

**Maternal and Child  
Health Services Title V  
Block Grant**

**North Carolina**

**FY 2017 Application/  
FY 2015 Annual Report**

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## I. General Requirements

### I.A. Letter of Transmittal



#### North Carolina Department of Health and Human Services

Pat McCrory  
Governor

Richard O. Brajer  
Secretary

July 15, 2016

Michael C. Lu, M.D., M.S., M.P.H.  
ATTN: MCH Block Grant  
Division of State and Community Health  
5600 Fishers Lane, Room 18-31  
Rockville, MD 20857  
mlu@hrsa.gov

Dear Dr. Lu:

Enclosed is North Carolina's application for the Maternal and Child Health Services Title V Block Grant Fiscal Year 2017. 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 Peter Andersen, Acting Chief, Women's and Children's Health Section, at (919)707-5513.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard O. Brajer".

Richard O. Brajer  
Secretary

Enclosure: *Maternal and Child Health Services Title V Block Grant FY17 Application/FY15 Annual Report*

cc: Danny Staley, NC DPH, Director

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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 C of the 2015 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 "GUIDANCE AND FORMS FOR THE TITLE V APPLICATION/ANNUAL REPORT," OMB NO: 0915-0172; published January 2015; expires December 31, 2017.

## I.E. Application/Annual Report Executive Summary

### Executive Summary

The Title V Program in NC is housed in the Women's and Children's Health Section (WCHS) in the NC Division of Public Health (NC DPH), 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.

### Highest Ranked Priority Needs

During 2014, the WCHS embarked upon two strategic planning processes (Perinatal Health and C&Y Branch) as part of the Needs Assessment, and these plans continue to inform the State Action Plan. Both of these processes reinforced the Section's commitment to ensuring that pregnant women, mothers, infants, and children with and without special health care needs receive preventive and primary care services that are family-centered, community-based, and coordinated. In 2015, the Section Management Team (SMT) decided upon the following priority needs and National Performance Measures (NPMs) to be used in the State Action Plan. As SMT considers each of these ten priority needs to be equally important, additional ranking of these needs did not occur. In 2016, the State Performance Measures (SPMs) and Evidence-Based or –Informed Strategy Measures (ESMs) were added.

NC Priority Needs and Performance Measures by Primary Population Health Domain		
Domain	Priority Need	Measures
Women/ Maternal Health	Improve the health of women of childbearing age with a special focus on health equity	<b>NPM 1</b> % of women with a past year preventive medical visit <b>ESM 1.1</b> # of participants in webinar explaining the preventive services for women covered through the Affordable Care Act (ACA).
	Reduce infant mortality with a special focus on social determinants of health	<b>NPM 3</b> % of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU) <b>ESM 3.1</b> % of birthing hospitals who complete the CDC

**NC Priority Needs and Performance Measures  
by Primary Population Health Domain**

Perinatal/ Infant Health		<p>Levels of Care Assessment Tool (CDC LOCATe) annually</p> <p><b>NPM 4A</b> % of infants who are ever breastfed</p> <p><b>NPM 4B</b> % of infants breastfed exclusively through 6 months</p> <p><b>ESM 4.1</b> % of local health departments who have had Maternal Health staff members trained on BF promotion and support through the NC Regional Lactation Training Centers</p>
	Increase the number of newborns screened for genetic and hearing disorders and prevent birth defects	<b>SPM 1</b> % of infants with confirmed hearing loss who are enrolled for intervention services no later than age 6 months
Child Health	Prevent child deaths	<b>SPM 2</b> # of substantiated reports of child abuse and neglect
	Increase developmental screenings for children and adolescents	<p><b>NPM 6</b> % of children, ages, 10-71 months, receiving a developmental screening using a parent-completed screening tool</p> <p><b>ESM 6.1</b> # 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</p>
Adolescent Health	Promote healthy schools and students who are ready to learn	<p><b>NPM 10</b> % of adolescents, ages 12 through 17, with a preventive medical visit in the past year</p> <p><b>SPM 4</b> Ratio of school health nurses to the public school student population</p> <p><b>ESM 10.1</b> # of adolescents receiving a preventive medical visit in the past year at a Local Health Department</p>
CSHCN	Improve the health of children with special needs	<p><b>NPM 11</b> % of children with and without special health care needs having a medical home</p> <p><b>ESM 11.1</b> # of policies, practices, and resources changed to support improved outcomes for CYSHCN by counties implementing Innovative Approaches strategies</p>
	Provide timely and comprehensive early intervention services for children with special developmental needs and their families.	<b>SPM 3</b> % 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)

NC Priority Needs and Performance Measures by Primary Population Health Domain		
Cross-Cutting or Life Course	Improve healthy behaviors in women and children and among families incorporating the life course approach	<p><b>NPM 14A</b> % of women who smoke during pregnancy</p> <p><b>NPM 14B</b> % of children who live in households where someone smokes</p> <p><b>ESM 14.1</b> # 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</p>
	Increase access to care for women, children, and families, especially in uninsured populations and where disparities exist	<b>NPM 15</b> % of children ages 0 through 17 who are adequately insured

### Emergent Needs

In the development and implementation of these strategic plans, many emergent and ongoing needs were identified. An overarching need is to promote health equity, as racial/ethnic disparities persist in many health outcomes. Providing affordable and accessible health care to the uninsured remains a priority need. DPH is beginning preparation for its initial application for “accredited status” from the national Public Health Accreditation Board. While the focus of planning to address the threat of Zika virus is in the Epidemiology Section of the DPH, the WCHS is involved in the response with the WHB to support the tracking of pregnant women who are diagnosed with Zika in the state.

### Accomplishments/Plans by Population Domain

#### Women/Maternal Health

##### *Accomplishments*

The infant mortality rate remained stable and the teen pregnancy rate was at an all-time low in 2014. LHDs provided prenatal care, pregnancy care management services, high risk maternity services, and family planning services, including long active reversible contraception. TPPI provided adolescent pregnancy prevention programs and adolescent parenting programs in several counties.

##### *Plan*

Increasing the percent of women with a past year preventive medical visit is a critical piece of the work of the WHB, particularly through its work with LHDs, but also through Healthy Beginnings (infant mortality reduction program), Pregnancy Care Management services, Preconception Peer Educator program, TPPI, and other programs, including the new Improving Community Outcomes for Maternal and Child Health initiative.

#### Perinatal/Infant Health

##### *Accomplishments*

The Perinatal Health Strategic Plan (PHSP) was formally released on March 24, 2016 at the *Improving Perinatal Health in NC...While Addressing Infant Mortality* day-long summit hosted by the State Health Director. The Breastfeeding Peer Counselor Program was active in 81 Local Agency WIC Programs in FY15. NC continues to

participate in the Infant Mortality CoIN Collaboratory in the Social Determinants of Health and Preconception and Interconception Care Learning Networks.

### *Plan*

An on-line version of the PHSP is to be released in the summer of 2016 which will include more specific information regarding the plan's action steps and partners who are currently working on them or are interested in working on them. The PHSP Team has agreed to meet every other month to ensure that the work on the plan continues. The NC Maternal Mortality Review Committee that supports the inquiry of maternal deaths across the state is slated to engage in its first review in fall 2016.

### Child Health

#### *Accomplishments*

The C&Y Branch is part of the NFP Funders Alliance in NC, and the Branch has agreed to be the lead agency for NFP for the state. To support the non-MIECHV sites, the Branch has hired a NFP State Nurse Consultant. There were twelve training opportunities offered to LHD providers on appropriate use of valid and reliable developmental, psychosocial, and behavioral screening tools by the Pediatric Medical Consultant. NC has been recognized by Triple P America for developing a Triple P State Learning Collaborative. Five groups of parents (n=39) participated in the initial rollout of a parent peer training module.

### *Plan*

The C&Y Branch will continue to refine the redesigned Child Health Agreement Addenda with LHDs to require that (1) all services supported by Title V funding 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 preparation of the C&Y Strategic Plan has helped staff focus on the area of family involvement and reassess current successful parent integration. Planned activities to more fully integrate parents operationally at both the State and local level include: increased requirement in contracts to include families in program planning and implementation; review of the annual MCHBG application; implementation of the train-the-trainer parent empowerment training series; regular joint meetings of the Branch Family Partners and the C&Y Branch Management Team; and increased representation of families and adolescents on workgroups and advisory councils. The C&Y Branch will also continue to provide leadership for the Child Fatality Task Force and state Child Fatality Prevention Team.

### Adolescent Health

#### *Accomplishments*

The School Health Nurse Consultant 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 Charter School Health Consultant position was filled in November 2015 and a basic Charter School Health Survey was developed and distributed in spring 2016. Youth Mental Health First Aid trainings continued throughout the state, some of which were conducted by the C&Y Branch's Behavioral Health Clinical Consultant.

### *Plan*

Adolescents are served across the C&Y Branch in all programs and represent almost half of the school age population. School health programs are coordinated across different state agencies through a matrix model, which focuses on the development, and implementation of a comprehensive school health system of care. The Branch is establishing an Adolescent Health Resource Center which will coordinate health initiatives, expand the use of

evidence-based programs, practices, and policies, and provide adolescent health resources for youth, parents, and providers. C&Y Branch staff will continue to work with CCNC Pediatrics and DMA to expand outreach to increase both the number of visits and the quality of the care provided during the annual well adolescent visits provided to Medicaid and Health Choice (SCHIP) enrollees.

## CSHCN

### *Accomplishments*

The importance of the medical home approach and strategies for partnering with and linking all children (especially CYSHCN) to medical homes was shared with LHDs via two regional trainings reaching 250 LHD staff, two live webinars reaching 120 LHD staff, and one archived webinar. The CSHCN Help Line call volume remained constant with 358 calls in FY15, with 76% of calls from families/caregivers. Help Line Outreach efforts include three main strategies: 1) direct outreach to parents/caregiver and the professionals who work with them; 2) the development/revision of promotional items; and 3) direct notification to Supplemental Security Income (SSI) applicants, ages birth to 18 years. The C&Y Branch Family Partnerships model ensures that parents of CSHCN have a voice in how the C&Y Branch services are offered and encourages them to participate in Branch trainings and presentations. An emphasis on performance improvement was implemented in the Care Coordination for Children (CC4C) program that included: 1) development of a performance improvement strategies document based on locally-submitted ideas; 2) implementation of a statewide Performance Improvement Process that identified 21 local agencies to whom intense, targeted technical assistance was provided; and 3) special focus on supervisors, which included a webinar targeted to supervisors.

### *Plan*

The C&Y Branch has intentionally restructured personnel so that services and supports for CYSHCN are better integrated into all aspects of Branch programs and initiatives. Promoting the medical home concept is a core message within all Branch programs. The CC4C program will continue. The C&Y Branch currently supports five LHDs (serving fourteen counties) to assess and improve the local systems of care for CYSHCN through its Innovative Approaches initiative. The toll-free Help Line for CYSHCN which provides information (e.g., health insurance, transition services, educational services, etc.) and links families and providers to local and state services will continue.

## Cross-Cutting/Life Course

### *Accomplishments*

Tobacco cessation efforts continued through NC's robust partnership of state and LHD partners, universities, and community-based organizations involved in efforts to decrease tobacco use and exposure. In collaboration with the Women and Tobacco Coalition for Health, the WHB updated the *Guide for Helping to Eliminate Tobacco Use and Exposure for Women*. The C&Y Branch's Minority Outreach Coordinator, CYSHCN Help Line Coordinator, and YSHCN Access to Care Coordinator conducted a total of 203 outreach activities to promote access to health insurance. Forty percent of the outreach efforts had special focus on reducing health disparities among African American, American Indian, Latino/Hispanic, and newcomer (refugees, immigrants) populations.

### *Plan*

Life course theory is a fundamental concept shaping both the C&Y Branch and the Perinatal Health Strategic Plans. Putting the theory into concrete action remains difficult, but the WCHS continues to strive to do so. Efforts to decrease tobacco use and exposure center on prevention, education, counseling, and care coordination. The C&Y Branch will continue to develop, obtain reviews and disseminate all the materials for both Health Check (Medicaid for Children) and Health Choice (NC CHIP) to providers and families across the state. The C&Y Branch will continue to work closely with the IB to increase access to vaccines for CYSHCN since their routine health is sometimes lost

while dealing with specialty care.

## II. Components of the Application/Annual Report

### II.A. Overview of the State

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 problems 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. Although the state is becoming more urban, 64 of the 100 counties are still considered rural.

According to July 2015 population estimates from the US Census Bureau, NC is the ninth most populous state in the nation with an estimated population of 10,042,802. Census data show that NC's population increased by about 1.5 million people between the 2000 and 2010, a growth rate of 18.5%, and nearly double the national rate of 9.7%. Population growth trends were not experienced equally as there was more rapid growth in major urban areas while many counties in the northeast and central coast experienced slow growth or population declines, and this trend is projected to continue over the next five years. One significant factor is population aging. Statewide, 17% of the population is projected to be 65 and older in 2020, and in 76 counties, the percentage 65 and older is projected to be higher than the statewide average (UNC Population Center Carolina Demography, *Population Growth & Population Aging in North Carolina Counties*, October 14, 2013).

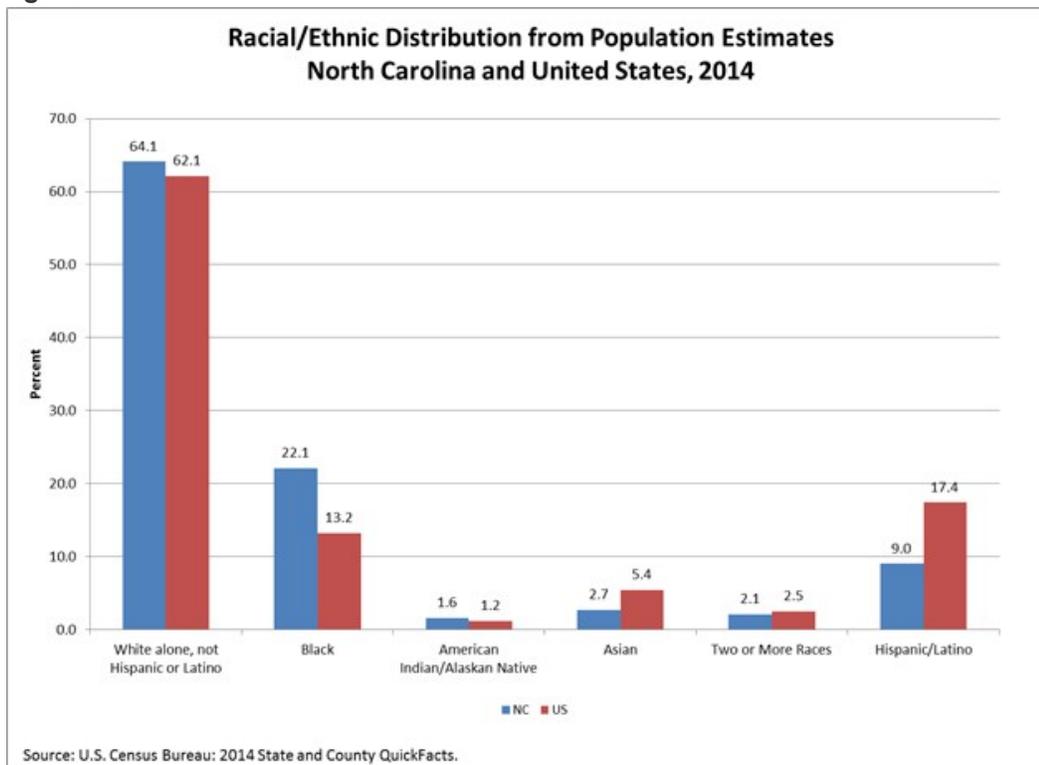
Per the 2013 US Census, the age distribution of the female population of NC mirrors that of the nation. Females in NC and in the US are also aging at approximately the same rate. Based on July 2013 population estimates from the NC State Data Center, the median age in NC is 38 years; for women it is 39.3 years. The number of women in NC in their prime reproductive years (ages 15-44) is 1,993,933, or 39.4% of the total female population. The 2024 population projections show that the proportion of women of childbearing age will comprise 38.7% of the total female population with a median age projected at 41.2 years (NC State Data Center). Projected trends for the female population mirror the population at large, with an increase in urban areas and decline in rural counties along with an aging population.

Births in NC peaked in 2007, with 130,866 births, and there was a steady decline since then to a total of 118,983 born in 2013, but a slight rise to 120,948 in 2014. NC's child population (ages 0 to 17) continues to grow, but growth is uneven across the state, mimicking the state as a whole as it is shrinking in rural counties and growing in urban counties, although the pace of growth in urban counties has slowed (comparison of 2010 to 2012 time period to 2000 to 2002). (UNC Population Center Carolina Demography Blog, *NC in Focus: Child Population*, May 29, 2014) Based on US Census 2014 population estimates, children under five years make up 6% of NC's population, while children under 18 years comprise 22.8%. These percentages are almost exactly the same as those for the US.

Census population estimates for 2014 indicate that more than one out of every four individuals in the state is a member of a minority group. African Americans are the largest minority group at 22% of the population. The combined other minority groups – Latinos (9%), American Indian and Alaska Native (1.6%), Asian/Pacific Islanders (2.8%) and those reporting two or more races (2.1%) – represent a much smaller proportion of the total population,

but their numbers have increased significantly over the past decade. See Figure 1 for a comparison of racial/ethnic distribution in NC and the US.

**Figure 1**



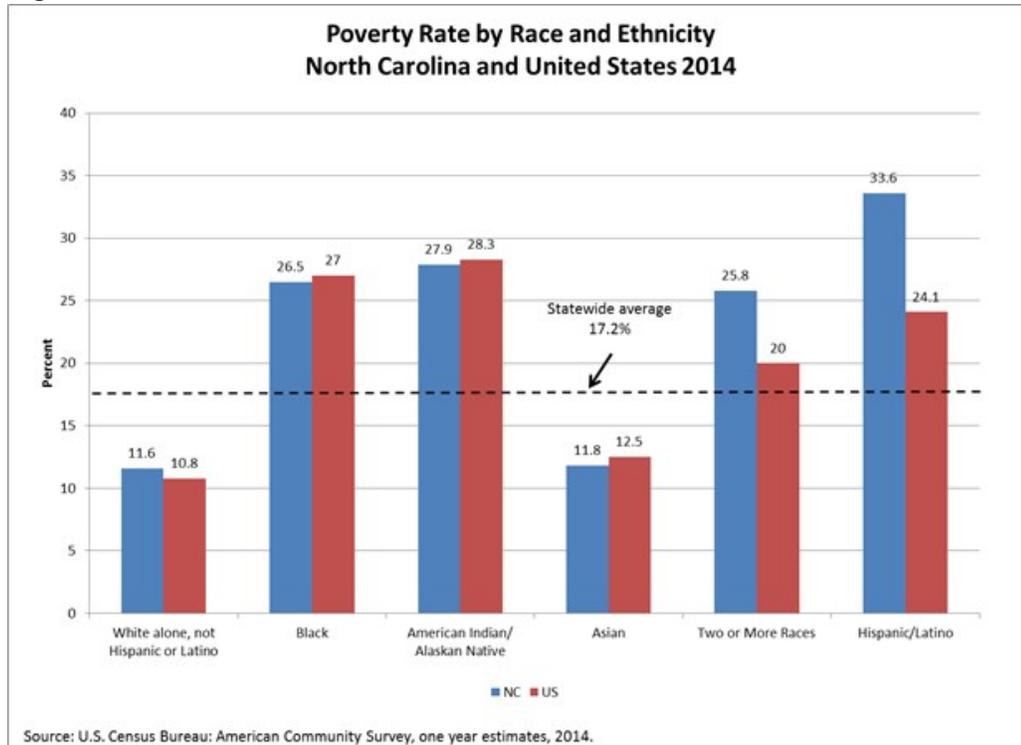
Per the 2010 US Census, NC is one of ten states/regions (including District of Columbia) in the nation in which Black or African American alone or in combination make up over 20 percent of the population. In addition, NC has the eleventh largest American Indian population in the US based on the census data. In 2000, US Census reported 378,462 persons of Hispanic/Latino origin in NC. In population estimates for 2013, the number more than doubled to 907,186 persons, a 139 percent increase.

The Hispanic/Latino growth has been due to in-migration of individuals concentrated between the ages of 15 and 29 and births. In 2012, the median age in NC was 37.8 years, but among the Hispanic/Latino population, the median age was 24.7 years (UNC Population Center Carolina Demography Blog, *North Carolina's Hispanic Population* October 7, 2014). In 2006, children of immigrants comprised 14% of NC's population of children; in 2011, they were 20% of all children. Nearly half (49%) of immigrants in the state are Hispanic, and an additional twenty percent are Asian (UNC Population Center Carolina Demography, *NC in Focus: Children of Immigrants* May 8, 2014). The younger age distribution of the Hispanic population in NC, and the relatively higher fertility and birth rates in this population pose unique challenges to the delivery of maternal health, child health and reproductive health services this group (Health Profile of North Carolinians: Update May 2011).

