IA implemented a resource change through the development of a CMARC, Family, and Professionals Informational Brochure. This tool gives a breakdown of all the services offered to families in a handy format and also identifies providers/professionals. A total of 600 brochures have been shared across the three counties. CMARC case managers in Granville, Vance, and Warren Counties now utilize the brochure with families as well as for resource sharing/recruitment. The plan for sustainability is simple and easily achieved; the CMARC care managers in each county have access to the Word document of the brochure which makes for easy, no barrier access to printing, sharing (in print or electronically), and updating information as services and requirements change over the years.

Henderson IA, the newest county that has received IA funding, is addressing policy and resource changes within the recreational park trails system. In early 2020, they used provider and parent/caretaker surveys and focus groups to collect data which identified issues regarding systemic change as it relates to CYSHCN in their community. They are now collaborating with Kids in Parks/TRACK Trails and partnering with the Henderson County Department of Public Health, the Committee for Activity and Nutrition, Kids in Parks, Henderson Co. School Nurses, Advent Health, Conserving Carolina, and local park rangers to address accessibility of local trails throughout the county to be inclusive of CYSHCN, and to increase awareness of disabilities, inclusion, and the importance of community-wide partnerships. This initiative aligns with the county goal of positively impacting health issues around weight and weight loss by increasing physical activity as outlined in the 2018 Henderson County Community Health Assessment (CHA) and the 2019 Henderson County State of the County Health (SOTCH) report. The 2019 SOTCH also prioritized TRACK Trails as part of the physical activity focus area innervations. Specifically, the need for more inclusive playgrounds and other outdoor recreational activities geared toward CYSHCN was also identified as an area of significance. They have completed accessibility reviews of three TRACK Trails (Fletcher Park, Mills River Park, and the Carl Sandburg Home), with another trail to be opened at the Park at Flat Rock. IA and TRACK Trails have begun a partnership with the intention of:

1. increasing families with CYSHCNs awareness of TRACK Trails and increase their use of these trails;
2. involving these families and children so that they can contribute to improving the trail system for their use;
3. increasing the number of health care providers in Henderson County who regularly discuss participation in physical activity with families and CYSHCN by using the TRACK Rx program to “prescribe” nature and outdoor activity;
4. creating an adapted version of the NCODH accessibility review to create a document specific to outdoor recreational space; and submit the document to NCODH and NC ADA Network for review; and
5. creating a TRACK Trail brochure specific to the needs of CYSHNC.

Impact of COVID on IA

By all accounts, the unexpected impact of COVID has been especially difficult for parents and families of CYSHCN and also impacted the implementation of IA in all ten counties. Overall IA has had to adapt to transitioning from in-person steering and/or subcommittee committee and parent advisory council meetings to videoconference meetings. Funding planned for in-person trainings (*Power Tools for Caregivers*) changed to virtual trainings which involved additional training costs for trainers to learn how to teach using various teleconference platforms and learn how to organize their presentation materials. Parents as Collaborative Leaders training offered to parents and families of CYSCHCN was also reorganized to a virtual format.

IA staff quickly adapted to utilizing communication platforms such as the Resource Café (through CHA IA), Survey Monkey, Constant Contact, and others in addition to the LHD websites and Face Book accounts for communicating with IA families, committee members, and community partners (i.e., newsletter, meeting reminders and updates, activities and events).

In addition, CHA IA created a Photo Voice virtual exhibit to visually display these effects within Cabarrus, Gaston, Union, and Rowan counties. Parents and families of CYSHCN were asked two life-altering questions: 1) How does life change for a family when they have a child with complex or special health care needs? And 2) What challenges do they encounter on their journey, particularly when also dealing with a pandemic? Because “a picture is worth a thousand words” the Photo Voice Project can be a powerful way to help others understand and connect with the issues encountered by families of children with complex or special health care needs The CHA 2020 IA Photo Voice Virtual Exhibit is located on the C&Y Branch website (https://publichealth.nc.gov/wch/families/cyshcn.htm).

The Robeson, Bladen, and Columbus IA Coordinator and Parent Outreach Coordinator developed a Disaster Preparedness video showing a detailed presentation for families of CYSHCN around preparedness strategies in the event of a natural disaster. Families of CYSHCN have to be extra prepared when encountering natural disasters, and the video teaches viewers different techniques in how to prepare and stay prepared, including the importance of packing masks and hand sanitizer during a pandemic. This video is also located on the C&Y Branch website.

In Henderson County, COVID greatly impacted their ability to complete TRACK Trails Accessibility Reviews due to social distancing constraints. It also impacted the rollout of TRACK Rx, particularly in their schools where they have partnered with the school nurses to write the “prescriptions.” Their school system recently returned to partial in-person learning recently, and they hope to see those numbers start to improve.

Health Care Transition for YSHCN and All Adolescents

Health care transition (HCT) for all adolescents, and especially YSHCN in partnership with a medical home, continued to be a focus for the C&Y Branch and its partners during FY20. 2018-19 NSCH data show that in NC, 16.5% (C.I. 10.3%-25.3%) of YSHCN, ages 12 through 17, received services necessary to make transitions to all aspects of adult life. This is worse than the national average of 22.9% (C.I. 20.8%-25.1%) and a decrease from the 2016-17 percentage of 22.4% (although the confidence intervals for both survey years overlap and are wide, so this is probably not a significant decrease). The C&Y Branch continued to work with partners to improve this rate and made transition information and resources available through many Branch programs. HCT is a domain in the AMCHP Standards for Systems of Care for CYSHCN that the Branch embedded and continued to work on as part of the Branch CYSHCN Strategic Plan.

The Title V CYSHCN Director continued to guide an internal C&Y Branch Health Care Transition Work Group to

further define HCT in Branch activities and efforts. The IA Director assumed the role of the work group coordinator and will continue to coordinate these meetings moving forward. Work group members will be focused on education and promotion of HCT among families and providers.

The PMC continued to maintain a listserv of pediatric, family physician, internal medicine-pediatric, and other provider champions with an interest in HCT. These providers are from academic centers, hospitals, CCNC, and communities across the state. This HCT listserv allowed for periodic conversations about current efforts, requests for expertise, and an opportunity to learn about and share HCT efforts within NC.

The PMC continued to co-chair the Fostering Health NC Transition Age Youth Work Group with Fostering Health NC staff. The NCODH director and Adolescent Health Coordinator also have participated. This work group, which consists of state and county DSS, young adults who were in foster care as part of community agencies, and several community agencies with youth advisory groups, continued to focus on reducing barriers and increasing the abilities of youth in foster care to have continuous Medicaid coverage and participate in NC's Foster Care 18 to 21 Program while also helping youth understand how and when to develop skills and knowledge around self-management and use of care. This Transition Work Group worked with state DSS level staff to perform activities related to shared decision making and informed consent (key parts of HCT) that are included in the federally required Health Oversight Care Plan for NC by NC DSS.

NC Office on Disability and Health (NCODH)

The NCODH, housed in the C&Y Branch, continued to integrate the health concerns of persons with disabilities, including CYSHCN, into state and local public health programs. This integration helped to create sustainable infrastructure, build capacity, maximize resources, and promote inclusive policy initiatives.

NCODH continued to collaborate with LHDs to increase accessibility and inclusion for CYSHCN by providing information, technical assistance and resources and by conducting on-site accessibility reviews. NCODH completed six accessibility reviews at LDHs in FY20 before travel for on-site accessibility reviews was halted due to COVID-19. Accessibility Review materials and resources were revised to better assist LHDs in increasing access and inclusion of CYSHCN. To further expand ability to provide accessibility reviews for LHDs, NCODH provided a one-day training in October 2019 for staff at the four IA Initiative sites to prepare them to conduct accessibility reviews in their community. Each of the sites conducted accessibility reviews at their LHD in fall 2019 and are now better prepared to conduct further accessibility reviews in the community as requested.

To address access to care and address the health and wellness needs CYSHCN in a community, NCODH partnered with Special Olympics North Carolina (SONC) to develop a pilot project designed to increase inclusion of individuals with I/DD and CYSHCN in Community Health Assessments. Working with three IA sites, NCODH and SONC is using the Mobilizing for Action through Planning and Partnerships (MAPP) Inclusion Guide promoted by NACCHO to develop guidelines for local communities to increase inclusion of CYSHCN in the assessment process. As LHD focus shifted to COVID-19 in spring 20, this project was put on hold until FY21.

NCODH continued collaboration with the NC Sexual Violence Prevention Team to promote the inclusion of individuals with disabilities in sexual health and sexual violence prevention in NC. As a part of this committee, NCODH is a member of the K-12 workgroup to further address sexual health education needs of CYSHCN. As a result of these workgroups, additional partnerships were established with NC DPI, Carolina Institute for Developmental Disabilities, and NC Coalition Against Sexual Assault. NCODH also worked to raise awareness of the sexual health education needs of CYSHCN in the Partners for Adolescent Sexual Health workgroup

NCODH collaborated with other partners including the NC Commission on CSHCN Oral Health Workgroup and the I/DD Dental Access Workgroup to ensure that the oral health needs of CYSHCN are being addressed. NCODH participated in multiple presentations for dental providers as part of the Dental Home for CYSHCN Initiative, specifically addressing accessibility needs and ADA compliance within dental practices.

The C&Y Branch involvement in emergency preparedness efforts expanded in FY20 as the NCODH strengthened the partnership with NC Emergency Management (NCEM) and participated in efforts to improve preparedness efforts for children and adults with disabilities through involvement in statewide workgroups including C-MIST Advisory Committee, Shelter Accessibility Workgroup, and Functional Assessment Support Team (FAST) Workgroup. NCODH increased involvement in NCEM by serving as a FAST Coordinator during Hurricane Dorian and training additional FAST members.

In partnership with NCEM, NCODH planned an Emergency Preparedness Summit for CYSHCN that was scheduled for May 2020,but was canceled due to COVID-19 restrictions. Recognizing the need to address the unique situation of preparing for hurricane season during COVID-19, NCODH and NCEM developed a webinar series in place of the Summit. This series titled *Hurricane Season and COVID-19: How Families of CYSHCN Can Be Prepared* provided information on personal preparedness, how state and local officials are preparing during COVID-19, and information on recovery and resources. Each webinar included a panel of emergency management professionals, community-based partners, and BFPs or family members of CYSHCN.

NCODH collaborated with the Social Determinants of Health CoIIN and the Office of Minority Health and Health Disparities to address inclusion of people with disabilities and CYSHCN in efforts to address health equity. With the shift to COVID-19 response efforts, NCODH collaborated with NCDHHS Historically Marginalized Population Workstreams to ensure the needs of people with disabilities and CYSHCN who are also part of racial and ethnic minorities were addressed during the COVID-19 response.

Genetics Program

The C&Y Branch includes genetics as a priority among its programs that serve CYSHCN. During FY20, the Branch continued to partner with other state public health agencies, public and private academia, industry, families, medicine, and community genetic and genomic stakeholders to finalize and publish online the 2020 NC Public Health Genetics and Genomics Plan which can be found at: https://publichealth.nc.gov/wch/doc/families/NC-PublicHealthGeneticsand GenomicsPlan-FINAL-Approved.pdf. The plan's objectives and actions focus on three priority areas for recommendations: Genetic Services and Testing; Education and Communication; and Epidemiology and Surveillance. The Branch, in partnership with the working group that developed the 2020 Plan, defined the membership (up to 18 people) and roles for a Genetics and Genomics Advisory Committee (GGAC) which was created to help monitor progress on the objectives and actions of the plan. The State Public Health Genetic Counselor (SPHGC), Branch PMC, Genetics and Newborn Screening Unit Manager, and the Branch FLS created an application to recruit families, health care providers, researchers, and industry representatives. Over 30 individuals applied in the spring of 2020. A selection team comprised of the PMC, SPHGC, Genetics and Newborn Screening Unit Manager, and two past co-chairs of the 2020 Plan committee (a geneticist and a family member) selected and invited 18 members to serve on the GGAC.

In addition to serving as a key member and staff for the NC Public Health Genetic and Genomics Plan leadership team, the SPHGC continued to be a resource to health care providers, LHDs, and other professionals across the state during FY20 and provided back-up Newborn Screening assistance. In addition, direct patient care was provided when timely genetic counseling services would not have been obtainable otherwise. Parents of CYSHCN seen in genetic clinics at medical centers across the state and by the SPHGC and did not have a medical home

continued to be encouraged to establish one and helped if needed. The SPHGC also provided technical assistance 427 times to providers regarding genetic services related to patient care in FY20. The SPHGC developed and delivered pertinent trainings to providers including the evaluation of children with developmental delays. This included an archived statewide genetic webinar training which was held in October 2018 and was available until October 2020 with nursing credits. This archived webinar provided guidance on how to take a family history/pedigree for nurses, physician and other interested health professionals. The SPHGC also provided Infant Toddler in-service trainings to the CDSAs primarily focused on general genetics and referrals.

The North Carolina Sickle Cell Syndrome Program provided services to 2,033 clients with sickle cell disease, age 0-21, during FY20. This included providing care coordination services along with client, family, and community education. Sickle Cell Educator/Counselors work collaboratively with health care providers to support clients in living healthier lives. Patient education is provided one-on-one to clients and families regarding preventative health care measures including education about keeping regular doctor appointments, staying on task with immunizations, taking penicillin to prevent bacterial infections, the recognition of early signs of complications, and when to seek immediate medical attention. Sickle Cell Educator/Counselors also provide education to increase knowledge about sickle cell disease to community groups that serve clients and families living with sickle cell disease. Education is provided to daycare centers, Head Start programs, schools, colleges, LHDs, local housing authorities, DSSs, and other agencies including faith-based organizations.

Hearing Program

The Carolina Children's Communicative Disorders Program (CCCDP) Financial Assistance Program provides hearing aids and cochlear implant supplies and equipment. They also provide the unique clinical care required to use, maintain, and enable progress with this specialized technology. Qualifying children are accepted into the program based on such criteria as family size, income, other medical expenses, and the limitations of insurance and other resources such as Medicaid. Previously supported by Title V funding, the state now utilizes state funding for this service and pays for children with no other payment options. A total of 200 children were served by CCCDP Financial Assistance Program in FY20. The Children's Cochlear Implant Center at UNC continues to experience tremendous growth, making it one of the largest centers in the country.

The UNC Craniofacial Center facilitates early intervention and improved care coordination for North Carolinians with craniofacial anomalies with efficient use of limited resources. Services are provided statewide that require extensive, long-term treatment to those who meet the funding criteria as payment of last resort. Approximately 530 patients were served in FY20.

A Cooperative Agreement for continued enhancement and interoperability of WCSWeb was continued in FY20, along with a HRSA funded grant that focused on increasing the percentage of infants diagnosed by three months of age and the percentage of infants with hearing loss enrolled in early intervention services by six months of age. The EHDI Advisory Committee met quarterly to discuss issues such as the quality of audiological and intervention service delivery and contribute to strategic planning. The NCPS EHDI Chapter Champion continued to work with program staff and the EHDI Advisory Committee to promote newborn hearing screening among pediatric peers and enhance the quality of audiological and intervention services for children and youth with hearing impairment.

Family and provider engagement continued to increase as the EHDI Program expanded family support services and created leadership, collaboration, and advocacy opportunities for families. Several activities contributed to this increase, such as the work efforts of the part-time Parent Consultant, supporting local family support groups (HITCHUP), expanding parent involvement on EHDI Advisory Board, disseminating upgraded materials to reflect

cultural diversity, and updating the Better Hearing and Speech Month (May) Campaign. The Parent Consultant collaborated with the C&Y Branch FLS to identify parents for participation in Branch activities (e.g., review public materials for distribution, development of new program materials, and participate on committees, etc.). Parents affiliated with the program are identified to attend the national EHDI conference to further expand the knowledge and skills to become a parent leader within the hearing loss/impairment community and to participate with the Branch on future program or services.

In FY20 the PNC reached out to the six nutritionists/RDN's employed by regional CDSAs to assess interest in networking and to discuss topics of common interest pertaining to the nutrition care and medical nutrition therapy of infants and toddlers with special health care needs. Based on an overwhelming interest, the PNC set up quarterly networking/virtual meetings which occurred in Feb, May, June, August and November 2020. Topics included best practices and favorite nutrition resources; micro-preemies and how CDSA nutritionists are providing nutrition care for this population; working with special formulas and working with WIC; nutrition telehealth and phone consults being utilized to reach families during COVID-19; and the role and value of CDSA nutritionists.

Infant-Toddler Program

In FY19, the NC state demographer estimated there were 362,856 infants and toddlers (zero to three years of age) living in NC. A total of 19,800 infants and toddlers, or 5.5% of NC's population younger than three years old, were enrolled in the Infant-Toddler Program (ITP) in FY19, which remained about the same as last year's rate. The ITP provides supports and services for families and their children, birth to three who have special needs. Children are eligible for enrollment if they have a 30% delay or score 2.0 standard deviations below the mean on a standardized test in at least one area of development (e.g., cognitive, physical, communication, social/emotional, or adaptive), or demonstrate a 25% delay or score 1.5 deviations below the mean on a standardized test in at least two or more areas of development. Children also qualify for enrollment based on state-specified established conditions that lead to or are likely to result in developmental delays or disabilities.

The ITP is comprised of the EIB and regional CDSAs located across the state. The EIB has the responsibility of implementing mandated Part C of the Individuals with Disabilities Education Act (IDEA) General Supervision components related to program compliance and monitoring, reporting of key federal performance indicators, fiscal management, dispute resolution, and targeted Technical Assistance and professional development. In addition, the EIB facilitates the Interagency Coordinating Council (ICC) which brings policy makers, service providers, and parents together to ensure that the supports and services offered to families are in line with their needs. The CDSAs conduct child find efforts in partnership with their Local Interagency Coordinating Councils (LICCs), evaluations and/or assessments, provide service coordination, and ensure enrolled children and families have Individualized Family Service Plans (IFSPs). IFSPs are developed via a team of family and professionals and are based on family identified needs to ensure that families receive appropriate services. Services are primarily provided through a network of contract providers who provide coaching to families and specialized therapies in children's natural learning environments (most often their homes) which are integrated into children and family's daily routines.

Recruitment and retention of staff members has been an ongoing challenge due to noncompetitive salaries, needed workforce in rural counties, among other factors, which collectively leads to high caseloads and an impact on timely services and eligibility determinations. Many CDSAs have been forced to rely on external providers for services. As with many other states across the country, it is difficult to recruit specialized therapists and mental health clinicians (such as occupational therapists, physical therapists, speech/language pathologists, and psychologists) that are in high demand and where there are national shortages, particularly when there is a significant pay differential between the CDSAs, private practices and clinic/hospital settings.

SPM#3 - Percent of infants and toddlers with IFSPs who receive the early intervention services on their IFSPs in a timely manner

In an effort to help monitor how well the WCHS is meeting the selected priority need, which is to provide timely and comprehensive early intervention services for children with special developmental needs and their families, the WCHS selected the following indicator as its SPM#3: Percent of infants and toddlers with IFSPs who receive the early intervention services on their IFSPs in a timely manner. The EIB is required to report on this indicator in the Part C State Performance Plan (SPP)/Annual Performance Report (APR). The SPP/APR is a requirement of the U.S. Department of Education, Office of Special Education Programs (OSEP), which mandates each state to develop a six-year plan, the SPP, with stakeholder input that establishes targets set by OSEP or the state, depending on the type of indicator. There are two types of indicators: compliance and outcomes or results. The latter indicators focus on child and family outcomes as well as child find, which measures the percentage of children identified, evaluated and enrolled in the birth to one range and in the birth to three age range in comparison to national population data. OSEP sets the three compliance indicators at 100% and the remaining eight indicators are set by the state with stakeholder input. States report annually on their progress through submission of the APR.

Compliance with SPM#3 indicator is determined via a self-assessment record review of all children in the ITP who had services added to their IFSPs over a three-month period (September through December). The target for this indicator is 100%, and the ITP had a compliance rate of 99.04% in FFY19, with fewer than 50 children across the state who did not receive all of their IFSP services in a timely manner due to CDSA-specific delays. This indicator has stayed consistently high since the first inclusion of this SPM in the NC MCHBG, as the compliance rate for FFY15 was 99.12%. It dipped to 97.93% for FFY16, but was back above 99% for the remaining years.

SSP/APR Indicator 11 is called the State Systemic Improvement Plan (SSIP) and follows a slightly different reporting period, which for this past FFY was April 2019 to April 2020. The SSIP consists of a multi-year plan focused on a results area that states, with input from their stakeholders, identified in 2014. The SSIP was initiated by the Office of Special Education Programs to shift from focusing on compliance to a more systemic results-focus area that impacts outcomes for children and families served by special education programs across the states. As exemplified by the data above, NC, like most states, has high levels of compliance, however many states found that children's outcomes had not changed at the same pace as compliance. The SSIP was developed to change this pattern and begin statewide planning that would make a difference in children's outcomes. Planning for the SSIP revealed a need to change practices and ensure fidelity and sustainability. In the formulation of the SSIP, states were instructed to obtain diverse stakeholders' input to identify an area of focus that would result in improved child and/or family outcomes. North Carolina's State-identified Measurable Result (SiMR) for its SSIP is to improve the social-emotional outcomes of infants and toddlers ages birth to three with developmental delays and/or disabilities who are enrolled in the NC ITP (federal indicator 3a). The SSIP aims to increase the capacity of the early intervention system to improve social-emotional outcomes using principles of implementation science to successfully implement, scale-up, and sustain selected evidence-based practices. Key elements of implementation support will be through state and local teaming structures, professional development opportunities, fidelity tools, and continuous evaluation activities that will inform progress and/or a need to change or correct the current course of action. Work on the SSIP continues to include active participation of internal and external stakeholders.

NC initially had five SSIP implementation teams, or content area teams - infrastructure, professional development, family engagement, evidence-based practices, and global outcomes integration. Collectively the teams recommended 18 strategies to be considered for implementation. A revised SSIP teaming structure was implemented in May 2017, which has dramatically helped to support implementation of evidence-based practices with supports to ensure fidelity and sustainability. In June 2018, the number of strategies under the SSIP were

reduced from 18 to three. This step to remove strategies from under the evaluation and reporting requirements of the SSIP was done intentionally to narrow the number of new practices that staff and providers were expected to implement and that the state was required to monitor and evaluate.

The three strategies that remain the focus of the SSIP include coaching interaction styles within the context of natural learning environment practices, roll out of an enhanced process for integrating global outcomes into the development of functional IFSP goals for children and families, and implementation of the pyramid model, which will provide a foundation for high quality early intervention services and supports that specifically address social-emotional development.

Each of the 16 CDSAs have attended at least one two-day training on coaching interaction styles of communication and natural learning environment practices, as well as a single day training on resource-based practices. These strategies were identified as a bridge to increase family engagement and family capacity to impact their child's social-emotional development. Additional planning efforts are underway to ensure trainings are available for contract providers.

The remaining 15 strategies removed from the SSIP did not go away; instead, they were shifted to the EIB to work on more methodically as the CDSAs' staff and providers strengthened their skills in the use of coaching interaction styles and natural learning environment practices within the context of everyday routines. The initial SSIP reporting period has ended, and the EIB is starting its next 5-year reporting term. The remaining strategies continue to be priorities for the EIB and are being addressed at varying stages of implementation depending on resources and staff capacity.

The NC ITP administers a yearly survey to the parents of children ages 0 to 3 years old who are receiving ITP services for six months or longer. The family survey is implemented as a means to fulfill federal Indicator 4, a results indicator, which measures the percent of families participating in Part C who report that early intervention services have helped the family:

A. Know their rights;
B. Effectively communicate their children's needs; and
C. Help their children develop and learn.

Historically, the NC ITP had low response rates using the National Center for Special Education Accountability Monitoring Family Survey for Early Intervention; response rates averaged around 13% and were not representative of families. In FY17, the NC ITP overhauled the Family Outcomes Measurement Process and began implementation of Section B of the revised Family Outcomes Survey (FOS-R) to intentionally address response rates. The revised survey has fewer, more family-friendly questions and is offered to families with multiple options for submitting their responses. Families are reminded in advance of their semi-annual IFSP team meeting by their early intervention service coordinator that they will be asked to complete a survey. At the semi-annual IFSP review, families are offered the opportunity to complete a paper form, obtain assistance from the ECAC to complete the survey through their 1-800 number, or complete the survey electronically on a phone, tablet, or computer.

As a result of the shorter survey and multiple methods of administration, survey response rates have improved and, more significantly, are more representative of the population served by the NC ITP. Overall, the NC ITP's response rate increased from 13.1% in FFY15 to 31% for FFY17, the first full year using the new survey process for all CDSAs. While the response rate remained high, at 28.5% in FFY18, the rate for FFY19 dropped substantially to 20.2% While some of the overall decrease can be attributed to the impact of COVID-19 during the final months of the year, quarterly data tracked by the N.C. ITP tells an expanded story. Response rates for all race/ethnicity groups were highly variable over the fiscal year, with a program-wide decrease in October-December 2019 that the N.C. ITP was

already working to address when COVID-19 began to impact the state.

In addition to addressing overall response rates, the state office has worked in collaboration with individual CDSAs on more targeted efforts to increase response rates for specific groups, in particular response rates for families of Black and Hispanic children where these groups may need particular focused work. Historically, response rates for families who identified as Black or African American or Hispanic or whose primary language was Spanish were even lower than the overall rate, often in the single digits. Changes in the survey process have resulted in response rates for these groups much closer to response rate for the ITP overall. Receiving representative data is critical for the program to better understand how to reach and serve all populations across the state and we continue to focus on this area to ensure the data represents the children and families we serve.

In addition to implementing FOS-R, the NC ITP contracted with the ECAC to facilitate focus groups with CDSAs. The purpose of these activities was to provide qualitative data that could be combined with quantitative data such as the family survey to assist in:

- identifying needs and promoting best practices that can lead to an increase in family engagement
- assessing the effectiveness of parent engagement efforts
- providing self-assessment data, and
- identifying strategies to increase feedback.

In FY18, focus groups were conducted with five CDSAs. The main themes that evolved from the sessions and phone interviews were as follows:

- Parents reported that the distraction of everyday demands were the primary barriers to completing the family outcomes survey
- Parents felt “overwhelmed” because of day-to-day demands and navigating all that needs to happen in any given day
- Most parents felt that taking on a Parent Leadership role would be too time consuming
- Families indicated that their coordinators were accessible and responsive to their concerns and the needs of their family, and they overall felt that their service coordinators were helpful
- Families reported that they would like opportunities to get together to learn from and share with each other
- All participants expressed some level of anxiety about exiting the program and transitioning from IFSP to IEP.

In an effort to enhance family engagement and leadership, the NC ITP contracted with the ECAC to provide parent leadership training with enrolled families. During FY20, these trainings were done virtually.

Children with Special Health Care Needs - Application Year

Priority 7 – Improve Access to Coordinated, Comprehensive, Ongoing Medical Care for CYSHCN

The C&Y Branch is committed to improving access to coordinated, comprehensive, ongoing medical care for CYSHCN. Assuring that children with and without special health care needs have a medical home in which they receive family-centered care is one goal of the Branch. To help gauge progress in this area, the C&Y Branch will continue to monitor data for NPM#11 (Percent of children with and without special health care needs, ages 0 through 17, who have a medical home), In addition, two ESMs have been selected: the percent of CYSHCN who received family-centered care as reported in the NSCH (2017-18 baseline is 87.4%); and the number of Medicaid, Managed Care Organization, or other stakeholder meetings attended by WCHS staff members with an agenda item related to medical home promotion (goal is at least eight meetings per year). The access to coordinated, comprehensive, ongoing medical care been even more important during the COVID-19 pandemic when many CYSHCN did not receive well and sick care services (including preventive health screenings and immunizations). The decline in visits and vaccines were for several reasons which included, but was not limited to, fear of being exposed to COVID-19 and providers not being able to provide full services, offering telehealth, challenges with broadband access, shift for some time to less in person care for all ages, and prioritization for in person care for children 2 years and under.