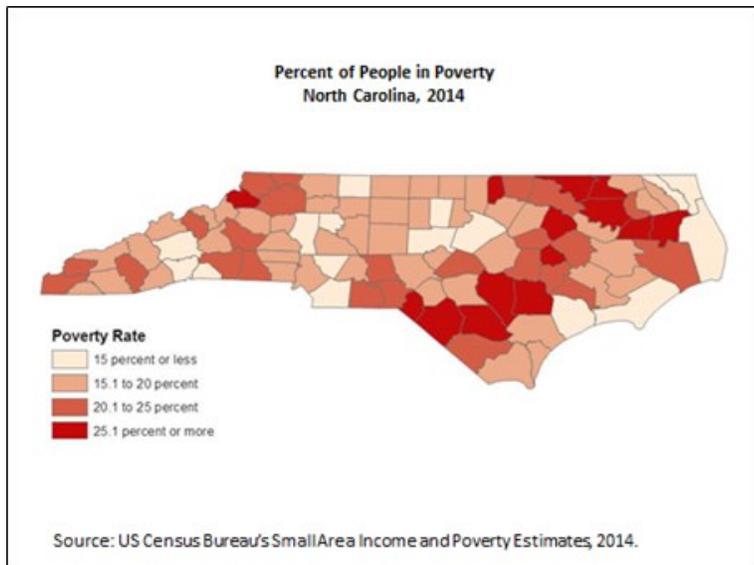
According to data from the American Community Survey, poverty rates in NC have climbed or stayed steady from 2007 to 2013, from 14.3% in 2007 to 17.2% in 2014, and are higher than national rates which were at 13% in 2007 and rose to 15.5% in 2014. The state's 2014 poverty rate was the thirteenth highest in the nation (tied with Texas). Minorities, women, children, and people who live in rural areas in NC are more likely to be poor than Whites, men, older adults, and people living in urban areas, although some urban and suburban areas are dealing with growing pockets of poverty. Poverty rates by race and ethnicity in NC are similar to national rates (Figure 2) in all categories except NC rates are higher for people of two or more races, those of Hispanic/Latino ethnicity, and those for White

alone, not Hispanic or Latino. The 2014 poverty rate for women in NC was 18.6% compared to 15.7% for men, and women earned just 85 cents for every dollar that men earned. 2014 poverty rates for children were 24.3% in NC and 21.7% in the US. Racial and ethnic disparities are great in child poverty rates, as with 2014 rates being 42% for Hispanic/Latino, 36% for American Indian, and 38% for Black children, but 14% for white children and 13% for Asian children. For children under the age of 5 years, rates are even higher, approaching 50% for American Indian, Black, and Hispanic/Latino children. There is great variability in county levels of poverty (Figure 3), with 2014 rates ranging from a low of 9.7% to a high of 33.1%, with the highest poverty rates found in 41 rural counties. (Mitchell, T. *Prosperity Watch Issue 56, No. 3: North Carolina's Poverty is Still 20 Percent Higher than Pre-Recession Levels* December 2015, Budget and Tax Center, NC Justice Center)

**Figure 2**



**Figure 3**



Recent employment data indicate the continuing and long term downward trend in employment, specifically in the traditional groups of construction and production occupations. Between 2007 and 2012, these occupations lost a total of 115,341 positions in NC. This decline is slightly offset by a net growth in the Food Preparation and Serving Related occupations which added more than 22,000 positions; the largest employment net growth for the same period. Because these occupations typically pay very low wages, these gains cannot be seen as truly replacing the loss of higher paying jobs in construction and production. In addition, the Computer and Mathematical Occupations experienced the fastest growth in the industry, at 9% from 2010 to 2012. However, the net effect is still of a long-term downward trend in the construction and production occupations. (Economic Snapshots: Occupational Mix, NC Department of Commerce, May 2014)

The mission of NC Department of Health and Human Services (NC DHHS), 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 Pat McCrory was sworn into office on January 5, 2013. Prior to being elected Governor, McCrory served as Mayor of Charlotte, NC, for seven terms, and he worked for Duke Energy for 29 years. Governor McCrory appointed Rick Brajer to serve as Secretary of NC DHHS, effective August 14, 2015, after the resignation of former Secretary Aldona Vos. Brajer has spent two decades serving in leadership roles in the healthcare and medical technology industries. Randall Williams, MD, an obstetrician/gynecologist from Raleigh Gynecology and Wellness became the Deputy Secretary of Health Services, overseeing the Division of Public Health (DPH) and the Office of Rural Health (ORH) on July 1, 2015. On December 14, 2015, Secretary Brajer announced that Dr. Williams had integrated into his duties the role of State Health Director. Effective November 25, 2015, Danny Staley was appointed Division Director after having served as Interim Deputy Director since February 2015.

Dr. Williams has cited the following four priorities for NC DHHS: 1) Medicaid reform; 2) improve behavioral health care; 3) more access to treatment for opioid use; and 4) reduce infant mortality.

On July 14, 2015, Governor McCrory signed Executive Order No. 76 establishing the Governor's Task Force on Mental Health and Substance Abuse. The purpose of the Task Force is to reduce stigma associated with mental health treatment in our state and encourage people to seek help before their situation becomes a crisis. The Task Force is made up of 24 members including experts from the justice system, the healthcare provider community, county leadership, non-governmental entities, and private sector employers. Secretary Bajer served as co-chair of the Task Force along with NC Supreme Court Chief Justice Mark Martin. They were tasked with submitting finding and strategic recommendations to the Governor for improving the lives of North Carolina children and adults with

mental illness and substance use disorders and their families by May 1, 2016. The task force identified a number of broad recommendations for improvement and offered potential strategies for accomplishing these more general recommendations. The priority areas included: 1) case management for children, adolescents, and adults; 2) more access to treatment of opioid use disorders; 3) implementation of the NC prescription drug abuse strategic plan; 4) diversion from criminal justice for those with mental illness and substance use disorders; and 5) appropriate, affordable, and supportive housing.

With regards to Department’s priority of increasing access to opioid use treatment, on June 20, 2016, Governor McCrory signed legislation making naloxone, a life-saving opioid reversal drug more accessible as it is now available without a prescription. North Carolina is the third state in the country to issue a standing prescription order statewide for naloxone. North Carolina’s Good Samaritan Law, which was passed in 2013, cleared the way for law enforcement to carry and use naloxone. It is now carried by officers at more than 70 law enforcement agencies across the state. In 2015, North Carolina reached a major milestone when the number of opioid overdose reversals from the use of naloxone exceeded the number of overdose deaths.

Efforts to reduce infant mortality are ongoing within the Women’s and Children’s Health Section (WCHS), but the 2015 state budget included three new initiatives to support these efforts. Session Law 2015-241, Section 12E.11 allocated \$2.5 million in new 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. The law required the establishment of a competitive process to award grants to LHDs to implement evidenced-based strategies to achieve these aims starting in FY17. During FY16, each county health department was offered funding (\$20,000 per planning grant) to increase their capacity to plan effective MCH improvement activities in their communities. Sixty-one counties accepted these planning funds and were invited to a DPH-sponsored MCH Action Institute in which they were trained in collective impact techniques. LHD staff members and their respective community partners attended along with a number of family leaders/consumers of services. A competitive RFA was released for this initiative, now known as the Improving Community Outcomes for Maternal and Child Health (ICO4MCH) Initiative on January 15, 2016. Following an extensive review of the submitted proposals, DPH recommended funding five projects which cover 13 counties. The evidence-based strategies chosen by the project sites to meet the three aims of the initiative are listed in Table 1 below:

<b>Program Aim</b>	<b>Evidence-Based Strategy</b>	<b>Project Sites</b>
Improved Birth Outcomes	Increase use of long acting reversible contraceptives (LARCs)	All
Reduced Infant Mortality	Ten Steps for Successful Breastfeeding	Cumberland/Montgomery/Hoke/Richmond; Mecklenburg/Union; & Robeson
	Smoking Cessation and Prevention	Alleghany/Ashe/Watauga/Wilkes/Avery & Durham
	Triple P (Positive Parenting Program)	Alleghany/Ashe/Watauga/Wilkes/Avery; Mecklenburg/Union; & Durham

<b>Program Aim</b>	<b>Evidence-Based Strategy</b>	<b>Project Sites</b>
Improved Health Among Children Aged 0-5	Family Connects Home Visiting	Durham
	CEASE (Clinical Effort Against Secondhand Smoke Exposure)	Cumberland/Montgomery/Hoke/Richmond & Robeson

An evaluation plan to determine the effectiveness of the ICO4MCH Initiative and to inform future investment/funding decisions has been created which will be supported by the Gillings School of Global Public Health. Data will be collected from the grantees sites to document improvements in the short-term and intermediate outcomes. As the counties continue their collective impact efforts, health equity will be infused throughout the process. Long-term outcomes will be evaluated using vital statistics data. Long-term outcomes that cut across the evidence-based strategies and the three aims of the Initiative include:

- Decrease infant mortality rates for all racial and ethnic groups
- Decrease unintended pregnancy rates
- Increase birth spacing rates
- Decrease preterm birth rates
- Decrease low (<2500 g) and very low (<1500 g) birthweight rates
- Decrease deaths to children ages 1 to 5
- Decrease number of substantiated cases of child abuse and neglect
- Decrease the rate of out-of-home placements for children ages 0-5

The second infant mortality reduction initiative included in the 2015 state budget was to re-allocate \$1.575 million in MCHBG funding to be distributed to LHDs with high infant mortality rates to implement evidence-based strategies that are proven to lower infant mortality rates in FY16 and FY17. Funding was reduced to 83 LHDs for family planning services and 78 LHDs for prenatal care services and reallocated to the 26 counties with the highest infant mortality rates and at least 10 infant deaths for the 2010-2014 time period. Counties were eligible for a range of \$35,000 to \$113,750 each depending on the selected evidence-based strategies and population size. The choices of evidence-based strategies include: 17P (alpha hydroxy progesterone); Centering Pregnancy; LARCs; Nurse-Family Partnership (NFP) expansion; and Safe Sleep.

A third legislative initiative was to increase the state appropriations to be used for the NFP home visiting services from \$675,000 to \$900,000, and to make these funds recurring, which solidifies this as an ongoing service. These funds, along with existing funds from the Maternal, Infant and Early Childhood Home Visiting grant and from the Maternal and Child Health Block Grant, will continue to support home visiting as an important strategy for improved birth outcomes and healthy children.

The Title V Director, who is also the WCHS Chief, is directly supervised by the Director of the Division of Public Health (DPH) who reports to the Assistant Secretary of DHHS. There is a weekly Division Management Team (DMT) meeting for 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 the day 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 target population(s).

In NC, Title V leadership has worked diligently in the past 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. 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 Children and Youth Branch (C&Y Branch) are funded by Title V, Medicaid match, Medicaid receipts and various grants. The operation support for programs and contracts is also a mixture. For instance, local school nurses, school health centers are state funded, but some of the School Nurse Consultants and School Health Center Director are funded by Title V while others are supported through a Medicaid match. The Office on Disability and Health is funded through a grant from the Centers for Disease Control and Prevention (CDC), but the 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.

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 NC DHHS 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 NC DHHS must be used to further the objectives of the program that generated the income.
- GS130A-124. This statute requires NC DHHS to establish and administer the statewide maternal and child health program for the delivery of preventive, diagnostic, therapeutic and rehabilitative health services to women of childbearing years, children and other persons who require these services. The statute also establishes how refunds received by the Children’s Special Health Services Program will be administered.
- GS130A-125. This statute requires NC DHHS 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 NC DHHS 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. These statutes require NC DHHS 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 NC DHHS 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 NC DHHS 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 entering kindergarten in the public schools and establish guidelines for how the assessment is to be conducted and reported. Guidelines for religious exemptions are also included.

More recently, the NC General Assembly enacted a bill to establish a Maternal Mortality Review Committee within NC DHHS to review maternal deaths and make recommendations to decrease maternal mortality within NC.

## **II.B. Five Year Needs Assessment Summary**

### **2016 Five-Year Needs Assessment Summary**

#### **1. PROCESS:**

The WCHS conceives of 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 as appropriate. The data capacity of WCHS is strong. A new MCH epidemiologist position, funded through the MCH Block Grant, will be established in FY17, and each Branch has staff members whose roles and responsibilities include coordinating data collection and analysis activities to guide effective monitoring, evaluation, and surveillance efforts. They also work directly with staff members of the NC State Center for Health Statistics (SCHS) who provide further analyses as necessary.

In determining the process for the 2015 Title V Needs Assessment, the SMT decided in the winter of 2013 that it would focus on developing two strategic plans, one a Perinatal Health Strategic Plan (PHSP) and the other the C&Y Branch Strategic Plan (C&YBSP).

The PHSP was formally released on March 24, 2016 at the *Improving Perinatal Health in NC...While Addressing Infant Mortality* day-long summit hosted by the State Health Director. About 100 people were in attendance, and the agenda included not only the release of the plan but also presentations about current and potential work going on in areas of the plan including risk appropriate care, social and economic inequities, home visiting, long acting reversible contraceptives, pregnancy medical home, and engaging faith and community leaders. An on-line version of the plan is to be released in the summer of 2016 which will include more specific information regarding the plan's action steps and partners who are currently working on them or are interested in working on them. The PHSP Team has agreed to meet every other month to ensure that the work on the plan continues. The data subcommittee is also meeting to continue to determine the best way to track success of the plan. During the summer of 2016, two paired practica interns (from the National MCH Workforce Development Center) will be developing a community user friendly version of the plan once local level feedback has been received through key informant interviews and focus groups.

The C&YBSP has been completed. Work groups, made of up C&Y Branch staff and family members, were formed to establish more specific strategies and activities in the following areas: administration; training; communication; family engagement; quality improvement; and orientation. The orientation group has finalized a new orientation manual and the other groups submitted draft plans to the BMT at the end of June. Appropriate strategies and activities from each of the focus areas will be represented in staff annual performance plans.

#### **2. FINDINGS:**

##### **a. MCH Population Needs**

The SMT returned to the findings in the 2015 Needs Assessment when it was determining the Evidence-Based or – Informed Strategy Measures and new State Performance Measures. More information about that process can be found in section II.D and II.E.

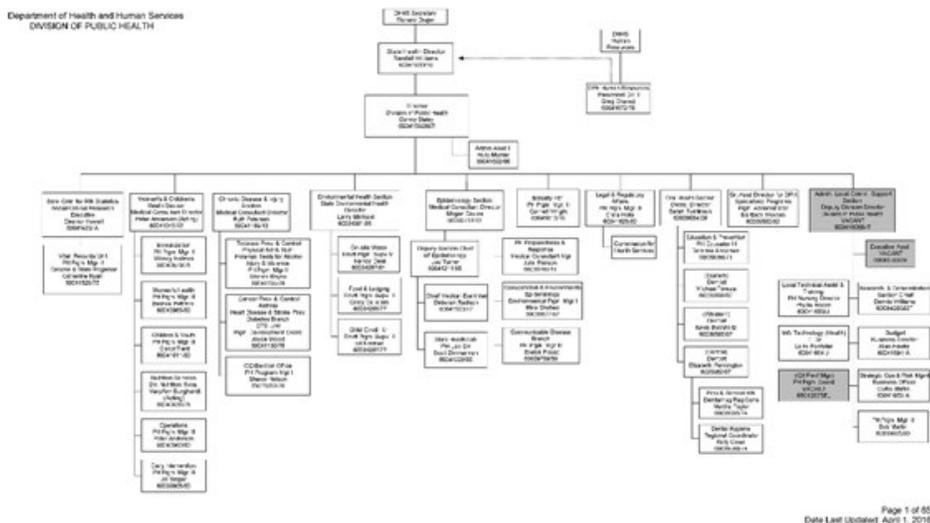
##### **b. Title V Program Capacity**

###### **i. Organizational Structure**

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. Members of the WCH Section Office in addition to the Section Chief, include the Operations Manager, the State Systems Development Initiative Project Coordinator, the Executive Director of Child Maltreatment Prevention Leadership Team, and an Administrative Assistant. The WCHS

has undergone quite a few administrative changes over the past few years. Dr. Kevin Ryan served as the Title V Program Director and Chief of WCHS from March 1999 until his retirement in September 2014. Peter Andersen, WCHS Operations Manager, assumed the duties of Interim WCHS Chief. It is anticipated that a new WCHS Chief will be hired in the summer of 2016. Carol Tant, who was the Children and Youth (C&Y) Branch Head and the CYSHCN State Director for Title V since February 2000, retired in June 2016. Marshall Tyson, who is the Health and Wellness Unit Manager in the C&Y Branch, has been appointed Acting Branch Head. In addition to the C&Y Branch, the WCHS includes four other branches: Women's Health (WHB), Early Intervention (EIB), Immunization (IB), and Nutrition Services (NSB). Also, a new MCH Epidemiologist position will be established in FY17. 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.

A copy of the NC DPH organizational chart is found below and at this URL: <http://publichealth.nc.gov/docs/DPH-Overall-pg1-040116-WebsiteBeacon.pdf>



## ii. 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. The six population health domains run across several different Branches within the WCHS, and the work of the LHDs falls within each of the domains.

Since January 1, 1995, all Supplemental Security Income (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 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.

### **iii. MCH Workforce Development and Capacity**

The WCHS oversees and administers an annual budget of over \$569 million and employs 926 people. This is 48% of the DPH staff, along with 64% 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. In addition, the EIB has a network of 16 Children's Developmental Service Agencies (CDSAs) serving all 100 counties.

The Title V Block Grant fully funds 23 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 primarily to provide services for individuals without another payer source. Limited funds also pay for enabling services and population health education.

In addition to the changes in personnel for the Title V Director and CSHCN Director, Mary Anne Burghardt was named Head of the NSB in May 2016 after serving as Interim Branch Head since May 2015. Prior to this role, she was the Public Health Nutrition Unit Supervisor.

Family Liaison Specialists (FLSs) – The C&Y Branch has 1.5 Full-Time Equivalents (FTEs) for parents of CYSHCN. One full time position is supported fully by Title V funding. Christy Moore joined the C&Y Branch in June 2015. In addition to being the parent of a child with special health care needs, she has a degree in Political Science and History from UNC-CH. She most recently worked for Bright Horizons Family Solutions where she developed learning centers in the classroom that include and support CSHCN. Christy staffs the Branch Family Partners that works with the C&Y BMT to plan, implement, and evaluate programs and services.

The second 0.5 FTE works with the Early Hearing Detection and Intervention (EHDI) program, connecting with families of children with hearing loss.

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. 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. A resource databank of primary contacts has been created which will include information about established relationships that have been developed among the Hispanic, African American, Hmong, Vietnamese, American Indian and Asian communities through years of service provision and community work. 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. Interpreters, including those for the hard of hearing and deaf populations, are also mandated in all direct service contracts.

### **c. 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, ODH, EDHI, etc.) and other Federal investments (e.g., PREP, WIC, Immunizations, etc.) is very strong. Through the SMT weekly meetings, the Title V Director is updated on plans and activities of the Branches 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 and Social Services/Child Welfare programs, so within the management structure of DHHS, 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. 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); ORH; and Division of Child Development and Early Education. The WCHS also collaborates with the Department of Insurance closely on the Affordable Care Act (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.

WCHS also collaborates on a number of activities with several professional organizations in the state including: 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 Section works closely with the NC Partnership for Children (SmartStart), Prevent Child Abuse NC, the NC Chapter of the March of Dimes (MOD), SHIFT (Sexual Health Initiatives For Teens) NC, NC Healthy Start Foundation (NCHSF), Community Care of North Carolina (CCNC), and many other organizations.

The Section's capacity in implementing family/consumer partnership and leadership programs is strong. 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. 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 Help Line. There are also the FLS positions which have always been filled by people who have a CSHCN. The EIB has rejoined 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, Young Families Connect, TPPI, and ICO4MCH projects 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.

## Five-Year Needs Assessment Summary (Submitted on July 15, 2015)

### II.B.1. Process

The WCHS conceives of 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. 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 staff members of the NC State Center for Health Statistics (SCHS) who provide further analyses as necessary. The SCHS is responsible for data collection, health-related research, production of reports, and maintenance of a comprehensive collection of health statistics. They provide high quality health information for better informed decisions and effective health policies by offering analyses of important health issues; a central collection site for information about cancer, birth defects, births, deaths, marriages and divorces; accurate and timely information; and a safe and secure environment for confidential records.

In addition to these day-to-day "micro" analyses of relevant inputs, the Section utilizes formal needs assessment processes, such as the five year MCH Block Grant needs assessment process, to review and titrate Section priorities and activities. In determining the process for the 2015 Title V Needs Assessment, the SMT decided in the winter of 2013 that it would focus on developing two strategic plans, one a Perinatal Health Strategic Plan (PHSP) and the other for the C&Y Branch. With the development of these plans, many steps in the needs assessment would be accomplished – engaging stakeholders, assessing needs and identifying desired outcomes and mandates, examining strengths and capacities, selecting priorities, and setting performance objectives – and the framework for the Title V State Action Plan would be established.

The decision to develop a PHSP stemmed from work that the NC Collaborative Improvement and Innovation Network (CoIIN) to Reduce Infant Mortality State Team did during the Regions IV, V, VI CoIIN Meeting held in October 2013. The Perinatal Health Strategic Planning Committee initially met in November 2013 and met monthly from May 2014 to February 2015. The Committee was made up of about 25 members representing various perinatal health entities across the state, including DPH, March of Dimes, NC Healthy Start Foundation (NCHSF), Community Care of NC (CCNC), NC Child, UNC Center for Maternal and Infant Health (CMIH), NC Hospital Association, NC Child Fatality Task Force (CFTF), and others. The Committee's goal was to develop a draft PHSP that will focus on infant mortality, maternal health, maternal morbidity, and the health of men and women of childbearing age while infusing health equity throughout the process. The Perinatal Health Strategic Planning Committee was comprised of four work groups: 1) Framework; 2) Evidence-based practice; 3) Current practice; and 4) Data. Utilizing the *12-Point Plan to Close the Black-White Gap in Birth Outcomes: A Life-Course Approach* developed by Lu, Kotelchuck, Hogan, Jones, Wright, and Halfon, the draft strategies were developed. The Data Work Group compiled a Perinatal Health Data Inventory of both quantitative and qualitative data which was used in the development of the plan. The original Data Inventory included more than 100 indicators from the MCH Block Grant, CoIIN, the Maternal and Child Health Bureau (MCHB) minimum and core data sets (M/CDS), Core Preconception Health Indicators, Association of Maternal and Child Health Programs (AMCHP) Life Course Metrics Project, and other sources. At this time, there are about thirty indicators, some still under development or identified as data gaps, which have been suggested as core indicators which will be used to monitor the success of the plan.

About 125 stakeholders were invited to participate in a Perinatal Health Strategic Planning Summit held on October 31, 2014. The purpose of the Summit was to gather broad based input about the draft plan. In addition to members of the PHSP Committee and other state health and human service agencies, additional entities represented included universities, hospitals, LHDs, and area health education centers, along with fatherhood, youth, child abuse and domestic violence programs. Participants broke into work groups and, through a facilitated process, developed

action steps and a timeline to address what is and what is not presently being done in NC regarding perinatal health best, promising, and emerging practices. On January 12, 2015 a meeting sponsored by the NC Chapter of the March of Dimes was held with 38 key decision and policy makers representing various agencies and groups across NC. Along with representatives from the PHSP committee, representatives included: NC Pediatric Society (NCPS), NC Medical Society, The Duke Endowment, Urban Ministries of Wake County, Kate B. Reynolds Charitable Trust, and Youth Empowered Solutions. In addition, staff members for a few state legislators attended. There was much positive and energetic discussion about the importance of the strategic plan with many suggestions made as to whom the group felt should be included as partners to assure successful implementation of the plan. The group decided that the plan was important and should move forward with the Women's Health Branch (WHB) serving as the lead agency. The plan is currently being vetted with the leadership of our partners and expected to be approved and released by the end of summer.

During the spring of 2014, the C&Y Branch Management Team (BMT) decided to embark on a four-phase planning process to develop a five-year strategic plan for the Branch. By design, the process was strongly focused on 360-degree stakeholder needs, opinions, and priorities to maximize the Branch's efforts to align its vision and finite resources with the needs of families in NC. In total, the opinions of over 700 North Carolinians shaped the development of this plan's priorities, strategies, and actions.

Through the summer of 2014, an independent consultant gathered stakeholder opinions from 237 participants through surveys, focus groups, and key informant interviews while conducting a scan of the political, economic, and governmental environment in which the C&Y Branch operates (Phase I). The methods used to obtain feedback are as follows:

- Surveys – C&Y Branch staff members and partner stakeholders each received an invitation to complete an electronic survey of similar questions to gauge similarities and differences among perceptions, needs, or priorities. Additionally, focus groups of parents from two military bases were invited to complete a short Pre-Meeting Survey.
- Focus Groups – Two focus groups were held with military families at Camp Lejeune and at Fort Bragg, in which families were asked a series of questions related to their families' experiences. These focus group questions were modified slightly for a focus group with NC American Indian Health Board officials.
- Key Informant Interviews – Nine Key Informant Stakeholder interviews were conducted, totaling 10 interviewees, representing large constituencies such as the Executive Director (ED) of the LHD Association and the ED of the Pediatric and Family Practice Associations. These questions were complementary to those asked of parents, staff, and other providers, but were more strategic or structural in nature.
- Environmental Scan – The stakeholder research was conducted concurrently with an extensive environmental scan to understand the overall context in which the C&Y Branch operates. Within that environmental scan, NC legislative and political news related to health was reviewed, as well as approximately 30 state health studies, including twelve NC Institute of Medicine (NCIOM) Task Force Reports; internal Branch reports; *Healthy North Carolina 2020*; *North Carolina's Plan to Promote the Health of People with Disabilities: Everywhere, Everyday, Everybody*; and *A Blueprint of the Future for Local Health Departments in North Carolina*.
- Parents of children served or potential consumers were involved at every level.

The consultant also reviewed CYSHCN parental opinion research conducted in 2013 by the C&Y Branch in multiple counties related to its Innovative Approaches (IA) program (seeks to foster improvement in community-based systems of care for CYSHCN) and also the results of a series of three Community Cafés regarding access to services for Latino families with CYSHCN (Diálogo Comunitario: Acceso de Servicios para Niños con Necesidades Especiales).

The results of this initial research phase were presented in September 2014 to members of the C&Y Branch Strategic Planning Executive Committee and other Branch staff members. The meeting participants reviewed the

themes and priorities that emerged from the stakeholder research and developed a set of six complementary key strategies that could guide the Strategic Action Plan (Phase II). In October, additional staff members of the Branch and several key partners held a one day retreat to discuss the results of Phase I and Phase II and to review and/or develop additional key strategies and activities (Phase III). The plan includes these ten core constructs:

- Systems Building
- Family Involvement
- Family and Patient Centeredness
- Evidence-Based Programs
- Promising Practices
- Racial/Ethnic Disparities and Equities
- CYSHCN
- Life Course Model
- Continuous Quality Improvement, and
- Medical Home

The plan's six key strategies are the following:

- A. Support the quality of health services (hospitals, private clinics, audiologists, etc.)
- B. Support the quality of health providers (physicians, nurses, audiologists, speech language pathologists, genetic counselors, social workers, mental health providers, etc.)
- C. Support access to quality care (community-based; clinic hours & locations; transportation; interpreter services; providers, etc.)
- D. Increase family support and resiliency
- E. Increase and sustain parent/community/provider education and awareness
- F. Increase and sustain family/community/provider strengthening and engagement

Work to finalize the plan and implement the activities is ongoing by the C&Y BMT and staff members.

In addition to the data sources already described, the other main data sources of this Needs Assessment include the following:

- Vital Statistics (e.g., birth and death files)
- National Survey of Children's Health (NSCH)
- National Survey of Children with Special Health Care Needs (NS-CSHCN)
- Behavioral Risk Factor Surveillance System (BRFSS)
- Youth Risk Behavior Surveillance System (YRBSS)
- Pregnancy Risk Assessment Monitoring System (PRAMS)
- US Census Data
- NC State Laboratory of Public Health (SLPH) Laboratory Information Management System (LIMS)
- NC Composite Linked Birth File
- Health Information System (HIS)
- NC Child Health Assessment Monitoring Program (NC CHAMP)
- The NC Child Health Report Card
- NC State Data Center (SDC)
- WCSWeb
- NC Crossroads WIC System
- Title V CSHCN Help Line
- NC Violent Death Reporting System (NC-VDRS)

As shared earlier, the Perinatal Health and C&Y Branch strategic plans were instrumental to the WCHS leadership

and staff as they finalized the state's Title V priority needs and developed NC's State Action Plan. The state's eight new national performance measures were selected in part, because of how they were related to the proposed outcomes and activities cited in the strategic plans

## II.B.2. Findings

### II.B.2.a. MCH Population Needs

#### *Women/Maternal Health*

Improving the health of women of childbearing age, the state priority need specific to the Women/Maternal Health domain, is a huge goal and encompasses a range of activities and programs. Many of these strategies are included in the NC PHSP, and some fall under the Perinatal/Infant Health population domain. Together these two domains reflect the needs of the legislatively-defined state MCH population group of preventive and primary care services for pregnant women, mothers, and infants up to age one. Data on the health of women of childbearing age is primarily obtained from the NC BRFSS. Due to recent changes in the weighting methodology and other factors for the BRFSS, comparable data are only available from 2011 to 2013.

The NC Preconception Health Strategic Plan, which was introduced in 2008 to provide awareness about reducing infant mortality and maternal mortality and morbidity by improving the health of women before, during, and after pregnancy, highlighted six priority areas: Pregnancy Intendedness, Obesity and Related Conditions, Substance Abuse, Mental Health, Collaborative Research of Preconception-focused Topics, and Policy Development and Access to Care. While some strategies to address these priority areas have been implemented, and preconception health awareness continues to grow, input from stakeholders identified the need to: broaden and add additional priority areas (Life Planning, Mental Wellness, and Access to Services); expand the priority population to include men; and incorporate both the Social Determinants of Health and Life Course Perspective models to the plan. So in 2014, the *NC Preconception Health Strategic Plan Supplement – 2014-2019* was released addressing those needs.

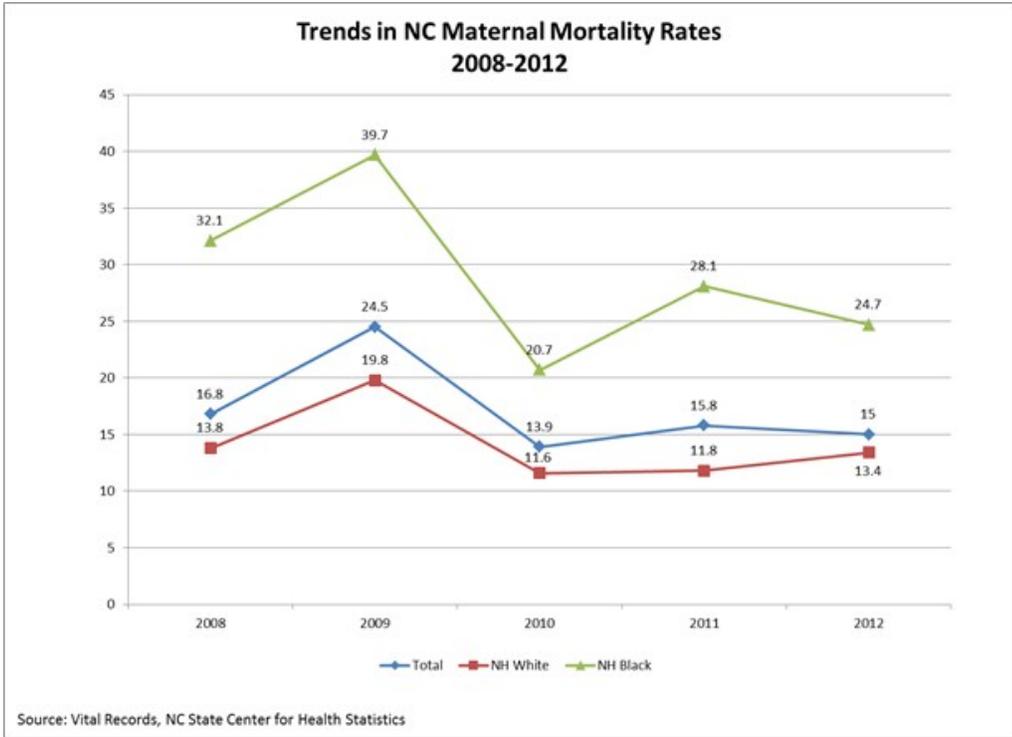
Disparities exist in many areas of preconception health (Table 1). While more White women reported that they had some type of health care coverage in 2013 than Black women, more Black women reported that they received a routine checkup in the past year. Only 43% of women overall reported taking a daily multivitamin, and White and Hispanic women reported doing so at a higher rate than Black and American Indian women. More than half the women who responded said that they were overweight or obese, and while the confidence intervals (CIs) are large, more Black and American Indian women reported that they are overweight or obese than White women. More White and American Indian women reported that they are current smokers and participate in binge drinking than Black women. Hispanic women are less likely to have some type of health care coverage, but reported fewer additional risk factors than non-Hispanic (NH) women.

<b>Table 1 - Characteristics of Women of Childbearing Age by Race/Ethnicity North Carolina, 2013</b>										
<i>Percent of women respondents aged 18 to 44 who:</i>	Total	95% CI	NH White	95% CI	NH Black	95% CI	NH American Indian	95% CI	Hispanic	95% CI
Had a routine checkup in the past year	71.5	68.5-74.4	70.1	66.0-73.8	79.8	73.9-84.7	73.2	46.4-89.6	67.5	58.3-75.5
Currently have some type of health care coverage	73.5	70.6-76.3	83	79.6-86	71.1	64.4-77	83.9	64-93.9	31.6	23.8-40.5

Table 1 - Characteristics of Women of Childbearing Age by Race/Ethnicity North Carolina, 2013										
<i>Percent of women respondents aged 18 to 44 who:</i>	Total	95% CI	NH White	95% CI	NH Black	95% CI	NH American Indian	95% CI	Hispanic	95% CI
Now take a multivitamin daily	43	39.4-46.7	45.5	40.7-50.4	35.4	28.6-42.9	31.4	14.4-55.6	50.5	41.1-59.8
Are overweight or obese based on body mass index (BMI)	55.9	52.4-59.4	51.4	46.8-55.8	67.5	59.9-74.3	80.7	51.4-94.3	57.9	47.7-67.5
Have been told by provider that they had hypertension including hypertension during pregnancy	15.6	13.5-18.0	14.9	12.2-18.2	21.2	16.7-26.7	25.6	9.7-52.6	10.9	6.1-18.7
Currently smoke every day or some days	19.6	17.2-22.2	24.6	21.2-28.4	17.1	12.8-22.6	40.6	19.5-65.9	4.7	2-10.4
Participated in binge drinking on at least one occasion in the past month	13.3	11.3-15.6	14.7	12-17.7	12.9	8.9-18.2	15.9	4.9-40.9	3.6	1.5-8.4
Source: NC BRFSS, NC SCHS										

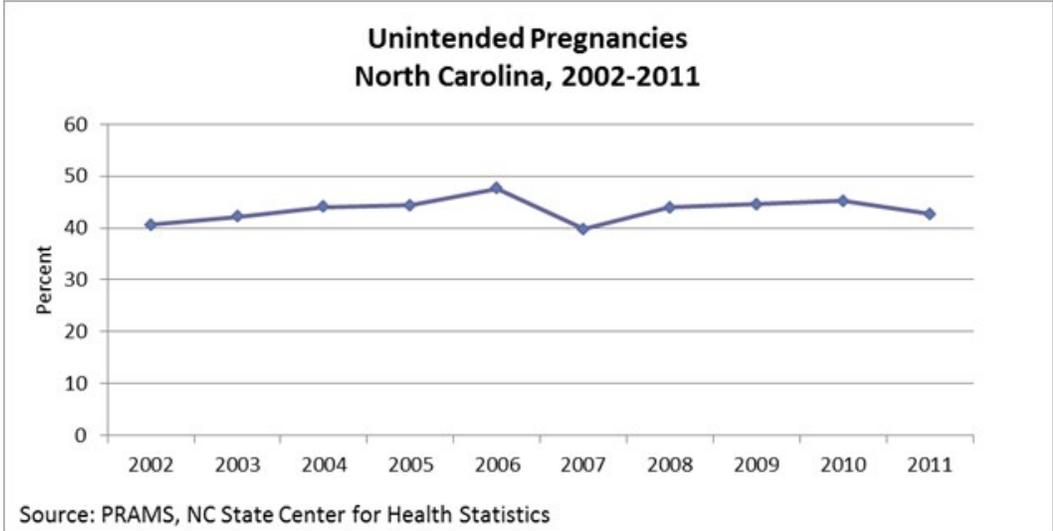
Maternal mortality and morbidity rates in NC are areas of huge concern. In 1988, the SCHS initiated an enhanced, state-wide, population-based system for identifying pregnancy-related deaths within NC; this multisource system has shown an increase in the identified number of pregnancy-related deaths by as much as 30 percent. The annual process for enhanced surveillance includes matching the death records for all women aged 10-50 years to the live birth and fetal death files for the same and previous calendar years to identify maternal deaths that occur within one year after delivery. In addition to obtaining information from maternal death and infant death certificates, hospital discharge records of women who die in a hospital with pregnancy-related discharge diagnoses are also obtained. Historically, a single physician who is board certified in obstetrics and gynecology as well as maternal and fetal medicine has done this review; however, NC participated in AMCHP's Every Mother Initiative in 2013-14 and is committed to sustaining and improving maternal mortality and morbidity surveillance by engaging more members to serve on the maternal mortality review committee. One of the biggest challenges in maternal mortality in NC is the racial disparity, with NH Black women being about two times more likely to die of pregnancy-related causes than NH White women for the time period 2008 to 2012 (see Figure 4). The rate of Hispanic women in NC dying due to pregnancy-related causes is very low, as there were only 18 deaths identified between 1999 and 2012.

**Figure 4**



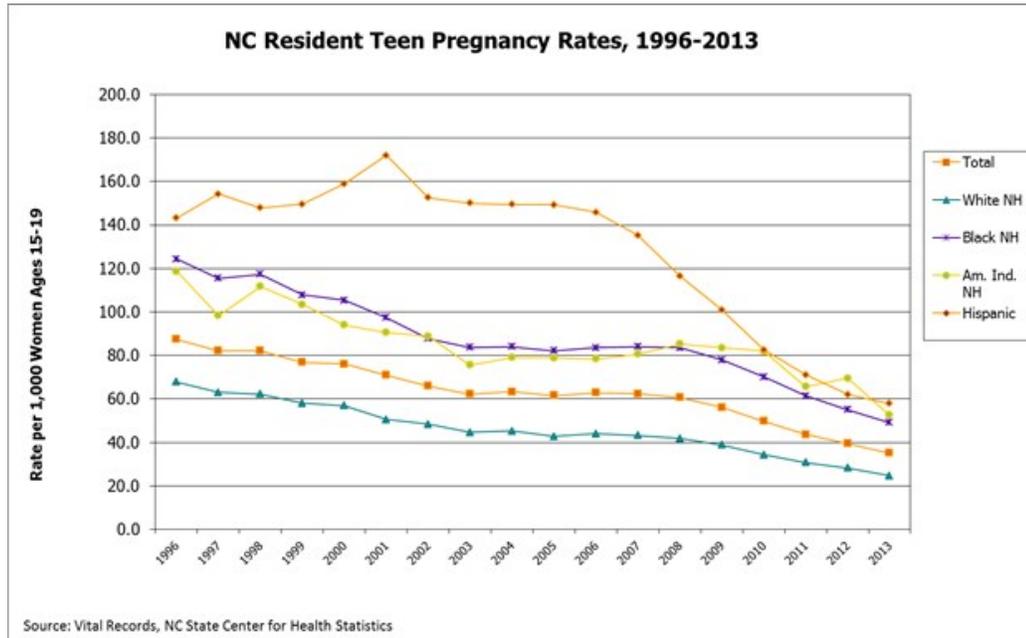
According to data from the 2011 NC PRAMS, the percentage of live births among women 18-44 that are unintended is 42.7%, which is in line with trend data for the past ten years (Figure 5). Although the majority of adolescent pregnancies are unintended, women over 20 also experience high rates of unintended pregnancy. NH Black women (68.5%) experience among the highest proportion of unintended pregnancies when compared with NH White (36.5%) and Hispanic women (31.8%). About 12.3% of births in NC in 2013 were conceived within six months of a previous pregnancy, a slight reduction from 13.6% in 2012. These data are self-reported and may be slightly lower than the actual numbers because women may not report a birth subsequent to an abortion. To decrease the number of unintended pregnancies and short birth intervals, much work is being done by the WHB in partnership with Title X to promote the use of long acting reversible contraception (LARC). LARC use by clients served in LHDs has almost doubled in the past four years, increasing from 9% in 2011 to 17% in 2014.

**Figure 5**



Following national trends, NC has reached a historic low in its teen pregnancy rate. The rate for females 15-19 peaked in 1990 at a rate of 105.4 per 1,000; in 2013, the rate was 35.2 per 1,000, a 66.6 percent decrease. Despite the encouraging declines in teen pregnancy rates for teens in all racial and ethnic groups, gaps persist among these groups (Figure 6). The disparity between White and Black rates has remained relatively unchanged since 2004. The gap between White and Hispanic rates has decreased more significantly, though Hispanic pregnancies continue to occur at more than twice the rate of White teens.

**Figure 6**

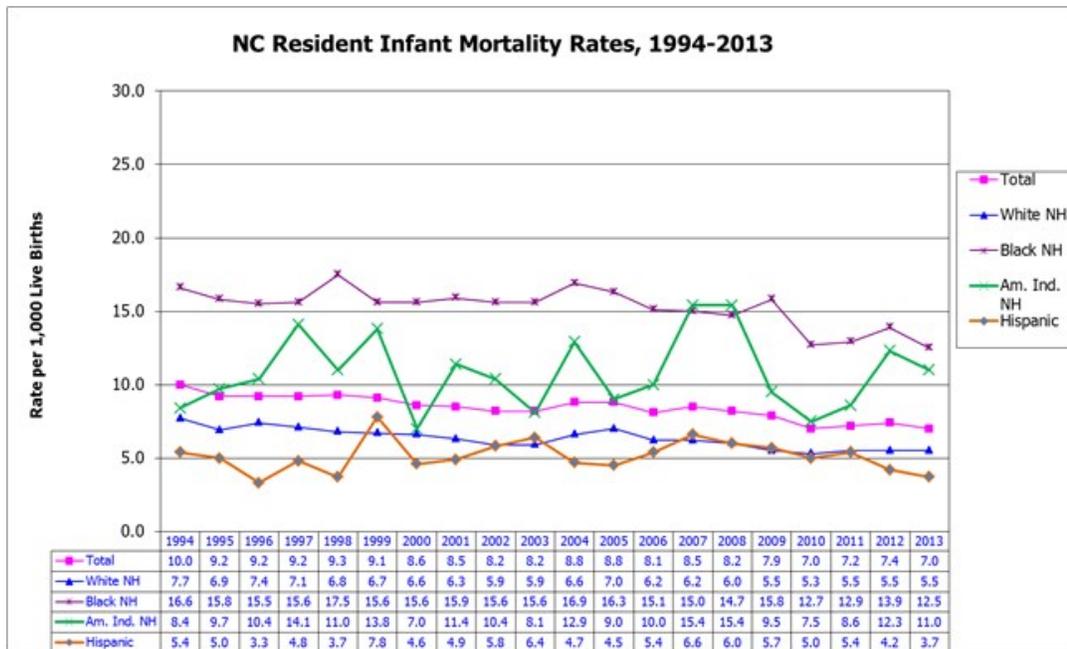


*Perinatal/Infant Health*

Reducing infant mortality and increasing the number of newborns screened for genetic and hearing disorders and preventing birth defects are the two state priority needs in this domain.

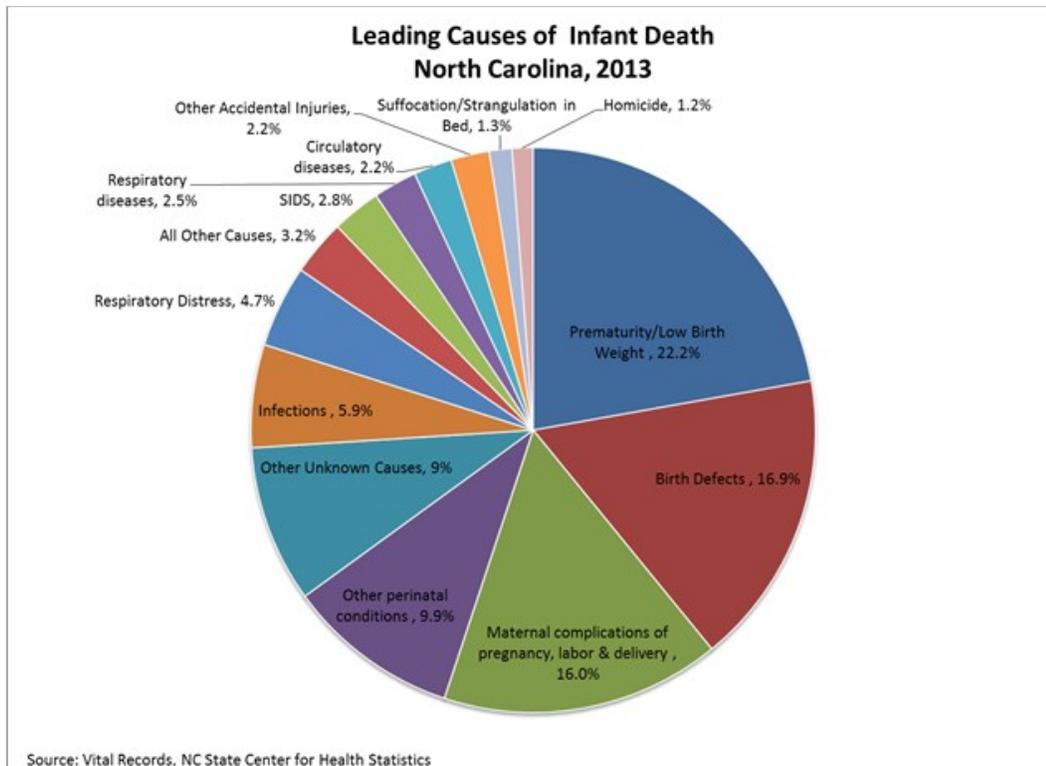
NC has made great strides in reducing its infant mortality rate (IMR) over the past forty years. The 2013 overall rate once again matched the state’s lowest rate of 7 deaths per 1,000 live births (first met in 2010), and the NH Black rate of 12.5 was the lowest in the state’s history. However, much work remains to decrease both the overall rate and the racial disparity in rates. Figure 7 highlights the racial disparities in the state’s IMRs. Over the last twenty years, the NH Black to NH White IMR ratio has varied, but Black rates have continuously been at least two times higher than White rates. In 2013 the NH Black rate was 2.3 times higher than the NH White rate and the NH American Indian rate was twice as high.

**Figure 7**



Prematurity/low birth weight, birth defects, maternal conditions and perinatal conditions are the four leading causes of infant death in NC. Together these causes accounted for approximately 65% of all infant deaths in 2013 (Figure 8). From 2012 to 2013, most postneonatal causes of death categories declined, with birth defects experiencing one of the largest declines. “Other perinatal conditions” include birth trauma, maternal factors and complications of pregnancy, labor and delivery, and newborn cardiovascular conditions. Maternal complications are responsible for 16% of all infant deaths in the state. These can include pre-existing chronic conditions like asthma, kidney, diabetes, heart disease or alcohol/drug addiction, as well as acute conditions like infections, complications of pregnancy, and post-surgical complications. Sudden Infant Death Syndrome (SIDS) deaths have demonstrated a dramatic decline from 12.8% in 2008 to 2.8% of all deaths in 2013, although much of that decline may be due to the improved classification and reporting of cause and manner of death for Sudden Unexpected Infant Deaths (SUID) through the CDC’s SUID Initiative. As a result of these efforts, cases that might have formerly been attributed to SIDS might now be classified as accidental suffocation/strangulation or unknown causes of death.