Education for Providers Regarding Medical Home

In FY22, information to support the medical home approach when serving as a primary care provider and partnering with medical homes will continue to be included in Child Health Program live and archived webinars that will be scheduled throughout the year for LHD clinical staff. Child Health provider web-based trainings will continue to be held at least quarterly to address specific needs for CYSHCN during COVID-19 which include but are not limited to: ongoing need for well care, immunizations, social determinants of health, use of telehealth, and virtual patient communication. The Child Health Training Program will be held once during the fiscal year to train new CHERRNs. Bright Futures preventive health recommendations will continue to be promoted for use in all LHDs to support comprehensive care of CYSHCN using the medical home approach and the identification of children as CYSHCN. Audits of services in LHDs will continue to support the need for linkage to a medical home or communication with the medical home as part of Medicaid requirements for well visits at all ages if the LHD is not serving as a medical home. The PMC will also explore opportunities with the NCPS, NC Medical Society Leadership College Program, and other events to promote family engagement in medical homes and will collaborate with the Branch Family Liaison and Branch Family Partners to develop a webinar for providers. The PMC will also explore interest from providers and other agencies about the use of the Family Voices Family Engagement Checklist or Family Engagement in Systems Assessment Tools (FESAT) and discuss the use of PACL training to help practices increase engagement of families and use of family advisors in the processes and policies of medical homes and their agencies. NCODH will also continue to offer accessibility reviews for LHDs at their request to enhance the care of CYSHCN and to assist in achieving accreditation requirements.

To increase the percentage of families of CSHCN who report that their children receive family-centered care, the C&Y Branch plans to continue several programs and activities during FY22. The CMARC program, which serves Medicaid and non-Medicaid children birth to five years of age, will continue to work to improve health outcomes for newborns, infants, and young children in partnership with their medical home, the Prepaid Health Plans, and clinically integrated network care managers during Medicaid transformation. CMARC care managers also provide outreach to make sure CSHCN are cared for in a medical home which includes children involved with DSS and especially in foster care. The WCHS continues its partnership with the DSS, DMH/DD/SAS and other partners to provide care coordination for infants exposed prenatally to substances. In addition, as NC moves into Medicaid Managed Care in FY22, the CMARC program will continue to support families of children who were in the NICU, exposed to toxic

stress, and have or are at risk for special health care to access care in a medical home. CMARC will continue to identify children and families whose health could be impacted by social determinants and connect them to community resources. Three areas of the state will serve as pilots for the NCDHHS Healthy Opportunities efforts to address non-medical drivers of health. Work on SDOH will also continue as part of Medicaid Transformation and the use of NCCARE360, a statewide coordinated care platform to link individuals to resources. Webinars and care pathways will continue to be developed and made available for CMARC care managers to help them partner with medical homes to care for children with a variety of conditions such as asthma, sickle cell, foster care, and substance affected infants .

Title V funds are used to support CMARC services for children, birth to 5 years of age, ineligible for Medicaid. The CMARC care managers will continue to use data reports to identify children who are receiving CMARC services that are not enrolled in Medicaid so that those children can be assessed for Medicaid eligibility. Additional C&Y Branch staff members will continue collaboration with ACA outreach efforts to ensure that continued enrollment in public and private health insurance is available to all families and that transition services from Health Choice are coordinated.

The Governor-appointed Commission on CSHCN will continue to monitor the quality and availability of services for CSHCN. The Commission's activities will include providing ongoing feedback and recommendations to NCDHHS on Medicaid Transformation, begun July 1, 2021, with many CYSHCN-moving from fee-for-service (Medicaid Direct) to the Standard Plan in Medicaid managed care. However, there are several thousand children and adults with special and complex mental and physical health needs who will not be moved to Standard Plan under Medicaid Managed Care and remain in fee-for-service at this time. The Commission will continue to provide feedback and recommendations to NCDHHS regarding the Tailored Plan to be implemented in 2022 and the Specialized Foster Care Plan to be implemented in 2023. In addition, the Commission will continue to monitor the availability and quality of services for CYSCHN who are receiving services through the Innovations Waiver while recommending that additional slots be made available to children on the wait list.

The Commission will continue to support NCDHHS efforts regarding telehealth and teledentistry during COVID-19 and in the future as appropriate. The Commission will reach out to the Secretary of NCDHHS to encourage ongoing use of telehealth as appropriate to meet the needs of CYSHCN. In addition, it will work with partners to help ensure that the necessary technology and bandwidth are readily available in underserved communities.

The Commission's Behavioral Health Workgroup will continue to monitor and provide recommendations on the ongoing development and implementation of the Tailored Health Plan for children and youth with intellectual and developmental delays and complex behavioral health diagnoses. In addition, the workgroup will continue to partner with state-level and non-profit agencies to ensure that CYSHCN at all ages receive the necessary behavioral health services, which are crucial, especially post-pandemic.

The C&Y Branch will continue to support a Title V Parent Representative to participate on the Commission. Additionally, the C&Y Branch supports the Title V Parent Representative to attend two workgroups of the Commission. Branch staff will continue to support the Commission on CSHCN and its related committees (Behavioral Health and Oral Health) by preparing reports, gathering data, and explaining the implications of proposed policies that keep these entities informed and focused on the interests of children and families.

The CYSHCN Help Line Coordinator and PMC will continue working with a large pediatric medical home with several locations in a rural county and several community practices as part of an academic health system to increase use of the Help Line and also to increase conversations about issues coming up for CYSHCN in medical homes in the community. The Help Line Specialist and medical home providers and staff will be developing processes for how to best work together to serve CYSHCN and their families including, but not limited to, children with new diagnoses,

addressing needs for enrollment in a variety of state and local programs, and HCT. The goal is to learn from these efforts and try to increase collaboration and communication between medical homes and the Help Line to increase the ability of medical homes to better serve CYSHCN.

Several staff members will continue to serve on state stakeholder advisory committee of EarlyWell Initiative. The PMC will continue to serve on the Medical Home Work Group to address how to best increase the knowledge, skills and abilities of medical homes to promote relational health and to identify and address social emotional concerns and social drivers (including structural racism) using a family-centered equity lens. This includes value-based payment strategies to compensate medical home providers for meaningful and ongoing family engagement such as serving as family advisors.

Education for Families

As a result of the CYSHCN strategic planning sessions in FY20, the C&Y Branch, in collaboration with BFPs, developed a CYSHCN webpage geared toward families. The webpage maintains current information and resources that address several key topics including: Diagnosis and Healthcare, Insurance and Financial Support; Family Support; Education Resources; Transition to Adulthood; and Advocacy/Legal. The webpage is updated regularly by the Help Line Coordinator, who receives ongoing feedback from families. The C&Y Branch, in collaboration with families, providers and agencies, will review and revise the regular communication regarding Help Line services with families applying for Social Security Disability Insurance.

The C&Y Branch will continue to maintain a statewide toll-free Help Line (available Monday through Friday) and email to assist families and providers with services for CYSHCN, including relevant up-to-date resources on COVID-19. Quarterly CYSHCN Help Line reports will be used to evaluate the call volume and Help Line inquiry characteristics. Reports on call volume and call requests will be shared quarterly with the NC Coalition to Promote Health Insurance for Children and with the Commission on CSHCN. The Help Line Coordinator, CYSHCN Access to Care Specialist, and Minority Outreach Specialist will continue to include and discuss access to Health Check and Health Choice insurance options via scheduled presentations and exhibits using materials designed for diverse racial/ethnic groups in NC. Help Line outreach efforts will utilize NC Medicaid's Enrollment Dashboard (https://dma.ncdhhs.gov/reports/dashboards#enroll) which reports the number of people by county and program aid category who have received a Medicaid or Health Choice identification card and are authorized to receive Medicaid or Health Choice services for each report month. Staff members will also use the SCHS's NC Social Determinants of Health by Regions story board maps. The Help Line staff will also explore the feasibility of adding a random phone call survey to Help Line callers to complement the existing online feedback survey. The Help Line Coordinator and PMC will explore the use of a series of questions with Help Line callers used by the Massachusetts Title V Program related to different transitions experienced by CYSHCN such as child care, EI to school, transition to adulthood/postsecondary life, hospital or health facility discharge, and guardianship.

As NC will be getting ready for its hurricane season in FY22, the needs of CYSHCN during a natural disaster and a pandemic will be greater than ever. As a result, the NCODH Director will continue to partner with NC Emergency Management to ensure the needs of CYSHCN and families are included in state and local disaster planning, response and recovery. NCODH will prioritize the dissemination of emergency preparedness resources through networks to ensure families have access to the information needed to prepare for hurricane season.

The PMC will continue to promote the need to address emergency preparedness for all children including CYSHCN during presentations and discussions with a variety of agencies including but not limited to LHDs, Emergency Medical Services for Children, DSS, pediatricians affiliated with Mountain Children's Network (covering the western

part of the state), the NC Medical Society (state chapter of the AMA), and the NCPS (state chapter of the AAP). This includes the need to prioritize well child care, immunizations (including COVID-19 vaccination), and screening for social drivers and emotional and mental health concerns during times of disasters (such as the current pandemic and seasonal hurricanes) and afterwards, especially for CYSHCN.

The NC EHDI program will continue to maintain the ncnewbornhearing.org website with an entire section dedicated to parents (https://www.ncnewbornhearing.org/Parents.asp). Additionally, the website includes a resource section for the purpose of educating families of children who are deaf or hard of hearing on the following topics: 1) Learning about Hearing Loss; 2) Supporting Families; 3) Finding and Obtaining Services; and 4) Helping to Pay for Services. These resources will be maintained and updated regularly.

Increasing Family Engagement

The C&Y Branch will continue to develop its multi-faceted family engagement activities in FY22. The BFP Steering Committee will meet quarterly and plans to fill two Family Partner vacancies through an application process. The new members will be selected to ensure diversity of the overall Committee's experience with the system of care for CYSHCN. Additionally, geographic, racial, ethnic, gender, sexual orientation, and ability will be taken into consideration to ensure a diverse Committee. The focus on less talking, more action and decision making will remain. Branch Family Partners are included in all aspects of program planning, implementation and evaluation. The C&Y BMT, the Unit Manager for Early Intervention Part C, and the Project Director of the Family Resource Center of the South Atlantic (the Title V family to family resource center) meet with the BFP.

The Parent Leadership Training Cadre will continue to deliver the PACL curriculum across the state. Plans for FY22 include increasing advertising of the curriculum to the Spanish speaking community and developing a webinar option for all of the modules, based on the successful pilot webinar series developed in FY20 for the UNC Cochlear Implant Center Parent Navigators. The C&Y Branch will explore opportunities for BFPs to partner with medical homes to advise on the development of family advisory councils in the medical home. The PACL curriculum can be utilized to support the development of members of the family advisory councils.

In FY22 the FLS will hold regular phone or webinar meetings with the IA Parent Outreach Coordinators to provide support and guidance, as well as host an opportunity for them to share best practices, successes/challenges, and support each other in their work. The FLS will also pilot the Sexual Health for CYSHCN training for families of CYSHCN, which was developed by BFPs and the FLS.

The C&Y Branch will continue to partner with the FRC of the South Atlantic, holding quarterly meetings where efforts to determine opportunities for collaboration, share training opportunities, and reduce duplicative efforts are discussed.

The C&Y Branch will continue to offer Triple P Stepping Stones seminar training events to further expand into unserved regions of the state or offer a more advanced level of Triple P Stepping Stones to the first cohort of twenty BFPs who were previously trained. The C&Y Branch will also continue to support two parents of CYSHCN who are trained as Triple P practitioners to attend the quarterly, statewide NC Triple P Learning Collaborative, the Partnership for Strategy and Governance, and the NC Triple P Partners Collaborative.

In an effort to educate others using learned and lived knowledge, the C&Y Branch will continue to pair staff members with a parent or youth to develop and co-present at conferences, workshops, and webinars. These training teams reflect the natural complement of experience that everyone contributes to the topic.

Each year the C&Y Branch supports families to attend the AMCHP national conference. The scholarship recipients are chosen by the BFP Steering Committee via an application process. The C&Y Branch plans to support six parents/caregivers of CYSHCN to attend the 2022 AMCHP Conference. Three parent/caregivers will be selected to attend as C&Y Branch AMCHP Scholars, defined as a parent/caregiver of a CYSHCN age birth to 21 who has previously been sponsored to attend an AMCHP conference by the C&Y Branch. Three parent/caregivers will be selected to attend as C&Y Branch AMCHP Ambassadors, defined as parents/caregivers of a CYSHCN ages birth to 21 who have not previously been sponsored to attend an AMCHP Conference by the C&Y Branch. The rationale for having Scholars and Ambassadors is that there is value in sending parents who have never had this opportunity because they have a unique energy and drive, but there is also value in sending a family partner that has previously been sponsored so that they have an opportunity to build on the knowledge gained from their last AMCHP conference.

The NC EHDI program will expand family engagement by hiring up to two additional parents of children who are deaf or hard of hearing to serve as EHDI Parent Consultants. The NC EHDI Advisory Committee will continue to have no less than 25% of its membership be parents of children who are DHH or adults who are themselves DHH. Families will be involved in presentations at local, state and national meetings to share their lived experiences with key stakeholders.

The NC SHC Program will expand its family and youth engagement through their participation in the bi-annual NCSHC Advisory Council Meetings and on behalf of their state funded health centers at the C&Y Branch meetings. The NC School Health Center Advisory Council's primary purpose is collaboration with the NC SHC Program in order to address, advise and respond to the Program's policies, procedures and proposals and provide input into and feedback about Program decisions affecting state funded SHCs. Students will provide presentations for council members and branch staff about their positive school health center experiences. They will also share feedback about how youth are effectively communicating with the health care staff and suggest ideas for increasing adolescent enrollment at their school health center. Through these activities, the NC SHC Program will increase internal collaborations with the FLS and BFPs and increase external collaborations with youth, families, and school health center staff.

Outreach Efforts

C&Y Branch efforts to collaborate with Latino and refugee community-based organizations will also include efforts with community health workers (promotores de salud) to ensure an understanding of services for CYSHCN. The Minority Outreach Coordinator will continue work with the NC Community Health Workers (CHW) Coordinator in the Office of Rural Health as training is developed and conducted by the state's community college system.

Innovative Approaches Initiative

FY22 marks the final year of the three-year (2019-2022) funding cycle for IA. The C&Y Branch will continue to support four LHDs (serving ten counties) to assess and improve the local systems of care for CYSHCN through their IA initiatives. IA sites will continue to work directly with families to implement action plans addressing community systems of care for CYSHCN. IA officially received a Best Practices designation from AMCHP in November 2018. To continue to build the evidence for IA, the initiative will enter year three of a three-year plan to undergo a rigorous process of evaluation to link effectiveness in improvement of NOM 17.2 and NPM's 6, 11, 12, and 15. In addition, IA sites will continue to leverage external funds to support the goals of Title V.

NC IA will continue to be highlighted as a Best Practice on the AMCHP Innovation Station website, on HRSA's Rural

Health Information Hub, via AMCHP's NPM 6 Toolkit, and via AMCHP's Implementation Road Maps Learning Module which highlights state's work on the focus areas of the Alliance for Innovation in Maternal and Child Health. Furthermore, IA continues to produce and share Snapshot of Success stories which highlight IA strategies at work and serve as a reference point for replication of IA projects.

The local IA projects are required to have a parent of CYSHCN serve as co-chair of the steering committee and parents must also serve on subcommittees. All IA sites will continue to utilize a part-time Parent Outreach Coordinator position in FY22 whose primary purpose is to perform outreach activities to engage parents of CYSHCN and to recruit their active involvement in the IA initiative. This position works collaboratively with parents, primary care providers and community agencies to improve the system of care for CYSHCN up to age 21. In addition, the position assists with carrying out action plan projects for IA which address education and support needs for parents and caregivers of CYSHCN as well as information and support for care providers and community agencies serving CYSHCN regarding available resources and how to the access/navigate the service system. All IA counties will continue to coordinate formal mechanisms, such as focus groups and surveys, to receive input from parents of CYSHCN at a minimum two times per year in an effort to thoroughly examine the community system of care for CYSHCN and inform action plan priority areas.

Each IA site will continue to have a Parent Advisory Council (PAC) which is a diverse group of parents and guardians of CYSHCN. The PAC is committed to advocacy and educating other families, agencies and healthcare professionals on issues that affect CYSHCN. PAC members will continue to meet monthly with service providers and agencies to promote collaboration and make recommendations as appropriate to the IA Steering Committee.

IA PAC members will serve external to IA on a variety of community and state level advisory boards/groups such as the ECAC Board of Directors for a term of 10/2018-9/2021, NC Council for Developmental Disabilities Board, Birth-Five Council, Special Olympics Family Advisory Committee, local Smart Start boards, the University of North Carolina at Pembroke's Adolescents Transitioning to Leadership and Success (ATLAS) project, Cabarrus Mental Health Task Force/Advisory Board, Union Local Interagency Coordinating Council, Cabarrus System of Care Collaborative and the National Alliance of Individuals with Dual Diagnosis. IA parents will also serve as consultants within their communities and provide trainings on topics including FAS and Autism Spectrum Disorders.

IA sites are also engaging systems of care for young children to reduce the effects of developmental delay, emotional disturbance, and chronic illness. Distribution of Mental Health Flow charts developed by both the Cabarrus and Robeson IA sites to assist with navigation of the MH system will continue in FY22. IA sites are also educating on the connection between adverse childhood experiences and their impact on disability and health and ways to foster resilient communities for CYSHCN. IA's newest goal, which was added in FY18, focuses on ensuring that families of CYSHCN have adequate health insurance and financing to pay for needed services. In FY22, IA will continue to update and promote the Health Care Financing Resources Guide was developed in FY20 to help families of CYSHCN navigate the health care system and to find financial resources to cover therapies, equipment, and other health necessities. The guide also features a glossary to help families manage the technical terms found in the world of health care and health financing. The Health Care Financing Guide was a project of the IA initiative housed within the Cabarrus Health Alliance and the most updated version of the guide can be found at www.resourcecafe.org. As the guide is not an exhaustive list of resources, consumers with additional needs are referred to the NC CYSHCN Help Line for additional resources.

Oral Health Care for CYSHCN

The Commission's Oral Health Workgroup will continue to focus on education and outreach to families and providers and is also charged with providing the Commission with recommendations to promote access to dental providers

accepting Medicaid for children and youth with physical or intellectual disabilities.

Two retired dental hygienists of DPH's Oral Health Section were hired in FY20 to promote the importance of a dental home for CYSHCN and the use of the Dental Home Checklist for CYSHCN among family organizations and oral health providers. They will utilize the presentations developed in FY21 to reach families and oral health providers throughout the state. Presentations will be made available virtually as well as in-person, as COVID may have an impact on travel and in-person contact in FY22. C&Y Branch staff members will be working with the dental hygienists to ensure that the presentations can be delivered virtually on various DPH-supported webinar platforms. BFPs will co-present with the dental hygienists when addressing family organizations and will give their presentations on-line and in-person, depending on the impact of COVID-19 on travel.

Additional Strategies to Support CYSHCN

The SCCNC, working collaboratively with the NC CCHSRC, will continue to provide training, technical assistance, and support for 64 local CCHCs to develop strategies for the inclusion of CSHCN in the state's licensed child care facilities. In the CCHC Service Model, which aligns with *Caring for Our Children* best practice standards, priority of services is given in order of the vulnerability of the children in early care settings, beginning with infants and children with special health care needs.
The PMC and SCCNC will continue to work with Our Children's Place of Coastal Horizons Center to work on developing strategies and tools for CCHCs, child care providers, and local re-entry councils to help support children and their families with incarcerated or returning parents who have children in child care. Our Children's Plan serves as NC's leading advocate and education resource focused on children of incarcerated parents.

The SCCNC will continue to participate in the EarlyWell Initiative, serving on the Child Care work group focusing on supporting and promoting social-emotional health in the childcare setting. The SCCNC will collaborate with the NC CCHSRC to develop toolkit modules to support caring for and the inclusion of CSHCN in the early learning setting. Module topics include Gastrostomy Tube Feedings, Diabetes, Seizures, Asthma and Anaphylaxis. The SCCNC will participate with the NC CCHSRC to share toolkit resources to CCHCs through learning collaboratives.

The Branch SPHGC will continue to provide additional trainings and technical assistance about children and youth with and at risk for genetic conditions in FY22. The SPHGC will explore updating a training which offered NCPD credits to provide guidance on how to take a family history/pedigree for nurses, physician and other interested health professionals. The SPHGC will continue to respond to additional requests from providers for other genetic topics and trainings in FY22 as part of Infant Toddler in-service trainings for CDSAs. The state GGAC, made up of professionals, families, and other stakeholders with interest in genetics, will continue to meet quarterly to discuss genetic issues and implement components of the 2020 NC Public Health Genetic and Genomics Plan. Sub-committees will continue to meet to focus on actions and goals in each of the three priority areas: Genetic Services and Testing; Education and Communication; and Epidemiology and Surveillance. The GGAC and three Sub-committees will continue to be staffed by the SPHGC.

The EHDI Advisory Committee will continue meeting quarterly and will assist with outreach efforts and program evaluation. EHDI Program staff will increase collaborative efforts with other programs and agencies such as CMARC, Family Connects, EIB, MIECHV, NFP, PCM, LHDs, WIC, Hands & Voices, National Center for Hearing Assessment and Management (NCHAM), HRSA, CDC, and EHDI programs in other states and territories to influence system change.

The EHDI program will work with The CARE Project to provide opportunities for parents and professionals to support

each other along the emotional journey of children who are deaf or hard of hearing. Parents as Collaborative Leaders training will continue to be offered to families across the state in collaboration with family support groups and agencies.

The EHDI Parent Consultant will lead an EHDI Parent Support Team, formed to offer parent-to-parent support for families of children who are deaf or hard of hearing. The initial team consists of six mothers of children who are deaf or hard of hearing and is diverse in race/ethnicity, communication mode, language (ASL, Spanish), geographical location, and type of hearing technology used (hearing aids, cochlear implants, no technology). Initially, the EHDI program will partner with the Early Learning Sensory Support Program for Children with Hearing Impairment to enroll families in this support program.

Current information about the receipt of intervention services and the outcomes of D/HH children that are identified through EHDI programs is limited. With the shift in focus toward evaluating long-term outcomes for children who are D/HH, the EHDI Program will enhance collaborations with educational programs serving these children with a focus on language, educational, and literacy outcomes. Appropriate Memoranda of Agreement will be developed to allow data sharing between the NC DPH and the NC DPI in a manner that is compliant with both HIPPA and FERPA regulations.

WCSWeb, the EHDI information system, will be enhanced, in collaboration with the Preschool Development Grant, to allow for data to be integrated into ECIDS. The ECIDS Governance Council has recommended integration of EHDI data into ECIDS to facilitate earlier assignment of a unique identifier which can be used to match data from a variety of early childhood programs and better measure outcomes for children. This work also contributes to the NC ECAP.

The EHDI program will continue to facilitate a “Common Ground Initiative” with key educational and health partners to engage in critical conversations to address conflicts that have arisen affecting schools and programs serving children and youth who are deaf or hard of hearing and their families over time. The goal of this initiative is for Schools for the Deaf, OPTION Schools (Spoken Language), and health professionals to be able to continue collaboration on behalf of the education and whole person development of all deaf or hard of hearing infants, children, and youth so that all of these children reach their full potential. Fourteen “Shared Understandings” have been developed by the NC Common Ground Workgroup. During FY22, these Shared Understandings will be broadly disseminated to stakeholder groups to facilitate discussion on proposed policy changes to decrease disparities in educational opportunities and outcomes for deaf and hard of hearing children in NC. Early identification of hearing loss in children, followed by appropriate and timely intervention, are key contributors to goal 8 (high quality early learning), goal 9 (on track for school success) and goal 10 (reading at grade level) of the NC ECAP.

The AAP has named a new NC EHDI Chapter Champion, who is deaf, to work closely with the EHDI Program. The developmental pediatrician will: 1) participate on the EHDI Advisory Committee; 2) provide consultation and support to new learning communities created across the state; 3) continue to provide feedback on program materials and correspondences targeting the medical home; and 4) consult with the NCPS and the C&Y PMC to identify strategies to share hearing loss information with its members, including presentations at meetings.

The EHDI Program’s Parent Consultant will continue to engage parent partners in EHDI activities. Additional parent members will be sought for: 1) participation on the EHDI Advisory Committee; 2) participation on EHDI Program committees; 3) review and development of program materials; 4) participation in one of the EHDI learning communities focused on increasing engagement of the medical home in the EHDI program; 5) attendance at Parents as Collaborative Leader Trainings; 6) attendance at the National EHDI conference; and, 7) co-presenting with EHDI regional consultants at stakeholder meetings, conferences, and during Better Hearing and Speech month activities about the importance of newborn hearing screening and timely follow up. In addition, the State Title V

Agency will continue to leverage resources to support a variety of contracts including genetic/metabolic services, screening to identify at-risk infants with neural tube and other birth defects, multidisciplinary craniofacial services for children, and treatment for communicative disorders related to hearing loss.

The EHDI program will continue to staff and coordinate a state-wide Cytomegalovirus (CMV) workgroup, made up of newborn screening stakeholders, families, audiologists, laboratorians, researchers, infectious disease specialists, otolaryngologists, pediatricians, and other medical providers. This workgroup will continue to explore and provide education to healthcare providers and the general public on CMV in efforts to increase awareness. They will also explore current screening protocols in NC and make recommendations for change as needed.

The EHDI Program will work collaboratively with the Division of Services for the Deaf and Hard of Hearing to implement the recommendations made by the Task Force on Access to Health Services for the Deaf and Hard of Hearing. This Task Force was convened in partnership with the NCIOM, and the recommendations are found in the *Assuring Accessible Communication for Deaf, Hard of Hearing, and DeafBlind Individuals in Health Settings* report. Since the onset of the COVID-19 pandemic, the need for communication access has risen to a new level of importance, especially in light of mandates and recommendations for the wearing of masks. Telemedicine was not specifically addressed in the current report, but as a result of COVID-19 and increased use of telehealth, the Task Force may reconvene to address this issue during FY22.

Ensuring Health Care Transition (HCT) Services

One component of improving access to coordinated, comprehensive, ongoing medical care for CYSHCN is to ensure that YSHCN make transitions to adult health care. The C&Y Branch has set an objective to improve this indicator as measured through the NSCH by 10% from a 2017-18 baseline of 24.1% to 26.5% by 2025.

Medical Home Work Group to Continue to Include CYSHCN Strategic Plan HCT Recommendations

During FY22, the Medical Home Work Group (previously known as the Transition Work Group) will move towards addressing medical home more broadly and continue to include transition as a significant component of the medical home approach. The IA Director, in partnership with several Branch staff members, including the PMC, Adolescent Health Coordinator, Help Line Coordinator, and Family representatives from the BFPs, on this work group will continue to coordinate efforts on medical home and HCT at the Branch level. The Medical Home Work Group will continue to reach out to other states and external partners in NC to learn about their efforts and partner with them as appropriate and continue to implement and revise relevant CYSHCN Strategic Plan Recommendations related to medical home and HCT. The work group will explore the goal cards developed by the Wisconsin CYSHCN program for use with medical homes and families to increase family-centered care by addressing a variety of goals that include the following categories: communication, community, social and school, home and family, independence, and medical and health.
The CYSHCN webpage will continue to provide information on transition and will be updated to include additional resources on a regular basis.

The Commission on CSHCN will explore the development of sample language for Transition of Care policies based on IA efforts and academic and hospital transition policies.

The PMC will also continue to maintain and promote communication among academic and community providers working on HCT efforts for YSHCN and with Branch programs to share best practices. The Help Line for CYSHCN links families to the ECAC, GotTransition.org, and the AAP for transition information and resources. The Help Line

staff members will explore how the Massachusetts Community Service Line addresses transitions across the life course which includes HCT as part of a script for all callers to the Help Line to better assess needs for children and their families. The SHC program will continue to emphasize the importance of “on-site” clinical services to support the needs of YSHCN and to support programs, incentives, and educational opportunities that help adolescents transition into all aspects of adult life. Addressing transition as a requirement of the annual well visit for all adolescents is strongly recommended NC Medicaid Division of Health Benefit’s HCPG.

MIECHV and CMARC programs will increase efforts to work on HCT skills with adolescent mothers served by their programs or whose children are served by these programs. The PMC will provide resources and TA specific to engaging adolescents and ways to incorporate HCT into home visits and care management and in consultation by CCHCs with child care facilities.

IA Transition Activities

IA meetings that focus on transition will provide opportunities for IA sites to share educational materials, policy changes and events focused on transition in their communities. The IA Director will develop a menu of options that can be replicated in other communities. This information will be made available on the CYSHCN webpage.

The Robeson County IA initiated the (Adolescents’ Transition to Leadership and Success) ATLAS project and will provide guidance and updates to other IA sites to determine if could be replicated in the remaining IA counties. This model pairs adolescents with chronic illness with mentors who are college students as well as youth from the community to provide social support for adolescents with chronic medical conditions and a forum to discuss and improve the experience of being an adolescent with a chronic illness. The goal of the group is to explore personal experience and reach out to others to try to improve the experience of being a teen with a chronic illness through monthly meetings, social activities, and service projects.

Health Care Transition for Youth in Foster Care

The PMC will continue to co-chair the Transition Age Work Group with Fostering Health NC. C&Y Branch staff members will continue to be involved, and additional staff will be identified to serve on the work group, which was established to assist in education, resources development, and outreach to transition age youth who are exiting, or have exited, foster care to help ensure better health outcomes through improved health programming. Activities will include reviewing and enhancing DSS protocol and guidance on informed and shared decision-making regarding health care for youth in foster care and aging out of foster care. The work group will partner with youth from Strong Able Youth Speaking Out (SAYSO), several other agencies with a focus on improving the health and well-being youth in foster care and health care providers caring for children in medical homes. This workgroup will work on the development, review and update of protocols, guidance, and education with DSS, the NCPS and NC Medicaid on informed and shared decision-making. The work group will also continue to provide feedback on the development of the Specialized Plan for Children in Foster Care. The work group, in partnership with DSS, will survey youth currently and formerly in foster care from ages 12-21 years throughout the state to ask about their health priorities and issues related to transition. Through the work group, Branch staff will collaborate with LINKS, NC Child, Youth Villages, Bright Futures at Wake Tech, Medicaid, SAYSO, and other stakeholders to develop and pilot educational resources for youth on transitioning to an adult medical home and applying for Medicaid. The plan is also to recruit and support a youth co-chair during FY22 to help lead the efforts of the work group and to also increase the youth-centered engagement strategies to accomplish the activities of the work group.

Modifications to Agreement Addenda and Contracts

The Medical Home Work Group will make recommendations to incorporate the use of one or more of the chosen transition tools within LHD and pediatric practices to assist parents, youth and practitioners in the transition planning process. Staff will explore ways to incorporate transition recommendations into agreement addenda and contracts for the FY23 contract year, including providing some sample transition of care policy statements that practitioners can adapt/adopt for their practice.

Prophylactic Antibiotics for Children with Sickle Cell Disease

During FY22, the Sickle Cell Education Consultant will work with the Sickle Cell Data Manager to incorporate a data element into the WCSWeb database by December 31, 2021, to track the date that each SC Educator Counselor completes discussions with parents about the importance of administering penicillin prophylaxis based on the toolkit which was rolled out in FY21.

The Sickle Cell Education Consultant in collaboration with the NCDHHS Office of Communications will submit the provider webinar slides focusing on the importance of prophylactic antibiotics and strategies through the Public Affairs approval process. Once approval is received, the provider webinar will be posted on the WHB website. In addition, outreach efforts will be carried out to promote awareness and increase provider knowledge about the importance of prophylactic antibiotics for infants and young children living with sickle cell disease.

Social Emotional Health of Children Served Through the CDSAs

The NC ITP will continue its efforts to provide timely and comprehensive early intervention services for children with special developmental needs and their families during FY21. One specific area in which the NC ITP goals overlap with those of the MCHBG is in improving the social emotional health of the children served through the CDSAs. The EIB would like to increase the percentage of children enrolled in the ITP who increased their rate of growth in positive social-emotional skill from 74.3% (FFY19 baseline) to 85% by 2025. This increase represents the average score needed to reach the top 10% of all states and territories for this indicator. This indicator also aligns with Goals 7 (Social-Emotional Health and Resilience) and 9 (On Track for School Success) of the ECAP. Specific NC ITP strategies toward reaching this goal include implementing statewide universal social-emotional screening using the ASQ-SE as well as enhancing and expanding the use of other evidence-based social-emotional assessment tools. In addition, the NC ITP will increase the number of Infant Mental health Specialists available as staff and contract providers.

The NC ITP submitted a proposal to the Preschool Development Grant (PDG) that included training and professional development on early childhood mental health/social emotional development. Embedded in the proposal was training for EI staff on Attachment and Biobehavioral Catchup and professional development in social emotional health, assessment and identification. The ITP is receiving technical assistance from the National Center on Child Poverty and Georgetown Center for Children and Families, through the Promoting Research-informed State Infant and Early Childhood Mental Health Policies and Scaled Initiatives (PRiSM) project that promotes efforts to achieve positive outcomes for infants and young children by highlighting research-informed infant-early childhood mental health state policies and scaled initiatives. In additional to PRiSM, the ITP has been engaging in a TA opportunity from the Zero to Three examining infant and early childhood mental health financing and policy efforts in states across the US. Staff members from the ITP serve on the Leadership Team of the NC Initiative for Young Children's Social-Emotional Health being co-led by NC Child and the NC Early Childhood Foundation and will continue to do so in FY21. NC ITP will also be implementing the Alliance for Infant Mental Health infant mental health competencies as part of their overall system enhancement to support early childhood mental health.

Family Engagement and Leadership

Family engagement and leadership is critical throughout the NC ITP. In addition to the early childhood mental health proposal, the EIB also submitted proposals to the PDG related to system priorities related to family engagement and leadership and teletherapy. With PDG funds, the EIB will continue their commitment and work around family engagement and leadership by enhancing family engagement in NC ITP for Preschool Transition and developing family engagement activities to support LICCs.

One of the most significant challenges is when a family moves from ITP services to preschool services. The NC ITP will partner with the ECAC to engage families early and provides resources, tools, and training to ease the transition from early intervention to preschool services. These activities will align with, and support, the guiding principles as outlined in the NC Early Childhood Cross-System Family Engagement and Leadership Framework.

In NC, LICCs are responsible for child find efforts, public awareness/communication, and the facilitation of collaborative community efforts on issues pertinent to the county populations they represent. The LICCs are comprised of community members who have a vested interest in an interagency system of service provision for children birth to five and their families. A July 2019 survey of LICCs revealed two impediments to the successful achievement of these efforts – lack of funding for child find activities and lack of parent representation on the LICC (approximately 60% lack parent representation). This PDG initiative will focus on identifying and removing barriers to family engagement by providing intentional supports and incentives to develop, sustain, and empower families through self- and community advocacy to inform local and state-level decisions. More than 32,500 children are enrolled in or referred to the NC ITP in counties with active LICCs. Working through the LICCs, the NC ITP will create an incentive program to recruit parents and develop a regional LICC conference and communications program to help LICCs establish concrete pathways to recruit and retain family members on the LICCs and fund child find activities.

In addition to these family engagement and leadership activities, the NC ITP will continue to contract with the ECAC to provide parent leadership training with enrolled families. The PACL trainings provide detailed information regarding leadership opportunities available to families at both a state and local level. In addition, the NC ITP will release an online professional development tool for families titled “informed and Inspired Families” which outlines the policy processes and ways families can help influence policies for young children with disabilities and special needs.

Teletherapy Efforts

As part of the original SSIP work, the NC ITP identified a critical need for teletherapy to help reach families in rurally disparate areas of the state. Recognizing that shortages in clinical personnel serving young children across the state and that this shortage is particularly magnified in rural areas, where sparse populations and driving distances compound the problem, teletherapy was considered to expand access to high-quality services equitably across the state. Utilizing teletherapy as a method for providing critical and time-sensitive services helps ensure that needed services such as Speech-Language Therapy are provided to young children with developmental delays at the needed frequency and intensity. With the COVID-19 pandemic, the need for teletherapy has been magnified as a way to effectively support families with needed resources and services.

The EIB, through the PDG, will ensure equity and access to technological and linguistic supports to families enrolled in the program. Provision of teletherapy will be implemented using appropriate devices which are encrypted and confidential ensures that families are protected under both the Family Education and Privacy Rights Act (FERPA) and the Health Information Portability and Accountability Act (HIPAA). Further, interpreter services will be afforded to

families across the state to receive high-quality teletherapy services. In addition, an online self-paced teletherapy module that emphasizes the importance and practical implementation of a coaching approach will be made available to CDSA staff and contracted providers.

Coaching and Natural Learning Environment Practices

The NC ITP also has a goal to continue SSIP efforts to achieve statewide implementation of Coaching and Natural Learning Environment Practices (NLEP) by 2025. During FY21, the ITP will provide training and follow-up support as outlined in the NC ITP Coaching and NLEP Toolkit; maintain a cadre of certified Master Coaches; and establish and maintain a cadre of Fidelity Coaches. In addition, the ITP will continue to partner with the Family Infant and Preschool Program to provide training and certifications opportunities.

Pyramid Model

In addition, the NC ITP was awarded an Intensive Technical Assistance opportunity with the National Center for Pyramid Model Innovations. The program has been actively discussing implementation plans, utilizing the principles of implementation science, for initial implementation at the Winston Salem Children's Developmental Service Agency. The implementation plan will include support to provide staff and provider training and technical assistance opportunities in order to implement the Pyramid Model for Supporting Social Emotional Competence in Infants and Young Children (Pyramid Model). As part of this work, staff from the NC ITP are also participating in a statewide cross-sector Pyramid Model State Leadership Team that brings together early childhood professionals and stakeholders from DPH, DPI, DCDEE, DMH, ECAC, NCPC, and the UNC system (with facilitated support from NCPMI) to discuss and plan for a coordinated, aligned, and integrated implementation of pyramid model across sectors in the state of NC. Key foundations of this work are equity and family engagement.

Cross-Cutting/Systems Building

State Performance Measures

SPM 5 - Ratio of black infant deaths to white infant deaths

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	2.7	
Numerator	12.5	
Denominator	4.7	
Data Source	NC Vital Statistics/SCHS	
Data Source Year	2019	
Provisional or Final ?	Final	

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	2.3	2.2	2.1	2.0	1.9	1.9

State Action Plan Table

State Action Plan Table (North Carolina) - Cross-Cutting/Systems Building - Entry 1
Priority Need
Increase health equity and eliminate disparities and address social determinants of health
SPM
SPM 5 - Ratio of black infant deaths to white infant deaths
Objectives
CCSB 8A.1. The percent of WCHS who complete the Health Equity Foundational Training annually will be at least 90%.
CCSB 8A.2. The percent of WCHS staff who complete the HE Foundational Training within 3 months of hire will be 100%.
Strategies
CCSB 8A.1. Deploy the DPH Health Equity Survey within the WCHS.
CCSB 8A.2. Launch DPH Health Equity Foundational Training in Learning Management System.
CCSB 8A.3. WCHS will identify how they are currently incorporating the five DPH Health Equity Framework strategies into their work.
CCSB 8A.4. WCHS will identify additional ways they can incorporate the five DPH Health Equity Framework strategies into their work.
CCSB 8A.5.WHB will continue to require all LHD staff, clinical and non-clinical to participate in at least one training annually focused on health equity, health disparities, or social determinants of health to support individual competencies and organizational capacity to promote health equity. This requirement is part of their agreement addenda. LHDs are provided a list of low-cost trainings or continuing education opportunities.

State Action Plan Table (North Carolina) - Cross-Cutting/Systems Building - Entry 2

Priority Need

Increase health equity and eliminate disparities and address social determinants of health

SPM

SPM 5 - Ratio of black infant deaths to white infant deaths

Objectives

CCSB 8B. By 2025, decrease the percent of children living across North Carolina in food insecure homes by 6% from 20.9% to 17.5% according to data provided by Feeding America and cited in the NC Early Childhood Action Plan.

Strategies

CCSB 8B.1. WCHS will work with NC CARE360 partners to identify how food insecurity screening, referrals and follow up being tracked in NC CARE 360 and conducted through LHD's can be enhanced.

CCSB 8B.2. Increase training to child health staff around nutrition/food insecurity; create training package; and identify audiences in WCHS and across DPH that would also benefit from these trainings and materials.

Cross-Cutting/Systems Builiding - Annual Report

These Cross-Cutting/Systems Building activities pertain to measures in the 2016-20 State Action Plan, some of which have been moved to other domains in the 2021-25 Action Plan.

NPM#14.1 – Percent of women who smoke during pregnancy
NPM#14.2 – Percent of children who live in households where someone smokes

The WCHS is working hard to decrease the percent of women who smoke during pregnancy (NPM#14.1) and the percent of children who live in households where someone smokes (NPM#14.2). While birth certificate data prior to 2011 are not comparable because of the state's change to the 2003 Revised Standard Birth Certificate in 2010, between 2011 and 2013, the percentage of women in NC who smoke during pregnancy remained just under 11% and this percentage dropped to 7.6% in 2019. Per 2019 National Vital Statistics System data for NC, non-Hispanic Asian (.6%) and Hispanic women (1.3%) were least likely to smoke during pregnancy and non-Hispanic American Indian women were most likely to smoke (18.7%). Non-Hispanic Black women (7.0%) were less likely to smoke than non-Hispanic White women (9.9%) or women of multiple races (10.9%). The 2018-19 NSCH indicated that 14.1% of children in NC lived in households where someone smoked as compared to 14.4% nationally. Children who are between 12-17 years old, whose parents are non-Hispanic (although sample size is small), who live in households at less than 100% of poverty, and who live with single parent, unmarried parents, or grandparents are more likely to live in households with someone who smokes.

NC has a robust partnership of state and LHD partners, universities, and community-based organizations involved in efforts to decrease tobacco use and exposure. Efforts center on prevention, education, counseling, and care coordination. Tobacco screening and counseling is infused within all programs supported by DPH. The Women and Tobacco Coalition for Health (WATCH) shares and disseminates information associated with women's health and tobacco use prevention and treatment across the lifespan. Healthcare providers, including LHDs, are the major partners in the tobacco cessation effort for pregnant women. Support provided to program partners includes training, technical assistance, strategic planning, and educational materials development and dissemination around tobacco cessation treatment. WATCH assisted in the latest development and update of the *You Quit Two* Quit Practice Bulletin (issued May 2019; available at https://youquittwoquit.org/wp-content/uploads/2019/07/YQ2Q-Practice-Bulletin-May-2019.pdf). This 2019 update included a focus on perinatal substance use. This is one of several provider and patient tobacco cessation materials developed and distributed to health care partners throughout the state. All materials are distributed free of charge.

The WHB and C&Y Branches continued to partner with the Tobacco Prevention and Control Branch (TPCB) to support continuing education training for health and human service providers and worked with other programs within DPH to ensure that the tobacco cessation and prevention efforts are embedded in their program efforts. In addition, LHD maternity clinics continued to provide prenatal care which is inclusive of provision of tobacco cessation counseling for pregnant women. The staff in these clinics utilize the evidenced-based best practice 5A's method for counseling about smoking cessation. This method includes screening and pregnancy-tailored counseling and referrals for pregnant women who use tobacco, with one of the primary referrals being to QuitlineNC, a free phone service available 24 hours a day, seven days a week to all North Carolinians to help them quit using tobacco. The www.quitlinenc.com website also has web coaches available and includes resources about helping others quit and secondhand smoke. Pregnant callers to the Quitline continued to be enrolled in an intensive 10-call coaching series provided by a team of dedicated pregnancy quit coaches. Pregnant and breastfeeding women postpartum enrolled in Medicaid who were interested in nicotine replacement therapy continued to be provided standing orders to be able to access 12 additional weeks of appropriate medication after a 2 week starter kit. LHD family planning clinics also utilize the 5A's method in working with women and men of childbearing age, including adolescents.

LHD family planning clinics assess the extent of tobacco use for all patients during the initial visit in the social history, and this assessment is updated at each annual preventative visit. In addition, all adolescents are provided with education and counseling to prevent the initiation of tobacco use. If any patient in the LHD family planning clinic is found to be currently using tobacco products she/he is counseled on stopping tobacco use utilizing the 5A's method approach.

Child health clinic providers in LHDs also continued to include efforts around assessment and counseling during preventive well child visits for youth tobacco use and for secondhand smoke exposure by caregivers during all well child visits for children and youth. An archived webinar from the TPCB continued to be made available to child health care professionals in LHDs about tobacco use and QutlineNC.

One strategy which will help NC improve in both NPMs#14a&b is to increase utilization of QuitlineNC, particularly by women of reproductive age (15 to 44 years). Thus, the WCHS has selected the following measure as its ESM for NPM#14a: number of women of reproductive age (15 to 44 years) who received at least one counseling session from the tobacco QuitlineNC in the prior 12 months. In FY14, there were 2,421 women who completed at least one counseling call, and there were 1,569 women in FY20. Of the women who were counseled, 2% were pregnant. Most of the women counseled used cigarettes only (74%); however, 19% were dual users of cigarettes and e-cigarettes in FY20. In addition, there were 11,311 total calls to QuitlineNC, with 20% of these being women of childbearing age (15-44 years). During FY20, there were 124 women of childbearing age who were pregnant, planning pregnancy, or breastfeeding who entered into the QuitlineNC pregnancy protocol.

In FY18, the WCHS also added ESM 14.2 (number of women who receive tobacco cessation counseling by care managers and/or home visitors) to its State Action Plan in an effort to help decrease the percent of children, ages 0 through 17, who live in households where someone smokes (NPM#14b). In FY20, at least 35,936 women received tobacco cessation counseling from CC4C case managers and other home visitors through NFP and Healthy Families America. CMHRP also provided tobacco cessation counseling, but data for FY20 on how many women received counseling is not available.

The PMC continued to serve as the medical director for QuitlineNC and provide advice and consult with other experts about protocols for nicotine replacement therapy for men and women, including women who are breastfeeding or pregnant. The PMC worked with the TPCB as part of a selection committee to review the RFPs to select a vendor for QuitlineNC to best meet the needs of NC. The PMC with TPCB staff continued to work with QuitlineNC's vendor to review materials and implement future texting and coaching resources for adolescents and concerned parents related to vaping.

The WHB continues to partner with the You Quit, Two Quit (YQ2Q), a program of the UNC CMIH. The goal of YQ2Q is to ensure that there is a comprehensive system in place to screen and treat tobacco use in women and pregnant and postpartum mothers. This project is unique in its focus on low-income women, new mothers, and recidivism prevention. From June 1, 2019 through May 31, 2020, YQ2Q staff members conducted 30 in-person trainings, reaching at least 548 health care professionals who serve women of reproductive age, including physicians, nurses, certified nurse midwives, physician assistants, billing specialists, health educators, social workers, and home visitors. These professionals came from at least 81 different organizations, including 33 LHDs. Trainings have served at least 50 counties across the state, including 20 counties with maternal smoking rates at least 1.5 times the statewide average, with ten of those counties having rates more than twice the state average. Additionally, YQ2Q participated in a Preconception Health webinar (planned as an in-person event, then moved to virtual) in cooperation with the March of Dimes in April that reached health care providers all around North Carolina. YQ2Q led a webinar focused on pregnancy and vaping to over 200 participants at the North Carolina Prevention Conference held by

Community Impact North Carolina. Lastly, in partnership with the state-wide Child Fatality Prevention Teams, YQ2Q led a virtual training on preterm birth and the connection to tobacco exposure. YQ2Q program members also continued to serve as faculty for the UNC/Duke/Tobacco Prevention and Control Branch Certified Tobacco Treatment Specialist training.

The WHB continued distribution of smoking cessation materials to LHDs, hospitals, community organizations, and private providers. These materials, available in English and Spanish, include:

- *If You Smoke and Are Pregnant* (maternal smoking brochure)
- *Oh Baby! We Want to Keep You Safe from Secondhand Smoke* (secondhand smoke brochure)
- *You Quit, Two Quit* (postpartum brochure)
- *E-Cigarettes and Vaping*
- *Benefits of Being Tobacco Free/Facts About E-Cigarettes*
- *Tobacco Cessation and Counseling 5As/5Rs Pocket Card* (provider resource)
- *We Know You Want to Protect Your Family* (secondhand smoke focused on male partners).

A Guide for Helping to Eliminate Tobacco Use and Exposure for Women (training manual) is hosted on the WHB webpage and on the YQ2Q webpage. These materials are also available for download on the WHB website and partnering organizations' websites (e.g., mombaby.org and EveryWomanNC). The WHB partnered with the TPCB and YQ2Q to provide 5 A's tobacco cessation counseling training for LHDs and health care clinics. YQ2Q also produced the 2019 Practice Bulletin for health care practitioners.

With tobacco use during pregnancy being a prevalent risk factor for preterm birth, emphasis on interventions to assist women with tobacco cessation continue to be a priority for Care Managers in the CMHRP. Medicaid recipients who report tobacco use at the same level as prior to pregnancy most likely will have a Maternal Infant Impactability Score of >200 to receive CMHRP services. All women assessed by the CMHRP Program receive the 5A's counseling and the appropriate level of tobacco cessation intervention. Special emphasis is placed on harm reduction and postpartum relapse prevention, as well as the dangers of infant exposure to secondhand smoke. The PMH program has a companion piece for prenatal care providers that aligns with the Tobacco Cessation Pathway for care managers and guidance for screening and documentation of care management activity related to tobacco use in pregnancy and postpartum which will continue to serve as a resource.

The Healthy Start NC Baby Love Plus Program conducted community wide outreach, group and individual education specifically focused on smoking cessation to preconception, pregnant and interconception women during FY20. Family Care Coordinators and Family Outreach Workers screened all newly enrolled program participants for tobacco use at the initial assessment and at each subsequent client contact by their using evidence-based screening tools/questionnaires, such as the 5A's. Pregnant and postpartum participants were also given YQ2Q information. As warranted, referrals were made to tobacco cessation programs and to QuitlineNC. Approximately 93% of pregnant women abstained from tobacco use during their third trimester, and 90% of all program participants abstained from tobacco use during program enrollment.

The Healthy Beginnings program conducted assessments for tobacco use and secondhand smoke exposure with 481 pregnant and interconception minority women at enrollment and during monthly care coordination contacts in FY20. Program staff provide tobacco cessation counseling using the 5As brief tobacco counseling intervention, educational materials and referrals to QuitlineNC.

The Infant Mortality Reduction program provides funding to LHDs in counties that have experienced high infant mortality rates to implement at least one evidence-based strategy proven to lower infant mortality rates. Under the

tobacco cessation and prevention strategy, LHDs provide tobacco use screening and counseling to all clients during health care visits. Tobacco cessation counseling services are provided by trained staff using the 5A's brief tobacco counseling intervention and a trained certified tobacco treatment specialist. Clients are referred to QuitlineNC and/or appropriate community resources, and offered U.S. Food and Drug Administration (FDA) approved tobacco treatment pharmacotherapy support when clinically appropriate. In FY20, the four LHDs that implemented the tobacco cessation and prevention strategy screened 1,288 clients and counseled 68 clients who reported tobacco use.

ICO4MCH project sites provided tobacco cessation and prevention trainings during FY20 to reduce infant mortality and improve health status of children, ages 0-5. There were 144 practitioners trained in 5A's, and 113 practitioners trained in becoming Certified Tobacco Treatment Specialist (CTTS). Previously trained CTTSs worked to assist with an e-cigarette awareness program at local high schools and continued to implement smoking cessation at their local social service agency. ICO4MCH sites also formed partnerships with local county school systems to place smoke free signage on campuses and worked with community health advisors (CHAs) who developed and implemented the "Fresh Life" tobacco prevention program in subsidized housing communities. Furthermore, through the Clinical Efforts Against Secondhand Smoke Exposure (CEASE) strategy, a total of 3,014 children ages 0-5 were screened for secondhand smoke exposure.

The North Carolina Sickle Cell Syndrome Program also utilized the 5A's tobacco cessation tool to screen adolescent and adult clients as a component of the program's required assessment activities. The 5A's tool is embedded in the program's Client Strengths and Needs Assessment.

Air quality in the home, including the impact of smoking, is a known trigger issue for many students with asthma. The statewide School Health Nurse Consultant (SHNC) Team impacted the health of children with asthma by providing technical assistance to school nurses and school staff that provide direct care to students. Schools were closed in early 2020 due to the COVID-19 pandemic, and case management data are not available for School Year 2019-20. School Nurse Care/Case Management programs were located in 49% of local school districts during the shortened 2019-20 school year and provided care to students with not only asthma but also diabetes, weight management, seizure disorder, severe allergies, and mental/behavioral health issues.

NC has seen a significant increase in youth tobacco use. According to the NC Youth Tobacco Survey, between 2011 through 2019 there was a 510% increase in reports of current e-cigarette use by middle school students and a 1129% increase in reports of current e-cigarette use by high school students. NC students were also reporting use of multiple products with 1 out of 2 current tobacco users reporting use of more than one product. Students also reported wanting to stop using tobacco. Among current high school users, 44.9% reported wanting to stop using all forms or tobacco and 41.9% of middle school users also reported this. Among current users, 65.7% of current high school tobacco users reported that they had attempted to quit in the past year, and 74.3% of current middle school users reported that they had attempted to quit in the past year. Child health clinic programs in local health departments continued follow the national recommendations for preventive health visits defined by Bright Futures. This included using evidence-based strategies to assess and counsel about tobacco use (vaping and other forms and not just smoking) in youth and parents at all well visits. The tobacco cessation and counseling service was also allowed as a telehealth option by NC Medicaid in May 2020. QuitlineNC continues to have an adolescent protocol to assist adolescent with cessation. The Tobacco Prevention and Control Branch in partnership with the PMC have been exploring additional options for adolescents that are texted based or use other non-phone methods. QuitlineNC launched a parent/adult ally based option that is web-based to work with youth on tobacco cessation. There are plans to release a web site and tools through QuitlineNC in 2021.

The C&Y Branch PNC had planned to explore inclusion of nutrition and physical activity counseling in smoking

cessation programs to reduce the risk of weight gain and to possibly address smoking as a weight control measure (especially in adolescent girls) in collaboration with the WHB and others. Due to COVID-19 that work did not occur in FY20 but was included in plans for FY21 and FY22.

NPM#15 – Percent of children age 0 through 17 who are adequately insured

The C&Y Branch has many efforts focused on increasing the percent of children age 0 through 17 who are adequately insured (NPM#15). According to the 2018-19 NSCH, 66.6% of parents in NC responded that their children were adequately insured similar to 66.8% nationally. In NC, CSHCN (64.1%) were less likely to be adequately insured than non-CSHCN (67.3%). Children <6 years of age were more likely to be adequately insured than children in the 6 to 11 and 12 to 17-year age groups. Ninety-three percent of parents of children receiving Medicaid responded that their insurance was adequate, while only 58.3% of parents of children with private insurance did. Non-Hispanic Black (79.4%) children were more likely to be adequately insured than non-Hispanic White (67.8%) children. According to data from the US Census Bureau 2019 American Community Survey, 5.8% of all children under 19 years were uninsured in NC, and 7.3% of children below 200% of poverty were uninsured.

In FY19, in the 31 SHCs funded by state dollars, 13% of the adolescents seen (ages 10-19 years) were uninsured or self-pay, and 60% were covered by public insurance (Medicaid, Health Check/ Health Choice). SHC staff work with families to enroll them in appropriate public or private insurance. The manager of this program is supported through Title V funds and provides credentialing, assuring SHCs meet National Standards on behalf of the NC Division of Health Benefits.

WCHS selected an ESM for NPM#15 that highlights the work already being done to promote access to health insurance, but which will also help target future activities to fill in gaps. The ESM is the number of outreach activities to promote access to health insurance done annually by the C&Y Branch's outreach team consisting of the Minority Outreach Coordinator, CYSHCN Help Line Coordinator, and CYSHCN Access to Care Coordinator. A quarterly report breaks down the activities by type of activity (presentation, exhibit, consultation, or collaboration), name of activity, participating audience (caregivers/families or professionals), target population (racial/ethnic), date, location, and staff member conducting the activity. Filling the previously vacant position in December 2019, the Minority Outreach Coordinator who is Latina and bi-lingual, is a trusted voice to the many community partners with whom she works. The CYSHCN Help Line Coordinator position continues to expand outreach efforts within the different tribes residing in the state, along with other marginalized populations. All three positions are funded through a Federal Financial Participation agreement with NC Medicaid. Collectively, they apply both data driven and targeted community approaches for Title XIX and XXI outreach. These approaches include: 1) applying state population data to prioritize under-insured or uninsured residents or communities, 2) providing an ongoing platform to share system-wide outreach and/or collaborative strategies, and 3) maximizing collaborative efforts for more focused, community-level outreach efforts. The outreach team meets monthly with the BPU manager to assess outreach strategies and review outreach data to prioritize outreach interventions. The three FTE staff continue to apply evidence-based and evidenced informed outreach approaches which include utilizing social marketing principles and consider the needs of diverse populations (i.e., preferred languages, ethnic and cultural social norms, the specific concerns for parents/guardians of children with special health care needs, and printed materials designed and developed for low literacy populations).