**Figure 8**

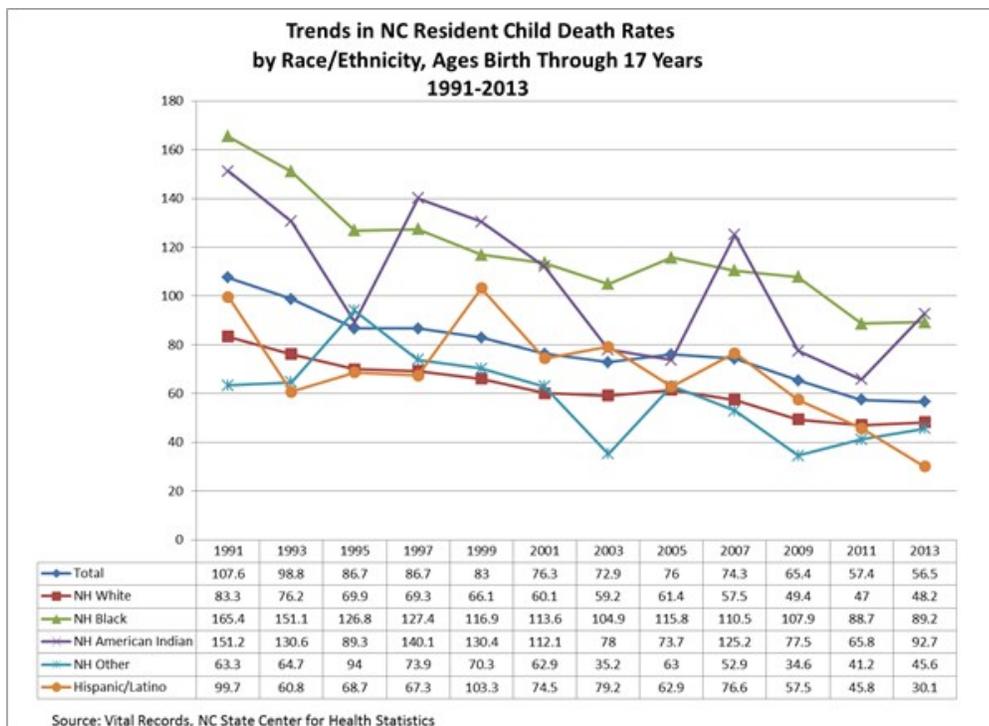


The Genetics and Newborn Screening Unit in the C&Y Branch, the NC Sickle Cell Program in the WHB, and UNC-Chapel Hill collaboratively provide timely follow-up services for all infants with suspicious laboratory results. In 2013, 99.3% of all infants received newborn screening which included all but one (Tyrosinemia, Type I) of the core conditions in the Recommended Uniform Screening Panel. The NC Early Hearing Detection and Intervention Program (EHDI) was established in 2000, and all birthing hospitals now provide newborn hearing screening. In FY14, a total of 119,399 infants (99.3% of live births) were screened for hearing.

#### Child Health

One of the state priority needs specific to this domain is to prevent child deaths. Since 1991, the child death rate has been cut in half in NC, from 107.6 per 100,000 to 56.3 per 100,000 in 2013 (Figure 9). As about two-thirds of child deaths in NC occur during the first year of life, much of that decrease can be attributed to the decrease in the IMR during the same time period. Progress has also been made because of sound public policy decisions improving health insurance for children, the graduated drivers licensing system, child safety seats, bicycle helmets and other prevention policies. The NC CFTF, the State and Local Child Fatality Prevention Teams, and all of their many partners have been an integral part of this work. However, even with an overall decrease in child deaths in 2013, there remain racial and ethnic disparities, with rates for NH Black and American Indian children at levels which are more than twice those of NH White and Hispanic/Latino children.

**Figure 9**



The 2014 NC Child Health Report Card gives a good overview of the status of children’s health in NC. Some of the key findings highlighted in the report card include:

- The percent of uninsured children declined from 8.1% in 2009 to 6.2% in 2013.
- The IMR dropped from 7.9 in 2009 to 7 in 2013.
- More than one-third (36.3%) of adolescents and teens ages 10-17 were overweight or obese based on CHAMP survey data collected in 2013.
- Although fewer high school students now smoke, one in five (22.4%) report using emerging tobacco products, like e-cigarettes, in the past 30 days in the 2013 NC Youth Tobacco Survey.

The other priority need in this domain is to increase developmental screenings for children and adolescents. Per the 2011/12 NSCH, 58% of children in NC had received appropriate developmental screening which is higher than the national average of 30.8%, but leaves much room for improvement. This percentage was lower for female children (54.9%) than male children (61.2%) and also lower for CSHCN (50.9%) than for non-CSHCN (59.2%), although the CI for CSHCN was extremely wide (>20%), so it is difficult to make comparisons.

### Adolescent Health

The state priority need falling under this domain is to promote healthy schools and students who are ready to learn, which is also impacted by the priority needs found in the other domains, particularly in the Cross-Cutting/Life Course domain.

Data from the 2011/12 NSCH indicate that the percentage of adolescents ages 12-17 in NC receiving at least one or more preventive medical care visits is similar to the national rate (78.2% in NC vs. 81.7% US), but both rates leave a lot of room for improvement. NC teens had rates similar to US rates as far as overall health, presence of chronic health conditions, and likelihood of having received care within a medical home, but were slightly less likely to receive needed mental health services than teens nationwide (Table 2). While the overall percentages of youth ages 10-17 years who are overweight or obese are similar in NC as in the nation, when this indicator is broken down by race/ethnicity, there are some differences (lower rates for Hispanic and Black youth in NC vs. US) although the CIs overlap for each group.

<i>Table 2- 2011/12 NSCH Adolescent Health Indicators</i>				
<i>Percent of adolescents ages 12 through 17 ...</i>	<i>NC</i>	<i>95% CI</i>	<i>US</i>	<i>95% CI</i>
<i>Whose parent describes being in excellent/very good health</i>	80.9	75.7-86.2	83.3	82.3-84.3
<i>Who currently have no chronic health condition</i>	69.4	63.9-75	69.2	68.1-70.3
<i>Who received coordinated, ongoing, comprehensive care within a medical home</i>	52	45.9-58	51.4	50.1-52.6
<i>Who needed and received mental health treatment or counseling in the past 12 months</i>	54.3	36.6-72	64.1	60.4-67.8
<i>Who are overweight/obese (age 10-17 years)</i>	31.4	26.5-36.3	31.3	30.3-32.4
<i>Hispanic</i>	26.1	11.0-41.1	39.9	36.6-43.2
<i>NH White</i>	29.1	23.1-35	26.3	25.2-27.4
<i>NH Black</i>	37.2	26-48.3	41.6	38.8-44.4

Data from the NC-VDRS show that from 2004 to 2012, there were 2,814 NC residents ages 10-24 who died as a result of violence. Of those deaths, 1,252 (44.5%) were suicide. The majority of youth suicide victims were identified as White (79%), while 18% were Black. The most common method of suicide among youth was firearms (56%), followed by hanging/strangulation/suffocation (32%) and poisoning (7%).

The number of full time school health nurses in NC has increased from 836.1 in 2005 to 1235.9 in 2014, improving the ratio of school health nurses to the public school student population from 1 nurse to 1593 students in 2005 down to 1 nurse to every 1160 students in 2014. However, this is still quite a ways from the goal established by NC DPH, the American Academy of Pediatrics (AAP), the CDC, the American School Health Association, and the National Association of School Nurses for the ratio not to exceed one nurse per 750 students.

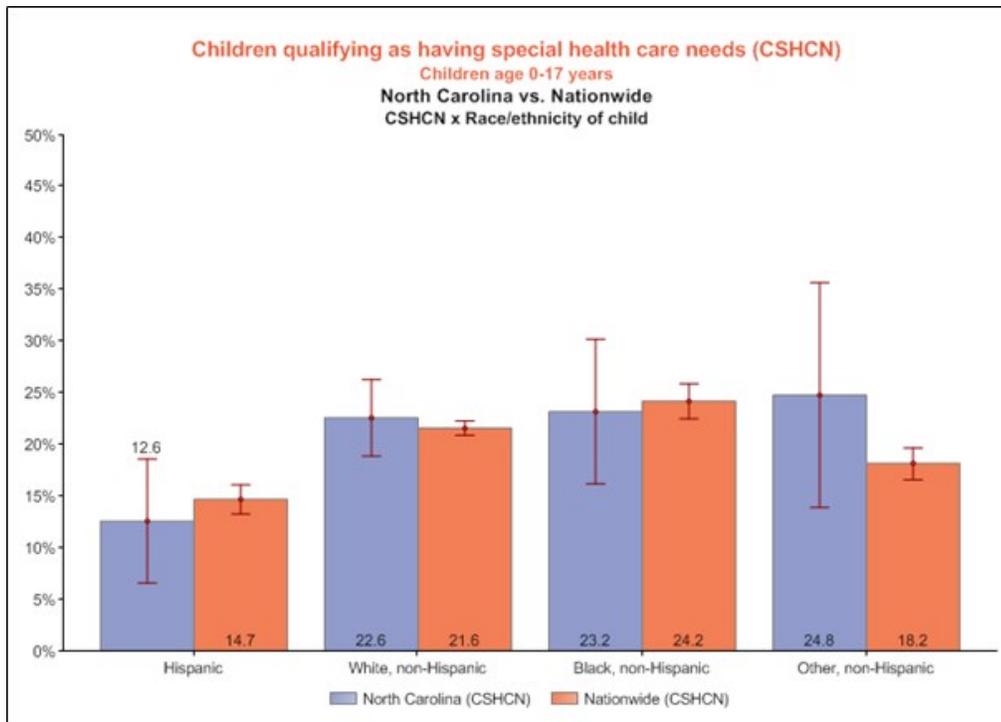
### *Children with Special Health Care Needs*

There are two state priority needs specific to this domain: 1) improve the health of CSHCN; and 2) provide timely and comprehensive early intervention services for children with special developmental needs and their families.

The NC CYSHCN Program has embraced the broad federal definition of CSHCN: children and youth who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally. While some programs and organizations in NC adhere to this definition, others provide services only to those children meeting narrower definitions. Programs and organizations may also limit eligibility for their services to subsets of children that meet more limited age, income, residency, or other criteria. This variance in definition increases the challenges in collecting information across agencies.

Per the 2011/12 NSCH, approximately 21.6% of children in NC have special health care needs as opposed to 19.8% of children nationally. The racial/ethnic breakdown of these children in NC is similar to that of the US (Figure 10).

### **Figure 10**



Source: 2011/12 NSCH

Having a medical home is important for all children, but particularly for CSHCN. According to the 2009/10 NS-CSHCN, 45.1% of CSHCN in NC met all the medical home criteria which is similar to the national rate of 43%. In NC, children age 0-5 were more likely to meet the criteria than children six and older (49.7% for ages 0-5; 46.4% for ages 6-11; and 41.1% for ages 12-17). In addition, those children living below the 200% federal poverty level [FPL] were also less likely not to have a medical home (38.3% for those at 0-99% FPL; 39.3% at 100-199% FPL; 50.6% at 200-399% FPL; and 52.4% at >400% FPL). NH White children are more likely to have a medical home (52.9%) than NH Black (34.1%) or Hispanic (35.6%) children. The greatest disparity is found in comparing CSHCN by insurance type. Children with private insurance are much more likely to have a medical home than those with public insurance (55.3% vs. 35.1% respectively). These data are replicated in the survey data for the nation as a whole and are similar to state and national data found in the 2005/06 NS-CSHCN. These data are somewhat puzzling since public insurers require families of children to choose a medical home and that provider is the gatekeeper for all specialty and related services. This is true for both Medicaid and NC Health Choice programs who together serve about 60% of newborns in NC.

Results of the 2009/10 NS-CSHCN for each of the MCHB Core Indicators indicate that NC data mimics national data with small differences that mostly fall within the range of the overlapping 95% CIs for each measure (Table 3). Within each core outcome, there are differences seen by racial/ethnic group and by those who have a medical home compared to those who do not, but many of these values also fall within overlapping CIs. For most of the indicators, responses of White parents showed higher values than those of any other racial/ethnic group, but not for indicators #5 (accessing community based services) and #6 (transition). In all of the indicators except for #4 (screening), CSHCN who had a medical home fared better than those children who did not, thus emphasizing the need for continued work in this area.

Table 3 -2009/10 NS-CSHCN MCHB CORE OUTCOMES				
Percent of CSHCN ...	NC	95% CI	US	95% CI

Table 3 -2009/10 NS-CSHCN MCHB CORE OUTCOMES

#1 – whose families are partners in shared decision-making for child's optimal health	74.6	70.7-78.5	70.3	69.4-71.1
Hispanic	53.7	39.5-67.9	63.5	60.9-66.1
NH White	79.6	75.2-84.1	74.2	73.2-75.1
NH Black	69.8	60.1-79.4	64.7	62.1-67.2
With Medical Home (MH)	91.8	87.6-96.1	89.9	89-90.7
Without MH	62.2	56.2-68.3	56.3	55.1-57.6
#2 – who receive coordinated, ongoing, comprehensive care within a medical home	46.1	40.7-49.6	43	42.1-43.8
Hispanic	35.6	21.4-49.7	33.2	30.5-35.8
NH White	52.9	47.4-58.3	48.8	47.7-49.8
NH Black	34.1	24.5-43.8	33.5	31.1-35.8
#3 – whose families have adequate private and/or public insurance to pay for the services they need	58.5	54-62.9	60.6	59.7-61.4
Hispanic	40.3	26.4-54.3	53.6	50.9-56.4
NH White	63.4	58.2-68.6	62.8	61.8-63.8
NH Black	53.1	42.7-63.6	58.9	56.3-61.4
With MH	69.6	63.4-75.7	72.9	71.7-74
Without MH	50.1	43.8-56.3	51.6	50.3-52.8
#4 – who are screened early and continuously for SHCN	78.7	74.9-82.5	78.6	77.8-79.3
Hispanic	71.6	58.6-84.5	74.9	72.5-77.3
NH White	80.6	76.4-84.8	79.6	78.7-80.4
NH Black	75.6	65.8-85.3	78.8	76.7-80.9
With MH	79.5	74.2-84.8	82.6	81.7-83.6
Without MH	79.1	73.7-84.6	76.1	75-77.2
#5 – who can easily access community based services	70.3	66.4-74.2	65.1	64.2-66
Hispanic	74.4	63.1-85.8	59.2	56.5-61.9
NH White	70.4	65.6-75.2	67.6	66.7-68.6
NH Black	69.4	60.1-78.7	64.1	61.6-66.7
With MH	83.6	78.9-88.4	81.6	80.6-82.6

Table 3 -2009/10 NS-CSHCN MCHB CORE OUTCOMES				
Without MH	60.3	54.3-66.3	53	51.7-54.3
#6 – Percent of YSHCN who receive the services necessary to make appropriate transitions to adult health care, work, and independence	43.7	36.5-50.8	40	49.2-63.5
Hispanic	43.1	10.7-75.4	25.3	21.1-29.4
NH White	50.4	42.1-58.7	45.7	44.1-47.2
NH Black	25.4	12.1-38.7	28.1	24.6-31.5
With MH	64.6	54.9-74.3	55	53-57.1
Without MH	30.2	21.2-39.1	29.2	27.4-31

NC's Early Intervention (EI) Program, governed under Part C of the Individuals with Disabilities Education Act (IDEA), serves infants and toddlers, birth to three years of age, with developmental disabilities or delays or established health conditions that lead to developmental delay. The EI Program is managed at the state level by the EI Branch (EIB) and at the local level by the EIB's employed and contracted Children's Developmental Services Agencies (CDSAs). Infants and toddlers are referred to the EI Program by many referral sources including child health clinics at LHDs. From FY01 to FY13, the number of infants and toddlers enrolled in the EI Program rose from 8,287 to 19,914, an increase of 140%. The percent of the total NC population of infants and toddlers who were enrolled rose from 2.4% in FY01 to 5.5% in FY13. Unfortunately, the EI Program has suffered major state budget cuts during FY13 and FY14; therefore, the program is currently examining the impact of the reductions on the provision of services to children and their families. In FY14, the number of children served dropped to 18,816. The EI Program will continue to serve as many infants and toddlers as possible and is exploring ways to strengthen its partnerships with the C&Y Branch.

#### *Cross-Cutting or Life Course*

The state priority needs under this domain are far reaching as they include increasing access to care for women, children, and families and improving healthy behaviors in women and children and among families. Each of these priorities both impacts and is impacted by the work done in all the other domains.

The ACA has helped increase access to care for women, children, and families. According to Census data from the Current Population Survey's Annual Social and Economic Supplement (CPS ASEC), the percent of children without health insurance in NC has dropped from 10.9% in 2010 to 7.8% in 2013. For people of all ages, the uninsured rate in 2013 was 16.5%, which is comparable to the rate of 17.1% in 2010. For adults, age 19 to 64 years, the uninsured rate was 24% for NC in 2013 compared to the US rate of 18.5%. The racial/ethnic distribution in 2013 for the nonelderly (age 0 to 64 years) uninsured in NC was as follows: 46% White, 14% Black, 32% Hispanic, and 9% of other race/ethnicity.

According to data found on the HHS.gov/HealthCare website maintained by the US DHHS, 560,357 consumers in NC selected or were automatically re-enrolled in quality, affordable health insurance through the Health Insurance Marketplace as of February 22, 2015. In addition, 92% of these consumers qualified for an average tax credit of \$315 per month. However, with the state having chosen not to expand Medicaid at this time, a number of NC adults fall in the coverage gap of having incomes above Medicaid eligibility limits but below the lower limit for Marketplace premium tax credits. A report from the Kaiser Family Foundation (Garfield, R, et.al. *The Coverage Gap: Uninsured Poor Adults in States that Do Not Expand Medicaid – An Update*. April 17, 2015) estimates that there are 357,000

North Carolinians that fall into this category, with 75% of these being adults without dependent children, 47% female, and 62% in a working family.

Efforts to improve healthy behaviors in order to decrease obesity, chronic diseases, and injuries are cross-cutting across all of DPH and NC DHHS. The WCHS partners with other state agencies as much as possible; e.g., staff members work with the Chronic Disease and Injury Section (CDIS) on projects and activities aimed at increasing physical activity, healthy weight, and improving nutrition for women, children, and families. As cited in Table 1, 2013 BRFSS data show that too many women of childbearing age responded that they are overweight or obese (55.9%) or currently smoke every day or some days (19.6%), and these data are mirrored for children and adolescents in the NC Child Health Report Card. WCHS also works closely with CDIS to address tobacco use among families of childbearing age with a specific focus on pregnant women.

## **II.B.2.b Title V Program Capacity**

### **II.B.2.b.i. Organizational Structure**

The NC DHHS is a cabinet-level agency created in October 1997 when the health divisions of the Department of Environment, Health and Natural Resources (DEHNR) were combined with the existing Department of Human Resources (DHR). The Department 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 (DSS); 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 NC DPH is comprised of the Director's Office and ten other offices and sections: Administrative, Local, and Community Support; Chronic Disease and Injury; Epidemiology; Human Resources; Office of Minority Health and Health Disparities; Oral Health; State Center for Health Statistics; SLPH; 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.

Governor Pat McCrory was sworn into office on January 5, 2013. Prior to being elected Governor, McCrory served as Mayor of Charlotte, NC, for seven terms, and he worked for Duke Energy for 29 years. Governor McCrory appointed Dr. Aldona Zofia Wos to serve as Secretary of the NC DHHS, effective January 5, 2013. Dr. Wos was born in Warsaw, Poland. She earned her medical degree at the Warsaw Medical Academy and completed her internship and residency in Internal Medicine and a fellowship in Pulmonary Medicine in New York. Dr. Wos was nominated by President George W. Bush in 2004 to serve as U.S. Ambassador to the Republic of Estonia, and she

concluded her tour on December 17, 2006.

The positions of State Health Director and Director of the DPH have been in transition for the last several years. Dr. Laura Gerald resigned her position as the State Health Director and Director of the DPH in July 2013. Dr. Robin Cummings, who also assumed the duties of DHHS Deputy Secretary for Health Services and Medicaid Director, was named the Acting State Health Director. In March 2014, Rear Adm. Penelope Slade-Sawyer, US Public Health Service (retired), became Director of the DPH. Ms. Slade-Sawyer resigned from this position in February 2015. Danny Staley, the current Deputy Director of NC DPH and a former director of the Appalachian District Health Department was asked to serve as the Acting Director of NC DPH. In April 2015, Dr. Megan Davies, Epidemiology Section Chief, assumed the role of Acting State Health Director. Dr. Cummings resigned in June 2015 to become Chancellor of the UNC at Pembroke. Dave Richard, Deputy Secretary of Behavioral Health and Developmental Disability Services, replaced Dr. Cummings as Deputy Secretary of Medical Assistance. Randall Williams, MD, an obstetrician/gynecologist from Raleigh Gynecology and Wellness became the Deputy Secretary of Health Services, overseeing the DPH and the ORHCC, on July 1, 2015.

Dr. Kevin Ryan served as the Title V Program Director and Chief of WCHS from March 1999 until his retirement in September 2014. Peter Andersen, WCHS Operations Manager, assumed the duties of Interim WCHS Chief and continues in that role as a national search for a new Title V Director is being conducted. Carol Tant, the Children and Youth (C&Y) Branch Head, is the CYSHCN State Director for Title V. 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 (EIB), Immunization (IB), and Nutrition Services (NSB).

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. Members of the WCH Section Office in addition to the Section Chief, include the Operations Manager, the State Systems Development Initiative Project Coordinator, the Executive Director of Child Maltreatment Prevention Leadership Team, and an Administrative Assistant. The WCHS is comprised of the following five Branches with their Units and major programs/activities listed in Table 4 along with their funding source(s).