In FY20, there were 88 activities reported reaching an estimated 10,842 people. The type and frequency of outreach activities include: exhibits at local or statewide events (16%); presentations to families/caregivers or professionals directly working with families/caregivers (27%); and direct consultation/collaboration with community stakeholders to promote benefits of Medicaid/NC Health Choice enrollment (57%). Twenty-one percent of the outreach efforts had special focus on reducing health disparities among African American, American Indian, Latino/Hispanic, and

newcomer (refugees, immigrants) populations. The remaining outreach activities (79%) were inclusive in focusing on all populations who may be unserved or under-served regarding Medicaid/NC Health Choice enrollment opportunities. The volume of outreach events did decline over past fiscal years due to the six month vacancy of the Minority Outreach Coordinator. Additionally, the COVID pandemic imposed quarantine, travel, and social distancing requirements curtailed all community level activities/events which typically occur during mid-March through the end of June. During this latter quarter, the outreach team developed revised strategies to promote NC children's public health insurance options, which included updating the informational flyer in both English and Spanish. https://publichealth.nc.gov/wch/doc/families/HelpLineInformationalCard-WEB-120219-ENGLISH.pdf Staff provided more collaborative opportunities by attending or presenting to various stakeholder organizations/agencies via their virtual community meetings. Additionally, Outreach staff also prepared information packets which were mailed to site contacts for inclusion in their distribution efforts (ex. Food distribution to rural or Latino populations, back to school events). The outreach team distributed 1,569 NC children's public health insurance flyers.

The NC Coalition to Promote Children's Health Insurance is a quarterly platform that offers an opportunity to link with multiple partners in the state system to update strategic planning efforts and partner with CHIPRA grant recipients to ensure statewide coverage. The Coalition is co-chaired by the Executive Director of the NC Pediatric Society and the C&Y Branch Latina Minority Outreach Coordinator. Additionally, the C&Y Branch's Access to Care Specialist for CYSHCN provides staff support. The Coalition is comprised of state and local government, private not-for-profit and business sectors, faith and minority communities, child health advocates, and funders who share best practices, successful statewide and local outreach strategies to in promoting positive health outcomes via access to NC Medicaid and NC Health Choice (CHIP) programs. Coalition topics include: 2020 Census and under reporting of children; Child Welfare Impact of the Opioid Epidemic, the initial rollout and then subsequent pause to Medicaid managed care, and discussions of federal and state trends and its implications on child health.

Using a data-driven approach provides the foundation and justification for prioritizing communities. The NC Division of Health Benefits' enrollment dashboard for Medicaid and NC Health Choice (https://medicaid.ncdhhs.gov/reports/dashboards#enroll) reflects the number of people by county and program aid category who are authorized to receive Medicaid or Health Choice services for each report month. This real-time data platform is an effective resource in targeting the under-insured or uninsured, along with reinforcing reenrollment for current beneficiaries. NC maintains a 95% enrollment in health insurance for children which may be a collective result of stakeholders' ongoing commitment via outreach interventions.

Many of the statewide activities are reliant on local, grassroots outreach via networking with partners. Gaining the trust and building relationships with these gatekeepers is essential to any effective outreach. The three C&Y Branch outreach staff conduct collective outreach efforts by being available to attend their local functions during weekdays, at night, or on weekends. These partnerships among local, community stakeholder promote enrollment, retention, access to a quality medical home, and the importance of preventive services and appropriate utilization. Outreach strategies include population specific events: Latino health fairs, Back-to School events, NC Indian Unity Conference, Refugee Stakeholders meetings, Episcopal Farmworker Ministries, Guatemalan Consulate Board, and Mexican Consulate Board. In addition, outreach activities targeted specific stakeholders: East Coast Migrant Head Start, south central NC pediatric practices, Local Interagency Coordination Councils (for statewide early intervention system), and LHDs.

Another outreach strategy employed in FY20 was promoting access to a dental home in parallel to a medical home, with a particular focus on CYSHCN. The Access to Care Specialist, along with BFPs and a retired dental hygienist/program consultant developed presentations targeting both dental practitioners and families discussing the importance of a dental home and strategies to promote accommodations that support positive oral health experiences between the dental provider and family. Dental provider presentations are conducted by the retired

dental hygienist/program consultant and offer continuing education credits. Another presentation specifically targeting families is co-presented by the retired dental hygienist/program consultant and a vetted family partner. In FY20, there were 45 promotional activities for the dental home trainings. There were originally fifteen presentations scheduled; however, the training team conducted five with the remainder cancelled or postponed due to COVID pandemic imposed quarantine, travel, and social distancing requirements. The presentations were converted to a virtual format to accommodate target audience access. Evaluations from the provider presentation reported that 98% could now identify environmental and communication strategies to support CYSHCN within the dental practice setting. Ninety-six percent would apply what they learned when they return to the dental practice setting. Regarding the family-focused presentation, 92% of attending family partners reported their knowledge regarding oral health for CYSHCN and strategies for working with dental providers had increased as a result of the information learned in this training. Families also reported their increased confidence to proactivity talk to their child's oral health provider about caring for their CYSHCN.

Childhood Immunizations

While most of the funding for childhood immunizations does not come from Title V, the WCHS supports the work of the Immunization Branch (IB) to raise immunization rates across the lifespan. The 2017-2019 National Immunization Survey (NIS) results (for children born 2016-17) were released in the fall of 2020. North Carolina's coverage estimate for the 4:3:1:3:3:1:4 series (which protects against Diphtheria, Tetanus, Pertussis, Polio, Measles, Mumps, Rubella, Haemophilus influenza type B, Hepatitis B, Varicella, and pneumococcal invasive disease) was 80.1%, which was slightly higher than the national estimate of 70.5% and was a statistically significant increase in estimated coverage compared to children born in 2014-2015. Results of the 2019 NIS-Teen, also released in the fall of 2020, showed that the rate of NC teens aged 13 through 17 years who have received one or more doses of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap) since the age of ten years was 92%, compared to the national estimate of 90.2%. Regarding the percent of teens up to date on the HPV series, the NC estimate was lower than the national estimate (49.5% v. 54.2%). The meningococcal conjugate coverage estimate in NC was higher than the national estimate (93.2% v. 88.9%) and showed a statistically significant percentage point increase from 2018.

On July 1, 2019, the CDC-developed quality improvement program formally known as AFIX (Assessment, Feedback, Incentive, and eXchange), underwent several methodological changes and was renamed IQIP (Immunization Quality Improvement for Providers). Like AFIX, IQIP is designed to promote and support implementation of provider-level strategies that were developed to help increase vaccination rates in children and adolescents. One of the key changes to this program is the incorporation of both childhood and adolescent assessments during each visit. Two-year-olds and thirteen-year-olds (as opposed to 13-17-year-olds in AFIX) are assessed to promote on-time vaccination. The follow-up process is also lengthier, extending to one year from the previous 3-6 months, to promote long-term, measurable changes within a provider's office. Strategies were also streamlined and broadened, to allow for wider interpretation. In FY20, the IB initiated 426 IQIP visits. In March 2020, all IB staff were instructed to telework in response to the COVID-19 pandemic. This directive essentially halted all new IQIP visits since it is a requirement that the initial visit be done in person.

Overall, the NC Immunization Program distributed a total of 2,284,442 doses of vaccine, including 427,120 doses of influenza vaccine in FY20.

The PMC continued to work with IB staff members to review a subset of medical exemption requests for immunizations that were non-standard from physicians licensed to practice in NC. There were fewer requests for medical exemptions, and requests were received later in the fall due to COVID-19 and two extensions of the deadline for individuals enrolled in childcare, school, colleges and universities having required immunizations

completed in order to attend the facilities. The PMC continued to work with the attorney general's office on appeals to medical exemption requests.

The PMC provided weekly webinars to child health clinic staff in LHDs from March to May 2020 that included highlighting the need for well visits and immunizations and the decreasing immunizations rates due to COVID-19.

Cross-Cutting/Systems Building - Application Year

Priority 8 – Increase Health Equity, Eliminate Disparities, and Address Social Determinants of Health

The WCHS is committed to increasing health equity, eliminating disparities, and addressing social determinants of health as cited in Priority Need 8. In previous MCH Block Grant applications, WCHS showed this commitment by working to apply an equity lens within each of the priorities related to population domains, but in this year's needs assessment, it was clear that a separate priority need specific to increasing health equity was required. While there are racial and ethnic disparities found in too many different maternal and child health outcomes, the selected SPM for this priority need, the ratio of black infant deaths to white infant deaths, is a sentinel measure. Unfortunately, while mortality rates for black and white infants both were at historic lows in 2018 at 12.2 and 5.0 per 1,000 infants, respectively, NC has not shown any progress in reducing the Black:white disparity ratio over the past two decades. The ratio was 2.3 in 1999, was at its highest at 2.9 in 2009, dropped to its lowest point at 2.2 in 2015, and was 2.5 in 2019. The small gains made during this time were generally due to an increase in the white infant mortality rate rather than a decrease in the black infant mortality rate. In addition to being a SPM, reducing this disparity ratio is a performance measure in the DPH Strategic Plan, a goal of the NC Early Childhood Action Plan, and an indicator in Healthy North Carolina 2030.

DPH Health Equity Framework

Each Branch in the WCHS is working on eliminating disparities and increasing health equity in its own ways including providing staff training, creating health equity teams, and ensuring that data are analyzed by race/ethnicity and other demographics as much as possible. The Division's Diversity, Equity, and Inclusion (DEI) Council developed a Health Equity Framework released in 2020 with these five priority strategies:

1. Utilize data, research, and evaluation to identify and respond to the causes and consequences of health inequity
2. Create opportunities for engaging priority populations in planning, implementing and evaluating DPH strategies
3. Collaborate with partners working to positively impact health of priority populations and the determinants of health
4. Build capacity of Division staff to advance health equity
5. Use tailored communication strategies to educate partners

The WCHS will assess where they are currently with implementation of these strategies during FY21 and identify additional ways they can them into their work. A method to document work done by the WCHS is under development.

DPH Foundational Health Equity Training

The SDoH COIIN team, which is shepherded by a member of the WHB and a colleague with the NC Chapter of the March of Dimes, has developed a foundational health equity training module which was scheduled to be released to all DPH employees as a module in the Learning Management System (LMS) during FY21; however, due to staff vacancies, competing priorities, and COIVD-19 pandemic response responsibilities, the release of the module has been delayed to FY22. The training uses components of the *Health Equity and Environmental Justice 101* training created by the Colorado Department of Public Health and Environment's Office of Health Equity as well as videos and other materials specific to NC. The training will be required of every DPH employee, thus Objectives CCSB 8A.1. (% of WCHS who complete the Health Equity Foundational Training annually will be at least 90%) and CCSB 8A.2 (% of WCHS staff who complete the HE Foundational Training within 3 months of hire will be 100%) should be

achievable and easily tracked and monitored in LMS. After receiving the training, employees will be invited to participate in debrief sessions held by facilitators that will be trained by members of the SDoH COIIN team. It is hoped that this foundational training will ensure that all employees have a basic understanding of health equity principles, but that the learning will not stop with just this training. Other resources will be offered within the module, and the WCHS will continue to encourage professional development and continuing education by staff members in this area.

DPH Health Equity Survey

In January 2020, the DPH DEI Council conducted the DPH Health Equity Survey using a stratified random sample sampling design with organization units as strata. This survey was designed to measure how Division staff members understand and practice health equity at work by measuring the extent to which they 1) recognized the influence of social factors on health, 2) had a knowledge of foundational terms and concepts, and 3) recognized DPH Health Equity Framework strategies as components of their own work activities. The survey was intentionally deployed prior to release of the DPH Health Equity Framework so that a true baseline of health equity knowledge and practices could be obtained. The survey, which was optional, not required, was sent to 408 employees and yielded a 55% response rate. Initial results showed that while 86% of respondents were knowledgeable about the term health disparity, only 53% were knowledgeable about the term health equity. With regard to the five framework priority strategies, respondents agreed that all were important to their roles (range from 51% for “Build capacity of Division staff to advance health equity” to 72% for “Collaborate with partners to impact the health of priority populations”), but not as many respondents thought that these strategies were actually a part of their role, in particular to “Build capacity of Division staff” (29%) and “Create opportunities to engage priority populations in planning, implementing, and evaluating strategies” (34%). In response to the question of “In your opinion, how much does DPH focus on addressing health inequities?”, 28% said the right amount, 32% said not enough, 1% said too much, and 39% said they did not know.

The WCHS conducted this same survey in December 2020 with all of its staff members to get baseline data for the percent of WCHS respondents to the DPH Health Equity Survey who agree that the five strategies are important to their work in DPH and also the percent of WCHS respondents who can appropriately define the terms health equity, health disparity, and determinants of health. With an overall survey response rate of 48%, the results indicate that there is still much work to be done as only 51% of respondents could define health equity. More respondents (88%) could define health disparity, and while 90% or better identified income, employment, housing, education, and social supports as determinants of health, only 43% of respondents identified leadership as a determinant, and 47% identified political influence as one. Thirty-four percent of respondents thought that there is not enough focus on health inequities within DPH and 31% of respondents thought there was not enough focus within WCHS. The majority of respondents said that the DPH Health Equity Framework strategies were important to their work, with the highest percentage (78%) agreeing that two strategies (using tailored communication strategies to educate partners and collaborating with partners working to positively impact health of priority populations and the determinants of health) were the most important. The survey will be conducted annually to measure whether there is improvement.

Additional WCHS Health Equity Plans and Activities

In the scope of work in the agreement addenda with LHDs for maternal health and family planning program activities, some of which are funded completely by Title V, the Women’s Health Branch includes the following requirement:

> All staff, clinical and non-clinical, shall participate in at least one training annually focused on health equity, health disparities, or social determinants of health to support individual competencies and organizational capacity to promote health equity.

To help the LHDs access good trainings, the WHB has posted a health equity training resource sheet on their website located here: https://whb.ncpublichealth.com/provpart/docs/6-11-20-APPROVED-HealthEquityResSheet-FINAL.

The WHB also continues to provide opportunities for staff to participate in the Phase I 2-day REI Foundational Training and REI Groundwater Training, along with opportunities for small group discussions. All new staff are required to complete this training within six months of hire. During FY22, the WHB will also require staff members to complete at least eight hours of health equity, implicit bias, or related training. This can be in person, virtually, or through podcasts or reading materials as approved by their supervisor.

The C&Y Branch has convened a Health Equity Continuous Quality Improvement Team that will:

1. Promote the DPH Health Equity Foundational Training.
2. Encourage participation in and analyze results of C&Y Branch staff responses to the DPH Health Equity Survey to share back with the Branch.
3. Assign a Health Equity Team member to each Unit withing the C&Y Branch to discuss the Health Equity Foundational Training and develop next steps in implementing health equity strategies in staff workplans.
4. Review contracts and LHD agreement addenda to incorporate health equity strategies.

The NC ITP recognizes and prioritizes the importance DEI. In 2020, the program hired external consultants to help establish a NC ITP DEI Council consisting of Branch staff and CDSA Directors to lead this work. Plans are underway to examine current system infrastructure and practices to help inform future efforts to ensure DEI in the NC ITP system.

DHHS Office of Health Equity

As part of the NCDHHS reorganization announced in April 2021, a new Office of Health Equity is to be established. Recruitment of a Chief Health Equity Officer is underway, and, in addition to leading cross department work on equity, the person in this position will direct an expanded Office of Health Equity (formerly the Office of Minority Health and Health Disparities) and the Office of Rural Health. The work of the DPH Diversity, Equity, and Inclusion Council, which includes members from WCHS, will be enhanced by the creation of this new position and Office.

Social Determinants of Health

As shared earlier, addressing SDoH is foundational to the Perinatal Health Strategic and Early Childhood Action Plans. It also is a priority for NCDHHS as NC moves into Medicaid transformation. The WCHS will continue to address SDoH as part of its programs and support the work being done by NCDHHS to launch Healthy Opportunity Pilots meant to address housing instability, food insecurity, lack of transportation, interpersonal violence, and toxic stress for eligible Medicaid beneficiaries. Additionally, the WCHS will continue to promote the use of NCCARE360.

Food Insecurity

WCHS sees working in the area of food insecurity with a focus on healthy equity and access to healthy food as a priority for the MCHBG and as a NCDHHS priority. Because data sources to measure nutrition insecurity (which is a new term being used to emphasize the importance of nutritious foods versus any foods) are lacking, data sources that measure food insecurity will continue to be used, while still elevating the important role of nutrition security. Even before COVID-19, many actions at the state and WCHS level have occurred since 2019 to elevate this to an even

greater priority. This includes NCDHHS's work on:

- Food Insecurity screening (required through Medicaid and voluntarily encouraged for all providers) https://www.ncdhhs.gov/about/department-initiatives/healthy-opportunities/screening-questions
- Food Insecurity (and other SDOH) referral and follow up through NCCARE360 – a Statewide Coordinated Care Network online platform https://www.ncdhhs.gov/about/department-initiatives/healthy-opportunities/nccare360
- Medicaid Transformation through the Healthy Opportunities Pilots which includes a focus on food insecurity and healthy food access (https://files.nc.gov/ncdhhs/SDOH-HealthyOpptys-FactSheet-FINAL-20181114.pdf). Proposals for these pilots were submitted to DHHS in February 2020, but evaluation of the proposals was suspended due to the state's ongoing response to the COVID-19 pandemic and a new award date has not yet been determined.
- NC ECAP released in 2019 which has prioritized food security as one of ten goals. WCHS has adopted the goal (CCSB 8B) from this plan which includes that by 2025, the percent of children living across North Carolina in food insecure homes will decrease by 6% from 20.9% to 17.5% according to data provided by Feeding America and cited in the NC Early Childhood Action Plan.

The two strategies to address this food insecurity objective complement interest and staffing within WCHS. NCCARE360 was launched in 2019 and became available statewide in June 2020, six months ahead of schedule. LHDs are natural partners to be enrolled in and using NCCARE360, but they may not all have integrated food insecurity screening, referral, and follow up (outside of their Medicaid populations) or may have experienced other challenges due to COVID-19. Therefore, strategy CCSB 8B.1. states that WCHS will work with NCCARE360 partners to identify how food insecurity screening, referrals and follow up being tracked in NCCARE360 and conducted through LHDs can be enhanced.

For strategy CCSB 8B.2., the PNC in the C&Y Branch will increase training to child health staff around nutrition/food insecurity; create a training package; and identify audiences in WCHS and across DPH that would also benefit from these trainings and materials. This strategy fits well with prioritized food insecurity work that the PNC has already been doing as part of the MCHBG since FY18 and because of the exponential rise in food insecurity due to COVID-19. As part of this strategy for FY22, the PNC will work with other WCHS staff and a dietetic intern to develop, implement and summarize a survey of DPH and/or NCDHHS state level staff to identify needs, assets and interests in food/nutrition security. One potential outcome of this assessment would be to create a Nutrition Security Team of interested staff members with lived experiences of food insecurity, expertise, and/or passion to plan for, address and evaluate this issue. Sensitivity and awareness around racial equity issues and systems that affect food insecurity will also be incorporated into plans developed by this team. These food insecurity strategies can also be aligned with work by the DPH Diversity, Equity, and Inclusion Council and through work under the Health Equity Framework where feasible and reasonable.

The COVID-19 pandemic has caused so much stress and hardship for individuals, children and families in North Carolina, with a disproportionate burden on historically marginalized populations. Food insecurity has increased, especially among children. WCHS will continue to work with multiple partners to ensure innovative ways to feed children and families during this pandemic. In FY21, the Title V Director co-chaired the Governor's Education and Nutrition workgroup along with a representative from the Department of Public Instruction, working with so many partners, volunteer organizations and advocates, to develop innovative strategies to ensure children across North Carolina and their families could access food with schools closed to in-person instruction. NC requested multiple waivers and quickly implemented USDA-approved flexibilities across programs such as WIC, Child Nutrition Programs (CACFP and School Nutrition Programs), SNAP and P-EBT. WCHS will continue to work with multiple partners to ensure innovative ways to provide nutritious and culturally appropriate foods to children and families

during this pandemic and afterward. The WCHS will continue to try to include information as part of outreach and/or presentations to LHDs, providers and other professionals across the state information about the changes or new programs that have been implemented to increase access to food such as NC 211, SNAP, P-EBT, and WIC during pandemic and beyond. In addition, the PMC will explore how to share resources as they become available through the Healthy Opportunities pilots and other efforts (i.e., Legal Aid of NC) to address increased needs for housing, transportation, and other SDOH to providers.

The PMC will also continue to work with the AAP Technical Assistance Project Advisory Committee for the Screening and Technical Resource Center to increase resources for health care providers and professionals around SDOH. The PMC will continue to work on revising the national AAP policy statements about food security and homelessness and housing security for children and families in partnership with pediatricians across the country.

Lastly, the PMC will continue to work with the state and regional child health nurse consultants on training and TA for CHERRNs and current staff in the child health clinics in LHDs to increase screening, assessment and referral for SDOH which include food, housing, interpersonal violence, and transportation. The PMC will also continue to work with partner agencies (i.e., DSS, CCNC, LINKS, SAYSO, Life Skills) on the Fostering Health NC Transition Age Youth Work Group who serve youth in foster care and those who were in care to increase awareness of resources for youth in and transitioning out of foster care to address SDOH.

III.F. Public Input

In addition to the NC Title V Needs Assessment process which provided many opportunities for public input on the development of the 2021-25 Priority Needs, the WCHS seeks public input on the MCH Block Grant Application/Annual Report in several ways. The Application/Annual Report is posted on the WCHS website (http://ncdhhs.gov/dph/wch/) in July (August/September in 2021 due to COVID-19) and sent to partnering agencies (including March of Dimes state chapter, NC Child, AHECs, etc.) to provide feedback to the Section Office. While comments on the block grant application itself are minimal, ongoing communication with these agencies include information about the block grant and impacts of policies and activities carried out by the WCHS. Also, the Title V Director presents an update on the MCHBG to various partners. In the past, the Title V Director has held a public meeting to discuss updates to the MCHBG and receive feedback, but this did not occur this year with the competing priorities related to the COVID-19 pandemic. The Title V program also planned to develop a short summary with highlights for partners, but this was also put on hold due to competing priorities with the COVID-19 pandemic. Since NC's application is predicated on the work of the Early Childhood Action Plan, Perinatal Health Strategic Plan and the C&Y Branch Strategic Plan, public input was built into this application at its inception. Partners, including family representatives, from around the state have and will continue to be engaged as the plans are implemented. Another method for gaining public input on the application is sharing portions of the document with members of the C&Y Branch Family Partnership who provide feedback and contribute to the State Action Plan narratives. Ongoing public input is obtained throughout the year as WCHS staff members work with both state and non-governmental agencies to improve programs and services.

III.G. Technical Assistance

The WCHS has been engaged in multiple technical assistance and training opportunities related to MCH. Therefore, we have not specifically taken advantage of the opportunities through MCHB. Various examples include:

- ASTHO Increasing Access to Contraception Learning Collaborative
- Leadership Exchange for Adolescent Health Promotion (LEAHP)
- Title X Peer Learning on monitoring
- ASPHN/HRSA Children's Healthy Weight Collaborative Improvement & Innovation Network (CoIIN) – Technical Assistance
- MCH Workforce Development Center (UNC) – Children & Youth Opioid Action Team
- MIECHV – Home Visiting Improvement Action Center Team (HV-ImpACT) for data and CQI
- Maternal Health Learning and Innovation Center as part of the Maternal Health Innovation effort
- National Center for Hearing Assessment and Management at Utah State University (NCHAM) – EHDI and Newborn Hearing Screening
- Zero to Three Infant and Early Childhood Mental Health Financing and Policy Project
- SAMHSA/ Center of Excellence Early Childhood Mental Health Consultation TA Support
- National Center for Children in Poverty – Promoting Research-Informed State IECMH Policies and Scaled Initiative (PRiSM) TA
- National Center for Pyramid Model Innovations TA
- Medicaid Innovation Accelerator Program (IAP) to Strengthen Partnerships While Developing Data Analytic Capacity to Support Reduction of Maternal Mortality (MM) and Severe Maternal Morbidity (SMM) in Medicaid
- ASTHVI – Association of State and Territorial Home Visiting Initiatives – Multiple training and technical assistance from applications to best practices.

Potential future areas of needed technical assistance for the WCHS are:

1. Successful examples and tools of programs and policies addressing institutional racism and its effect on MCH populations
2. Improving mental and behavioral health services for young children through early childhood mental health consultation across various programs
3. Fetal and Infant Mortality Review and other ways to strengthen child fatality prevention systems (There has been ongoing interest in NC to implement a FIMR and recommendations through the Child Fatality Task Force on the Child Fatality Prevention System for ongoing improvement, which may include the development of a FIMR. The CFTF worked with partners to draft potential legislation proposing necessary funding to implement these recommendations, but this has not moved forward at the time of this application/report.)

IV. Title V-Medicaid IAA/MOU

The Title V-Medicaid IAA/MOU is uploaded as a PDF file to this section - NC Title V-Medicaid IAA-MOU 2021.pdf

V. Supporting Documents

The following supporting documents have been provided to supplement the narrative discussion.