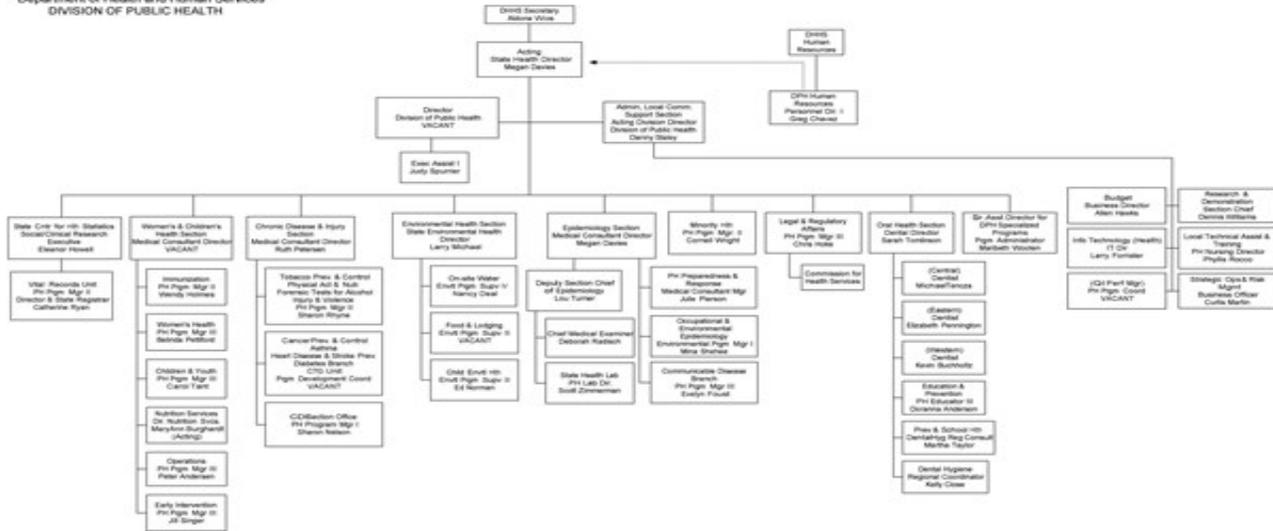
Table 4 - WCHS Major Programs/Activities by Organizational Structure and Funding Source(s)				
	Title V Funding	State Funding/ FFP	Federal/ Other Funding	Primary Population Health Domain*
WCH Section Office				
Child Maltreatment Prevention		X	X	CH
State Systems Development Initiative			X	ALL
Children and Youth Branch				
<i>Best Practice Unit</i>				
Child Health Data Collection and Management	X	X		CH

Table4 - WCHSMajor Programs/Activities by Organizational Structure and Funding Source(s)				
	Title V Funding	State Funding/ FFP	Federal/ Other Funding	Primary Population Health Domain*
Commission on CSHCN	X	X		CSHCN
Office of Disability and Health	X	X	X	ALL
Child Fatality Prevention System	X	X		CH
Quality Assurance	X	X		CH
Innovative Approaches	X	X		CSHCN
<i>Genetics and Newborn Screening Unit</i>				
Clinic Services for CSHCN	X	X	X	CSHCN
Early Hearing Detection and Intervention Services		X	X	PIH
Genetic Counseling Services	X	X		PIH
Newborn Screening Services			X	PIH
<i>Health and Wellness Unit</i>				
Childcare Health Consultation	X	X		CH
Maternal, Infant, and Early Childhood Home Visiting Program			X	PIH
NC Child Fatality Task Force		X		CH
Nurse Family Partnership		X	X	PIH
Child Clinical Services	X	X		CH
Strengthening Families (Triple P)	X	X		CH
Coordinated Care for Children	X	X		CSHCN
Project LAUNCH			X	CH
State Early Childhood Systems			X	CH
<i>School Health Unit</i>				
Kindergarten Health Assessment	X	X		CH
School Nurse Consultation and Support	X	X		AH
School Health Center Consultation and Support	X	X		AH
School Nutrition Consultation and Support	X	X		AH

Table4 - WCHSMajor Programs/Activities by Organizational Structure and Funding Source(s)				
	Title V Funding	State Funding/ FFP	Federal/ Other Funding	Primary Population Health Domain*
Policy and Reporting by School Health Centers	X	X		AH
Early Intervention Branch				
Children's Developmental Service Agencies		X	X	CSHCN
Quality Improvement		X	X	CSHCN
Immunization Branch				
<i>Communication, Outreach, and Professional Development Unit</i>			X	CCLC
<i>Customer Service (Vaccine Distribution) Unit(Management of state's Universal Childhood Vaccine Distribution Program [UCVDP] and the federal Vaccine for Children [VFC] program)</i>			X	CCLC
<i>Field Services Unit</i>			X	CCLC
<i>Operations Unit</i>			X	CCLC
<i>NC Immunization Registry Unit</i>		X	X	CCLC
Nutrition Services Branch				
<i>Information Systems Unit(Crossroads)</i>			X	CCLC
<i>Public Health Nutrition Unit(Management of Special Supplemental Nutrition Program for Women, Infants, and Children [WIC]; Breastfeeding Promotion; Nutrition Training; and Surveillance and Evaluation)</i>		X	X	PIH
<i>Special Nutrition Programs Unit(Child and Adult Care Food Program [CACFP] and Summer Food Service Program for Children [SFSP])</i>			X	CH
<i>Vendor Unit(WIC Vender Component and WIC Farmers' Market Nutrition Program [FMNP])</i>			X	CCLC
Women's Health Branch				
<i>Family Planning and Reproductive Health Unit</i>				
Family Planning Program	X	X	X	WMH
Teen Pregnancy Prevention Initiatives	X	X	X	AH
PREPare for Success (PREP)			X	AH

Table4 - WCHSMajor Programs/Activities by Organizational Structure and Funding Source(s)				
	Title V Funding	State Funding/ FFP	Federal/ Other Funding	Primary Population Health Domain*
<i>Perinatal Health Unit</i>				
Perinatal Health Clinical Services	X	X		PIH
Health and Behavior Intervention		X		WMH
Healthy Beginnings (Minority Infant Mortality Reduction Program)	X	X		PIH
NC Healthy Start Baby Love Plus Program			X	PIH
Pregnancy Care Management	X	X		WMH
Sudden Infant Death Syndrome (SIDS) Grief Counseling and Education	X	X		PIH
High Risk Maternity Care	X	X		WMH
17-P Promotion	X	X		WMH
Perinatal Quality Collaborative	X	X	X	PIH
<i>Preconception Health and Family Support Unit</i>				
Nutrition Education	X	X	X	CCLC
Preconception Health	X	X		CCLC
NC Sickle Cell Syndrome Program		X		CCLC
Women's Health and Tobacco Use Program	X	X		CCLC
Young Families Connect			X	WMH
* WMH = Women/Maternal Health; PIH = Perinatal/Infant Health; CH = Child Health; CSHCN = Children with Special Health Care Needs; AH = Adolescent Health; CCLC = Cross-Cutting or Life Course; and ALL = Covers all domains				

A copy of the NC DPH organizational chart is found below and at this URL: <http://publichealth.nc.gov/docs/DPH-Overall-pg1-NG-6-4-15-forPostingonWebsiteBeacon.pdf>.



### II.B.2.b.ii. 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. The six population health domains run across several different Branches within the WCHS, and the work of the LHDs falls within each of the domains, as illustrated in Table 4.

Since January 1, 1995, all Supplemental Security Income (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.

### **II.B.2.b.iii. MCH Workforce Development and Capacity**

The WCHS oversees and administers an annual budget of over \$528 million and employs 1,166 people. This is 55% of the DPH staff, along with 68% 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. In addition, the EIB has a network of 16 CDSAs serving all 100 counties.

The Title V Block Grant fully funds 23 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 CDIS, and the Oral Health Section. The funding that goes directly to LHDs is used primarily to provide services for individuals without another payer source. Limited funds also pay for enabling services and population health education.

As noted earlier, the WCHS is in transition as the search for a Section Chief to replace Dr. Ryan is ongoing. In addition, two Branch Heads (EIB and NSB) retired in the past year and there are a number of other staff within the WCHS (including two more Branch Heads and the Section Business Operations Manager) who are eligible to retire or will be within the next five years, so the workforce is definitely in flux. Senior management level employees who remain include:

Section Business Operations Manager – Peter Andersen assumed this position in March 2001 and is currently serving as the Interim Section Chief and Title V Director. Andersen has a master's degree in Health Education from the University of Virginia (1976) and a MBA from Delaware State University (1989). He previously worked with the Delaware DPH and in the NC DPH in health promotion and chronic disease prevention positions.

WHB Head – Belinda Pettiford assumed this position in March 2012 after serving as a WHB Unit Supervisor. Pettiford has undergraduate degrees in psychology and community health education 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.

C&Y Branch Head – Carol Tant became Branch Head in February 2000. She has an undergraduate degree in psychology and earned her MPH in health administration from the UNC School of Public Health in 1980. Her work experience in children's health for over 38 years has included positions in genetics, specialized services and preventive health at both the regional and state levels.

NSB Head – Mary Anne Burghardt has been serving as Interim Branch Head since May 2015 and continues in the role of Public Health Nutrition Unit Supervisor. She has an undergraduate degree in Nutrition from The 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 – Jill Singer assumed this position in April 2015. She has an undergraduate degree with double majors in Elementary Education and Psychology and a MS in Special Education. Her previous position was Director of the State Office of Special Education for the U.S. Virgin Islands. She also has a law degree and 18 years of experience in child protection and educational advocacy. Before moving to the Virgin Islands in 2008, she had a solo practice and worked for the DC Office of the Attorney General as an Assistant Attorney General in the Child Protection Branch.

State Systems Development Initiative (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.

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. Isa Cheren was hired in October 2011. She graduated from the Wake Forest University Bowman Gray School of Medicine and completed her Family Practice Residency at the Maine Medical Center in 1991.

Family Liaison Specialists (FLSs) – The C&Y Branch has 1.5 Full-Time Equivalents (FTEs) for parents of CYSHCN. One full time position is supported fully by Title V funding. Christy Moore joined the C&Y Branch in June 2015. In addition to being the parent of a child with special health care needs, she has a degree in Political Science and History from UNC-CH. She most recently worked for Bright Horizons Family Solutions where she developed learning centers in the classroom that include and support CSHCN. The part-time position is funded through EHDI federal funding, and Holly Shoun holds that position.

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, parents to provide culturally sensitive services across NC. A resource databank of primary contacts is being created which will include information about established relationships that have been developed among the Hispanic, African American, Hmong, Vietnamese, American Indian and Asian communities through years of service provision and community work. 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.

### **II.B.2.c. 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, the Title V Director is updated on plans and activities of the Branches to work with partners. The weekly DMT meetings provide an avenue for the Section Chief to partner with administrators of other Health Resources and Services Administration (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. Meeting minutes are posted on the Association's website for all WCHS to review as necessary. 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 and 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. 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.

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 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 Section works closely with the NC Partnership for Children (SmartStart), Prevent Child Abuse NC, the NC Chapter of the March of Dimes, SHIFT (Sexual Health Initiatives For Teens) NC (formerly the Adolescent Pregnancy Prevention Campaign of NC), NCHSF, 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 II.F.3 of the State Action Plan.

In addition to the BFP, the C&Y Branch obtains family input through the EHDl Family Partnership, EHDl 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 has been invited to rejoin the BFP and has indicated that they will become active at the next meeting. 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, Young Families Connect, 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. Family/consumer partnership also remains a hallmark of the work of our partnering organizations.

## II.C. State Selected Priorities

No.	Priority Need
1	Improve the health of women of childbearing age with a special focus on health equity
2	Reduce infant mortality with a special focus on social determinants of health
3	Increase the number of newborns screened for genetic and hearing disorders and prevent birth defects
4	Prevent child deaths
5	Improve the health of children with special needs
6	Provide timely and comprehensive early intervention services for children with special developmental needs and their families.
7	Promote healthy schools and students who are ready to learn
8	Increase developmental screenings for children and adolescents
9	Increase access to care for women, children, and families, especially in uninsured populations and where disparities exist
10	Improve healthy behaviors in women and children and among families incorporating the life course approach

*Healthy NC 2020: A Better State of Health* serves as NC's health improvement plan to address and improve the state's most pressing health priorities. The HNC 2020 objectives were developed over a one-year period in 2009-10 on behalf of the Governor's Task Force for Healthy Carolinians, facilitated by the NC Institute of Medicine. The final plan includes 40 objectives in the following thirteen focus areas: tobacco use; nutrition and physical activity; sexually transmitted disease and unintended pregnancy; substance abuse; environmental risks; injury and violence; infectious disease and foodborne illness; mental health; social determinants of health; maternal and infant health; oral health; chronic disease; and a cross-cutting focus area. While the DPH health improvement plan touches on the work being done in the WCHS, it does not go into the depth that the Title V plan requires.

In 2003 the SMT defined a consensus set of core WCH Indicators to be used to communicate the value of the work done by the WCHS with policymakers, stakeholders, and the general public. These indicators are the following:

1. Reduce infant mortality
2. Improve the health of women of childbearing age
3. Prevent child deaths
4. Eliminate vaccine-preventable diseases
5. Increase access to care for women, children, and families
6. Increase the number of newborns screened for genetic and hearing disorders and prevent birth defects
7. Improve the health of children with special needs

8. Improve healthy behaviors in women and children and among families
9. Promote healthy schools and students who are ready to learn
10. Provide timely and comprehensive early intervention services for children with special developmental needs and their families.

The purpose of defining the set of indicators was to help the WCHS better define its mission and promote a common vision among staff. In addition, as these indicators are shared with stakeholders and policymakers, they provide information about how the work of the WCHS contributes to the welfare of the state. The process of defining the indicators also helped the SMT gain clarity about where evidence-based interventions exist and identify areas offering opportunities for improvement. Also, the choice of indicators helps Section staff members understand core job responsibilities and evaluate performance as the indicators can be used in individual work plans. Another important outcome of the selection of indicators is that they allow for a more data driven environment throughout the WCHS.

During the 2010 Title V Needs Assessment process, SMT members found that these broad priority areas provided an excellent template for describing to federal, state and local stakeholders the charges given to the WCHS. While other states may use the needs assessment process to identify more narrow or more specific priorities, such as "improve school nurse to student ratio in public schools," or "increase the number of disorders screened by the newborn metabolic screening program," the WCHS approach, which aimed to identify the full range of activities the WCHS is charged to support, seemed to work well.

In the midst of the MCH Block Grant transformation process and while conducting the 2015 Title V Needs Assessment, the SMT returned once again to this list of priority needs to decide if they still worked well. Because the priority needs use such broad, inclusive categories, it has seemed reasonable to leave them mostly unchanged. SMT feels no needs assessment process would ever lead it to conclude, for example, that "reducing infant mortality" or "improving the health of children with special needs" would not be a priority area for the Section. What the needs assessment has done, of course, is to provide the Section with a wide range of data that allow refinement of the Section's strategies for reducing infant mortality, improving the health of children with special needs, and all of the other priority areas identified. It has also strengthened the Section's resolve to focus on social determinants of health and its impact on health equity.

The development of both the PHSP and the C&YBSP has strengthened the decision of the SMT to keep most of these priority needs, as the results of the data assessments, environmental scans, work group processes, and input from stakeholders reiterated time and again that these were priority need areas. An argument can be made that improvement in each of the C&Y Branch Strategies and the points in the 12-Point Plan to Close the Black-White Gap in Birth Outcomes (Table 2) will positively impact these priority needs. A crosswalk was done of the C&Y Branch's action steps and the PHSP's strategies to the priority needs which also showed great overlap.

<b>Table 2 – C&amp;Y Branch Strategic Plan Strategies and Perinatal Health Strategic Plan Points</b>	
C&YBSP Strategies	
A.	Support the quality of health services (hospitals, private clinics, audiologists, etc.)
B.	Support the quality of health providers (physicians, nurses, audiologists, speech language pathologists, genetic counselors, social workers, mental health providers, etc.)
C.	Support access to quality care (community-based; clinic hours & locations; transportation; interpreter services; providers, etc.)

<b>Table 2 – C&amp;Y Branch Strategic Plan Strategies and Perinatal Health Strategic Plan Points</b>	
D.	Increase family support and resiliency
E.	Increase and sustain parent/community/provider education and awareness
F.	Increase and sustain Family/Community/Provider Strengthening and Engagement
<b>PHSP Points</b>	
1.	Provide interconception care to women with prior adverse pregnancy outcomes
2.	Increase access to preconception health and health care to women and men
3.	Improve the quality of maternal care (includes prenatal, labor, delivery and postpartum care)
4.	Expand healthcare access over the life course for women and men
5.	Strengthen father involvement in families
6.	Enhance coordination and integration of family support services
7.	Create reproductive social capital in all communities
8.	Invest in community building
9.	Close the education gap
10.	Reduce poverty among families
11.	Support working mothers and families
12.	Undo racism

After reviewing this crosswalk and in developing the Five-Year State Action Plan Table, members of the SMT decided on the following priority needs shown here by Primary Population Health Domain (Table 3).

<b>Table 3 – NC Priority Needs by Primary Population Health Domain</b>	
<b>Women/Maternal Health (WMH)</b>	<b>Improve the health of women of childbearing age with a special focus on health equity</b>
<b>Perinatal/Infant Health (PIH)</b>	<b>Reduce infant mortality with a special focus on social determinants of health</b>
	<b>Increase the number of newborns screened for genetic and hearing disorders and prevent birth defects</b>
<b>Child Health (CH)</b>	<b>Prevent child deaths</b>
	<b>Increase developmental screenings for children and adolescents</b>
<b>Adolescent Health (AH)</b>	<b>Promote healthy schools and students who are ready to learn</b>
	<b>Improve the health of children with special needs</b>

<b>Table 3 – NC Priority Needs by Primary Population Health Domain</b>	
<b>CSHCN</b>	<b>Provide timely and comprehensive early intervention services for children with special developmental needs and their families</b>
<b>Cross-Cutting or Life Course (CCLC)</b>	<b>Increase access to care for women, children, and families, especially in uninsured populations and where disparities exist</b>
	<b>Improve healthy behaviors in women and children and among families incorporating the life course approach</b>

Members of the SMT decided to discontinue one of the original priority needs and replace it with another. The priority need that is to be discontinued is “eliminate vaccine-preventable diseases.” While Title V programs in NC wholeheartedly support the use of immunizations and will continue to do so in partnership with the IB, Title V funding does not directly support NC immunization programs. This need can and will be subsumed under several of the other priority needs, particularly the two Cross-Cutting or Life Course Domain priority needs. The replacement priority need is to “increase developmental screenings for children and adolescents.” The need for a broader focus on developmental screenings has grown over time in NC. In 2003, the C&Y Branch required all LHD to use standardized, valid developmental screening tools in child health clinics. In 2004, the Division of Medical Assistance (DMA) changed Medicaid policy to require use of a valid, standardized tool at 6, 12, 18 or 24 months and 3, 4 and 5-year-old visits. During this same time, CCNC networks took advantage of an ABCD (Assuring Better Child Health & Development) project sponsored by The Commonwealth Fund to greatly improve the screening rates in the private forum. In 2010, the Modified Checklist for Autism in Toddlers (M-CHAT) was required in LHDs and the private sector at the 18 and 24 month well-visits. Compliance has grown and early intervention referrals have increased from 3400 in 2003 to more than 20,000 annually. Our challenge is to maintain the use of valid screening tools statewide and expand practices so there is routine adherence to M-CHAT screening requirements and use of valid behavioral health and adolescent risk screening tools that are indicated by best practice policy and result in positive impacts to children’s health concerns.

## II.D. Linkage of State Selected Priorities with National Performance and Outcome Measures

- NPM 1 - Percent of women with a past year preventive medical visit
- NPM 3 - Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)
- NPM 4 - A) Percent of infants who are ever breastfed and B) Percent of infants breastfed exclusively through 6 months
- NPM 6 - Percent of children, ages 10 through 71 months, receiving a developmental screening using a parent-completed screening tool
- NPM 10 - Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year.
- NPM 11 - Percent of children with and without special health care needs having a medical home
- NPM 14 - A) Percent of women who smoke during pregnancy and B) Percent of children who live in households where someone smokes
- NPM 15 - Percent of children ages 0 through 17 who are adequately insured

After members of the NC Title V Program attended the 2015 Association of Maternal and Child Health Programs (AMCHP) Annual Conference and attended presentations regarding the final grant application guidance, the SMT selected NC's eight national performance measures (NPMs). In a series of meetings, the SSDI Project Coordinator provided an overview of the new NPMs and their associated national outcome measures (NOMs), state trend data for each of the measures, and crosswalks linking the previous NPMs and state performance measures (SPMs) to the new population domains and linking the action steps and strategies of the C&YBSP and the PHSP to the new NPMs and NOMs. The SMT reviewed the data together, discussed the findings of the needs assessment and strategic plans, reviewed currently used evidence-based practices and resource allocations, and offered their initial NPM selections at the second meeting. Certainly a rationale could be made for choosing all fifteen of the NPMs. After resting with these selections for a couple of weeks, the SMT met to make their final selections.

### ***Rationale for Selected NPMs***

#### WMH Domain

##### *NPM#1: Well-woman visit*

The SMT chose this measure instead of the low-risk cesarean delivery measure for the WMH domain because through its participation in the Region IV CoIIN to reduce infant mortality and through partnerships with DMA, NC Hospital Association, CCNC, the Perinatal Quality Collaborative of NC (PQCNC), and the MOD and with the emphasis that has been placed on the 39 Weeks initiative, NC has shown that it has already had quite a bit of success in reducing the number of women having elective deliveries and has reduced the percent of cesarean deliveries among low-risk first births. There has been a steady decline in the percentage of non-medically indicated early term (37 or 38 weeks) singleton live births among all early term singleton live births 37-41 weeks from 2011 to 2014, from 7.8% in the first quarter of 2011 to 6.9% in the last quarter of 2014. While much work has been done and is ongoing to improve preconception health of women in the state, the SMT decided that it should focus its efforts on increasing the percentage of women receiving annual preventive medical visits. Trend data from the BRFSS is only available for 2011 to 2013, but only an average of 72.3% of all women surveyed received a routine check-up in the past year for that time period. Black women had a higher rate (80%) than White women (69.9%) or Latina women (70%) of receiving a preventive visit, but there's much room for improvement in all racial and ethnic groups.

#### PIH Domain

##### *NPM#3: Perinatal Regionalization*

##### *NPM#4A&B: Breastfeeding*

These measures were selected for this domain by the SMT in part because of the work that is ongoing to improve the state's performance in these areas. Many of the strategies developed in the PHSP center around ensuring that low birth weight or premature infants are born in risk-appropriate facilities. Through its work in the COLIN to Reduce Infant Mortality, the WHB is working towards aligning the neonatal levels of care cited on the required Hospital License Renewal Applications with the AAP 2012 Levels of Neonatal Care Definitions. Birth certificate data for low birth weight and premature births have been compared with the 2014 Hospital License Renewal Applications, and all birth hospitals were invited to respond to the Perinatal Hospital Level of Care Assessment Tool (LOCATe) to obtain a standardized assessment of each NC birthing hospital's neonatal and maternal level of care. A work group comprised of representatives from the NC OB GYN Society, the NCPS, the PQCNC, the UNC Center for Maternal and Infant Health (CMIH), the NC Hospital Association, NC DPH, and hospitals and medical schools across the state continues to meet periodically to determine next steps and will be instrumental in moving forward the PHSP activities around risk appropriate care.

Work to increase breastfeeding rates in NC is ongoing and will remain a priority goal for both the NSB and the WCHS as a whole. While the NSB takes the lead in many of the breastfeeding promotion activities, staff members throughout the WCHS partner with the NSB to ensure that efforts span all the Section programs. Most of the state WIC programs have Breastfeeding Peer Counselors also available. The NSB recently announced funding availability for the remaining WIC programs to ensure statewide coverage. NC's MIECHV program is partnering with the NC Cooperative Extension – Expanded Food and Nutrition Education Program to provide MIECHV participants with in home and classroom instruction in the areas of health, nutrition, food safety, food preparation and physical activity. The curriculum stresses the importance of breastfeeding through breastfeeding education, encourages the initiation of breastfeeding and provides individualized support of breastfeeding duration and exclusivity to HFA's enrolled prenatal or at birth families as well as NFP's first-time, low-income mothers through a series of home visits and support group sessions. The C&Y Branch also has two recorded webinars *Promoting, Protecting and Supporting Breastfeeding: Resources* and *Promoting, Protecting and Supporting Breastfeeding: Clinical* which are archived and available for health care provider review and professional development.

While NPM#5 (safe sleep) was not selected as one of NC's NPMs, the WCHS remains committed to continue its work to improve this measure. The Sudden Infant Death Syndrome Grief Counseling programs will continue, with counselors available through LHDs who have been trained by the WHB. The WHB will also continue to partner with the NCHSF who maintains a Safe Sleep Toolkit which includes webisodes and other resources to help share information. The NCHSF also works closely with childcare centers and hospital nurseries to ensure that babies are placed on their backs to sleep when appropriate.