Supporting Document #01 - Glossary of Acronyms Used in the FY22 NC MCHBG Application.pdf

VI. Organizational Chart

The Organizational Chart is uploaded as a PDF file to this section - WCHS Organizational Chart 2021.pdf

VII. Appendix

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Form 2
MCH Budget/Expenditure Details

State: North Carolina

	FY 22 Application Budgeted	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	$ 18,806,308	
A. Preventive and Primary Care for Children	$ 6,357,173	(33.8%)
B. Children with Special Health Care Needs	$ 7,339,060	(39%)
C. Title V Administrative Costs	$ 251,032	(1.4%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	$ 13,947,265	
3. STATE MCH FUNDS (Item 18c of SF-424)	$ 37,169,426	
4. LOCAL MCH FUNDS (Item 18d of SF-424)	$ 0	
5. OTHER FUNDS (Item 18e of SF-424)	$ 65,371,749	
6. PROGRAM INCOME (Item 18f of SF-424)	$ 73,859,576	
7. TOTAL STATE MATCH (Lines 3 through 6)	$ 176,400,751	
A. Your State's FY 1989 Maintenance of Effort Amount $ 29,063,379		
8. FEDERAL-STATE TITLE V BLOCK GRANT PARTNERSHIP SUBTOTAL (Total lines 1 and 7)	$ 195,207,059	
9. OTHER FEDERAL FUNDS Please refer to the next page to view the list of Other Federal Programs provided by the State on Form 2.		
10. OTHER FEDERAL FUNDS(Subtotal of all funds under item 9)	$ 456,342,218	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	$ 651,549,277	

OTHER FEDERAL FUNDS	FY 22 Application Budgeted
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Formula Grants	$ 4,347,563
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	$ 2,229,216
Department of Health and Human Services (DHHS) > Office of Adolescent Health > Support for Pregnant and Parenting Teens	$ 933,785
US Department of Agriculture (USDA) > Food and Nutrition Services > Child and Adult Care Food Program (CACFP)	$ 152,500,591
Department of Health and Human Services (DHHS) > Centers for Medicare & Medicaid Services (CMS) > Children's Health Insurance Program Reauthorization Act (CHIPRA)	$ 251,175
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Universal Newborn Hearing Screening and Intervention	$ 250,066
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > Temporary Assistance for Needy Families (TANF)	$ 4,450,000
Department of Health and Human Services (DHHS) > Centers for Medicare & Medicaid Services (CMS) > Title XIX -- Grants to States for Medical Assistance Programs	$ 2,904,835
Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > Title X Family Planning	$ 7,164,114
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Vaccines For Children/Immunizations	$ 12,230,672
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Early Hearing Detection and Intervention (EHDI) State Programs	$ 242,814
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Essentials for Childhood	$ 518,821
US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC)	$ 237,222,422
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Healthy Start	$ 1,981,895
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	$ 120,639

OTHER FEDERAL FUNDS	FY 22 Application Budgeted
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Maternal Health Innovation Program	$ 256,416
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Preventing Maternal Deaths: Supporting Maternal Mortality Review Committees	$ 197,894
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > COVID Immunization Funding	$ 28,287,006
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Sickle Cell Funding	$ 252,294

	FY 20 Annual Report Budgeted		FY 20 Annual Report Expended	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	$ 17,424,544		$ 18,812,551	
A. Preventive and Primary Care for Children	$ 6,241,790	(35.8%)	$ 6,352,099	(33.7%)
B. Children with Special Health Care Needs	$ 6,491,961	(37.3%)	$ 6,985,757	(37.1%)
C. Title V Administrative Costs	$ 286,199	(1.6%)	$ 227,347	(1.3%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	$ 13,019,950		$ 13,565,203	
3. STATE MCH FUNDS (Item 18c of SF-424)	$ 41,861,408		$ 38,249,324	
4. LOCAL MCH FUNDS (Item 18d of SF-424)	$ 0		$ 0	
5. OTHER FUNDS (Item 18e of SF-424)	$ 66,078,190		$ 52,819,279	
6. PROGRAM INCOME (Item 18f of SF-424)	$ 70,779,201		$ 73,859,576	
7. TOTAL STATE MATCH (Lines 3 through 6)	$ 178,718,799		$ 164,928,179	
A. Your State's FY 1989 Maintenance of Effort Amount $ 29,063,379				
8. FEDERAL-STATE TITLE V BLOCK GRANT PARTNERSHIP SUBTOTAL (Total lines 1 and 7)	$ 196,143,343		$ 183,740,730	
9. OTHER FEDERAL FUNDS Please refer to the next page to view the list of Other Federal Programs provided by the State on Form 2.				
10. OTHER FEDERAL FUNDS (Subtotal of all funds under item 9)	$ 403,362,999		$ 281,671,839	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	$ 599,506,342		$ 465,412,569	

OTHER FEDERAL FUNDS	FY 20 Annual Report Budgeted	FY 20 Annual Report Expended
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	$ 101,484	$ 102,615
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Healthy Start	$ 2,146,932	$ 1,079,968
US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC)	$ 241,321,824	$ 157,340,950
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Early Hearing Detection and Intervention (EHDI) State Programs	$ 226,017	$ 223,395
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Essentials for Childhood	$ 298,332	$ 328,370
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Vaccines For Children/Immunizations	$ 14,144,929	$ 7,159,645
Department of Health and Human Services (DHHS) > Substance Abuse and Mental Health Services Administration > Project LAUNCH	$ 2,390	$ 0
Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > Title X Family Planning	$ 5,761,427	$ 7,711,284
Department of Health and Human Services (DHHS) > Centers for Medicare & Medicaid Services (CMS) > Title XIX -- Grants to States for Medical Assistance Programs	$ 2,392,210	$ 2,211,748
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > Temporary Assistance for Needy Families (TANF)	$ 2,950,000	$ 4,160,665
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Universal Newborn Hearing Screening and Intervention	$ 350,104	$ 224,177
Department of Health and Human Services (DHHS) > Centers for Medicare & Medicaid Services (CMS) > Children's Health Insurance Program Reauthorization Act (CHIPRA)	$ 238,631	$ 40,911
Department of Health and Human Services (DHHS) > Office of Adolescent Health > Support for Pregnant and Parenting Teens	$ 1,975,902	$ 484,344

OTHER FEDERAL FUNDS	FY 20 Annual Report Budgeted	FY 20 Annual Report Expended
US Department of Agriculture (USDA) > Food and Nutrition Services > Child and Adult Care Food Program (CACFP)	$ 128,061,131	$ 96,631,422
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	$ 1,946,053	$ 1,253,676
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > Child Care and Development Block Grant (CCDBG)	$ 62,205	$ 0
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Formula Grants	$ 1,383,428	$ 2,718,669

Form Notes for Form 2:

None

Field Level Notes for Form 2:

1.	**Field Name:**	**Federal Allocation, C. Title V Administrative Costs:**
	Fiscal Year:	**2020**
	Column Name:	**Annual Report Expended**
	Field Note: A decrease in indirect cost amounts accounts for the majority of the decreased expenditures, which is to be expected as spending was reduced due to the COVID-19 pandemic.	
2.	**Field Name:**	**5. OTHER FUNDS**
	Fiscal Year:	**2020**
	Column Name:	**Annual Report Expended**
	Field Note: The variance is primarily due to expenditures in the WIC program being significantly lower than what is budgeted as budgeted amounts were projections based on caseloads from prior years.	
3.	**Field Name:**	**Other Federal Funds, Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Healthy Start**
	Fiscal Year:	**2020**
	Column Name:	**Annual Report Expended**
	Field Note: The actual award amount is $1,122,898, but this was incorrectly overbudgeted in the state budget system.	
4.	**Field Name:**	**Other Federal Funds, US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC)**
	Fiscal Year:	**2020**
	Column Name:	**Annual Report Expended**
	Field Note: The budget (revenue) is reported on a SFY basis in the North Carolina Accounting System. The budget is greater than expenditures since it is budgeted according to anticipated spending that crosses two federal fiscal years. Remaining funds can be utilized during the 1st quarter of the following SFY, which is the 4th quarter of the active FFY.	
5.	**Field Name:**	**Other Federal Funds, Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Vaccines For Children/Immunizations**
	Fiscal Year:	**2020**

	Column Name:	**Annual Report Expended**
	Field Note: The amount budgeted in FY20 included additional funding received toward the end of the fiscal year for influenza and COVID-19 vaccine planning which can be spent over multiple years, not just in FY20.	
6.	**Field Name:**	**Other Federal Funds, Department of Health and Human Services (DHHS) > Substance Abuse and Mental Health Services Administration > Project LAUNCH**
	Fiscal Year:	**2020**
	Column Name:	**Annual Report Expended**
	Field Note: The FY20 budget amount is not correct. It should have been removed and will be trued up in the next budget cycle.	
7.	**Field Name:**	**Other Federal Funds, Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > Title X Family Planning**
	Fiscal Year:	**2020**
	Column Name:	**Annual Report Expended**
	Field Note: The FY20 budgeted amount did not reflect the newly awarded funding level for NC.	
8.	**Field Name:**	**Other Federal Funds, Department of Health and Human Services (DHHS) > Centers for Medicare & Medicaid Services (CMS) > Children's Health Insurance Program Reauthorization Act (CHIPRA)**
	Fiscal Year:	**2020**
	Column Name:	**Annual Report Expended**
	Field Note: These funds were not fully spent due to position vacancies.	
9.	**Field Name:**	**Other Federal Funds, Department of Health and Human Services (DHHS) > Office of Adolescent Health > Support for Pregnant and Parenting Teens**
	Fiscal Year:	**2020**
	Column Name:	**Annual Report Expended**
	Field Note: The FY20 budget amount includes budgets for two programs of about $1 million each. Project REACH funding was not fully expended due to it being a start up year for that grant. Young Families Connect ended in 2017 and the award amount should not have been included in the FY20 budget and will be trued up in the next budget cycle.	
10.	**Field Name:**	**Other Federal Funds, US Department of Agriculture (USDA) > Food and Nutrition Services > Child and Adult Care Food Program (CACFP)**

	Fiscal Year:	**2020**
	Column Name:	**Annual Report Expended**
	Field Note: The budget (revenue) is reported on a SFY basis in the North Carolina Accounting System. The budget is greater than expenditures since it is budgeted according to anticipated spending that crosses two federal fiscal years. Remaining funds can be utilized during the 1st quarter of the following SFY, which is the 4th quarter of the active FFY.	
11.	**Field Name:**	**Other Federal Funds, Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)**
	Fiscal Year:	**2020**
	Column Name:	**Annual Report Expended**
	Field Note: The actual award amount was $1.6 million, not the $1.9 million cited in the state budget system. Two years are allowed for spending the full amount of this award.	
12.	**Field Name:**	**Other Federal Funds, Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > Child Care and Development Block Grant (CCDBG)**
	Fiscal Year:	**2020**
	Column Name:	**Annual Report Expended**
	Field Note: The FY20 budget amount is not correct. It should have been removed and will be trued up in the next budget cycle.	
13.	**Field Name:**	**Other Federal Funds, Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Formula Grants**
	Fiscal Year:	**2020**
	Column Name:	**Annual Report Expended**
	Field Note: The annual grant award is approximately $3.2M. However, we had two MIECHV grants budgeted given the time during the fiscal year – some funds budgeted from the previous year grant that would end in Sep.t, and also budget up for the new grant beginning in Oct. – thus we were overbudget until liquidation completed and crossed into a new state fiscal year, when the previous year grant funds are taken down. When the new grant is budgeted, funding for contracts and salaries is budgeted at 100% because we annualize salaries in the budget and have to cover annualized contract encumbrances.	

Data Alerts: None

Form 3a
Budget and Expenditure Details by Types of Individuals Served

State: North Carolina

I. TYPES OF INDIVIDUALS SERVED

IA. Federal MCH Block Grant	FY 22 Application Budgeted	FY 20 Annual Report Expended
1. Pregnant Women	$ 1,679,893	$ 1,486,115
2. Infants < 1 year	$ 1,577,241	$ 1,269,144
3. Children 1 through 21 Years	$ 6,357,173	$ 6,352,099
4. CSHCN	$ 7,339,060	$ 6,985,757
5. All Others	$ 1,601,909	$ 2,492,089
Federal Total of Individuals Served	$ 18,555,276	$ 18,585,204

IB. Non-Federal MCH Block Grant	FY 22 Application Budgeted	FY 20 Annual Report Expended
1. Pregnant Women	$ 41,910,362	$ 40,327,543
2. Infants < 1 year	$ 20,294,779	$ 17,160,240
3. Children 1 through 21 Years	$ 57,772,090	$ 55,414,943
4. CSHCN	$ 29,057,813	$ 28,071,621
5. All Others	$ 26,506,260	$ 23,781,910
Non-Federal Total of Individuals Served	$ 175,541,304	$ 164,756,257
Federal State MCH Block Grant Partnership Total	$ 194,096,580	$ 183,341,461

Form Notes for Form 3a:

None

Field Level Notes for Form 3a:

None

Data Alerts: None

Form 3b
Budget and Expenditure Details by Types of Services

State: North Carolina

II. TYPES OF SERVICES

IIA. Federal MCH Block Grant	FY 22 Application Budgeted	FY 20 Annual Report Expended
1. Direct Services	$ 0	$ 0
A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One	$ 0	$ 0
B. Preventive and Primary Care Services for Children	$ 0	$ 0
C. Services for CSHCN	$ 0	$ 0
2. Enabling Services	$ 15,012,348	$ 15,560,219
3. Public Health Services and Systems	$ 3,793,960	$ 3,252,332
4. Select the types of Federally-supported "Direct Services", as reported in II.A.1. Provide the total amount of Federal MCH Block Grant funds expended for each type of reported service		
Pharmacy		$ 0
Physician/Office Services		$ 0
Hospital Charges (Includes Inpatient and Outpatient Services)		$ 0
Dental Care (Does Not Include Orthodontic Services)		$ 0
Durable Medical Equipment and Supplies		$ 0
Laboratory Services		$ 0
Direct Services Line 4 Expended Total		$ 0
Federal Total	$ 18,806,308	$ 18,812,551

IIB. Non-Federal MCH Block Grant	FY 22 Application Budgeted	FY 20 Annual Report Expended
1. Direct Services	$ 29,802,062	$ 29,426,019
A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One	$ 14,497,764	$ 14,497,764
B. Preventive and Primary Care Services for Children	$ 14,539,145	$ 14,539,145
C. Services for CSHCN	$ 765,153	$ 389,110
2. Enabling Services	$ 139,617,170	$ 129,666,700
3. Public Health Services and Systems	$ 6,329,250	$ 6,087,187
4. Select the types of Non-Federally-supported "Direct Services", as reported in II.B.1. Provide the total amount of Non-Federal MCH Block Grant funds expended for each type of reported service		
Pharmacy		$ 0
Physician/Office Services		$ 0
Hospital Charges (Includes Inpatient and Outpatient Services)		$ 0
Dental Care (Does Not Include Orthodontic Services)		$ 0
Durable Medical Equipment and Supplies		$ 0
Laboratory Services		$ 0
Other		
Other		$ 29,426,019
Direct Services Line 4 Expended Total		$ 29,426,019
Non-Federal Total	$ 175,748,482	$ 165,179,906

Form Notes for Form 3b:

None

Field Level Notes for Form 3b:

1.	**Field Name:**	**IIB. - Other - Other**
	Fiscal Year:	**2022**
	Column Name:	**Annual Report Expended**

Field Note:
The majority of these dollars go to local health departments for MCH services. With the current system, we do not have the ability to differentiate local services provided within the larger categories of child health, maternal health, and family planning.

Form 4
Number and Percentage of Newborns and Others Screened Cases Confirmed and Treated

State: North Carolina

Total Births by Occurrence: 120,581 **Data Source Year: 2019**

1. Core RUSP Conditions

Program Name	(A) Aggregate Total Number Receiving at Least One Valid Screen	(B) Aggregate Total Number of Out-of-Range Results	(C) Aggregate Total Number Confirmed Cases	(D) Aggregate Total Number Referred for Treatment
Core RUSP Conditions	118,762 (98.5%)	1,383	240	236 (98.3%)

Program Name(s)				
3-Hydroxy-3-Methyglutaric Aciduria	3-Methylcrotonyl-Coa Carboxylase Deficiency	Argininosuccinic Aciduria	Biotinidase Deficiency	Carnitine Uptake Defect/Carnitine Transport Defect
Citrullinemia, Type I	Classic Galactosemia	Classic Phenylketonuria	Congenital Adrenal Hyperplasia	Critical Congenital Heart Disease
Cystic Fibrosis	Glutaric Acidemia Type I	Holocarboxylase Synthase Deficiency	Homocystinuria	Isovaleric Acidemia
Long-Chain L-3 Hydroxyacyl-Coa Dehydrogenase Deficiency	Maple Syrup Urine Disease	Medium-Chain Acyl-Coa Dehydrogenase Deficiency	Methylmalonic Acidemia (Cobalamin Disorders)	Methylmalonic Acidemia (Methylmalonyl-Coa Mutase)
Primary Congenital Hypothyroidism	Propionic Acidemia	S, ßeta-Thalassemia	S,C Disease	S,S Disease (Sickle Cell Anemia)
Severe Combined Immunodeficiences	ß-Ketothiolase Deficiency	Trifunctional Protein Deficiency	Tyrosinemia, Type I	Very Long-Chain Acyl-Coa Dehydrogenase Deficiency

2. Other Newborn Screening Tests

Program Name	(A) Total Number Receiving at Least One Screen	(B) Total Number Presumptive Positive Screens	(C) Total Number Confirmed Cases	(D) Total Number Referred for Treatment
Newborn Hearing	119,709 (99.3%)	4,643	234	234 (100.0%)

3. Screening Programs for Older Children & Women

None

4. Long-Term Follow-Up

WCHS provides long-term follow-up for people with Sickle Cell disease and provides short-term follow-up for the other genetic conditions. Long-term follow-up and medical management is transitioned to sub-specialists.

Form Notes for Form 4:

None

Field Level Notes for Form 4:

1.	**Field Name:**	**Core RUSP Conditions - Total Number Referred For Treatment**
	Fiscal Year:	**2020**
	Column Name:	**Core RUSP Conditions**

Field Note:
Three infants were not referred for treatment because treatment was not required and one infant died prior to receiving treatment.

Data Alerts: None

Form 5
Count of Individuals Served by Title V & Total Percentage of Populations Served by Title V

State: North Carolina

Annual Report Year 2020

Form 5a – Count of Individuals Served by Title V (Direct & Enabling Services Only)

		Primary Source of Coverage				
Types Of Individuals Served	(A) Title V Total Served	(B) Title XIX %	(C) Title XXI %	(D) Private / Other %	(E) None %	(F) Unknown %
1. Pregnant Women	25,707	69.0	0.0	4.5	25.2	1.3
2. Infants < 1 Year of Age	10,380	89.0	0.0	1.2	9.8	0.0
3. Children 1 through 21 Years of Age	70,886	66.2	0.0	5.0	11.8	17.0
3a. Children with Special Health Care Needs 0 through 21 years of age^	33,726	65.2	0.0	0.4	0.1	34.3
4. Others	17,196	41.7	0.0	13.2	41.4	3.7
Total	124,169					

Form 5b – Total Percentage of Populations Served by Title V (Direct, Enabling, and Public Health Services and Systems)

Populations Served by Title V	Reference Data	Used Reference Data?	Denominator	Total % Served	Form 5b Count (Calculated)	Form 5a Count
1. Pregnant Women	118,725	No	115,109	90.0	103,598	25,707
2. Infants < 1 Year of Age	120,577	No	118,645	99.2	117,696	10,380
3. Children 1 through 21 Years of Age	2,758,673	Yes	2,758,673	13.8	380,697	70,886
3a. Children with Special Health Care Needs 0 through 21 years of age^	624,431	Yes	624,431	10.2	63,692	33,726
4. Others	7,610,520	Yes	7,610,520	0.9	68,495	17,196

^Represents a subset of all infants and children.

Form Notes for Form 5:

None

Field Level Notes for Form 5a:

1.	**Field Name:**	**Pregnant Women Total Served**
	Fiscal Year:	**2020**
	Field Note: Data source is Special Report of LHD-HSA data run by State Center for Health Statistics.	
2.	**Field Name:**	**Infants Less Than One YearTotal Served**
	Fiscal Year:	**2020**
	Field Note: Data source is Special Report of LHD-HSA data run by State Center for Health Statistics.	
3.	**Field Name:**	**Children 1 through 21 Years of Age**
	Fiscal Year:	**2020**
	Field Note: Data source for Children Age 1 through 21 is Special Report of LHD-HSA data run by State Center for Health Statistics. Data source for CSHCN is explained in next note.	
4.	**Field Name:**	**Children with Special Health Care Needs 0 through 21 Years of Age**
	Fiscal Year:	**2020**
	Field Note: This is based on FY20 CMARC data from the CareImpact database and FY20 CYSHCN Help Line calls. The CMARC data are only available by Medicaid or non-Medicaid status (which are counted as unknown). The insurance status of people making Help Line calls does not change the overall status due to such small numbers.	
5.	**Field Name:**	**Others**
	Fiscal Year:	**2020**
	Field Note: This is a prorated count of women served in local health department Family Planning clinics through Title V funding taken from the Family Planning Annual Report.	

Field Level Notes for Form 5b:

1.	**Field Name:**	**Pregnant Women**
	Fiscal Year:	**2020**
	Field Note: 90% of obstetrical care providers (public and private) in the state are participants in the Pregnancy Medical Home program.	
2.	**Field Name:**	**InfantsLess Than One Year**
	Fiscal Year:	**2020**
	Field Note: 99% of all infants received newborn hearing screening.	
3.	**Field Name:**	**Children 1 Through 21 Years of Age**
	Fiscal Year:	**2020**
	Field Note: Includes: 5 year-olds in 2019 per Census Bureau Population Estimates as all have received kindergarten health assessments and immunizations histories have been reviewed (125,056); Average monthly participation count of children being served by WIC (121,317); and the number of 12 year-olds in 2019 per Census Bureau Population Estimates as all are required by law to have received immunizations for school (135,204).	
4.	**Field Name:**	**Children with Special Health Care Needs 0 through 21 Years of Age**
	Fiscal Year:	**2020**
	Field Note: Includes: CMARC, CYSHCN Help Line, Early Intervention Infant Toddler Program, and Help Line Outreach.	
5.	**Field Name:**	**Others**
	Fiscal Year:	**2020**
	Field Note: Includes Preconception Health Campaign community ambassadors trained and those trained by them, Sickle Cell Clients who are over age 20, Family Planning Clients (men and women) over age 20 (potential overlap with children here, but not much), NC Healthy Start Baby Love Plus interconception care clients and fathers, and people served by NCQuitline who are 25 and older.	

Data Alerts: None

Form 6
Deliveries and Infants Served by Title V and Entitled to Benefits Under Title XIX

State: North Carolina

Annual Report Year 2020

I. Unduplicated Count by Race/Ethnicity

	(A) Total	(B) Non-Hispanic White	(C) Non-Hispanic Black or African American	(D) Hispanic	(E) Non-Hispanic American Indian or Native Alaskan	(F) Non-Hispanic Asian	(G) Non-Hispanic Native Hawaiian or Other Pacific Islander	(H) Non-Hispanic Multiple Race	(I) Other & Unknown
1. Total Deliveries in State	118,725	61,636	27,351	19,101	1,400	4,520	115	3,321	1,281
Title V Served	117,775	61,143	27,132	18,948	1,389	4,484	114	3,294	1,271
Eligible for Title XIX	63,945	23,365	20,921	14,404	1,132	1,240	64	2,094	725
2. Total Infants in State	118,705	58,461	26,998	21,796	1,306	3,943	101	6,100	0
Title V Served	117,755	57,993	26,782	21,622	1,296	3,911	100	6,051	0
Eligible for Title XIX	67,718	24,962	22,037	15,142	1,164	1,370	69	2,192	782

Form Notes for Form 6:

Data on the number of deliveries in the state and how many births and infants are eligible for Title XIX were obtained from the 2019 NC Composite Linked Birth File. The number of infants in the state is from the US Census Bureau (State Characteristics Datasets: 2019 Annual State Resident Population Estimates for 6 Race Groups (5 Race Alone Groups and Two or More Races) by Age, Sex, and Hispanic Origin). The number of Title V served by race is obtained by multiplying the percentage of newborns screened for hearing in 2019 (99.2%) by the total number of deliveries and infants.

Field Level Notes for Form 6:

None

Form 7
State MCH Toll-Free Telephone Line and Other Appropriate Methods Data

State: North Carolina

A. State MCH Toll-Free Telephone Lines	2022 Application Year	2020 Annual Report Year
1. State MCH Toll-Free "Hotline" Telephone Number	(800) 737-3028	(800) 737-3028
2. State MCH Toll-Free "Hotline" Name	CYSHCN Help Line	CYSHCN Help Line
3. Name of Contact Person for State MCH "Hotline"	Nikki Hinnaut	Nikki Hinnaut
4. Contact Person's Telephone Number	(919) 707-5675	(919) 707-5675
5. Number of Calls Received on the State MCH "Hotline"		455

B. Other Appropriate Methods	2022 Application Year	2020 Annual Report Year
1. Other Toll-Free "Hotline" Names		
2. Number of Calls on Other Toll-Free "Hotlines"		
3. State Title V Program Website Address	https://publichealth.nc.gov/wch/	
4. Number of Hits to the State Title V Program Website		
5. State Title V Social Media Websites	https://twitter.com/NCPublicHealth	
6. Number of Hits to the State Title V Program Social Media Websites		

Form Notes for Form 7:

None

Form 8
State MCH and CSHCN Directors Contact Information

State: North Carolina

1. Title V Maternal and Child Health (MCH) Director	
Name	Kelly Kimple
Title	Women's and Children's Health Section Chief/Title V Director
Address 1	1928 Mail Service Center
Address 2	5601 Six Forks Road
City/State/Zip	Raleigh / NC / 27699
Telephone	(919) 641-9301
Extension	
Email	kelly.kimple@dhhs.nc.gov

2. Title V Children with Special Health Care Needs (CSHCN) Director	
Name	Gerri Mattson
Title	Interim CYSCHN Director/Pediatric Medical Consultant
Address 1	1928 Mail Service Center
Address 2	5601 Six Forks Road
City/State/Zip	Raleigh / NC / 27699
Telephone	(919) 608-0004
Extension	
Email	gerri.mattson@dhhs.nc.gov

3. State Family or Youth Leader (Optional)	
Name	Holly Shoun
Title	Family Liaison Specialist
Address 1	1928 Mail Service Center
Address 2	
City/State/Zip	Raleigh / NC / 27699
Telephone	(919) 274-0414
Extension	
Email	holly.shoun@dhhs.nc.gov

Form Notes for Form 8:

None

Form 9
List of MCH Priority Needs

State: North Carolina

Application Year 2022

No.	Priority Need	Priority Need Type (New, Revised or Continued Priority Need for this five-year reporting period)
1.	Improve access to high quality integrated health care services	New
2.	Increase pregnancy intendedness within reproductive justice framework	New
3.	Prevent infant/fetal deaths and premature births	New
4.	Promote safe, stable, and nurturing relationships	New
5.	Improve immunization rates to prevent vaccine-preventable diseases	New
6.	Improve access to coordinated, comprehensive, ongoing medical care for CYSHCN	New
7.	Improve access to mental/behavioral health services	New
8.	Increase health equity and eliminate disparities and address social determinants of health	New

Form Notes for Form 9:

None

Field Level Notes for Form 9:

None

Form 9 State Priorities – Needs Assessment Year – Application Year 2021

No.	Priority Need	Priority Need Type (New, Revised or Continued Priority Need for this five-year reporting period)
1.	Improve access to high quality integrated health care services	New
2.	Increase pregnancy intendedness within reproductive justice framework	New
3.	Prevent infant/fetal deaths and premature births	New
4.	Promote safe, stable, and nurturing relationships	New
5.	Improve immunization rates to prevent vaccine-preventable diseases	New
6.	Improve access to coordinated, comprehensive, ongoing medical care for CYSHCN	New
7.	Improve access to mental/behavioral health services	New
8.	Increase health equity and eliminate disparities and address social determinants of health	New

Form Notes for Form 9:

None

Field Level Notes for Form 9:

None

Form 10
National Outcome Measures (NOMs)

State: North Carolina

Form Notes for Form 10 NPMs, NOMs, SPMs, SOMs, and ESMs.

None

NOM 1 - Percent of pregnant women who receive prenatal care beginning in the first trimester

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	74.2 %	0.1 %	87,311	117,730
2018	74.7 %	0.1 %	88,123	118,033
2017	74.8 %	0.1 %	89,198	119,326
2016	74.9 %	0.1 %	89,983	120,088
2015	73.7 %	0.1 %	88,307	119,752
2014	74.1 %	0.1 %	88,579	119,583
2013	72.0 %	0.1 %	84,444	117,290
2012	72.7 %	0.1 %	85,679	117,860
2011	72.3 %	0.1 %	85,784	118,593

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20, a confidence interval width >20% points or >1.2 times the estimate, or >10% missing data and should be interpreted with caution

NOM 1 - Notes:

None

Data Alerts: None

NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations

Data Source: HCUP - State Inpatient Databases (SID)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	74.0	2.6	815	110,129
2017	76.0	2.6	847	111,408
2016	81.7	2.7	910	111,443
2015	69.3	2.9	580	83,675
2014	69.3	2.5	774	111,700
2013	67.0	2.5	725	108,283
2012	75.7	2.6	831	109,796
2011	81.2	2.7	902	111,084
2010	78.3	2.6	890	113,693
2009	70.6	2.5	832	117,863
2008	62.8	2.3	769	122,538

Legends:

Indicator has a numerator ≤10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 2 - Notes:

None

Data Alerts: None

NOM 3 - Maternal mortality rate per 100,000 live births

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015_2019	18.2	1.7	109	599,426
2014_2018	17.9	1.7	108	601,676

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 3 - Notes:

None

Data Alerts: None

NOM 4 - Percent of low birth weight deliveries (<2,500 grams)

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	9.3 %	0.1 %	11,047	118,659
2018	9.2 %	0.1 %	10,970	118,871
2017	9.4 %	0.1 %	11,268	120,039
2016	9.2 %	0.1 %	11,127	120,712
2015	9.1 %	0.1 %	11,023	120,775
2014	8.9 %	0.1 %	10,720	120,903
2013	8.8 %	0.1 %	10,432	118,913
2012	8.8 %	0.1 %	10,563	119,749
2011	9.0 %	0.1 %	10,839	120,309
2010	9.1 %	0.1 %	11,109	122,271
2009	9.0 %	0.1 %	11,454	126,773

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20, a confidence interval width >20% points or >1.2 times the estimate, or >10% missing data and should be interpreted with caution

NOM 4 - Notes:

None

Data Alerts: None

NOM 5 - Percent of preterm births (<37 weeks)

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	10.7 %	0.1 %	12,646	118,688
2018	10.4 %	0.1 %	12,340	118,888
2017	10.5 %	0.1 %	12,591	120,070
2016	10.4 %	0.1 %	12,542	120,729
2015	10.2 %	0.1 %	12,297	120,789
2014	9.7 %	0.1 %	11,781	120,907
2013	9.9 %	0.1 %	11,800	118,896
2012	10.1 %	0.1 %	12,056	119,723
2011	10.2 %	0.1 %	12,278	120,264
2010	10.4 %	0.1 %	12,758	122,302
2009	10.6 %	0.1 %	13,437	126,810

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20, a confidence interval width >20% points or >1.2 times the estimate, or >10% missing data and should be interpreted with caution

NOM 5 - Notes:

None

Data Alerts: None

NOM 6 - Percent of early term births (37, 38 weeks)

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	27.3 %	0.1 %	32,452	118,688
2018	26.2 %	0.1 %	31,121	118,888
2017	25.4 %	0.1 %	30,534	120,070
2016	24.6 %	0.1 %	29,727	120,729
2015	24.2 %	0.1 %	29,188	120,789
2014	24.0 %	0.1 %	28,978	120,907
2013	23.7 %	0.1 %	28,139	118,896
2012	24.1 %	0.1 %	28,834	119,723
2011	24.4 %	0.1 %	29,315	120,264
2010	24.9 %	0.1 %	30,503	122,302
2009	25.8 %	0.1 %	32,679	126,810

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20, a confidence interval width >20% points or >1.2 times the estimate, or >10% missing data and should be interpreted with caution

NOM 6 - Notes:

None

Data Alerts: None

NOM 7 - Percent of non-medically indicated early elective deliveries

Data Source: CMS Hospital Compare

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019/Q1-2019/Q4	1.0 %			
2018/Q4-2019/Q3	1.0 %			
2018/Q3-2019/Q2	1.0 %			
2018/Q2-2019/Q1	1.0 %			
2018/Q1-2018/Q4	1.0 %			
2017/Q4-2018/Q3	1.0 %			
2017/Q3-2018/Q2	1.0 %			
2017/Q2-2018/Q1	1.0 %			
2017/Q1-2017/Q4	1.0 %			
2016/Q4-2017/Q3	1.0 %			
2016/Q3-2017/Q2	2.0 %			
2016/Q2-2017/Q1	2.0 %			
2016/Q1-2016/Q4	2.0 %			
2015/Q4-2016/Q3	1.0 %			
2015/Q3-2016/Q2	1.0 %			
2015/Q2-2016/Q1	1.0 %			
2015/Q1-2015/Q4	1.0 %			
2014/Q4-2015/Q3	2.0 %			
2014/Q3-2015/Q2	2.0 %			
2014/Q2-2015/Q1	2.0 %			
2014/Q1-2014/Q4	2.0 %			
2013/Q4-2014/Q3	2.0 %			
2013/Q3-2014/Q2	3.0 %			
2013/Q2-2014/Q1	3.0 %			

Legends:

NOM 7 - Notes:

None

Data Alerts: None

NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	6.9	0.2	818	119,366
2017	7.2	0.2	864	120,538
2016	7.5	0.3	908	121,194
2015	7.5	0.3	904	121,280
2014	7.8	0.3	953	121,436
2013	7.5	0.3	900	119,390
2012	7.5	0.3	896	120,250
2011	7.3	0.3	879	120,767
2010	7.2	0.2	888	122,750
2009	7.7	0.3	981	127,272

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 8 - Notes:

None

Data Alerts: None

NOM 9.1 - Infant mortality rate per 1,000 live births

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	6.8	0.2	803	118,954
2017	7.0	0.2	845	120,125
2016	7.2	0.3	874	120,779
2015	7.3	0.3	888	120,843
2014	7.1	0.2	864	120,975
2013	7.0	0.2	832	119,002
2012	7.4	0.3	886	119,831
2011	7.2	0.3	867	120,389
2010	7.1	0.2	867	122,350
2009	7.9	0.3	1,004	126,845

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.1 - Notes:

None

Data Alerts: None

NOM 9.2 - Neonatal mortality rate per 1,000 live births

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	4.3	0.2	507	118,954
2017	4.7	0.2	568	120,125
2016	4.9	0.2	591	120,779
2015	4.9	0.2	595	120,843
2014	4.9	0.2	595	120,975
2013	5.1	0.2	601	119,002
2012	4.9	0.2	588	119,831
2011	5.0	0.2	597	120,389
2010	5.0	0.2	608	122,350
2009	5.3	0.2	673	126,845

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.2 - Notes:

None

Data Alerts: None

NOM 9.3 - Post neonatal mortality rate per 1,000 live births

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	2.5	0.1	296	118,954
2017	2.3	0.1	277	120,125
2016	2.3	0.1	283	120,779
2015	2.4	0.1	293	120,843
2014	2.2	0.1	269	120,975
2013	1.9	0.1	231	119,002
2012	2.5	0.1	298	119,831
2011	2.2	0.1	270	120,389
2010	2.1	0.1	259	122,350
2009	2.6	0.1	331	126,845

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.3 - Notes:

None

Data Alerts: None

NOM 9.4 - Preterm-related mortality rate per 100,000 live births

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	239.6	14.2	285	118,954
2017	275.5	15.2	331	120,125
2016	287.3	15.5	347	120,779
2015	294.6	15.6	356	120,843
2014	300.1	15.8	363	120,975
2013	291.6	15.7	347	119,002
2012	291.2	15.6	349	119,831
2011	296.5	15.7	357	120,389
2010	277.9	15.1	340	122,350
2009	328.7	16.1	417	126,845

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.4 - Notes:

None

Data Alerts: None

NOM 9.5 - Sudden Unexpected Infant Death (SUID) rate per 100,000 live births

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	111.8	9.7	133	118,954
2017	111.6	9.6	134	120,125
2016	115.1	9.8	139	120,779
2015	113.4	9.7	137	120,843
2014	118.2	9.9	143	120,975
2013	97.5	9.1	116	119,002
2012	115.2	9.8	138	119,831
2011	100.5	9.1	121	120,389
2010	95.6	8.8	117	122,350
2009	113.5	9.5	144	126,845

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.5 - Notes:

None

Data Alerts: None

NOM 10 - Percent of women who drink alcohol in the last 3 months of pregnancy

Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	7.9 %	1.1 %	9,064	114,306
2017	9.5 %	1.1 %	10,925	114,833
2008	8.2 %	0.8 %	10,279	125,506
2007	5.8 %	0.7 %	7,316	125,511

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has an unweighted denominator between 30 and 59 or confidence interval width >20% points or >1.2 times the estimate and should be interpreted with caution

NOM 10 - Notes:

None

Data Alerts: None

NOM 11 - Rate of neonatal abstinence syndrome per 1,000 birth hospitalizations

Data Source: HCUP - State Inpatient Databases (SID)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	10.2	0.3	1,122	109,879
2017	10.6	0.3	1,193	112,365
2016	9.5	0.3	1,069	112,926
2015	9.2	0.3	779	84,898
2014	8.2	0.3	925	112,507
2013	6.5	0.2	706	109,244
2012	5.3	0.2	590	111,005
2011	4.3	0.2	479	112,134
2010	3.5	0.2	403	114,608
2009	2.7	0.2	328	121,257
2008	1.8	0.1	224	125,615

Legends:

Indicator has a numerator ≤10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 11 - Notes:

None

Data Alerts: None

NOM 12 - Percent of eligible newborns screened for heritable disorders with on time physician notification for out of range screens who are followed up in a timely manner. (DEVELOPMENTAL)

Federally available Data (FAD) for this measure is not available/reportable.

NOM 12 - Notes:

None

Data Alerts: None

NOM 13 - Percent of children meeting the criteria developed for school readiness (DEVELOPMENTAL)

Federally available Data (FAD) for this measure is not available/reportable.

NOM 13 - Notes:

None

Data Alerts: None

NOM 14 - Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018_2019	10.6 %	1.2 %	226,185	2,140,915
2017_2018	10.5 %	1.4 %	228,629	2,169,962
2016_2017	10.6 %	1.4 %	232,089	2,188,748
2016	12.1 %	1.7 %	258,785	2,147,521

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 14 - Notes:

None

Data Alerts: None

NOM 15 - Child Mortality rate, ages 1 through 9, per 100,000

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend				
Year	**Annual Indicator**	**Standard Error**	**Numerator**	**Denominator**
2019	19.3	1.3	216	1,119,745
2018	17.2	1.2	193	1,119,672
2017	17.6	1.3	198	1,122,462
2016	19.0	1.3	214	1,125,637
2015	20.3	1.3	229	1,127,226
2014	18.5	1.3	210	1,132,467
2013	19.3	1.3	220	1,137,991
2012	18.3	1.3	209	1,141,962
2011	18.1	1.3	207	1,144,798
2010	19.2	1.3	220	1,144,649
2009	20.4	1.3	232	1,139,298

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 15 - Notes:

None

Data Alerts: None

NOM 16.1 - Adolescent mortality rate ages 10 through 19, per 100,000

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend				
Year	**Annual Indicator**	**Standard Error**	**Numerator**	**Denominator**
2019	34.3	1.6	464	1,353,801
2018	32.9	1.6	444	1,348,386
2017	34.8	1.6	464	1,335,106
2016	37.5	1.7	496	1,322,412
2015	31.0	1.5	407	1,311,470
2014	33.9	1.6	442	1,304,805
2013	31.0	1.5	404	1,301,668
2012	31.3	1.6	406	1,299,173
2011	36.1	1.7	468	1,296,193
2010	34.6	1.6	446	1,290,695
2009	37.7	1.7	485	1,288,104

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 16.1 - Notes:

None

Data Alerts: None

NOM 16.2 - Adolescent motor vehicle mortality rate, ages 15 through 19, per 100,000

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017_2019	13.3	0.8	273	2,048,817
2016_2018	13.8	0.8	280	2,030,330
2015_2017	14.9	0.9	299	2,007,053
2014_2016	16.0	0.9	318	1,983,550
2013_2015	14.9	0.9	292	1,965,337
2012_2014	14.7	0.9	288	1,955,097
2011_2013	15.2	0.9	297	1,955,777
2010_2012	17.1	0.9	335	1,963,873
2009_2011	19.2	1.0	380	1,976,599
2008_2010	21.2	1.0	420	1,980,406
2007_2009	23.9	1.1	471	1,967,040

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 16.2 - Notes:

None

Data Alerts: None

NOM 16.3 - Adolescent suicide rate, ages 15 through 19, per 100,000

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017_2019	8.9	0.7	182	2,048,817
2016_2018	9.2	0.7	187	2,030,330
2015_2017	8.9	0.7	179	2,007,053
2014_2016	9.4	0.7	187	1,983,550
2013_2015	8.5	0.7	167	1,965,337
2012_2014	7.8	0.6	152	1,955,097
2011_2013	6.7	0.6	131	1,955,777
2010_2012	6.9	0.6	135	1,963,873
2009_2011	7.8	0.6	154	1,976,599
2008_2010	7.7	0.6	152	1,980,406
2007_2009	7.4	0.6	145	1,967,040

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 16.3 - Notes:

None

Data Alerts: None

NOM 17.1 - Percent of children with special health care needs (CSHCN), ages 0 through 17

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018_2019	21.7 %	1.5 %	498,468	2,293,539
2017_2018	21.2 %	1.7 %	485,743	2,294,344
2016_2017	21.1 %	1.7 %	480,138	2,278,464
2016	21.6 %	1.9 %	489,644	2,265,402

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 17.1 - Notes:

None

Data Alerts: None

NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018_2019	18.1 %	2.6 %	90,187	498,468
2017_2018	14.7 %	2.4 %	71,213	485,743
2016_2017	15.5 %	2.8 %	74,633	480,138
2016	18.9 %	4.2 %	92,477	489,644

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 17.2 - Notes:

None

Data Alerts: None

NOM 17.3 - Percent of children, ages 3 through 17, diagnosed with an autism spectrum disorder

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018_2019	3.1 %	0.6 %	59,792	1,919,851
2017_2018	1.8 %	0.4 %	34,874	1,942,945
2016_2017	1.7 %	0.4 %	33,264	1,954,259
2016	2.0 %	0.5 %	38,859	1,915,311

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 17.3 - Notes:

None

Data Alerts: None

NOM 17.4 - Percent of children, ages 3 through 17, diagnosed with Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder (ADD/ADHD)

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018_2019	12.4 %	1.3 %	236,329	1,906,762
2017_2018	10.3 %	1.4 %	199,401	1,930,627
2016_2017	10.5 %	1.4 %	203,098	1,941,172
2016	10.4 %	1.4 %	197,676	1,898,666

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 17.4 - Notes:

None

Data Alerts: None

NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018_2019	52.7 %	5.2 %	141,170	268,024
2017_2018	50.6 %	6.1 %	121,773	240,512
2016_2017	43.2 %	6.4 %	95,209	220,209
2016	45.7 %	7.3 %	97,945	214,300

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 18 - Notes:

None

Data Alerts: None

NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018_2019	91.1 %	1.0 %	2,085,839	2,290,068
2017_2018	88.7 %	1.6 %	2,034,995	2,294,344
2016_2017	89.1 %	1.6 %	2,027,301	2,276,068
2016	89.6 %	1.6 %	2,025,041	2,260,610

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 19 - Notes:

None

Data Alerts: None

NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)

Data Source: WIC

Multi-Year Trend				
Year	**Annual Indicator**	**Standard Error**	**Numerator**	**Denominator**
2018	15.0 %	0.1 %	13,368	88,963
2016	14.2 %	0.1 %	13,849	97,286
2014	15.0 %	0.1 %	13,827	92,407
2012	13.5 %	0.1 %	12,575	92,859
2010	13.9 %	0.1 %	12,459	89,798
2008	14.2 %	0.1 %	10,440	73,574

Legends:

Indicator has a denominator <50 and is not reportable

Indicator has a confidence interval width >20% points or >1.2 times the estimate and should be interpreted with caution

Data Source: Youth Risk Behavior Surveillance System (YRBSS)

Multi-Year Trend				
Year	**Annual Indicator**	**Standard Error**	**Numerator**	**Denominator**
2019	15.4 %	1.4 %	63,235	410,622
2017	15.4 %	1.1 %	66,425	432,035
2015	16.4 %	1.4 %	68,596	417,208
2013	12.5 %	0.9 %	52,783	421,815
2011	12.9 %	1.5 %	53,533	415,433
2009	13.2 %	1.2 %	53,695	406,168
2007	12.7 %	1.2 %	46,593	367,524
2005	13.4 %	1.2 %	50,885	380,019

Legends:

Indicator has an unweighted denominator <100 and is not reportable

Indicator has a confidence interval width >20% points or >1.2 times the estimate and should be interpreted with caution

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018_2019	16.1 %	2.5 %	156,262	972,744
2017_2018	13.5 %	2.4 %	133,707	992,873
2016_2017	13.1 %	2.3 %	131,585	1,000,931
2016	12.6 %	2.0 %	113,147	898,624

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 20 - Notes:

None

Data Alerts: None

NOM 21 - Percent of children, ages 0 through 17, without health insurance

Data Source: American Community Survey (ACS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	5.5 %	0.3 %	127,033	2,293,400
2018	4.9 %	0.3 %	113,604	2,297,795
2017	4.5 %	0.2 %	103,784	2,300,781
2016	4.3 %	0.2 %	98,271	2,294,158
2015	4.6 %	0.2 %	104,590	2,286,419
2014	5.3 %	0.3 %	121,516	2,289,345
2013	5.9 %	0.3 %	135,699	2,283,544
2012	7.3 %	0.3 %	167,287	2,282,478
2011	7.8 %	0.4 %	177,990	2,290,269
2010	8.1 %	0.3 %	184,881	2,283,103
2009	7.9 %	0.3 %	179,093	2,271,639

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 21 - Notes:

None

Data Alerts: None

NOM 22.1 - Percent of children who have completed the combined 7-vaccine series (4:3:1:3*:3:1:4) by age 24 months

Data Source: National Immunization Survey (NIS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	77.9 %	3.1 %	95,000	122,000
2015	73.0 %	3.4 %	91,000	124,000
2014	69.9 %	4.0 %	87,000	124,000
2013	71.2 %	3.8 %	88,000	123,000
2012	76.5 %	3.8 %	95,000	124,000
2011	72.0 %	4.1 %	90,000	125,000

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval width/estimate >1.2

Estimates with 95% confidence interval widths >20 or that are inestimable might not be reliable

NOM 22.1 - Notes:

None

Data Alerts: None

NOM 22.2 - Percent of children, ages 6 months through 17 years, who are vaccinated annually against seasonal influenza

Data Source: National Immunization Survey (NIS) – Flu

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019_2020	64.4 %	1.6 %	1,395,814	2,167,413
2018_2019	65.4 %	1.5 %	1,413,403	2,160,176
2017_2018	59.3 %	1.7 %	1,280,587	2,159,969
2016_2017	60.6 %	1.7 %	1,306,872	2,156,911
2015_2016	60.6 %	1.9 %	1,297,209	2,141,316
2014_2015	60.7 %	2.1 %	1,285,333	2,118,216
2013_2014	61.4 %	1.8 %	1,321,283	2,153,730
2012_2013	57.6 %	2.0 %	1,244,218	2,161,520
2011_2012	55.7 %	3.1 %	1,188,294	2,134,601
2010_2011	51.7 %	2.7 %	1,095,627	2,119,202
2009_2010	47.3 %	3.9 %	1,071,779	2,265,918

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or because the relative standard error is >0.3.

Estimates with 95% confidence interval half-widths > 10 might not be reliable

NOM 22.2 - Notes:

None

Data Alerts: None

NOM 22.3 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine

Data Source: National Immunization Survey (NIS) - Teen

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	71.3 %	3.3 %	471,579	661,756
2018	68.6 %	3.2 %	453,863	661,238
2017	66.8 %	3.1 %	441,771	661,313
2016	57.5 %	3.3 %	377,126	655,800
2015	56.7 %	3.1 %	369,417	651,689

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval width/estimate > 1.2

Estimates with 95% confidence interval widths > 20 or that are inestimable might not be reliable

NOM 22.3 - Notes:

None

Data Alerts: None

NOM 22.4 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the Tdap vaccine

Data Source: National Immunization Survey (NIS) - Teen

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	92.0 %	2.1 %	608,684	661,756
2018	89.1 %	2.1 %	589,099	661,238
2017	91.9 %	1.7 %	607,771	661,313
2016	89.2 %	2.0 %	584,642	655,800
2015	93.4 %	1.5 %	608,666	651,689
2014	92.3 %	1.9 %	598,117	647,948
2013	89.4 %	2.0 %	573,089	641,084
2012	87.9 %	2.3 %	557,002	633,720
2011	77.8 %	2.9 %	491,003	631,495
2010	67.7 %	2.9 %	411,306	607,904
2009	54.8 %	3.3 %	333,405	608,979

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval width/estimate > 1.2

Estimates with 95% confidence interval widths > 20 or that are inestimable might not be reliable

NOM 22.4 - Notes:

None

Data Alerts: None

NOM 22.5 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the meningococcal conjugate vaccine

Data Source: National Immunization Survey (NIS) - Teen

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	93.2 %	1.9 %	616,510	661,756
2018	86.1 %	2.4 %	569,365	661,238
2017	84.8 %	2.4 %	561,007	661,313
2016	75.7 %	2.9 %	496,468	655,800
2015	78.5 %	2.6 %	511,648	651,689
2014	74.1 %	2.9 %	480,407	647,948
2013	72.4 %	2.9 %	464,207	641,084
2012	68.2 %	3.2 %	432,326	633,720
2011	65.9 %	3.2 %	416,429	631,495
2010	52.4 %	3.1 %	318,321	607,904
2009	46.8 %	3.3 %	284,930	608,979

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval width/estimate >1.2

Estimates with 95% confidence interval widths > 20 or that are inestimable might not be reliable

NOM 22.5 - Notes:

None

Data Alerts: None

NOM 23 - Teen birth rate, ages 15 through 19, per 1,000 females

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	18.2	0.2	6,168	338,155
2018	18.7	0.2	6,303	336,190
2017	20.6	0.3	6,845	331,778
2016	21.8	0.3	7,190	329,556
2015	23.5	0.3	7,641	324,650
2014	25.9	0.3	8,280	319,520
2013	28.4	0.3	9,020	317,937
2012	31.7	0.3	10,077	317,673
2011	34.8	0.3	11,070	318,457
2010	38.4	0.4	12,309	320,963
2009	43.7	0.4	14,093	322,835

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 23 - Notes:

None

Data Alerts: None

NOM 24 - Percent of women who experience postpartum depressive symptoms following a recent live birth

Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	10.7 %	1.2 %	12,002	112,361
2017	11.7 %	1.2 %	13,359	114,509

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has an unweighted denominator between 30 and 59 or a confidence interval width >20% points or >1.2 times the estimate and should be interpreted with caution

NOM 24 - Notes:

None

Data Alerts: None

NOM 25 - Percent of children, ages 0 through 17, who were unable to obtain needed health care in the past year

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018_2019	3.1 %	0.7 %	71,828	2,280,941
2017_2018	3.5 %	0.8 %	79,386	2,266,104
2016_2017	2.9 %	0.8 %	65,333	2,259,072
2016	2.7 %	0.8 %	60,460	2,265,402

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 25 - Notes:

None

Data Alerts: None

Form 10
National Performance Measures (NPMs)

State: North Carolina

NPM 1 - Percent of women, ages 18 through 44, with a preventive medical visit in the past year

Federally Available Data					
Data Source: Behavioral Risk Factor Surveillance System (BRFSS)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective					78
Annual Indicator				77.6	76.1
Numerator				1,412,575	1,386,809
Denominator				1,820,993	1,823,266
Data Source				BRFSS	BRFSS
Data Source Year				2018	2019

Previous NPM-1 BRFSS data for survey years 2015, 2016 and 2017 that was pre-populated under the 2016, 2017 and 2018 Annual Report Years is no longer displayed since it is not comparable with 2018 survey data.

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	78.0	78.0	79.0	79.0	80.0	80.0

Field Level Notes for Form 10 NPMs:

None

NPM 3 - Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)

Federally available Data (FAD) for this measure is not available/reportable.

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective	90	90	90	90	90
Annual Indicator	77.5	76.1	77.3	76.7	77.3
Numerator	1,626	1,502	1,560	1,269	1,560
Denominator	2,097	1,974	2,017	1,654	2,017
Data Source	NC Vital Statistics	NC Vital Statistics	NC Vital Statistics	NC Vital Statistics	NC Vital Statistics
Data Source Year	2015	2016	2017	2018	2019
Provisional or Final ?	Provisional	Provisional	Provisional	Provisional	Provisional

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	90.0	90.0	90.0	90.0	90.0	90.0

Field Level Notes for Form 10 NPMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**
	Field Note: The state data for NPM#3 are based on the current self-designated levels of care which do not align with the AAP/ACOG/SMFM guidelines, thus are marked provisional.	
2.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**
	Field Note: The state data for NPM#3 are based on the current self-designated levels of care which do not align with the AAP/ACOG/SMFM guidelines, thus are marked provisional.	
3.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: The state data for NPM#3 are based on the current self-designated levels of care which do not align with the AAP/ACOG/SMFM guidelines, thus are marked provisional.	
4.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: The state data for NPM#3 are based on the current self-designated levels of care which do not align with the AAP/ACOG/SMFM guidelines, thus are marked provisional.	
5.	**Field Name:**	**2020**
	Column Name:	**State Provided Data**
	Field Note: The state data for NPM#3 are based on the current self-designated levels of care which do not align with the AAP/ACOG/SMFM guidelines, thus are marked provisional.	

NPM 4A - Percent of infants who are ever breastfed

Federally Available Data					
Data Source: National Immunization Survey (NIS)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective	78	79	80	84	85
Annual Indicator	75.3	83.5	84.9	82.5	80.3
Numerator	92,299	90,633	103,683	88,249	90,222
Denominator	122,600	108,563	122,165	106,953	112,365
Data Source	NIS	NIS	NIS	NIS	NIS
Data Source Year	2013	2014	2015	2016	2017

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	85.0	85.0	85.0	85.0	85.0	85.0

Field Level Notes for Form 10 NPMs:

None

NPM 4B - Percent of infants breastfed exclusively through 6 months

Federally Available Data					
Data Source: National Immunization Survey (NIS)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective	22	23	24	25	26
Annual Indicator	20.8	26.1	27.0	23.4	23.3
Numerator	24,773	27,283	31,775	24,051	25,865
Denominator	119,114	104,660	117,705	102,887	111,143
Data Source	NIS	NIS	NIS	NIS	NIS
Data Source Year	2013	2014	2015	2016	2017

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	26.5	27.0	27.5	28.0	28.0	28.0

Field Level Notes for Form 10 NPMs:

None

NPM 6 - Percent of children, ages 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			62	50	50
Annual Indicator		47.6	44.4	43.0	48.1
Numerator		132,477	120,289	112,720	119,658
Denominator		278,073	270,809	261,906	249,001
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2017_2018	2018_2019

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	50.0	50.0	50.0	50.0	50.0	50.0

Field Level Notes for Form 10 NPMs:

None

NPM 10 - Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year.

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			83	83	83
Annual Indicator		85.5	81.0	81.0	87.3
Numerator		643,711	638,902	638,902	786,182
Denominator		752,936	788,733	788,733	900,582
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2016_2017	2019

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	87.5	87.5	87.5	88.0	88.0	88.0

Field Level Notes for Form 10 NPMs:

None

NPM 11 - Percent of children with and without special health care needs, ages 0 through 17, who have a medical home - Children with Special Health Care Needs

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH) - CSHCN					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			60	50	45
Annual Indicator		52.6	46.9	41.0	48.4
Numerator		257,575	225,282	199,181	241,421
Denominator		489,644	480,138	485,743	498,468
Data Source		NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN
Data Source Year		2016	2016_2017	2017_2018	2018_2019

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	48.5	48.5	49.0	49.0	50.0	50.0

Field Level Notes for Form 10 NPMs:

None

Form 10
National Performance Measures (NPMs) (2016-2020 Needs Assessment Cycle)

State: North Carolina

2016-2020: NPM 14.1 - Percent of women who smoke during pregnancy

Federally Available Data					
Data Source: National Vital Statistics System (NVSS)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective	9.8	9.6	9.4	9	9
Annual Indicator	9.4	8.9	8.7	8.4	7.6
Numerator	11,300	10,780	10,403	9,936	8,991
Denominator	120,769	120,735	120,100	118,920	118,682
Data Source	NVSS	NVSS	NVSS	NVSS	NVSS
Data Source Year	2015	2016	2017	2018	2019

Field Level Notes for Form 10 NPMs:

None

2016-2020: NPM 14.2 - Percent of children, ages 0 through 17, who live in households where someone smokes - Child Health

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			19	19	18.5
Annual Indicator		19.2	18.3	15.4	14.1
Numerator		427,229	413,153	346,362	312,548
Denominator		2,225,253	2,257,225	2,253,664	2,213,403
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2017_2018	2018_2019

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Field Level Notes for Form 10 NPMs:

None

2016-2020: NPM 15 - Percent of children, ages 0 through 17, who are continuously and adequately insured - Child Health

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			66	66	70
Annual Indicator		66.8	66.2	68.2	66.6
Numerator		1,504,417	1,503,878	1,562,073	1,523,858
Denominator		2,253,063	2,272,294	2,289,632	2,288,827
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2017_2018	2018_2019

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Field Level Notes for Form 10 NPMs:

None

NPM 15 - Percent of children, ages 0 through 17, who are continuously and adequately insured - Adolescent Health

Field Level Notes for Form 10 NPMs:

None

NPM 15 - Percent of children, ages 0 through 17, who are continuously and adequately insured - Children with Special Health Care Needs

Field Level Notes for Form 10 NPMs:

None

Form 10
State Performance Measures (SPMs)

State: North Carolina

SPM 1 - Percent of PRAMS respondents who reported that their pregnancy was intended

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	55.8	
Numerator		
Denominator		
Data Source	NC Pregnancy Risk Assessment Monitoring System	
Data Source Year	2019	
Provisional or Final ?	Final	

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	59.7	60.0	60.3	60.6	61.0	61.0

Field Level Notes for Form 10 SPMs:

None

SPM 2 - Percent of women who smoke during pregnancy

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	7.6	
Numerator	8,991	
Denominator	118,725	
Data Source	NC Vital Statistics/SCHS	
Data Source Year	2019	
Provisional or Final ?	Final	

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	8.1	7.9	7.8	7.7	7.5	7.5

Field Level Notes for Form 10 SPMs:

None

SPM 3 - Percent of children with two or more Adverse Childhood Experiences (ACEs)

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	15.3	
Numerator		
Denominator		
Data Source	2018-19 NSCH	
Data Source Year	2018-19	
Provisional or Final ?	Final	

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	15.0	15.0	14.0	14.0	13.0	13.0

Field Level Notes for Form 10 SPMs:

None

SPM 4 - Percent of NC children, ages 19 through 35 months, who have completed the combined 7-vaccine series (4:3:1:3*:3:1:4)

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	80.1	
Numerator		
Denominator		
Data Source	2017-19 National Immunization Survey	
Data Source Year	2019	
Provisional or Final ?	Final	

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	90.0	90.0	90.0	90.0	90.0	90.0

Field Level Notes for Form 10 SPMs:

None

SPM 5 - Ratio of black infant deaths to white infant deaths

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	2.7	
Numerator	12.5	
Denominator	4.7	
Data Source	NC Vital Statistics/SCHS	
Data Source Year	2019	
Provisional or Final ?	Final	

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	2.3	2.2	2.1	2.0	1.9	1.9

Field Level Notes for Form 10 SPMs:

None

Form 10
State Performance Measures (SPMs) (2016-2020 Needs Assessment Cycle)

2016-2020: SPM 1 - Percent of infants with confirmed hearing loss who are enrolled for intervention services no later than age 6 months

Measure Status:				**Active**	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		60	60	50	50
Annual Indicator	41.1	44.2	41.7	48.7	43.6
Numerator	83	96	83	110	102
Denominator	202	217	199	226	234
Data Source	WCSWeb Hearing Link	WCSWeb Hearing Link	WCSWeb Hearing Link	WCSWeb Hearing Link	WCSWeb Hearing Link
Data Source Year	2015	2016	2017	2018	2019
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 SPMs:

1.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**
	Field Note: Another 32 children enrolled after 6 months of age who had originally declined EI services when first referred. Twenty other families declined EI services, 1 infant died, 5 were out of state residents, and 1 moved out of NC before services could be started.	
2.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: 5 infants died before services, 6 non-resident or moved out of state, 1 unable to receive services due to medical reasons, 37 parent/family declined services, 1 family contacted but unresponsive, 12 unable to contact, 5 unknown reason, 44 received services after 6 months of age, 5 enrolled in services but age of enrollment not known	

2016-2020: SPM 2 - Number of substantiated reports of child abuse and/or neglect

Measure Status:				Active	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		10,000	9,500	8,000	7,500
Annual Indicator	9,358	8,737	9,640	9,167	7,446
Numerator					
Denominator					
Data Source	UNC Jordan Institute for Families	UNC Jordan Institute for Families	UNC Jordan Institute for Families	UNC Jordan Institute for Families	UNC Jordan Institute for Families
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 SPMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**
	Field Note: More Information on Data Source: Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina (v3.2)	
2.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**
	Field Note: More Information on Data Source: Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina (v3.2).	
3.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: More Information on Data Source: Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina (v3.2).	
4.	**Field Name:**	**2020**
	Column Name:	**State Provided Data**
	Field Note: More Information on Data Source: Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina (v3.2).	