#### CH Domain

##### *NPM#6: Developmental screening*

The rationale for this measure is captured above in section C, as this is also one of NC's priority needs. Obesity prevention was mentioned again and again as a great need in the needs assessment process for the C&Y Strategic Plan and certainly is an important emphasis of work done through the LHD child health clinics, school health centers, and home visiting programs. However, the lead state agency promoting physical activity in children is the Eat Smart, Move More NC (ESMMNC) movement which is housed in DPH's CDIS. Staff members from the WCHS participate on the ESMMNC Leadership Team and are instrumental in moving forward the NC Obesity Prevention Plan. Similarly, the lead agency for injury prevention, including child injury prevention, is the Injury and Violence Prevention Branch (IVPB) which is also located in CDIS. WCHS staff members partner with the IVPB to decrease child injuries, particularly around youth suicide and motor vehicle accidents.

#### AH Domain

##### *NPM#10: Adolescent well-visit*

While the C&Y Branch has done some work around the prevention of bullying with plans to do more, increasing adolescent well visits will help the WCHS reach many of its priorities that fall under domains other than just AH. Certainly preventive medical visits will help keep adolescents from missing school for illnesses, but they will also help with improving the health of women of childbearing age with a special focus on health equity and improving healthy behaviors in women and children and among families incorporating the life course approach. There has been a significant effort to bring all providers of early childhood services together which has increased needed linkages and systems approach to improving care. This has been reinforced by the Governor's Early Childhood Advisory Council. The C&Y Branch has participated completely in this work, but the same type of focus is needed for adolescent health. There are numerous services for adolescents across the state, but cohesive leadership to merge thinking and program planning has not been obtained. The focus on removing the barriers to effective practice in each of the critical components of a comprehensive adolescent health system includes: access to services designed for adolescents are often categorical, rather than comprehensive; attention to behavioral health/risk taking behaviors is limited; getting community agreement to serve adolescents in a "comprehensive" way and designation of resources to support comprehensive programs; the continuing perception that adolescent health equals reproductive health; and limited understanding of adolescents and how to serve them including medical homes, family support, parent education, and health disparities. Adolescent well-child care is only one indication of the health status of adolescents. The C&Y Branch has a strong history of providing technical assistance and training and is currently focused on improving adolescent care and well-being through a systems approach. With the creation of the Adolescent Health Resource Center on the horizon, the WCHS hopes to initiate a more coordinated comprehensive array of services targeting adolescents in the state.

#### CSHCN Domain

##### *NPM#11: Medical home*

Successful transition from youth to adult health care services, the other national performance measure option in this domain, is and will remain a goal of the WCHS, but as having a medical home can be a determinant in ensuring a good transition, the WCHS selected the medical home measure for this domain. The C&Y Branch has many initiatives and programs supporting medical homes for children with and without special health care needs, including the IA Initiatives, Care Coordination for Children, and school health centers among others. Medical home is also one of the core constructs in the C&YBSP.

#### CCLC Domain

##### *NPM#14A&B: Smoking*

##### *NPM#15: Adequate insurance coverage*

The NC DPH has an Oral Health Section (OHS) whose primary focus is to provide dental health prevention and education services for children in NC. Title V funds a position in OHS and WCHS partners with them as much as possible to promote good oral health for children and all women, including pregnant women. The OHS has had significant reductions in funding and is exploring ways to expand their current services through grants. The C&Y Branch currently works closely with them on oral health access for CYSHCN, but they need at least a year to reprioritize services and determine new directions. Oral health was not listed by key partners as the areas of greatest concern for the populations the WCHS serves, although a great deal of progress is certainly needed and the WCHS will mutually explore ways to move forward together with the OHS.

The other two measures in this domain regarding smoking and adequate health insurance fall more in line with the priorities of NC's Title V program. Smoking during pregnancy and exposing children to second-hand smoke are behaviors that can be modified, and trends in these behaviors seem to be moving in the right direction in NC. LHDs are required to provide the 5 A's (Ask, Advise, Assess, Assist, and Arrange) evidence-based counseling for families in maternal health, child health, and family planning clinics. The statewide Pregnancy Medical Home (PMH) program

has also developed a clinical pathway for providers to utilize with pregnant and postpartum women. Training providers on how to implement the 5 A's counseling is a priority and must be sustained and expanded in order to impact the populations at risk. The WHB also coordinates WATCH (Women and Tobacco Coalition for Health) to increase awareness of tobacco use and strengthen education and training. In addition, NFP home visiting, funded by Title V, works with first-time, low-income pregnant women to stop smoking for improved birth outcomes. One of the largest problems that NC children face is the consistently increasing number affected by asthma. Because of our growing battle with asthma and asthma-related problems, prevention and early intervention is a natural priority for block grant efforts. Assessments for second-hand smoke exposure are part of well child care for all ages, and the C&Y Branch will continue to collaborate with task forces and work groups that include goals related to air quality in the home for children as well as including air quality issues in planning continuing education programming. Currently, the Branch works with the NC Asthma Alliance, NC Health Alliance, NCPS Asthma Workgroup, and WATCH. The Asthma Program in DPH has just lost funding so it is important that a focus on reduction of smoking in the homes of children remain a high priority.

The WCHS will continue to explore ways to ensure that all children are adequately insured, as access to care impacts all the other priority needs.

### ***Rationale for Selected Evidence-Based or –Informed Strategy Measures (ESMs)***

During FY16, members of the SMT and the SSDI Project Coordinator participated in the *Taking Action with Evidence* webinars hosted by AMCHP and Johns Hopkins University Bloomberg School of Public Health and AMCHP's *Development of Evidence-Based or –Informed Strategy Measures* webinar to more fully understand the MCHB performance measure framework and learn about the process of selecting NC's ESMs. Additionally, the SSDI Project Coordinator was able to attend MCHB's State Technical Assistance Meeting in April and she, along with other staff members, participated in the ESM Learning Labs hosted by MCHB to get more help on finalizing the state's ESMs. After much discussion and review of data findings from the original 2015 Needs Assessment as well as updated data, the following measures selected by SMT:

<b>Table 4 – NC Selected ESMs</b>		
<b>Domain</b>	<b>NPM</b>	<b>ESM</b>
WMH	1) Well-woman visit	# of participants in webinar explaining the preventive services for women covered through the ACA
PIH	3) Perinatal regionalization	% of birthing hospitals who complete the LOCATe tool annually
	4) Breastfeeding	% of LHDs who have had Maternal Health staff members trained on BF promotion and support through the NC Regional Lactation Training Centers
CH	6) Developmental screening	# 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
AH	10) Adolescent well-visit	# of adolescents receiving a preventive medical visit in the past year at a LHD
CSHCN	11) Medical home	# of policies, practices, and resources changed to support improved outcomes for CYSHCN by counties implementing Innovative Approaches strategies.
CCLC	14) Smoking	# 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
	15) Adequate insurance coverage	# of outreach activities to promote access to health insurance done annually by the C&Y Branch's Minority Outreach Coordinator, CYSHCN Help Line Coordinator, and YSHCN Access to Care Coordinator

## II.E. Linkage of State Selected Priorities with State Performance and Outcome Measures

- SPM 1 - Percent of infants with confirmed hearing loss who are enrolled for intervention services no later than age 6 months
- SPM 2 - Number of substantiated reports of child abuse and/or neglect
- 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)
- SPM 4 - The ratio of school health nurses to the public school student population

After the SMT decided upon the ESMs for the NPMs, they discussed the selection of the SPMs. Two of the state's priority needs determined through the 2015 Title V Needs Assessment process were not adequately addressed through the selected NPMs, thus required the selection of SPMs. One of these priority needs is to increase the number of newborns screened for genetic and hearing disorders and prevent birth defects. NC has a strong history of universal genetic and hearing newborn screening services; however, current information about the receipt of intervention services and the outcomes of deaf or hard of hearing children that are identified through NC's EHDI program is limited. Work is ongoing to enhance collaborations with educational programs serving these children with a focus on language, educational, and literacy outcomes. Since the earlier children with hearing loss start getting services, the better their chance of improving their language skills, the chosen SPM will focus on ensuring that infants with confirmed hearing loss will be enrolled for intervention services no later than 6 months of age.

The other priority need not addressed specifically by NPMs is "prevent child deaths." The NC Child Fatality Prevention System, which includes the NC Child Fatality Task Force, the State Child Fatality Prevention Team and the Local Child Fatality and Community Protection Teams, works to reduce preventable child deaths. As stated above, the WCHS did not choose to select the NPM regarding preventing childhood injuries as the IVPB takes the lead on that for North Carolina in partnership with WCHS. The Executive Director of the Child Maltreatment Prevention Leadership Team is housed in the WCHS and directs the state's CDC Essentials for Childhood grant, therefore, the SMT decided to continue to use a former SPM to monitor progress under this priority area. The SPM is the number of substantiated reports of child abuse and neglect.

Additionally, SMT selected one SPM to better address the state's unique needs under the domain of CSHCN. One of the priority needs in this domain is to provide timely and comprehensive early intervention services for children with special developmental needs and their families. The Early Intervention Branch (EIB), which serves as the state lead agency to carry out Part C of the Individuals with Disabilities Education Act (IDEA), is housed in the WCHS, and all the Branches collaborate to ensure that proper referrals are made to the NC Infant-Toddler Program (ITP). One of the indicators used in the Part C State Performance Plan (SPP)/Annual Performance Report (APR) is the percent of infants and toddlers with Individualized Family Services Plans (IFSPs) who receive the early intervention services on their IFSPs in a timely manner. The SMT decided to use this same measure as an SPM.

In the Adolescent Health Domain, the SMT also chose to continue to use one more former SPM (the ratio of school health nurses to the public school student population) as a potential method of increasing the percent of adolescents with a preventive medical visit in the past year (NPM#5).

<b>Table 5 – NC Selected SPMs</b>		
<b><i>NC's Priority Needs for which there is no NPM</i></b>		
<b><i>Domain</i></b>	<b><i>Priority</i></b>	<b><i>SPM</i></b>
PIH	Increase the number of newborns	1. % of infants with confirmed hearing

<b>Table 5 – NC Selected SPMs</b>		
	screened for genetic and hearing disorders and prevent birth defects	loss who are enrolled for intervention services no later than age 6 months
CH	Prevent child deaths	2. # of substantiated reports of child abuse and neglect
<b><i>Additional SPMs to Enhance Particular Domains</i></b>		
<b><i>Domain</i></b>	<b><i>NPM</i></b>	<b><i>SPM</i></b>
CH	4. Percent of children, ages, 10-71 months, receiving a developmental screening using a parent-completed screening tool	3. % of infants and toddlers with Individualized Family Services Plans (IFSPs) who receive the early intervention services on their IFSPs in a timely manner
AH	5. Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year	4. Ratio of school health nurses to the public school student population

## II.F. Five Year State Action Plan

### II.F.1 State Action Plan and Strategies by MCH Population Domain

#### Women/Maternal Health

##### State Action Plan Table

###### State Action Plan Table - Women/Maternal Health - Entry 1

###### Priority Need

Improve the health of women of childbearing age with a special focus on health equity

###### NPM

Percent of women with a past year preventive medical visit

###### Objectives

1. By 2020, the percentage of women receiving maternity care in LHDs who transition to well woman care in a medical home will increase by 5%. (Perinatal Health Strategic Plan [PHSP] Strategy 1C)

## Strategies

1. Implement Perinatal Health Strategic Plan (PHSP) Strategy 1C (Assure women are transitioned from different points of care and have access to postpartum/primary/well woman care including access to ongoing health insurance coverage and a medical home) with the following action steps: A. Determine baseline data B. Increase utilization of the postpartum clinic visit by offering dual appointment scheduling for mom/baby and/or dual home visit for mom/baby) C. Improve mechanisms for OB providers to refer patients to medical homes by developing a patient handout (on-line/print) with medical home providers D. Work with local Healthy Beginning, NFP, and HFA programs to ensure that participants have a medical home.
2. Implement PHSP Strategy 1D (Provide outreach in pediatric clinics, community settings, etc., to ensure women are receiving interconception care services) with the following action steps: A. Increase outreach to substance use treatment programs with interconception care and family planning services B. Conduct outreach to pediatric clinics pertaining to interconception care services and education. Utilize education for providers on timing and methods of introduction of interconception care with the pediatric population and their families. C. Implement use of interconception education for families during the one month well child visit. D. Engage pediatric providers to provide evidence-based tobacco treatment services and provide a tobacco-free living environment to help tobacco users quit and stay quit and to protect people from secondhand and thirdhand smoke. Work with decision-makers to make multi-unit housing, government buildings, grounds, and public places tobacco-free.
3. Develop a webinar explaining the preventive services for women covered through the Affordable Care Act (ACA) and share it live and archived with local health department and other women's health providers.

## ESMs

ESM 1.1 - Number of local health department staff members and other women's health providers who participate in webinar explaining the preventive services for women covered through the Affordable Care Act (ACA)

## NOMs

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

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

NOM 4.1 - Percent of low birth weight deliveries (<2,500 grams)

NOM 4.2 - Percent of very low birth weight deliveries (<1,500 grams)

NOM 4.3 - Percent of moderately low birth weight deliveries (1,500-2,499 grams)

NOM 5.1 - Percent of preterm births (<37 weeks)

NOM 5.2 - Percent of early preterm births (<34 weeks)

NOM 5.3 - Percent of late preterm births (34-36 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

## Measures

### NPM 1 - Percent of women with a past year preventive medical visit

Annual Objectives						
	2016	2017	2018	2019	2020	2021
Annual Objective	71	72	73	74	75	76

**Data Source: Behavioral Risk Factor Surveillance System (BRFSS)**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2014	71.3 %	1.5 %	1,257,832	1,764,465
2013	71.8 %	1.5 %	1,263,629	1,761,210
2012	72.2 %	1.2 %	1,257,441	1,740,636
2011	73.0 %	1.5 %	1,244,857	1,705,017
2010	73.4 %	1.5 %	1,235,091	1,683,636
2009	70.8 %	1.6 %	1,189,845	1,681,582

**Legends:**

-  Indicator has an unweighted denominator <30 and is not reportable
-  Indicator has a confidence interval width >20% and should be interpreted with caution

**ESM 1.1 - Number of local health department staff members and other women's health providers who participate in webinar explaining the preventive services for women covered through the Affordable Care Act (ACA)**

Annual Objectives					
	2017	2018	2019	2020	2021
Annual Objective	3,000.0	3,000.0	3,000.0	3,000.0	3,000.0

**Women/Maternal Health - Plan for the Application Year**

The WHB develops and promotes programs and services that protect the health and well-being of infants and of women during their child-bearing years. The WHB's goal is to improve the overall health of women, reduce infant sickness and death, and strengthen families and communities. The WHB also offers guidance, consultation and training for professionals who provide women's health services. Increasing the percent 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 2014 BRFSS, 71.3% of women surveyed had received such a service, which is in line with BRFSS data for the past five years. Of the women who responded to the survey, those with higher income, higher educational attainment, and health insurance were more likely than other women to receive a preventative medical visit. Non-Hispanic Black women (79.4%) were more likely to have had a visit than non-Hispanic White women (70.9%) or Hispanic women (56.7%). Women who are covered by the ACA are provided well woman visits without cost-sharing among the majority of health plans, but many women and their providers are not aware of this coverage. Therefore, the WCHS selected as one of its ESMs the number of participants in webinar explaining the preventive services for women covered through the ACA. In FY17, the WHB will develop the webinar using information from MCHB and other HRSA divisions. Initially the target audience will be clinic and program staff who serve women of childbearing age in LHDs, community health centers,

and other community-based organizations participating in WHB programs and initiatives, but the webinar will be archived and the link will be posted on the WHB website and shared broadly so that it is available for viewing by other providers. A survey tool will be included as part of the ACA webinar which will track the number of participants who viewed it and requested a certificate of attendance. In addition to the webinar, the WHB plans to develop materials to raise awareness of the well-woman visit and coverage benefits and provide information on how to find a provider that will be distributed through LHDs and community-based organizations. One of the strategies included in the NC Perinatal Health Strategic Plan is: Assure women are transitioned from different points of care and have access to postpartum/primary/well woman care including access to ongoing health insurance coverage and a medical home. With the help of its partners, the WHB will continue to work on implementing the action steps laid out under this strategy in the plan. One of these action steps is improving mechanisms for OB providers to refer patients to medical homes by developing a patient handout (on-line/print) with medical home providers, and ACA information about preventive medical visits could be incorporated into this handout as well.

To increase these rates in FY17, LHDs will continue to provide family planning preventative services to include clinical care, contraceptive method, and reproductive life planning. LHD's maternity clinics will also continue to provide prenatal care which is inclusive of clinical care, referral for Medicaid and WIC services, provision of tobacco cessation counseling, screening for domestic 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. DPH partners with DMA and CCNC in implementing the statewide PMH program, aimed at improving the quality of maternity care, improving maternal and infant outcomes, and reducing health care costs. Approximately 80% of all obstetrical care providers (public and private) in NC are PMHs who provide prenatal care services to the state's Medicaid population. 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 Pregnancy 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, 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. A PMH Care Pathway was developed in 2015 for PMHs. 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. CCNC is currently partnering with LHDs and private providers on a postpartum pilot initiative to increase the number of postpartum visits received by low income women. There are 45 pregnancy medical homes currently participating in the initiative. If proven successful, the model will be spread statewide.

Pregnancy Care Management (PCM) services are available to pregnant and postpartum women enrolled in NC Medicaid statewide, and to a limited number of low income, pregnant women ineligible for Medicaid in some counties. Pregnancy Care Managers are registered nurses or social workers. In FY17, PCM services will continue to be offered to Medicaid eligible women (and some other low-income women ineligible for Medicaid) who are at higher risk for preterm birth. Care managers will continue to 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 PCM via the LHDs before making contact with 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. Care Management Pathways for substance use, domestic violence and reproductive planning are currently being

developed as tools for care managers to provide more effective service in these areas.

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 primarily African American and American Indian families in the preconception, prenatal, and interconception periods. The ten Healthy Beginnings program sites will continue to provide services to pregnant women and women up to two years postpartum in eleven NC counties. Healthy Beginnings program staff will continue to ensure that program participants receive prenatal care throughout their pregnancy, receive a postpartum checkup, and have a primary care provider. They will also work with interconception women to enhance health behaviors to include keeping preventive medical appointments.

The WHB also works to develop and enhance preconception efforts within NC. In partnership with the national Office of Minority Health, the WHB implements the Preconception Peer Educator (PPE) program in NC colleges and universities. Initially the program focused on Historically Black Colleges and Universities (HBCUs); the program has 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 surrounding communities. The NC Preconception Health Strategic Plan also includes a stronger focus on social determinants of health, male engagement, and mental health.

With the rollout of the 2003 Revised Birth Certificate during 2010, data regarding prenatal care are not comparable prior to 2011 since the previous version of the certificate included a field for capturing the month that a mother initiated prenatal care and the revised certificate asks for the complete date of the first prenatal care visit (month/day/year). During the 2011 to 2013 time period, only about 70% of infants were born to women receiving prenatal care beginning in the first trimester (former NPM#18), and this dropped to 68.2% in 2014 leaving lots of room for improvement. To help increase this percentage, LHDs with maternity clinics will continue to provide prenatal care and to ensure that all pregnant women in the state have access to early and continuous prenatal care. LHDs strive to schedule patients who come in for pregnancy testing for their first prenatal care visit within their first trimester of pregnancy. A focus upon confirmation of pregnancy is completion of presumptive eligibility determination and a referral for Medicaid eligibility determination for all pregnant women, not just those who will remain in the LHD for prenatal services. This is in an effort to reduce this as a barrier to care for all pregnant women seeking care across the state. The PMH program will continue to engage additional public and private providers to serve pregnant women in our state. Discussions are also occurring to encourage a greater number of public and private providers to accept Medicaid presumptive eligibility. This will allow low income pregnant women to be seen earlier in their pregnancy versus waiting until the Medicaid application has been fully approved. Funding will also continue for the ten Healthy Beginnings program sites. Healthy Beginnings program staff will continue to ensure that program participants have a prenatal care provider and a primary care medical home.

The state teen birth rate for females 15-17 years of age (former NPM#8) reached a low of 12.2 per 1,000 in 2014. That same year, NC had the 29<sup>th</sup> highest teen birth rate for girls age 15 to 19 in the nation at 25.9 per 1,000 with the national rate being 24.2 per 1,000. Within the WHB, the Teen Pregnancy Prevention Initiatives (TPPI) supports communities across NC 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. Project REACH (Redefining and Empowering Adolescents and Community Health) is a community-wide program that involves implementing evidence-based programs to scale and also includes community mobilization around teen pregnancy prevention for sustainability and shifts in community norms around teen pregnancy. While many of these programs are funded through other federal programs (Title X Family Planning, Office of Adolescent Health, and Temporary Assistance for Needy Families [TANF]) and state funds, Title V funds will be used to fund some TPPI in FY17. The WHB plans to fund four agencies to implement APP in four different counties. The four agencies will receive additional technical assistance, training, site visits, and capacity building to implement an APP. Each agency will reach up to 15 participants with monthly home visits using an evidence-based curriculum (either Parents as Teachers or Partners for a Healthy Baby) and offer a minimum of a quarterly peer-to-peer group instructional meeting. In addition, the WHB plans to fund SHIFT NC (Sexual Health Initiatives for Teens – formerly known as the Adolescent Pregnancy Prevention Campaign of North Carolina [APPCNC]) to provide information, education, resources, consultation and training to professionals and stakeholders working to reduce teen pregnancy in the state. This will include implementation of the annual Teen Pregnancy Prevention Conference along with one Hispanic Outreach training workshop reaching a total of 30 Hispanic Youth.

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, the 2012 data, which are the most recent available, aren’t comparable to data from previous years for former SPM#4 (Percent of women responding to the PRAMS survey that they wanted to be pregnant later or not then or at any time in the future). Low participation was a substantial problem for NC PRAMS in 2012, with an overall weighted response rate of 51%. In response to this question in 2012, 26.3% of respondents wanted to be pregnant later, 11.4% wanted to be pregnant sooner, 41.3% wanted to be pregnant then, 8.5% did not want to be pregnant then or any time, and 12.6% were not sure what they wanted. A primary objective of the WHB is to increase intended pregnancies. The WHB plans to continue allocating Title V funding to all 85 LHDs for the provision of family planning services. Services such as physical exams, counseling, contraceptives and screening/testing for STIs will be included for these patients. Regional trainings are planned this fall to ensure that LHD staff are implementing Quality Family Planning to include preconception health and tiered counseling.

In FY17, a continued emphasis will be placed on very effective or highly effective methods of contraception, with education and counseling provided to the patients to enable them to choose the best method for themselves. Under the CoIIN to reduce infant mortality, NC’s Preconception and Interconception Care Team has developed and tested a survey to be used with women of childbearing age to determine interest and knowledge of long acting reversible contraceptives (LARCs). The survey was approved by DHHS’s Institutional Review Board in the spring of 2016 and is currently being translated into Spanish. The survey will be implemented during July and August 2016. Additionally, all five ICO4MCH project sites (covering 13 counties) chose to increase the use of LARCs as their evidence-based strategy to improve birth outcomes. Title V funding is also utilized to reduce infant mortality in counties with the highest infant mortality rate in the state. Funding has been distributed to 26 counties with 18 of the sites selecting LARC as one of their evidenced-based strategies for implementation. Conversations are also occurring with DMA, CCNC, and other providers to increase access to same day LARC insertion along with immediate postpartum insertion. Currently reimbursement issues have made these processes challenging.