2016-2020: SPM 3 - Percent of infants and toddlers with Individualized Family Services Plans (IFSPs) who receive the early intervention services on their IFSPs in a timely manner (within 30 days)

Measure Status:				**Active**	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		100	100	100	100
Annual Indicator	99.1	97.9	99.3	99.5	98.4
Numerator					
Denominator					
Data Source	NC Health Information System	NC Health Information System	NC Health Information System	NC Health Information System	NC Health Information System
Data Source Year	2015	2016	2017	2018	2019
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 SPMs:

None

2016-2020: SPM 4 - The ratio of school health nurses to the public school student population

Measure Status:				Active	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		1,067	750	750	750
Annual Indicator	1,086	1,073	1,055	1,021	1,007
Numerator					
Denominator					
Data Source	NC Annual School Health Services Report	NC Annual School Health Services Report	NC Annual School Health Services Report	NC Annual School Health Services Report	NC Annual School Health Services Report
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 SPMs:

None

Form 10
Evidence-Based or –Informed Strategy Measures (ESMs)

State: North Carolina

ESM 1.1 - Number of LHDs that offer extended hours for FP services.

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	15	
Numerator		
Denominator		
Data Source	NC Family Planning Program Service Site Informatio	
Data Source Year	2020	
Provisional or Final ?	Final	

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	15.0	15.5	16.0	16.5	17.0	17.0

Field Level Notes for Form 10 ESMs:

None

ESM 1.2 - Percent of WHB programs that utilize the PCH Outreach and Education Toolkit

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	0.0	5.0	10.0	15.0	20.0	20.0

Field Level Notes for Form 10 ESMs:

None

ESM 1.3 - Percent of LHDs who had staff complete training on reproductive justice framework, contraceptive methods, and reproductive life planning (RLP).

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	30.0	40.0	50.0	60.0	75.0	75.0

Field Level Notes for Form 10 ESMs:

None

ESM 1.4 - Percent of LHDs offering same day insertion of both contraceptive implants and intrauterine devices (IUDs)

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	74.0	74.5	75.0	75.5	76.0	76.0

Field Level Notes for Form 10 ESMs:

None

ESM 3.1 - Percent of birth facilities with level of care documented using the CDC LOCATe tool.

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator		70.9
Numerator		61
Denominator		86
Data Source		WHB Internal Log
Data Source Year		FY19-20
Provisional or Final ?		Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	50.0	75.0	100.0	100.0	100.0	100.0

Field Level Notes for Form 10 ESMs:

None

ESM 3.2 - Percent of LHDs who are utilizing the NC Psychiatry Access Line (NC-PAL)

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator		1.2
Numerator		1
Denominator		85
Data Source		WHB Internal Log
Data Source Year		2020
Provisional or Final ?		Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	25.0	35.0	50.0	60.0	75.0	75.0

Field Level Notes for Form 10 ESMs:

None

ESM 4.1 - Number of eligible WIC participants who receive breastfeeding peer counselor services

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	27,587	25,020
Numerator		
Denominator		
Data Source	NC Crossroads WIC System	NC Crossroads WIC System
Data Source Year	2019	2020
Provisional or Final ?	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	28,350.0	29,120.0	29,900.0	30,660.0	31,425.0	31,425.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: Data are for the State Fiscal Year (July 1 - June 30).	
2.	**Field Name:**	**2020**
	Column Name:	**State Provided Data**
	Field Note: Data are for the State Fiscal Year (July 1 - June 30).	

ESM 6.1 - Percent of LHDs whose child health staff receive training on appropriate use of valid and reliable developmental, psychosocial, social determinants of health, and behavioral health screening tools for children during state fiscal year

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator		75
Numerator		51
Denominator		68
Data Source		C and Y Branch staff internal log
Data Source Year		FY19-20
Provisional or Final ?		Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	80.0	85.0	90.0	95.0	100.0	100.0

Field Level Notes for Form 10 ESMs:

None

ESM 10.1 - Number of adolescents receiving a preventive medical visit in the past year at a local health department or school health center

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator		16,676
Numerator		
Denominator		
Data Source		LHD/HSA and NC SHC Annual Report
Data Source Year		2020
Provisional or Final ?		Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	24,225.0	24,709.0	25,203.0	25,707.0	26,222.0	26,222.0

Field Level Notes for Form 10 ESMs:

None

ESM 10.2 - Percent of adolescents who had a behavioral health screening at time of preventive care visit

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	66.3	67.6	68.9	70.4	71.8	71.8

Field Level Notes for Form 10 ESMs:

None

ESM 11.1 - Percent of children with special health care needs who received family-centered care

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	85	
Numerator		
Denominator		
Data Source	2018-19 NSCH	
Data Source Year	2018-19	
Provisional or Final ?	Final	

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	88.7	89.2	89.6	90.1	90.5	90.5

Field Level Notes for Form 10 ESMs:

None

ESM 11.2 - Number of Medicaid, Managed Care Organization, or other stakeholder meetings attended by WCHS staff members with an agenda item related to medical home promotion

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator		8
Numerator		
Denominator		
Data Source		C and Y Branch Internal Staff Log
Data Source Year		2020
Provisional or Final ?		Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	10.0	12.0	12.0	14.0	16.0	16.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2020**
	Column Name:	**State Provided Data**

Field Note:
Data are for State Fiscal Year (July 1 - June 30).

Form 10
Evidence-Based or -Informed Strategy Measures (ESMs) (2016-2020 Needs Assessment Cycle)

2016-2020: ESM 1.2 - Percent of women enrolled in Medicaid who deliver and receive a primary care visit within 12 months of delivery

Measure Status:			**Active**	
State Provided Data				
	2017	**2018**	**2019**	**2020**
Annual Objective	25	20	20	20
Annual Indicator	18.6	17.2	17.2	16.8
Numerator	7,938	7,723	7,479	6,761
Denominator	42,700	44,871	43,567	40,340
Data Source	NC SCHS	NC SCHS	NC SCHS	NC SCHS
Data Source Year	2015	2016	2017	2019
Provisional or Final ?	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**
	Field Note: SCHS staff match Medicaid claims of PPHV data with NC Composite Linked Birth File.	
2.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: SCHS staff match Medicaid claims of primary care visit data with NC Composite Linked Birth File.	
3.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: SCHS staff match Medicaid claims of primary care visit data with NC Composite Linked Birth File.	
4.	**Field Name:**	**2020**
	Column Name:	**State Provided Data**
	Field Note: SCHS staff match Medicaid claims of primary care visit data with NC Composite Linked Birth File. The percent of women for 2018 (not captured in data table as the most recent year was cited instead) was 17.2%.	

2016-2020: ESM 3.1 - Percent of birthing hospitals who complete the CDC Levels of Care Assessment Tool (CDC LOCATe) annually

Measure Status:				Active	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		40	0	29	30
Annual Indicator	0	0	0	33.7	70.9
Numerator				29	61
Denominator				86	86
Data Source	LOCATe Survey Tool	LOCATe Survey Tool	LOCATe Survey Tool	WHB Internal Log	WHB Internal Log
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**
	Field Note: Funding for the Perinatal/Neonatal Outreach Coordination project began in FY18. Goals are to have 18 birthing hospitals in Perinatal Care Regions 4 & 6 complete the LOCATe tool in FY19 and the remaining 13 hospitals completing it in FY20.	
2.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: Funding for the Perinatal/Neonatal Outreach Coordination project began in FY18, but was only in place for 3 months. 29 hospitals completed LOCATe in FY19 which will be reported next year.	

2016-2020: ESM 4.1 - Percent of local health departments who have had Maternal Health staff members trained on BF promotion and support through the NC Regional Lactation Training Centers

Measure Status:				**Active**	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		50	60	60	60
Annual Indicator	70	63.8	60	46.8	100
Numerator	56	51	48	36	77
Denominator	80	80	80	77	77
Data Source	Regional Lactation Consultant Work Plans	Regional Lactation Consultant Work Plans	Regional Lactation Consultant Work Plans	Regional Lactation Consultant Work Plans	Regional Lactation Consultant Work Plans
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**

Field Note:
Data for 2016 and 2017 were updated as the proper denominator is now 80, not 100 as 20 county health departments do not provide direct prenatal care.

2016-2020: ESM 4.2 - Percent of LHDs who are working toward or awarded the NC Breastfeeding Coalition's Mother-Baby Award for outpatient healthcare clinics (either child health or maternity clinics)

Measure Status:			**Active**	
State Provided Data				
	2017	**2018**	**2019**	**2020**
Annual Objective	0	5	5	5
Annual Indicator	2	3	5	7
Numerator	2	3	5	7
Denominator	100	100	100	100
Data Source	NC Breastfeeding Coalition	NC Breastfeeding Coalition	NC Breastfeeding Coalition	NC Breastfeeding Coalition
Data Source Year	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

None

2016-2020: ESM 6.1 - Number of training opportunities to LHD providers on appropriate use of valid and reliable developmental, psychosocial, and behavioral health screening tools for children during state fiscal year

Measure Status:				**Active**	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		10	10	10	10
Annual Indicator	17	13	9	6	5
Numerator					
Denominator					
Data Source	Pediatric Medical Consultant Training Logs	Pediatric Medical Consultant Training Logs	Pediatric Medical Consultant Training Logs	Pediatric Medical Consultant Training Logs	Pediatric Medical Consultant Training Logs
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
The annual objective for 2016 is higher than the objectives for future years because there were an unusually high number of training opportunities in 2016. The annual objective of 10 training opportunities is more realistic.

2016-2020: ESM 10.1 - Number of adolescents receiving a preventive medical visit in the past year at a local health department

Measure Status:				Active	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective				12,000	12,000
Annual Indicator	6,797	6,581	11,698	12,521	7,332
Numerator					
Denominator					
Data Source	NC Health Information System	NC Health Information System	NC LHD-HSA	NC LHD-HSA	NC LHD-HSA
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: With the switch from the NC Health Information System to the NC LHD-HSA system, data from 2018 onward are not comparable to data from previous years.	
2.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: With the switch from the NC Health Information System to the NC LHD-HSA system, data from 2018 onward are not comparable to data from previous years.	
3.	**Field Name:**	**2020**
	Column Name:	**State Provided Data**
	Field Note: With the switch from the NC Health Information System to the NC LHD-HSA system, data from 2018 onward are not comparable to data from previous years.	

2016-2020: ESM 11.1 - Number of policies, practices, and resources changed to support improved outcomes for CYSHCN by counties implementing Innovative Approaches strategies.

Measure Status:				Active	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		20	25	30	20
Annual Indicator	29	29	40	59	32
Numerator					
Denominator					
Data Source	IA Initiative State Director	IA Initiative State Director	IA Initiative State Director	IA Initiative State Director	IA Initiative State Director
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

None

2016-2020: ESM 14.1.1 - Number of women of reproductive age (15 to 44 years) who received at least one counseling session from the tobacco QuitlineNC in the prior 12 months

Measure Status:				**Active**	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		2,500	3,200	3,000	3,000
Annual Indicator	2,060	3,167	2,740	1,652	1,569
Numerator					
Denominator					
Data Source	QuitlineNC Data Report	QuitlineNC Data Report	QuitlineNC Data Report	QuitlineNC Data Report	QuitlineNC Data Report
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

None

2016-2020: ESM 14.2.1 - Number of women who receive tobacco cessation counseling by care managers and/or home visitors

Measure Status:			Active	
State Provided Data				
	2017	**2018**	**2019**	**2020**
Annual Objective			60,000	60,000
Annual Indicator			64,600	35,936
Numerator				
Denominator				
Data Source			CC4C and Home Visiting program databases	CC4C and Home Visiting program databases
Data Source Year			2019	2020
Provisional or Final ?			Final	Final

Field Level Notes for Form 10 ESMs:

None

2016-2020: ESM 15.1 - Number of outreach activities to promote access to health insurance done annually by the Children and Youth Branch's Minority Outreach Coordinator, CYSHCN HelpLine Coordinator, and YSHCN Access to Care Coordinator

Measure Status:				**Active**	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		200	200	200	200
Annual Indicator	167	191	187	186	88
Numerator					
Denominator					
Data Source	CSHCN Quarterly Outreach Report	CSHCN Quarterly Outreach Report	CSHCN Quarterly Outreach Report	CSHCN Quarterly Outreach Report	CSHCN Quarterly Outreach Report
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

None

Form 10
State Performance Measure (SPM) Detail Sheets

State: North Carolina

SPM 1 - Percent of PRAMS respondents who reported that their pregnancy was intended
Population Domain(s) – Women/Maternal Health

Measure Status:	Active
Goal:	By 2025, increase the number of live births that were the result of an intended pregnancy to 61%
Definition:	**Unit Type:** Percentage **Unit Number:** 100 **Numerator:** Number of PRAMS respondents who reported that they wanted to be pregnant then or sooner **Denominator:** Number of PRAMS respondents
Data Sources and Data Issues:	NC Pregnancy Risk Assessment Monitoring System (PRAMS)
Significance:	Unintended pregnancies directly correlate with poor birth outcomes. Couples may have risk factors or be engaging in behaviors that impact their own health and - unknowingly - the health of their unborn child at risk. Healthy timing and spacing of pregnancy provides couples the opportunity to prepare for the healthiest pregnancy possible.

SPM 2 - Percent of women who smoke during pregnancy
Population Domain(s) – Perinatal/Infant Health

Measure Status:	Active
Goal:	By June 30, 2025, reduce the percent of women who smoke during pregnancy by 10.7% to 7.5%.
Definition:	**Unit Type:** Percentage **Unit Number:** 100 **Numerator:** Number of women who report smoking during pregnancy **Denominator:** Number of live births
Data Sources and Data Issues:	Vital Statistics/NC State Center for Health Statistics
Significance:	Women who smoke during pregnancy are more likely to experience a fetal death or deliver a low birth weight baby. Adverse effects of parental smoking on children have been a clinical and public health concern for decades. Children have an increased frequency of ear infections; acute respiratory illnesses and related hospital admissions during infancy; severe asthma and asthma-related problems; lower respiratory tract infections; and SIDS. The Health Consequences of Smoking—50 Years of Progress. A Report of the Surgeon General. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. https://www.surgeongeneral.gov/library/reports/50-years-of-progress/index.html

SPM 3 - Percent of children with two or more Adverse Childhood Experiences (ACEs)
Population Domain(s) – Child Health

Measure Status:	Active
Goal:	By 2030, reduce the percent of children with two or more ACEs to 18%.
Definition:	**Unit Type:** Percentage **Unit Number:** 100 **Numerator:** Number of children with 2 or more adverse childhood experiences as reported by their parents **Denominator:** Number of children age 0-17 years
Data Sources and Data Issues:	National Survey of Children's Health
Significance:	Children thrive in safe, stable, and nurturing environments. Adverse experiences, such as exposure to trauma, violence, or neglect during childhood, increase the likelihood of poor physical and mental health as a child grows up. The more Adverse Childhood Experiences (ACEs) an individual has, the greater the risk for health-related challenges in adulthood. This includes a higher risk for coronary heart disease, stroke, asthma, and chronic obstructive pulmonary disease, much higher risk of depression, higher rates of risky health behaviors like smoking and heavy drinking, and more socioeconomic challenges. Research has shown that exposure to these ACEs can impact children's neurobiological development, negatively affecting their learning, language, behavior, and physical and mental health. Decreasing childhood exposures to trauma, building resilience, strong relationships with caregivers, and providing safe, stable environments can help children overcome the impact of ACEs. While two-thirds of people have at least one ACE, the more ACEs a child accumulates the more at risk to chronic disease and risky health behaviors they become. (NCIOM. Healthy North Carolina 2030 A Path Toward Health. Morrisville, NC: NCIOM; 2020)

SPM 4 - Percent of NC children, ages 19 through 35 months, who have completed the combined 7-vaccine series (4:3:1:3*:3:1:4)
Population Domain(s) – Child Health

Measure Status:	Active
Goal:	By 2025, increase the percent of all children 19 to 36 months of age who have completed recommended vaccines to 90%
Definition:	**Unit Type:** Percentage **Unit Number:** 100 **Numerator:** Number of NC children sampled, ages 19 through 35 months, who have completed the combined 7-vaccine series (4:3:1:3*:3:1:4) **Denominator:** Number of NC children sampled, ages 19 through 35 months
Data Sources and Data Issues:	National Immunization Survey
Significance:	Vaccination is one of the greatest public health achievements of the 20th century, resulting in dramatic declines in morbidity and mortality for many infectious diseases. Childhood vaccination in particular is considered among the most cost-effective preventive services available, as it averts a potential lifetime lost to death and disability. Currently, there are 12 different vaccines recommended by the Centers for Disease Control and Prevention from birth through age 18, many of which require multiple doses for effectiveness as well as boosters to sustain immunity. (https://www.cdc.gov/vaccines/index.html)

SPM 5 - Ratio of black infant deaths to white infant deaths
Population Domain(s) – Cross-Cutting/Systems Building

Measure Status:	Active
Goal:	By 2025, decrease the statewide black/white infant mortality ratio to 1.92.
Definition:	**Unit Type:** Ratio **Unit Number:** 1 **Numerator:** Black, non-Hispanic infant mortality rate **Denominator:** White, non-Hsipanic infant mortalit rate
Data Sources and Data Issues:	Vital Statistics/NC State Center for Health Statistics
Significance:	The death of an infant in the first year of life is considered a sentinel public health event and an indicator of the overall health of a population. The 2018 infant mortality rate for North Carolina was 6.8 deaths per 1,000 live births, which represents a historic low for the state. While the state has experienced substantial declines in overall infant mortality over the last two decades, racial disparities in infant mortality persist and at times widen. Comparing infant mortality rates among babies born to non-Hispanic Black mothers with non-Hispanic white mothers, the disparity ratio remained virtually unchanged from 1999 to 2018,with non-Hispanic Black infants having mortality rates 2.4 to 2.5 times higher than non-Hispanic white infants throughout this time period. Disparity ratios are also high among non-Hispanic American Indians, with rates 1.6 to 2 times higher than non-Hispanic white infants over the same period.

Form 10
State Performance Measure (SPM) Detail Sheets (2016-2020 Needs Assessment Cycle)

2016-2020: SPM 1 - Percent of infants with confirmed hearing loss who are enrolled for intervention services no later than age 6 months
Population Domain(s) – Perinatal/Infant Health

<table>
<tr><td>Measure Status:</td><td>Active</td></tr>
<tr><td>Goal:</td><td>To increase the percent of infants with confirmed hearing loss who are enrolled for intervention services no later than age 6 months</td></tr>
<tr><td>Definition:</td><td>
<table>
<tr><td>Unit Type:</td><td>Percentage</td></tr>
<tr><td>Unit Number:</td><td>100</td></tr>
<tr><td>Numerator:</td><td>Percent of infants with confirmed hearing loss who are enrolled for intervention services no later than age 6 months</td></tr>
<tr><td>Denominator:</td><td>Number of infants with confirmed hearing loss in the calendar year</td></tr>
</table>
</td></tr>
<tr><td>Healthy People 2020 Objective:</td><td>ENT-VSL-1.3 Increase the proportion of infants with confirmed hearing loss who are enrolled for intervention services no later than age 6 months</td></tr>
<tr><td>Data Sources and Data Issues:</td><td>WCSWeb Hearing Link, North Carolina’s web-based data tracking and surveillance system for newborn hearing screening</td></tr>
<tr><td>Significance:</td><td>Hearing loss can affect a child’s ability to develop communication, language, and social skills. The most important time for a child to be exposed to and learn language is the first three years of life. Children who receive appropriate hearing-related equipment and early intervention at no later than 6 months of age perform as much as 20 to 40 percentile points higher on school-related measures (vocabulary, articulation, intelligibility, social adjustment, and behavior) as compared to those who do not receive those devices and services early.</td></tr>
</table>

2016-2020: SPM 2 - Number of substantiated reports of child abuse and/or neglect
Population Domain(s) – Child Health

<table>
<tr><td>Measure Status:</td><td>Active</td></tr>
<tr><td>Goal:</td><td>To ensure that families receive sufficient and appropriate support during pregnancy, at birth and during child-rearing years, resulting in reduced incidence of substantiated child abuse and/or neglect</td></tr>
<tr><td>Definition:</td><td>
<table>
<tr><td>Unit Type:</td><td>Count</td></tr>
<tr><td>Unit Number:</td><td>20,000</td></tr>
<tr><td>Numerator:</td><td>Point in time number of substantiated reports of abuse and/or neglect in a given fiscal year</td></tr>
<tr><td>Denominator:</td><td></td></tr>
</table>
</td></tr>
<tr><td>Healthy People 2020 Objective:</td><td>IVP-37 Reduce child maltreatment deaths and IVP-38 Reduce nonfatal child maltreatment</td></tr>
<tr><td>Data Sources and Data Issues:</td><td>Sum of the Abuse and Neglect, Abuse, Neglect, and Dependency category totals found in the Type of Finding by Category report (Investigated Reports of Abuse and Neglect Type of Finding on Most Severe Report by Categories) from the Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina (v3.2). This is a point in time report. It is important to note that this information is report-based. Thus, one report may include multiple children. In instances where different children have different finding types, only the most severe finding is counted. Citation: Duncan, D.F., Kum, H.C., Flair, K.A., Stewart, C.J., Vaughn, J.S., Guest, S., Rose, R.A., Gwaltney, A.Y., and Gogan, H.C. (2016). Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina (v3.2). Retrieved (month/day/year) from the University of North Carolina at Chapel Hill Jordan Institute for Families website. URL: http://ssw.unc.edu/ma/</td></tr>
<tr><td>Significance:</td><td>Child maltreatment is a significant public health problem that negatively impacts North Carolina’s future. Per the Understanding Child Maltreatment fact sheet produced by the Centers for Disease Control and Prevention (http://www.cdc.gov/violenceprevention/pdf/understanding-cm-factsheet.pdf), abused children often suffer physical injuries and stress that negatively impacts early brain development and the nervous and immune systems. It impacts health across an individual’s lifespan and is associated with a broad range of problems including alcoholism, depression, drug abuse, eating disorders, obesity, high-risk sexual behaviors, smoking, suicide, and certain chronic conditions.</td></tr>
</table>

2016-2020: SPM 3 - Percent of infants and toddlers with Individualized Family Services Plans (IFSPs) who receive the early intervention services on their IFSPs in a timely manner (within 30 days)
Population Domain(s) – Children with Special Health Care Needs

<table>
<tr><td>Measure Status:</td><td>Active</td></tr>
<tr><td>Goal:</td><td>For the WCHS to show improvement in ensuring that infants and toddlers with IFSPs receive the early intervention services on their IFSPs in a timely manner (within 30 days)</td></tr>
<tr><td>Definition:</td><td>
<table>
<tr><td>Unit Type:</td><td>Percentage</td></tr>
<tr><td>Unit Number:</td><td>100</td></tr>
<tr><td>Numerator:</td><td>Number of infants and toddlers who had services added to their IFSPs during the month of January who receive the early intervention services on their IFSPs within 30 days</td></tr>
<tr><td>Denominator:</td><td>Number of infants and toddlers who had services added to their IFSPs during the month of January</td></tr>
</table>
</td></tr>
<tr><td>Healthy People 2020 Objective:</td><td>DH-20 Increase the proportion of children with disabilities, birth through age 2 years, who receive early intervention services in home or community-based settings</td></tr>
<tr><td>Data Sources and Data Issues:</td><td>NC Health Information System</td></tr>
<tr><td>Significance:</td><td>Each of the (16 Children’s Developmental Services Agencies (CDSAs) receives referrals from a variety of sources, including but not limited to, pediatricians, CC4C, Neonatal Intensive Care Units (NICUs), parents, and community partners, such as Head Start and Early Start. The CDSAs are required to evaluate all children within 45 days of referral for eligibility and if eligible, develop an Individualized Family Service Plan for each child and family, if the family decides to enroll in the North Carolina Infant-Toddler Program (ITP) and receive services and supports for their child(ren). The focus of ITP is on family-directed services for infants and toddlers, with an emphasis on providing services based on family routines, in natural learning environments and in a culturally sensitive manner. Not every eligible child and family enrolls in the ITP. Although it is a mandatory program that each state must provide, enrollment and participation are voluntary. Many factors affect a family’s decision to enroll, including the extent of financial contribution, family readiness and family acceptance that their child may have developmental delays. Early child development research has shown that the rate of learning and development is most rapid in a child’s first three years of life. Because of this special period of readiness for learning, timing of intervention becomes particularly important.</td></tr>
</table>

2016-2020: SPM 4 - The ratio of school health nurses to the public school student population
Population Domain(s) – Adolescent Health

Measure Status:	Active
Goal:	To decrease the ratio of school health nurses to the public school student population.
Definition:	**Unit Type:** Ratio **Unit Number:** 1 **Numerator:** The ratio of school health nurses to the public school student population in a given school year **Denominator:** N/A
Healthy People 2020 Objective:	ECBP-5 Increase the proportion of elementary, middle, and senior high schools that have a full-time registered school nurse-to-student ratio of at least 1:750
Data Sources and Data Issues:	North Carolina Annual School Health Services Report for Public Schools
Significance:	A licensed practical nurse or registered nurse is an essential component of a healthy school. Current models of school health services reflect and understanding that children's physical and mental health are linked to their abilities to succeed academically and socially in the school environment. School nurses assess student health and development, help families determine when medical services are needed, and serve as a professional link with physicians and community resources.

Form 10
State Outcome Measure (SOM) Detail Sheets

State: North Carolina

No State Outcome Measures were created by the State.

Form 10
Evidence-Based or –Informed Strategy Measures (ESM) Detail Sheets

State: North Carolina

ESM 1.1 - Number of LHDs that offer extended hours for FP services.
NPM 1 – Percent of women, ages 18 through 44, with a preventive medical visit in the past year

Measure Status:	Active
Goal:	To increase the number of LHDs that offer extended hours for FP services by 10% (from 15 to 17) by 2025 in order to increase access to preventive medical visits.
Definition:	**Unit Type:** Count **Unit Number:** 100 **Numerator:** Number of LHDs that offer extended hours for FP services. **Denominator:**
Data Sources and Data Issues:	NC Family Planning Program Service Site Information
Significance:	There is moderate evidence that having extended hours can prevent missed opportunities in providing preventive services to women. As cited by both the American College of Obstetricians and Gynecologists and the Institute of Medicine, the well woman visit provides an opportunity for the provision of preventive services that can improve women's health immediately and long term, address reproductive life planning/family planning, and ultimately improve birth outcomes.

ESM 1.2 - Percent of WHB programs that utilize the PCH Outreach and Education Toolkit
NPM 1 – Percent of women, ages 18 through 44, with a preventive medical visit in the past year

Measure Status:	Active
Goal:	By 2025, 20% of WHB programs will utilize the PCH Outreach and Education Toolkit in an effort to increase the percent of women who receive annual preventive medical visits.
Definition:	**Unit Type:** Percentage **Unit Number:** 100 **Numerator:** Number of WHB programs that utilize the PCH Outreach and Education Toolkit **Denominator:** Number of WHB programs
Data Sources and Data Issues:	The Women's Health Branch (WHB) Unit Managers will keep an internal log of programs using the Tool kit and will share this log with the WHB Head annually.
Significance:	A well-woman or preconception visit provides a critical opportunity to receive recommended clinical preventive services, including screening, counseling, and immunizations, which can lead to appropriate identification, treatment, and prevention of disease to optimize the health of women before, between, and beyond potential pregnancies. For example, screening and management of chronic conditions such as diabetes, and counseling to achieve a healthy weight and smoking cessation, can be advanced within a well woman visit to promote women's health prior to and between pregnancies and improve subsequent maternal and perinatal outcomes. The annual well-woman visit is recommended by the American College of Obstetrics and Gynecologists (ACOG). http://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Gynecologic-Practice/Well-Woman-Visit

ESM 1.3 - Percent of LHDs who had staff complete training on reproductive justice framework, contraceptive methods, and reproductive life planning (RLP).
NPM 1 – Percent of women, ages 18 through 44, with a preventive medical visit in the past year

Measure Status:	Active
Goal:	By 2025, 50% of LHDs will have staff who completed training on reproductive justice framework, contraceptive methods, and RLP in an effort to increase intended pregnancies.
Definition:	**Unit Type:** Percentage **Unit Number:** 100 **Numerator:** Number of LHDs who had staff complete training on reproductive justice framework, contraceptive methods, and RLP **Denominator:** 85 LHDs
Data Sources and Data Issues:	LHDs will report annual to the Family Planning & Reproductive Health Unit Manager the number of staff members completing training on reproductive justice framework, contraceptive methods, and RLP. In addition, any training sponsored directly by the WHB will have rosters providing LHD site information.
Significance:	Unintended pregnancy is correlated with late or inadequate prenatal care, low birth weight, neonatal death, domestic violence, child abuse, and exposure of the fetus to harmful substances like tobacco, alcohol, and other drugs. It is associated with social and economic co-factors such as economic hardship, marital dissolution, failure to achieve educational goals, and spousal abuse. Reproductive life planning is also a critical component of pregnancy intendedness. Individuals should receive the support needed to make the best decision for themselves concerning their reproductive health, while ensuring this decision is free of coercion and the individual is aware of all their options.

ESM 1.4 - Percent of LHDs offering same day insertion of both contraceptive implants and intrauterine devices (IUDs)
NPM 1 – Percent of women, ages 18 through 44, with a preventive medical visit in the past year

Measure Status:	Active
Goal:	By 2025, at least 76% of LHDS will offer same day insertion of contraceptive implants and IUDs in an effort to increase intended pregnancies.
Definition:	**Unit Type:** Percentage **Unit Number:** 100 **Numerator:** Number of LHDs that offer same day insertion of contraceptive methods. (IUDs & implants) **Denominator:** 99 counties
Data Sources and Data Issues:	NC Family Planning Local Health Department Clinical Practice Survey Note: Polk County does not provide FP services but assures services are available at Blue Ridge Health, the FQHC in their county.
Significance:	Unintended pregnancy is correlated with late or inadequate prenatal care, low birth weight, neonatal death, domestic violence, child abuse, and exposure of the fetus to harmful substances like tobacco, alcohol, and other drugs. It is associated with social and economic co-factors such as economic hardship, marital dissolution, failure to achieve educational goals, and spousal abuse. Reproductive life planning is also a critical component of pregnancy intendedness. Individuals should receive the support needed to make the best decision for themselves concerning their reproductive health, while ensuring this decision is free of coercion and the individual is aware of all their options.

ESM 3.1 - Percent of birth facilities with level of care documented using the CDC LOCATe tool.
NPM 3 – Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)

Measure Status:	Active
Goal:	By 2025, 100% of birth facilities will have levels of neonatal and maternal care documented in an effort to ensure risk appropriate care is provided for infants and mothers.
Definition:	**Unit Type:** Percentage **Unit Number:** 100 **Numerator:** Number of birthing facilities in NC which have completed the CDC Levels of Care Assessment Tool (CDC LOCATe) and been assigned appropriate maternal and neonatal levels of care within the past five years **Denominator:** Total Number of birthing facilities in NC
Data Sources and Data Issues:	The Women's Health Branch (WHB) will keep an internal log of birthing facilities that complete the LOCATe tool within each calendar year. The WHB is working with the Division of Health Services Regulations to update the existing neonatal rules and to develop maternal health rules.
Significance:	Ensuring that infants are born at facilities that are equipped to meet the need of both the infant and the mother is important to improve both maternal and neonatal outcomes. The LOCATe tool is a hospital survey on obstetric and neonatal practices and services which classifies maternal and neonatal levels of care based on responses to survey questions that are tied to criteria found in the 2015 ACOG/SMFM maternal levels of care and the 2012 AAP neonatal levels of care.

ESM 3.2 - Percent of LHDs who are utilizing the NC Psychiatry Access Line (NC-PAL)
NPM 3 – Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)

Measure Status:	Active
Goal:	By 2025, 75% of LHDs will use the NC-PAL in an effort to assist primary care providers in addressing the behavioral health needs of pregnant and post-partum patients.
Definition:	**Unit Type:** Percentage **Unit Number:** 100 **Numerator:** Number of LHDs who are utilizing the NC-PAL **Denominator:** Number of LHDs providing maternal health services
Data Sources and Data Issues:	NC MATTERS Report
Significance:	Depression and anxiety during pregnancy and the postpartum period are common and have significant negative impacts on mother and child. Suicide is a leading cause of maternal mortality. Evidence-based efforts for screening, assessment, and treatment improve maternal and infant mental health, as well as overall family health, throughout the lives of women and children. NC-PAL or the NC Psychiatry Access Line, is a telephone consultation program designed to assist primary care providers in addressing the behavioral health needs of pediatric, pregnant, and post-partum patients. When primary care providers have a question about perinatal mental health, they can call the NC-PAL to be connected with the information they need. Care coordinators respond to questions within the scope of their expertise, provide resources and referrals, and can connect providers to psychiatric perinatal mental health specialists. Board-certified psychiatric perinatal mental health specialists can assist with diagnostic clarification and medication questions.

ESM 4.1 - Number of eligible WIC participants who receive breastfeeding peer counselor services
NPM 4 – A) Percent of infants who are ever breastfed B) Percent of infants breastfed exclusively through 6 months

Measure Status:	Active
Goal:	By 2025, the number of eligible WIC participants who receive breastfeeding peer counselor services will be 31,425 (15% increase from FY19 baseline of 27, 587).
Definition:	**Unit Type:** Count **Unit Number:** 100,000 **Numerator:** Number of eligible WIC participants who receive breastfeeding peer counselor services (determined by having a signed Breastfeeding Peer Counselor Program Letter of Agreement in the Crossroads WIC System) **Denominator:**
Data Sources and Data Issues:	NC Crossroads WIC System
Significance:	Systematic literature reviews have returned similar findings: “Dedicated lactation specialists may play a role in providing education and support to pregnant women and new mothers wishing to breastfeed and to continue breastfeeding (duration) to improve breastfeeding outcomes.”1 1 Patel, S., & Patel, S. (2016). The Effectiveness of Lactation Consultants and Lactation Counselors on Breastfeeding Outcomes. Journal of Human Lactation, 32(3), 530–541.

ESM 6.1 - Percent of LHDs whose child health staff receive training on appropriate use of valid and reliable developmental, psychosocial, social determinants of health, and behavioral health screening tools for children during state fiscal year
NPM 6 – Percent of children, ages 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year

Measure Status:	Active
Goal:	By 2025, 100% of LHDs providing direct child health services will have received training on the use of valid and reliable developmental, psychosocial, social determinants of health, and behavioral health screening tools for children
Definition:	**Unit Type:** Percentage **Unit Number:** 100 **Numerator:** Number LHDs whose child health staff receive training on appropriate use of valid and reliable developmental, psychosocial, social determinants of health, and behavioral health screening tools for children during state fiscal year **Denominator:** Number of LHDs providing child health services
Data Sources and Data Issues:	The Pediatric Medical Consultant in the Children & Youth Branch will collect this information annually as she provides the majority of these trainings.
Significance:	The risk for developmental delay is increased in the population of low income children seen in LHDs. The appropriate use of evidence-based tools in developmental, psychosocial, and behavioral health screening for children greatly improves the ability to elicit and identify developmental concerns from parents. Formal tools are much more effective than in informal interview. Screening examines the general population to identify those children at most risk. Children identified with concerns are at risk for developmental delay and are referred for further evaluation. Evaluation goes beyond screening to ascertain diagnosis and develop recommendations for intervention or treatment. This is generally not done by the primary care medical home, unless co-located or integrated professionals are in the practice. The evaluation determines the existence of developmental delay or disability which generates a decision regarding intervention. Ongoing periodic screening gives a longitudinal perspective of an infant or child's developmental progress. All concerns must be clarified and a need for a referral for further evaluation and intervention needs to be determined. Early referral for diagnosis and intervention helps to: - prevent or reduce the impact of developmental delays - identify, build and reinforce developmental strengths in the child and family - prevent fully developed developmental conditions or disorders; and - support school readiness.

ESM 10.1 - Number of adolescents receiving a preventive medical visit in the past year at a local health department or school health center
NPM 10 – Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year.

Measure Status:	Active
Goal:	By 2025, at least 26,222 adolescents will have received a preventive medical visit in the past year at a local health department or school health center
Definition:	**Unit Type:** Count **Unit Number:** 100,000 **Numerator:** Number of adolescents receiving a preventive medical visit in the past year at a local health department or school health center. **Denominator:**
Data Sources and Data Issues:	Local Health Department - Health Systems Analysis (LHD-HSA) and School Health Center Annual Report
Significance:	While adolescents are generally healthy, preventive medical visits are important in order to address unique health care needs as early as possible and to promote behaviors that will improve long term health.

ESM 10.2 - Percent of adolescents who had a behavioral health screening at time of preventive care visit
NPM 10 – Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year.

Measure Status:	Active
Goal:	By 2025, the percent of adolescents who had a behavioral health screening at time of preventive care visit will increase by 2 percent each year
Definition:	**Unit Type:** Percentage **Unit Number:** 100 **Numerator:** # of adolescents who had a behavioral health screening at time of preventive care visit in LHD or at SHC. **Denominator:** # of adolescents who had a preventive care visit
Data Sources and Data Issues:	Local Health Department - Health Systems Analysis (LHD-HSA) and School Health Center Annual Report
Significance:	“Mental health and substance use disorders are the most significant threat to the lifelong health and well-being of youth. Approximately one in five adolescents has a diagnosable mental health or substance use disorder, that, if left untreated, will likely persist into adulthood and contribute to poor lifelong education, employment, and health outcomes. Youth with mental health and substance use disorders are often involved in more than one special service system, including mental health, special education, child welfare, juvenile justice, and health care. Prevention and early intervention are particularly important among adolescents, as are follow-up care and recovery supports after treatment. Ensuring a full continuum of care for adolescents can result in substantially shorter and less disabling experiences with mental health and substance use disorders and create a more positive health trajectory into adulthood.” (Issue Brief: Transforming North Carolina's Mental Health and Substance Use Systems A Report from the NCIOM Task Force on Mental Health and Substance Use North Carolina Medical Journal November 2016, 77 (6) 437-440; DOI: https://doi.org/10.18043/ncm.77.6.437)

ESM 11.1 - Percent of children with special health care needs who received family-centered care
NPM 11 – Percent of children with and without special health care needs, ages 0 through 17, who have a medical home

Measure Status:	Active
Goal:	By 2025, increase the percent of CSHCN who received family-centered care to 90%
Definition:	**Unit Type:** Percentage **Unit Number:** 100 **Numerator:** Number of CSHCN ages 0 through 17 that received family-centered care **Denominator:** Number of CSHCN ages 0 through 17
Data Sources and Data Issues:	National Survey of Children's Health (NSCH)
Significance:	The American Academy of Pediatrics (AAP) specifies seven qualities essential to medical home care, which include accessible, family-centered, continuous, comprehensive, coordinated, compassionate and culturally effective. Providing comprehensive and coordinated care to children in a medical home is the standard of pediatric practice. Research indicates that children with a stable and continuous source of health care are more likely to receive appropriate preventive care, are less likely to be hospitalized for preventable conditions, and are more likely to be diagnosed early for chronic or disabling conditions. The Maternal and Child Health Bureau uses the AAP definition of medical home. www.medicalhomeinfo.aap.org In the NSCH, family-centered care is comprised of responses to five experience-of-care questions: [provider] spends enough time with child, listens carefully to you, is sensitive to family values/customs, gives needed information , and family feels like partner.

ESM 11.2 - Number of Medicaid, Managed Care Organization, or other stakeholder meetings attended by WCHS staff members with an agenda item related to medical home promotion
NPM 11 – Percent of children with and without special health care needs, ages 0 through 17, who have a medical home

Measure Status:	Active
Goal:	By 2025, increase the percent of children with and without special health care needs, ages 0 through 17, who have a medical home to 45%.
Definition:	**Unit Type:** Count **Unit Number:** 100 **Numerator:** Number of Medicaid, Managed Care Organization, or other stakeholder meetings attended by MCH staff with an agenda item related to medical home promotion **Denominator:**
Data Sources and Data Issues:	Internal log kept by C&Y Branch Staff
Significance:	The American Academy of Pediatrics (AAP) specifies seven qualities essential to medical home care, which include accessible, family-centered, continuous, comprehensive, coordinated, compassionate and culturally effective. Providing comprehensive and coordinated care to children in a medical home is the standard of pediatric practice. Research indicates that children with a stable and continuous source of health care are more likely to receive appropriate preventive care, are less likely to be hospitalized for preventable conditions, and are more likely to be diagnosed early for chronic or disabling conditions. The Maternal and Child Health Bureau uses the AAP definition of medical home. www.medicalhomeinfo.aap.org

Form 10
Evidence-Based or -Informed Strategy Measure (ESM) (2016-2020 Needs Assessment Cycle)

2016-2020: ESM 1.2 - Percent of women enrolled in Medicaid who deliver and receive a primary care visit within 12 months of delivery
NPM 1 – Percent of women, ages 18 through 44, with a preventive medical visit in the past year

<table>
<tr><td>Measure Status:</td><td>Active</td></tr>
<tr><td>Goal:</td><td>To increase the percent of women enrolled in Medicaid with a past year preventive medical visit</td></tr>
<tr><td>Definition:</td><td>
<table>
<tr><td>Unit Type:</td><td>Percentage</td></tr>
<tr><td>Unit Number:</td><td>100</td></tr>
<tr><td>Numerator:</td><td>Number of women enrolled in Medicaid who deliver and receive a primary care visit within 12 months of delivery</td></tr>
<tr><td>Denominator:</td><td>Number of women enrolled in Medicaid continuously for 12 months who delivered a baby</td></tr>
</table>
</td></tr>
<tr><td>Data Sources and Data Issues:</td><td>NC Division of Medical Assistance created a special report using the 2014 NC Composite Linked Birth File to get the deliveries count. The following codes were used to define a primary care visit to determine the numerator: ICD 9 CODES - V70.0, V72.31; ICD 10 CODES - Z00.00, Z00.01, Z01.411, Z01.419; and CPT CODES - 99394, 99395, 99396.</td></tr>
<tr><td>Significance:</td><td>As cited by both the American Congress of Obstetricians and Gynecologists and the Institute of Medicine, the well woman visit provides an opportunity for the provision of preventive services that can improve women’s health immediately and long term, address reproductive life planning/family planning, and ultimately improve birth outcomes.</td></tr>
</table>

2016-2020: ESM 3.1 - Percent of birthing hospitals who complete the CDC Levels of Care Assessment Tool (CDC LOCATe) annually
NPM 3 – Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)

<table>
<tr><td>Measure Status:</td><td>Active</td></tr>
<tr><td>Goal:</td><td>To accurately identify the neonatal and maternal level of care provided at the birthing hospitals in North Carolina</td></tr>
<tr><td>Definition:</td><td>
<table>
<tr><td>Unit Type:</td><td>Percentage</td></tr>
<tr><td>Unit Number:</td><td>100</td></tr>
<tr><td>Numerator:</td><td>Number of birthing hospitals who complete the CDC Levels of Care Assessment Tool (CDC LOCATe) annually</td></tr>
<tr><td>Denominator:</td><td>Number of birthing hospitals in North Carolina</td></tr>
</table>
</td></tr>
<tr><td>Data Sources and Data Issues:</td><td>The Women’s Health Branch will keep an internal log of hospitals that complete the LOCATe tool within each calendar year.</td></tr>
<tr><td>Significance:</td><td>Ensuring that infants are born at facilities that are equipped to meet the need of both the infant and the mother is important to improve both maternal and neonatal outcomes. The LOCATe tool is a hospital survey on obstetric and neonatal practices and services which classifies maternal and neonatal levels of care based on responses to survey questions that are tied to criteria found in the 2015 ACOG/SMFM maternal levels of care and the 2012 AAP neonatal levels of care</td></tr>
</table>

2016-2020: ESM 4.1 - Percent of local health departments who have had Maternal Health staff members trained on BF promotion and support through the NC Regional Lactation Training Centers
NPM 4 – A) Percent of infants who are ever breastfed B) Percent of infants breastfed exclusively through 6 months

Measure Status:	Active
Goal:	To increase the amount of breastfeeding promotion and support provided to women receiving maternal health care in local health departments
Definition:	<table><tr><td>**Unit Type:**</td><td>Percentage</td></tr><tr><td>**Unit Number:**</td><td>100</td></tr><tr><td>**Numerator:**</td><td>Number of local health departments who have had Maternal Health staff members trained on BF promotion and support through the NC Regional Lactation Training Centers</td></tr><tr><td>**Denominator:**</td><td>Number of local health departments who provide prenatal direct services (80)</td></tr></table>
Data Sources and Data Issues:	The State Breastfeeding Peer Counselor Coordinator will provide a baseline count of local health departments with Maternal Health staff who have received training as of July 1, 2015 and then update this count annually. She will obtain this data from the work plans provided by the Regional Lactation Training Consultants.
Significance:	Exclusive breastfeeding is considered one of the most effective preventive health measures to reduce child morbidity and mortality, in the US and globally. Health practitioners play a key role in providing support to breastfeeding women.

2016-2020: ESM 4.2 - Percent of LHDs who are working toward or awarded the NC Breastfeeding Coalition's Mother-Baby Award for outpatient healthcare clinics (either child health or maternity clinics)
NPM 4 – A) Percent of infants who are ever breastfed B) Percent of infants breastfed exclusively through 6 months

Measure Status:	Active
Goal:	To increase the amount of breastfeeding promotion and support provided to women receiving maternal health care in local health departments.
Definition:	<table><tr><td>**Unit Type:**</td><td>Percentage</td></tr><tr><td>**Unit Number:**</td><td>100</td></tr><tr><td>**Numerator:**</td><td>Number of local health departments who are working toward or awarded the NC Breastfeeding Coalition's Mother-Baby Award for outpatient healthcare clinics</td></tr><tr><td>**Denominator:**</td><td>Number of local health departments (100 – counties in district health departments are considered individually for this measure)</td></tr></table>
Data Sources and Data Issues:	The North Carolina Breastfeeding Coalition has developed a Mother-Baby Award for outpatient healthcare clinics. Criteria for the award are very closely based on the Baby-Friendly USA Guidelines and Evaluation Criteria and the Academy of Breastfeeding Medicine's Clinical Protocol #14: Breastfeeding-Friendly Physician's Office: Optimizing Care for Infants and Children. As such, the act of reviewing criteria is, in and of itself, an opportunity to identify evidence-based best practices for the care of pregnant and/or post-partum women and children in support of breastfeeding. Currently, there are no LHD clinics which have received this award. With the timing of the application process, awards to LHDs would probably begin in FY19 at the earliest.
Significance:	Exclusive breastfeeding is considered one of the most effective preventive health measures to reduce child morbidity and mortality, in the US and globally. Health practitioners play a key role in providing support to breastfeeding women.

2016-2020: ESM 6.1 - Number of training opportunities to LHD providers on appropriate use of valid and reliable developmental, psychosocial, and behavioral health screening tools for children during state fiscal year
NPM 6 – Percent of children, ages 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year

Measure Status:	Active
Goal:	To increase the number of LHD providers trained on appropriate use of valid and reliable developmental, psychosocial, and behavioral health screening tools for children. This includes staff in child health clinics and care managers with CC4C. Provide
Definition:	**Unit Type:** Count **Unit Number:** 100 **Numerator:** Number of training opportunities to LHD providers on appropriate use of valid and reliable developmental, psychosocial, and behavioral health screening tools for children during state fiscal year **Denominator:**
Data Sources and Data Issues:	The Pediatric Medical Consultant in the Children & Youth Branch will collect this information annually as she provides the majority of these trainings.
Significance:	The risk for developmental delay is increased in the population of low income children seen in LHDs. The appropriate use of evidence-based tools in developmental, psychosocial, and behavioral health screening for children greatly improves the ability to elicit and identify developmental concerns from parents. Formal tools are much more effective than in informal interview. Screening examines the general population to identify those children at most risk. Children identified with concerns are at risk for developmental delay and are referred for further evaluation. Evaluation goes beyond screening to ascertain diagnosis and develop recommendations for intervention or treatment. This is generally not done by the primary care medical home, unless co-located or integrated professionals are in the practice. The evaluation determines the existence of developmental delay or disability which generates a decision regarding intervention. Ongoing periodic screening gives a longitudinal perspective of an infant or child's developmental progress. All concerns must be clarified and a need for a referral for further evaluation and intervention needs to be determined. Early referral for diagnosis and intervention helps to: • prevent or reduce the impact of developmental delays • identify, build and reinforce developmental strengths in the child and family • prevent fully developed developmental conditions or disorders; and • support school readiness.

2016-2020: ESM 10.1 - Number of adolescents receiving a preventive medical visit in the past year at a local health department
NPM 10 – Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year.

Measure Status:	Active
Goal:	To increase the percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year
Definition:	**Unit Type:** Count **Unit Number:** 100,000 **Numerator:** Number of adolescents receiving a preventive medical visit in the past year at a local health department **Denominator:**
Data Sources and Data Issues:	North Carolina Health Information System (data pulled through the Client Services Data Warehouse)
Significance:	While adolescents are generally healthy, preventive medical visits are important in order to address unique health care needs as early as possible and to promote behaviors that will improve long term health.

2016-2020: ESM 11.1 - Number of policies, practices, and resources changed to support improved outcomes for CYSHCN by counties implementing Innovative Approaches strategies.
NPM 11 – Percent of children with and without special health care needs, ages 0 through 17, who have a medical home

Measure Status:	Active
Goal:	To improve the health of children and youth with special health care needs by improving community-wide systems of care through implementation of the Innovative Approaches Initiative strategies, particularly the systems change approach
Definition:	**Unit Type:** Count **Unit Number:** 100 **Numerator:** Number of policy/practice/resource changes achieved using Innovative Approaches strategies for CYSHCN **Denominator:**
Data Sources and Data Issues:	Data provided by the State Director of the Innovative Approaches Initiative collected via the Innovative Approaches Strategic Results Framework
Significance:	The purpose of the Innovative Approaches (IA) initiative is to thoroughly examine and foster improvement for community-wide systems of care that will effectively meet the needs of families of children and youth with special health care needs, resulting in increased family satisfaction with services received and improved outcomes for children and youth with special health care needs.

2016-2020: ESM 14.1.1 - Number of women of reproductive age (15 to 44 years) who received at least one counseling session from the tobacco QuitlineNC in the prior 12 months
2016-2020: NPM 14.1 – Percent of women who smoke during pregnancy

Measure Status:	Active
Goal:	To decrease the percent of women who smoke during pregnancy and decrease the percent of children who live in households where someone smokes
Definition:	**Unit Type:** Count **Unit Number:** 5,000 **Numerator:** Number of women of reproductive age (15 to 44 years) who received at least one counseling session from the tobacco QuitlineNC in the prior 12 months **Denominator:**
Data Sources and Data Issues:	QuitlineNC Data Report
Significance:	Smoking during pregnancy can cause premature birth, certain birth defects, and infant death. Children exposed to secondhand smoke are at an increased risk for ear infections, more frequent asthma attacks, and death from Sudden Infant Death Syndrome.

2016-2020: ESM 14.2.1 - Number of women who receive tobacco cessation counseling by care managers and/or home visitors
2016-2020: NPM 14.2 – Percent of children, ages 0 through 17, who live in households where someone smokes

Measure Status:	Active
Goal:	To decrease the percent of women who smoke during pregnancy and decrease the percent of children who live in households where someone smokes
Definition:	**Unit Type:** Count **Unit Number:** 100,000 **Numerator:** Number of women who receive tobacco cessation counseling by care managers and/or home visitors **Denominator:**
Data Sources and Data Issues:	CCNC, NFP, and HFA Reports
Significance:	Smoking during pregnancy can cause premature birth, certain birth defects, and infant death. Children exposed to secondhand smoke are at an increased risk for ear infections, more frequent asthma attacks, and death from Sudden Infant Death Syndrome.

2016-2020: ESM 15.1 - Number of outreach activities to promote access to health insurance done annually by the Children and Youth Branch's Minority Outreach Coordinator, CYSHCN HelpLine Coordinator, and YSHCN Access to Care Coordinator
2016-2020: NPM 15 – Percent of children, ages 0 through 17, who are continuously and adequately insured

Measure Status:	Active
Goal:	To increase the number of children who are adequately insured
Definition:	**Unit Type:** Count **Unit Number:** 500 **Numerator:** Number of outreach activities to promote access to health insurance done annually by the Children and Youth Branch's Minority Outreach Coordinator, CYSHCN HelpLine Coordinator, and YSHCN Access to Care Coordinator **Denominator:**
Data Sources and Data Issues:	Quarterly Outreach Report submitted by the Children and Youth Branch's Minority Outreach Coordinator, CYSHCN HelpLine Coordinator, and YSHCN Access to Care Coordinator
Significance:	Having health insurance allows children to receive preventive care including well-child visits and immunizations. Children with insurance are more likely to have a usual source of care. With their elevated need for services, health insurance is especially important for children and youth with special health care needs.

Form 11
Other State Data

State: North Carolina

The Form 11 data are available for review via the link below.

Form 11 Data

Form 12
MCH Data Access and Linkages

State: North Carolina

Annual Report Year 2020

	Access				Linkages	
Data Sources	(A) State Title V Program has Consistent Annual Access to Data Source	(B) State Title V Program has Access to an Electronic Data Source	(C) Describe Periodicity	(D) Indicate Lag Length for Most Timely Data Available in Number of Months	(E) Data Source is Linked to Vital Records Birth	(F) Data Source is Linked to Another Data Source
1) Vital Records Birth	Yes	Yes	More often than monthly	0		
2) Vital Records Death	Yes	Yes	Quarterly	3	Yes	
3) Medicaid	Yes	Yes	Quarterly	3	Yes	
4) WIC	Yes	Yes	Quarterly	2	Yes	
5) Newborn Bloodspot Screening	Yes	Yes	More often than monthly	1	Yes	
6) Newborn Hearing Screening	Yes	Yes	More often than monthly	1	Yes	
7) Hospital Discharge	Yes	Yes	Quarterly	6	Yes	
8) PRAMS or PRAMS-like	Yes	Yes	Quarterly	18	Yes	

Form Notes for Form 12:

None

Field Level Notes for Form 12:

Data Source Name:	8) PRAMS or PRAMS-like
	Field Note: While the WCHS has had consistent access to PRAMS data for many years (and access to the electronic data source on an as needed basis), an application for CDC funding was not submitted by the State Center for Health Statistics in 2020. However, the State Center has committed to conducting an in-house PRAMS-like survey to obtain similar data for WCHS surveillance.