In conjunction with wanting to increase planned pregnancies, another objective of the WHB is to promote healthy behaviors for women prior to pregnancy, with one being to increase the percent of women of childbearing age taking folic acid regularly (former SPM#5). Data for this measure are obtained through the BRFSS, and due to changes in the BRFSS methodology, data prior to 2011 are not comparable. According to survey responses, the percent of women taking folic acid regularly jumped from 33.2% in 2011 to 43% in 2013 and fell back to 32.5% in 2014. In order to keep improving this rate, in FY17 the WHB, in partnership with the March of Dimes (MOD) Preconception Health

Campaign, will continue to provide folic acid education to public and private health care professionals via in-office trainings, conference exhibits, webinars, and coalition meetings and to consumers via health fairs, places of worship and community forums. Additionally, lay health educators will be trained to educate peers, and the state multivitamin distribution project will continue. Folic acid education will continue to be part of a bundled preconception health message for all women of childbearing age and will coordinate with the NC Preconception Health Strategic Plan Supplement for 2014 -2019. Spanish language media will continue and the Latino campaign will expand outreach and preconception health education services to Spanish-speaking women using the established best-practice “Promotora” (health promoter) model, especially as Spanish-speaking women of childbearing age are at highest risk for neural tube defects (NTD). The middle and high school preconception health curricula will also continue to be provided.

Improving appropriate weight gain during pregnancy (former SPM#7) and decreasing the amount of overweight and obesity among women of reproductive age (former SPM#8) remain important to the WHB as they work to improve the health of all women. As a result of implementing the 2003 Revised Birth Certificate, data for these measures are more comprehensive as the amount of weight gained during pregnancy is now available on all women giving birth as well as their pre-pregnancy weight which can be used for SPM#8. Data for the 2011 to 2014 time period show that just under 30% of women gained within the Institute of Medicine Recommended Weight Gain Ranges and almost 50% of women prior to pregnancy are overweight or obese (BMI $\geq$ 26). Healthy weight education will continue to be promoted by the WHB as an important health message in FY17. In partnership with the MOD Preconception Health Campaign, healthy weight education and training will continue to be offered to health care providers and consumers in offices, communities, and online. Healthy weight information included in the Ready, Set, Plan tool kit will be provided to young women, men and families in select NC counties. The Healthy Before Pregnancy high school and Healthy: Now & Later middle school curricula will continue to be provided in additional classrooms. Additionally, healthy weight/healthy lifestyle messages will also address young men since they are now included as a priority population in the NC Preconception Health Strategic Plan Supplement for 2014 -2019. Technical assistance will continue to be provided for adapting standard Electronic Medical Records (EMRs) to allow for BMI calculation in pregnancy to be based on pre-pregnancy weight and recommended gestational weight gain and not just weight gain per se which, erroneously, may be the default of some EMR software programs. New bilingual (English & Spanish) patient education materials addressing recommended gestational weight gain, and including a pregnancy weight tracker, will be distributed to prenatal patients in select maternity centers for testing. “Ensure all pregnant women receive appropriate gestational weight gain guidance” is an action step in the recently released North Carolina’s Perinatal Health Strategic Plan 2016-2020.

## **Women/Maternal Health - Annual Report**

In FY15 through Title V, TPPI funded the APPCNC (currently SHIFT NC) to provide information, education, resources, consultation and training to professionals and stakeholders working to reduce teen pregnancy in the state. TPPI also provided APPCNC (currently SHIFT NC) funding to offer scholarships to their annual conference for every TPPI funded agency and to host a Safe Housing Forum. The conference was held in May 2015 and had 258 people in attendance, 54 of the attendees on one of the scholarships. The Safe Housing Forum focused on housing for pregnant and parenting homeless teens and was held in February 2015 with 63 attendees.

In addition to the teen pregnancy prevention work funded through Title V, TPPI funded 54 agencies to implement adolescent pregnancy prevention programs or adolescent parenting programs. Through the 32 primary prevention programs funded in 28 counties, 5074 youth completed an evidence-based or evidence-informed teen pregnancy prevention program. TPPI funded 22 secondary prevention programs in 21 counties. A total of 614 participants were served with monthly home visits using an evidence-based curriculum (either Parents as Teachers or Partners for a Healthy Baby) and offered a minimum of 12 hours of peer to peer group instruction. Of the 575 female participants, 2.4% had a repeat pregnancy and 36% reported using a long acting reversible contraceptive (LARC). Of the 614

total participants, 4.1% reported dropping out of school that year.

The LHD maternity clinics continued to provide prenatal care and to ensure that all pregnant women in the state have access to early and continuous prenatal care in FY15. Prenatal care was provided to 38,480 unduplicated patients in the LHDs. PCM services were provided to approximately 1,300 uninsured women, ineligible for Medicaid, in FY15. 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. The ten Healthy Beginnings program sites provided services to 518 pregnant women and women up to two years postpartum in 12 counties during FY15.

Title V funding was allocated to all 85 LHDs for the delivery of family planning services in FY15. As a result of this funding, 30,818 family planning patients were seen in 2015. Female patients were able to choose an appropriate method of birth control from among the range of options and many were able to use long acting reversible contraception (LARC), which provides longer protection from pregnancy. During 2015, 12.8% 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, C&YB used Title V funds to support adolescent reproductive health services. This is part of C&YB's increased emphasis on adolescent health.

Nine colleges had Preconception Peer Educators trained through the PPE program during FY15.

In partnership with the MOD Preconception Health Campaign, the WHB provided folic acid education to health care providers and consumers in clinical office setting trainings, at health care professional conferences, in one-on-one consumer and community ambassador sessions and at community health fairs and events. Additionally, 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 everywomannc.com website was maintained to address folic acid and preconception health education. Also, EveryWoman NC Facebook and Twitter accounts issued press releases and electronic newsletters. Spanish language media was provided to address the high rates of neural tube defects in the Hispanic population and included radio, television and newspaper ads.

Also in partnership with the MOD Preconception Health Campaign, in FY15 the WHB participated in several activities to promote healthy weight. The Healthy Weight Matters webinar was provided to health care professionals in provider offices and at health care conferences. The webinar is also available on the EveryWoman NC website. For consumers, community ambassadors were trained to reach their peers with one-on-one healthy weight education. Additionally, a healthy weight display board was created from the content used to develop the Spanish language brochure, "Mujer, Madre y Mi Amiga." The Spanish "Promotora" program trained 15 new Promotoras; healthy weight continues to be one of the educational components. The Healthy Before Pregnancy curriculum, which includes healthy weight promotion, was introduced to additional high school classrooms.

The providers in NC's maternity clinics continued to assess gestational weight gain for all pregnant women and provided guidance as necessary in FY15.

Show Your Love is a health education brochure that was developed in English and Spanish for women with, or at risk for, cardiovascular disease and includes information about healthy weight. As per state mandate, NC family planning clinics continued to record BMI and provide education for all clients and made referrals as needed for clients who were not at a healthy weight. Healthy weight was promoted and integrated into Healthy Beginnings and Healthy Start Baby Love Plus program activities as a required component. Finally, the NC Preconception Health Strategic Plan Supplement for 2014 -2019 reiterates healthy weight as a priority area, and the plan has been promoted and distributed statewide.

## Perinatal/Infant Health

### State Action Plan Table

#### State Action Plan Table - Perinatal/Infant Health - Entry 1

##### Priority Need

Reduce infant mortality with a special focus on social determinants of health

##### NPM

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

##### Objectives

1. By 2020, increase the percentage of women seen at LHDs using long acting reversible contraceptives (LARCs) by 10%.
3. By 2018, a Section-wide workgroup will review WCHS policies and practices that may impact institutional and structural racism (PHSP Strategy 12C)
4. By 2020, reduce the infant mortality racial disparity between whites and African Americans to 1.92(Healthy NC 2020 Objective)
5. By 2020, reduce the infant mortality rate (per 1,000 live births) to 6.3(Healthy NC 2020 Objective)

## Strategies

1A. Continue provider training 1B. Improve access and increase knowledge and awareness of LARC for women

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2A. WCHS staff members will participate in the COIIN Collaboratory's Social Determinants of Health Learning Network 2B. Promote community and systems dialog and discussion on racism 2C. Partner with NC Racial Equity Institute to expand their training across the state by providing funding, support, and access to partner database (PHSP Strategy 12B.1)

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3A. Continue to implement Healthy Beginnings and NC Healthy Start programs 3B. Implement the ICO4MCH initiative and the initiative using newly targeted funding to reduce infant mortality in 26 counties with the highest infant mortality rate

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4A. Implement PHSP Strategy 3E (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 the following action steps: A. Increase the percent of VLBW (very low birthweight) and high-risk babies who are born at Level 3 and Level 4 hospitals B. Define, identify and promote centers of excellence for VBAC (vaginal birth after cesarean) births. C. Define levels of neonatal and maternity care services for hospitals D. Implement the ACOG & SMFM Standardized Levels of Maternal Care

## ESMs

ESM 3.1 - Percent of birthing hospitals who complete the CDC Levels of Care Assessment Tool (CDC LOCATe) annually

## NOMs

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

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

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

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

## State Action Plan Table - Perinatal/Infant Health - Entry 2

### Priority Need

Reduce infant mortality with a special focus on social determinants of health

### NPM

A) Percent of infants who are ever breastfed and B) Percent of infants breastfed exclusively through 6 months

### Objectives

1. By 2020, reduce the infant mortality racial disparity between whites and African Americans to 1.92(Healthy NC 2020 Objective)
2. By 2020, reduce the infant mortality rate (per 1,000 live births) to 6.3(Healthy NC 2020 Objective)

### Strategies

- 1A. Implement PHSP Strategy 3F (Promote access to comprehensive breastfeeding support services including medical lactation services) with the following action steps: A. Expand breastfeeding peer counseling program to all counties in NC B. Increase the number of IBCLCs (International Board Certified Lactation Consultants) per live birth, especially those of color, by increasing educational support (including mentoring) and financial support C. Reimburse for the provision of medical lactation services by IBCLCs, MDs and Extenders D. Increase the number of facilities participating in NC Maternity Center Breastfeeding Friendly Designation or NC Breastfeeding-Friendly Child Care Designation Program or achieving a Baby Friendly Hospital Designation E. Reduce infant formula utilization by increasing the initiation, duration, and exclusivity of breastfeeding
- 2A. Implement PHSP Strategy 7C (Promote utilization of breastfeeding friendly policies and services in local communities) with the following action steps: A. Achieve statewide baby-friendly certification or designation by submitting applications to certification/designation programs B. Advocate among the business community to adopt breastfeeding-friendly policies and practices by supporting use of breastfeeding-friendly designations

### ESMs

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

## NOMs

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

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

## State Action Plan Table - Perinatal/Infant Health - Entry 3

### Priority Need

Increase the number of newborns screened for genetic and hearing disorders and prevent birth defects

### SPM

Percent of infants with confirmed hearing loss who are enrolled for intervention services no later than age 6 months

### Objectives

1. Each year, 99% of newborn infants will be screened for genetic/metabolic disorders and will receive necessary follow-up.
2. By 2020, 50% of NC infants that are screened for genetic/metabolic and/or hearing disorders will receive expedited follow-up services.

### Strategies

1A. Educate pregnant women who receive care at LHDs about newborn screening  
1B. Continually improve the WCSWeb data system that allows tracking of follow-up for newborns screened for hearing and Sickle Cell issues.  
1C. Educate providers and parents about RUSP, including new SCID screening  
1D. Continue a systems development approach in working with communities to meet the Healthy People 2020 goals of 90.2% of infants screened for hearing loss by 1 month of age, 72.6% of infants receiving diagnostic audiology evaluation by 3 months of age, and 55% of infants with hearing loss being enrolled in early intervention by 6 months of age.

**Measures**

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

Annual Objectives						
	2016	2017	2018	2019	2020	2021
Annual Objective	90	90	90	90	90	90

**FAD not available for this measure.**

**ESM 3.1 - Percent of birthing hospitals who complete the CDC Levels of Care Assessment Tool (CDC LOCATe) annually**

Annual Objectives					
	2017	2018	2019	2020	2021
Annual Objective	40.0	90.0	90.0	90.0	90.0

**NPM-4 A) Percent of infants who are ever breastfed**

Annual Objectives						
	2016	2017	2018	2019	2020	2021
Annual Objective	78.0	79.0	80.0	81.0	81.9	81.9

Data Source: National Immunization Survey (NIS)

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2012	78.7 %	3.3 %	90,330	114,797
2011	77.2 %	3.4 %		
2010	72.1 %	3.9 %		
2009	69.1 %	3.4 %		
2008	70.6 %	2.7 %		
2007	72.4 %	2.9 %		

**Legends:**

-  Indicator has an unweighted denominator <50 and is not reportable
-  Indicator has a confidence interval width >20% and should be interpreted with caution

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

Annual Objectives						
	2016	2017	2018	2019	2020	2021
Annual Objective	22.0	23.0	24.0	25.0	25.5	25.5

**Data Source: National Immunization Survey (NIS)**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2012	23.1 %	3.5 %	26,275	113,939
2011	20.7 %	3.2 %		
2010	19.1 %	3.3 %		
2009	13.9 %	2.3 %		
2008	9.9 %	1.6 %		
2007	10.2 %	1.6 %		

**Legends:**

-  Indicator has an unweighted denominator <50 and is not reportable
-  Indicator has a confidence interval width >20% and should be interpreted with caution

**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**

Annual Objectives					
	2017	2018	2019	2020	2021
Annual Objective	50.0	60.0	70.0	80.0	85.0

**Perinatal/Infant Health - Plan for the Application Year**

The PHSP and the work being done through the Infant Mortality COLLN Collaboratory are the driving forces for the WHB and their work in this particular domain. 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 be 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 WHB continues to work toward piloting revised questions that the NC Division of Health Services Regulations utilizes in determining levels of care and to ensure that the questions are answered appropriately by the right staff member. However, through some potential grant funding from United Healthcare, in FY17 the WHB would like to hire a Masters-prepared Registered Nurse to travel to delivering hospitals in the state to provide training and technical support related to completing the Level of Care Assessment Tool (LOCATe), which resulted in the choice of the EMS for this NPM to be the percent of birthing hospitals who complete the LOCATe tool annually. 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 (Percent of very low birth weight [VLBW] infants born in a hospital with a Level III+ Neonatal Intensive Care Unit [NICU]) are based on the current self-designated levels of care which do not align with the AAP guidelines. Data for 2014 show that 79.6% of VLBW infants received care at currently designated Level III+ NICUs, which is similar to data for the past five years.

The WHB also 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 North Carolina who meet the clinical criteria for its use. CMIH, working in partnership with WHB, CCNC, and DMA, focuses on consumer education, access to medications, and provider guidance and support. CMIH hopes to increase access to and compliance with 17P treatment by providing support to over 1,000 health care providers in North Carolina serving low-income, high-risk populations as well as training and technical assistance to eight large maternity clinics on implementing quality improvement projects around 17P. The targeted counties receiving reallocated Title V funds to reduce infant mortality could choose to increase access to 17P as one of their strategies.

Limited funds are also provided to the NCHSF to implement the Safe Sleep Campaign. This Campaign addresses infant health in regards to safe sleep positioning and environments, co-sleeping and exposure to secondhand smoke in order to reduce the risk of Sudden Infant Death Syndrome, accidental infant asphyxiation, and suffocation deaths.

The PQCNC is an entity composed of many stakeholders in maternal-infant care in NC and receives some state funding. PQCNC provides training on maternal, nursery and neonatal quality initiatives for 1100 unduplicated healthcare professionals each year. This includes initiatives that promote perinatal regionalization. Other current initiatives include Conservative Management of Preeclampsia, Patient/Family Engagement, and Milk-Well, which is an initiative to promote exclusive human milk for babies. WHB also provides limited funding to support a network of LHDs and East Carolina University in the provision of high risk maternity clinic services. Pregnant women are referred to these sites throughout the state.

The North Carolina Maternal Mortality Review Committee was established by the WHB in support of recent North Carolina legislature (§130A-33.52) passed in December 2015 that supports the inquiry of maternal deaths across the state. This committee is comprised of nine appointed members that are multidisciplinary that will meet tri-annually to review cases and develop recommendations for the prevention of future deaths. The committee is slated to engage in its first review in fall 2016. The goal of the reviews is to be able to make recommendations that address preventability, identify contributing factors, and help facilitate necessary system changes.

Increasing the percent of infants who are ever breastfed or are breastfed exclusively through six months (NPM#4A-B and former NPM#11) is a goal not just of the WHB, but the WCHS as a whole. WHB Data from the National Immunization Survey (NIS) show that in 2012, 78.7% of infants in NC were ever breastfed. Combined survey results from 2009 to 2011 suggest that Hispanic women are more likely to breastfeed (80.9%) than non-Hispanic White women (72.5%) and non-Hispanic Black women (62.7%), although the CI for the data on Black women is >20%. Survey results also show that women are more likely to breastfeed if they have higher educational attainment, earn more, are older, and are married. 2012 NIS data show that only 23.1% of infants in NC were breastfed exclusively through six months of age; this percentage has more than doubled from the 2007 NIS result of 10.2%. Stratified data for combined survey results from 2009 to 2011 show that non-Hispanic White women (17.6%) were more likely to exclusively breastfeed than non-Hispanic Black women (14.6%) and Hispanic women (12.9%). Rates of infants who were breastfed exclusively were also higher for older, married women and those with higher education level and income.

While much of the work done to promote breastfeeding in NC falls under the NSB within its WIC program, Title V funding is used for several breastfeeding promotion activities, and the NSB and the WHB will continue to partner in this work. LHD maternity clinics will continue to provide prenatal care, which is inclusive of promoting exclusive breastfeeding for at least six months, through counseling and education with prenatal patients. The ESM chosen for

this NPM is the percentage of LHDs whose Maternal Health staff members are trained on breastfeeding promotion and support through the NC Regional Lactation Training Centers. The State Breastfeeding Peer Counselor Coordinator provided a baseline count of LHDs with Maternal Health staff members who have received training as of July 1, 2015 which was 44%. This measure will be updated annually from the work plans provided by the six Regional Lactation Training Consultants. The NSB will continue its efforts to expand the implementation of the Breastfeeding Peer Counselor (BFPC) Program with an anticipated increase of local WIC agencies that participate in the BFPC from 83% to 90%. Additionally, three ICO4MCH project sites (covering seven counties) have chosen to implement Ten Steps for Successful Breastfeeding as one of their strategies.

Healthy Beginnings, NC's minority infant mortality reduction program, will continue to conduct an initial assessment with the pregnant women it serves in eleven counties to determine their plan to breastfeed and provide education and materials on breastfeeding in the upcoming year. Program staff will conduct an initial assessment with newly enrolled postpartum women to determine if they initiated breastfeeding and their current breastfeeding status. Breastfeeding women will be provided continued breastfeeding support through monthly care coordination contacts, home visits, and referrals to available breastfeeding peer educators and lactation consultants.

Pregnancy Care Managers will continue to assess each of their patients prenatally and in the postpartum period for breastfeeding support needs as part of the care management services provided. If the patient indicates a need for breastfeeding support at any time, the Pregnancy Care Manager will make an appropriate referral to the needed support services and document these findings and interventions in the patient's Pregnancy Assessment in the Case Management Information System (CMIS). PCM services will typically be provided through the end of the month where the 60th postpartum day falls. As part of the maternal health funding provided to LHDs, staff members are also strongly encouraged to follow the guidance from the Surgeon General's Call to Action to Support Breastfeeding, 2011. This is inclusive of ensuring that staff are trained appropriately throughout the agency.

CenteringPregnancy<sup>®</sup> is an evidenced-based approach to delivering prenatal care in a group setting that has begun to grow more popular across the state both in LHDs and in private practices. This approach to care follows the recommended schedule of ten prenatal visits, but each is 90 minutes to two hours long – giving women ten times more time with their provider. Women engage in their care by taking more of an active role in their visits that provides a much deeper and meaningful level of participation in 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. The WHB was able to coordinate three trainings for providers/support staff across the state conducted by the Centering<sup>®</sup> Healthcare Institute. Centering includes guidance on prenatal weight gain. With the newly targeted MCHBG funding to the 26 counties with the highest infant mortality rates, three LHDs have chosen to implement or expand centering pregnancy within their clinics. To help with this transition, the WHB was able to coordinate three trainings for providers/support staff across the state conducted by the Centering<sup>®</sup> Healthcare Institute in the late spring/summer of 2016.

The C&YB will continue to use Title V funds to support NFP home visiting as part of a NFP Funders Alliance. Other NFP funders include The Duke Endowment, Kate B. Reynolds Charitable Trust, Blue Cross and Blue Shield Foundation of North Carolina, the NC Partnership for Children, and Prevent Child Abuse North Carolina.

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 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.

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 (former NPM#1). In FY17, 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 C&Y Branch pediatric medical consultant (PMC) will continue outreach to health care providers to support newborn screening follow-up.

Screening for Severe Combined Immunodeficiency Disorder (SCID) is currently scheduled to be added to the panel of screening in FY17 as legislation passed in May 2015 to require a DNA-based test that measures T cell Receptor Excision Circles. The C&Y Branch hired an additional Cystic Fibrosis (CF) NBS Genetic Counselor in 2016 to augment follow-up and allow expansion of current program resources to accommodate the addition of SCID newborn screening follow-up in FY17. The SLPH has begun to prepare for implementing SCID screening and was recently awarded a grant from the Association of Public Health Laboratories which will enable the purchase of equipment and provide laboratory and follow-up staff training. The C&Y Branch staff members continue to work with the immunologists at Duke and UNC to develop educational materials. The C&Y Branch staff will also begin work with SLPH to develop an educational plan to introduce SCID screening to health departments, primary care providers, and hospitals to roll out in FY17. An upcoming reprint of the NBS parent brochure will reflect this panel addition as well.

In addition, in FY17, the Newborn Screening Laboratory will work on the method validation and resume CF DNA testing in house as well as migrate the software application "Starlims" from version 9 to version 11. Also, the MS/MS lab will continue to evaluate cutoffs for analytes on an as-needed basis.

The Sickle Cell Syndrome Program (SCP) provides testing, counseling, care coordination and education for individuals and families living with sickle cell disease or trait. Funded primarily with federal, state and Medicaid resources, services are provided for individuals throughout the life cycle by state staff along with contracted community based organizations and medical centers. The SCP plans to finalize and roll out enhancements to the existing WCSWeb database reporting capability in FY17 so that DPH staff and community based organizations can document care coordination efforts into the system and participating medical centers have read only access for data they enter into the database.

The Sickle Cell Program is collecting data on the provision of trait counseling and follow-up efforts across North Carolina. The data will be used to develop a best practice sickle cell trait counseling and education model to reach the vast number of parents of infants identified through the NC State Laboratory Newborn Screening Program. The model will include a standardized approach for follow-up of teens and young adults identified with sickle cell trait as newborns. The goal of this effort is to ensure that this population is informed about their trait status and promotes individual informed reproductive life/health decision making.

The EHDI program, which is primarily funded through other federal grants but housed in the C&Y Branch, will continue its activities in FY17. All 86 hospitals/birthing facilities in NC will continue to 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.

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 will continue to

provide ongoing technical assistance, consultation, and support to birthing facilities, physicians, audiologists, interventionists, and families. In FY17, the EHDI Regional Consultants will improve service delivery by reaching out to more families of deaf or hard of hearing children across the state to improve early identification and quality intervention. Staff members will participate in continuing education activities to maintain use of current best practices to meet the diverse population needs. The EHDI Program Education and Training Committee will work to develop high-quality, relevant, web-based training regarding EHDI, data reporting, hearing screening, speech-language development and other topics as needed by public health partners and stakeholders.

The EHDI program will also continue quality improvement work with the goal of reducing loss to follow-up after newborn hearing screening. The state EHDI Quality Improvement (QI) team will meet quarterly to evaluate on-going Plan-Do-Study-Act (PDSA) cycles and to prioritize additional change strategies. 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 CCNC, Family Connects, EIB, MIECHV, NFP, PCM, LHDs, WIC, National Center for Hearing Assessment and Management (NCHAM), CDC, and EHDI programs in other states and territories to influence system change.

One SPM was selected to identify progress to address the WCHS' 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 64.1% and dropped to 57.8% in 2014. Provisional data for 2015 (final data isn't available until 18 months after a given calendar year) indicates that the percentage has continued to decline to 41.3%. Part of the reason for the decrease can be explained by a change in how children are enrolled in the 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.

Current information about the receipt of intervention services and the outcomes of deaf or hard of hearing (DHH) children that are identified through EHDI programs is limited. With the shift in focus toward evaluating long-term outcomes for children who are DHH, 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. A pilot project to demonstrate the feasibility and results of linking existing early intervention/educational records on DHH children in North Carolina with NC EHDI data to obtain and assess information about data elements including but not limited to: 1) date of identification of hearing loss for each infant; 2) list of services received, including dates; 3) dimensions of language proficiency; 4) measures of academic success (e.g., grade level); and 5) use of special education/support services. The correlation between language, literacy and educational outcomes and other variables will be examined. These variables include but are not limited to: 1) date of identification of hearing loss; 2) age at first amplification fitting; 3) type/degree of hearing loss; 4) age at enrollment in intervention/educational services; 5) use of special education/support services; 6) type/frequency/length of intervention/educational/support services; and 7) maternal age/education level at the child's birth. The anticipated public health impact from this successfully completed project involves increasing the available evidence about both the receipt of intervention services and the longitudinal outcomes of DHH children identified through state EHDI programs.

The EHDI program will utilize findings from the previously completed EHDI System Self-Assessment for strategic planning to strengthen existing early intervention systems for DHH children using proven quality improvement strategies and techniques. Key stakeholders will be involved throughout this process.

## **Perinatal/Infant Health - Annual Report**

The North Carolina Maternal Safety Committee also is interested in making risk appropriate care a priority. This Committee includes representatives from the NC OB/GYN Society, DMA, PQCNC, Nurse Midwifery Association, AHEC, Nursing Association, Blue Cross/Blue Shield, DPH, and others. Conversations will continue with this newly formed partnership on how to strengthen our state's perinatal regionalization system.

The High Risk Maternity Clinic program funded 11 prenatal clinics within LHDs along with East Carolina University in FY15 utilizing state dollars. Some of the high risk pregnant women who initiated their prenatal care at LHDs with only low risk maternity services were transferred to these high risk maternity clinics for their prenatal care. Clinical practice in the high risk maternity clinics helped ensure that deliveries took place at facilities that had the capacity to manage high risk deliveries and neonates. LHDs that had the capacity to provide care to high risk women also ensured that their deliveries took place at facilities that had the capacity to manage high risk deliveries and neonates.

The Healthy Beginnings program conducted outreach within communities of color to reach women who otherwise may not initiate or continue ongoing care. The program continued to work with women in the interconception period on reproductive life planning, healthy weight, and referral for ongoing primary care. LHD maternity clinics provided prenatal care, which is inclusive of promoting breastfeeding, through counseling and education with prenatal patients.

Pregnancy Care Managers assessed each of their patients prenatally and postpartum for breastfeeding support needs during FY15 as part of their case management services. If the patient indicated a need for breastfeeding support at any time, the Pregnancy Care Manager made an appropriate referral to the needed support services and documented these findings and interventions in the patient's Pregnancy Assessment in the Case Management Information System. NC Baby Love Plus, a federally funded Healthy Start Program, also provides education and support for pregnant and postpartum women inclusive of breastfeeding promotion. The federal Office of Adolescent Health funded NC's Young Families Connect (YFC) program which works with expectant and parenting young women and men ages 13-24 years of age residing in Bladen, Onslow, Robeson, Rockingham, and Wayne counties. With a strong focus on self-sufficiency, young parents receive support with meeting their educational, job training, and health and wellness goals as well as strengthening their parenting skills. In FY15, YFC served a total of 467 participants.

The Breastfeeding Peer Counselor Program was active in 81 Local Agency WIC Programs in FY15. Statewide, the WIC breastfeeding food package for fully and partially breastfeeding dyads were also available. WIC breastfeeding supplies including multi-user and single-user electric pumps, manual pumps and optional supplies were available for participants. Regional Lactation Training Centers were also available in the six perinatal regions and staffed with a Regional Breastfeeding Coordinator. They provide accurate, standardized, evidence-based lactation management training and continuing education for breastfeeding peer counselors, breastfeeding peer counselor managers, public health agency staff and other medical professionals serving the WIC eligible population in the respective perinatal region.

In FY14, the C&Y Branch Public Health Educator worked with the WHB, BFPs, and the PMC to adapt existing CCHD educational materials from two other states. A new section on the Branch Newborn Screening Program web site was created about CCHD screening. CCHD resources were compiled by the Public Health Educator for a resource sheet for providers and families. A statewide electronic CCHD database was developed by PQCNC and available by September 2014 to allow reporting of positive CCHD screening results within 7 days of the positive screening result and quarterly reporting to the NC Birth Defects Monitoring Program of aggregate CCHD screening processes by medical facilities and health care providers screening newborns and infants. Prior to April 1, 2015, medical facilities and providers were required to directly fax positive or failed CCHD screening results to the NCBDMP or to enter the results into the electronic CCHD database. A multi-disciplinary panel of experts which included two parents of children with CCHD was used that met for several months. This panel developed recommendations for CCHD

rules under the leadership of the PMC. The PMC and other DPH staff members used the recommendations to move through the DHHS rule-making process which resulted in temporary rules effective in July 2014 and then permanent rules effective April 2015. Outreach letters about the temporary rules were sent out by the state health director in September 2014 and February 2015. In addition, the PMC worked with numerous partners such as the NC Chapter of the American Heart Association, the NC Hospital Association, the NC Pediatric Society, and the NC Academy of Family Physicians to increase awareness about the temporary and permanent rules for CCHD screening and reporting of results by medical facilities, and health care providers.

In FY15, the Public Health Educator, NBS Follow-up Coordinator, and Regional Genetic Counselors updated the C&Y Genetic and Newborn Screening unit website to include links to multiple family and provider resources. The SLPH replaced the previous galactosemia screening methodologies and testing algorithm with a new two tier approach that runs Total galactose and GALT enzyme simultaneously, with a reflex DNA mutation panel. This methodology allows for a faster turn-around time and more detailed results. In addition, the total galactose and GALT cut-offs were revised with guidance from the metabolic geneticist at UNC. Also, the C&Y follow-up staff worked with the metabolic geneticist at UNC to update the follow-up protocols in accordance with the new screening methodology. SLPH also recruited new parent representatives to sit on the Newborn Screening Advisory Committee. The NBS follow-up coordinator and the PH educator worked together to update the NBS brochure to include new sections related to carrier detection and the anticipated addition of SCID to the panel.

The SLPH and the Hearing Link added a check box indicating the presence or absence of meconium ileus (MI) on the NBS filter paper. This allowed the SLPH to run DNA analysis on babies with MI who have a normal immunoreactive trypsinogen (IRT) level. This step will allow for early detection and follow-up of babies affected with CF that may be missed on the CF screen.

In FY15, the MS/MS lab continued to monitor additional analytes for consideration of inclusion in the screening panel. Data was reviewed for the calendar year 2014 in order to develop cutoffs for the new analytes chosen for inclusion (SUAC, ASA, C4DC, ARG).

The six comprehensive sickle cell medical centers are entering data documenting the total number of clients served and the number and types of services provided to each client in the WCS-Web database. Technical assistance has been offered to medical center staff to ensure understanding of data entry requirements and to promote timely, accurate submission of sickle cell client information.

In FY15, WCSWeb Hearing Link collected hearing screening data on a total of 122,697 live births. A total of 121,613 (99.1% of live births) were screened for hearing, with 119,088 (97.9% of live births) screened by 1 month of age. Follow up service was provided by the C&Y Branch's regional speech and audiology consultants. All hospitals/birthing facilities continued using WCS Web Hearing Link to report newborn hearing screening results. A Cooperative Agreement for continued enhancement and interoperability of WCSWeb was continued, along with a HRSA funded grant that focused on quality improvement.

Due to loss of a program manager position to budget cuts, the NC EHDI program underwent significant restructuring during FY15. EHDI Regional Consultant coverage areas were reduced in size and consultants began tracking infants from birth through the entire 1-3-6 process. This change reduced the number of hand-offs in the tracking process for individual infants and allowed for better continuity of care. During the restructuring process, a state EHDI data committee and an education/training committee were created, both of which have been successful additions to the program. The members of the data committee are improving their data analysis skills and are better able to interpret data for those providers they serve. The education/training committee has been able to focus on developing targeted educational programs for specific needs, such as improved timing of reporting data to the EHDI program, EHDI-IS (WCSWeb) use, and physician training related to the importance of sending infants for recommended follow-up screening or diagnostic evaluation in a timely manner. These two committees are working side-by-side to present data to reporting sources to help them better understand the impact of their hospital/practice on 1-3-6 goals and to

train (or retrain) providers on prompt and complete reporting and referral after data analysis reveals targeted needs.

The EHDI Advisory Committee continued to meet 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.

The state-wide EHDI QI team also continued to meet quarterly to identify and prioritize potential change strategies that would lead to reduced loss to follow up. Analysis of EHDI data indicated current QI tests of change have led to improvement in the percentage of infants screened by one month, diagnosed by three months, and enrolled in intervention by six months; however, the desired reduction in loss to follow-up was not seen. The EHDI team continued its pilot project with East Carolina University to support Teleaudiology as a safety net in the far eastern counties of NC where proximal audiology services are scarce. The number served by Teleaudiology remains very small, with a total of 6 clients in 2015. The program will investigate the reasons for these small numbers and explore options for standardizing referral, scheduling, and marketing options using proven QI methodology.

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 hiring a part-time parent consultant, building local family support groups (HITCHUP), fostering Spanish and English Phone Trees linking parents that have been trained to provide peer support to parents of newly diagnosed children, holding Continuation of Care Workshops with parents as co-presenters, disseminating upgraded materials to reflect cultural diversity, and updating the Better Hearing and Speech Month (May) Campaign to include social media tweets. The Parent Consultant collaborates with the Branch Family Liaison Specialist to identify parents for participation in Branch activities (e.g., review public materials for distribution, 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.

The NCPS also named a new EHDI Champion who has quickly joined the EHDI Advisory Board to promote newborn hearing screening among pediatric peers and enhance the quality of audiological and intervention services for children and youth with hearing impairment.

## Child Health

### State Action Plan Table

#### State Action Plan Table - Child Health - Entry 1

##### Priority Need

Increase developmental screenings for children and adolescents

##### NPM

Percent of children, ages 10 through 71 months, receiving a developmental screening using a parent-completed screening tool

##### Objectives

1. Increase appropriate use of valid and reliable developmental, psychosocial, and behavioral health screening tools by 10% using TA and training models.

##### Strategies

1A. Regional child health and school health consultants and the Pediatric Medical Consultant will provide semi-annual statewide trainings and quarterly trainings to LHD child health nurses and private providers 1B. Make archived trainings available with specific information regarding interpretation of developmental screening tools, parental guidance and referral resources 1C. Assess the impact of TA and training through internal and external record audits, training evaluations and analysis of ABCD data for developmental, behavioral and autism screening information. 1D. Provide an easy-to-use information exchange system between home visitors and primary care providers to ensure a timely update of developmental screening results to the medical home provider.

##### ESMs

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

## NOMs

NOM 13 - Percent of children meeting the criteria developed for school readiness (DEVELOPMENTAL)

NOM 19 - Percent of children in excellent or very good health

## State Action Plan Table - Child Health - Entry 2

### Priority Need

Prevent child deaths

### SPM

Number of substantiated reports of child abuse and/or neglect

### Objectives

1. Each year, the local Child Fatality Prevention Teams will review child deaths and increase usable recommendations on policy and program changes by 20%. Policy recommendations will be provided to the NC Child Fatality Task Force, the State Child Fatality Prevention Team and the Branch Management Team semi-annually. Baseline data will be determined in FY17.
2. Each year, increase suicide prevention activities by Branch staff by 10%.

### Strategies

1A. Provide technical assistance and training on effective child death review procedures and prevention strategies to 100 local child fatality prevention teams. 1B. Determine and use a scoring system to identify recommendation "usefulness" as identified by key agencies. 1C. The Local CFPT Coordinator will participate as an appointed member of the NC State Child Fatality Prevention Team and an ex-officio member of each 100 local CFPT.

2A. Implement suicide prevention strategies in schools through the School Nursing Program, school health centers through adolescent risk assessments, and behavioral health consultation to school nurses, school staff, LHD clinical staff, and C&Y staff. 2B. Implement Youth Mental Health First Aid training across the state for populations serving youth such as school nurses, school staff, LHD staff, and community organizations.

## Measures

### NPM 6 - Percent of children, ages 10 through 71 months, receiving a developmental screening using a parent-completed screening tool

Annual Objectives						
	2016	2017	2018	2019	2020	2021
Annual Objective	60	61	62	63	64	65

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2011_2012	58.0 %	3.5 %	336,004	579,404
2007	47.0 %	3.4 %	290,840	618,709

**Legends:**

- 🚩 Indicator has an unweighted denominator <30 and is not reportable
- ⚡ Indicator has a confidence interval width >20% and should be interpreted with caution

### 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

Annual Objectives					
	2017	2018	2019	2020	2021
Annual Objective	10.0	10.0	10.0	10.0	10.0

### Child Health - Plan for the Application Year

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 many collaborative activities at the state level. Through multiple collaborative opportunities, the WCHS convenes internal and external partners in planning and implementation of programs 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, 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 community services to benefit the health and well-being of families. The current Early Childhood Comprehensive Systems (ECCS) formula grant will end July 31, 2016. A competitive application for the new five-year cycle has been submitted to HRSA. The

application focused on increase social-emotional screening in two place-based sites. Two of the activities of the current ECCS grant will be continued past the end of the grant project period—support for the Governor’s NC Early Childhood Advisory Council (NCECAC) and the Early Childhood Matrix Team in the NC DPH.

The NCECAC was reestablished by Governor McCrory in 2014 showing NC’s commitment to developing a new early childhood system-building initiative drawing on the State’s public and private sector strengths and expertise and bringing together talented specialists, educators and citizens to (1) provide innovative leadership to ensure a quality system to benefit young children and their families and quality programs and services, particularly for young at-risk children, (2) reduce demands on our criminal justice system and the need for social service intervention, and (3) improve college attendance, future employment and wage prospects. The NCECAC was authorized to create and sustain a shared vision for young children and a comprehensive, integrated system of family strengthening services, including early care and education services that support children, families, and communities. The NCECAC also developed, encouraged and supported initiatives to strengthen the state’s early childhood system to achieve the best possible outcomes for the state’s young children. The NC Title V Director is a member of the NCECAC; however, the NC Title V CYSHCN Director is currently serving on the NCECAC due to the vacancy in the Title V Director position. In addition, the ECCS grant Project Director is facilitating a subcommittee of the NCECAC, the Grants Review Subcommittee, to review early childhood grants and to facilitate the use of the grants to strengthen the system of care for young children. Working within this comprehensive system of care, the WCHS, and in particular, the C&Y Branch, will be focusing on means to increase the percent of children, ages 10 through 71 months, receiving a developmental screening using a parent-completed tool (NPM#6) and accessing appropriate care. Per the 2011/12 NSCH, 58% of children in NC had received appropriate developmental screening which is higher than the national average of 30.8%, but leaves much room for improvement. This percentage was lower for female children (54.9%) than male children (61.2%) and also lower for CSHCN (50.9%) than for non-CSHCN (59.2%), although the CI for CSHCN was extremely wide (>20%), so it is difficult to make comparisons.

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, and behavioral screening tools during a state fiscal year. In FY15, there were twelve trainings. These trainings are typically provided or coordinated by the PMC, both in-person or through webinars. Four regional child health meetings were conducted by staff members of the C&Y Branch in the fall of 2014 and spring of 2015 with approximately 60 staff members from LHDs attending each meeting (a total of 240 staff attended). One agenda item in the fall was focused on delivering quality care for adolescents the use of the Common Factors approach, and an agenda item in the spring was the importance and use of the parent-completed Ages and Stages Questionnaires: Social Emotional (ASQ:SE) screening tool when concerns are identified on the general developmental screening tool or when there are concerns by the health care provider. The PMC facilitated 4 webinars for providers who were not able to attend the in person regional meetings on the ASQ:SE in May 2015. One session was recorded and made available on line to approximately 850 local child health nurses, nursing supervisors and Directors of Nursing in the 85 LHDs across the state. The PMC also provided webinar training to LHDs on the M-CHAT-R/F™ screening tool for autism spectrum disorders in the winter of 2015. The number of children receiving developmental screenings in LHDs reported through the Health Information System has declined over the past five years as there were 35,717 reported in 2011 and just 26,100 in 2015. This decline is not too surprising as fewer LHDs are providing direct child health services.

The C&Y Branch will also be increasing family involvement in all its programs per their work with the 2015-2020 C&YBSP. While the C&Y Branch programs have made great strides in involving parents in programs, co-training, and support of the BFP, staff members will be challenged to increase involvement of parents in program planning, implementation and evaluation, and in co-training opportunities. The preparation of the C&Y Strategic Plan has helped staff focus on this particular area and reassess current successful parent integration. The Branch’s goal is to truly integrate parents operationally at both the State and local level throughout the breadth of children’s programs and services. Activities will include increased requirement in contracts to include families in program planning and

implementation, review of the annual MCHBG application, implementation of the train-the-trainer parent empowerment training series, regular joint meetings of the Branch Family Partners and the C&Y Branch Management Team, and increased representation of families and adolescents on workgroups and advisory councils.

The C&Y Branch will continue to refine the redesigned Child Health Agreement Addenda with LHDs to require that (1) all services supported by Title V funding 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 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 Agreement Addenda with LHDs for child health services pays for a variety of services for low income families which 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; and
12. Training related to skill development related to evidence-based services.

The WCHS provides preventive health services to children from birth to 21 years of age primarily through LHD clinics. The schedule of recommended visits is based on Bright Futures guidelines. The Pediatric Medical Consultant (PMC) will continue to provide quarterly training for physicians and mid-level providers in local health departments and technical assistance to the regional child health consultants to assist them in helping local health department child health clinics with delivery of care based on Bright Futures components. Branch nurse consultants 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 screenings with families. Screenings are required at age appropriate times for visits provided at 6, 12, and 18 or 24 months and then at 3, 4 and 5 years of age in LHDs. Regional child health nurse consultants routinely conduct individual site visits to review child health services and provide technical assistance and education about best practices to LHD staff. Care Coordination for Children (CC4C) care managers will continue to conduct general developmental screenings and share the results with the appropriate medical home practitioners. The CC4C program will be exploring the use of the Ages and Stages Questionnaire Social Emotional 2 as a screening tool for children with toxic stress and with concerns for social-

emotional delay. Medicaid funds children enrolled in that program and Title V funds are used to support non-Medicaid children. CC4C is an at-risk population management model provided in partnership with CCNC and DMA. CC4C staff serve children from birth to five years of age who meet the following priority risk factors: 1) children with special health care needs/CSHCN (\*Title V definition); 2) children exposed to toxic stress in early childhood including, but not limited to, extreme poverty in conjunction with continuous family chaos, recurrent physical or emotional abuse, chronic neglect, severe and enduring maternal depression, persistent parental substance abuse or repeated exposure to violence in the community or within the family; 3) children in the foster care system; and 4) children who are high cost /high users of services. Referrals originate from the medical home, community organization, or family. CCNC-identified Medicaid claims trigger referrals based on high cost utilization. In addition, the Branch provides funding to LHDs to replicate this service for the birth to five non-Medicaid population.

The C&Y Branch has played a key role in the development and implementation of the NC Child Fatality Prevention System that serves as a central resource for action related to reducing preventable child deaths. The enabling legislation passed in 1991 created the four components of this system: the NC Child Fatality Task Force (CFTF); the state Child Fatality Prevention Team; local Child Fatality Prevention Teams (CFPTs); and Community Child Protection Teams (CCPTs) in each county. The Executive Director of the Task Force and the state coordinator for the CFPTs are housed in the C&Y Branch providing a mechanism for leadership and participation in Task Force activities. These staff members work closely with the staff of the IVPB. Additional partners include other state agencies and non-profit agencies such as North Carolina Safe Kids, the University of North Carolina Injury Prevention Center, and the Governor's Highway Safety Program. The Task Force is a critical resource for routine analysis of child fatalities in the state. It is unique in its ability to assure introduction and monitoring of legislation related to reducing child fatalities. Task Force membership includes legislators, leaders of state agencies (health, social services, juvenile justice, and education), child advocacy organizations, and child abuse prevention organizations. The State Team is 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.

For FY17, local CFPTs, supported through Title V funds, will continue to review the deaths of children under age 18 to identify system problems and make recommendations for prevention of future fatalities and to take action on those recommendations. They will also continue to provide education to their communities on ways to keep children alive and safe. The CFPT Coordinator will continue to monitor the activities of the local teams to ensure compliance with the NC Child Fatality Prevention System's statutory requirements. The CFPT Coordinator makes site visits to local CFPTs and provides quarterly statewide webinars to increase the local teams' knowledge about current health, data and child safety issues. In FY17, the CFPT Coordinator will conduct a training needs assessment to identify the top three training needs per local teams and identify speakers for these presentations.

In line with one of the WCHS's priority needs to decrease child deaths, WCHS 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. Data over the past five years (2012 to 2016) shows an average of about 10,700 reports per year with a slight trend downward. Additionally, work continues on efforts to decrease former NPM#10: Rate of deaths to children aged 14 years and younger caused by motor vehicle crashes per 100,000 children. Fortunately, the number of deaths each year is small, leading to fluctuating rates, but there has been a downward trend from a rate of 5.5 in 2004 down to 2.5 in 2014.

North Carolina is one of five states awarded the Implementation of Essentials for Childhood (E4C): Safe, Stable, Nurturing, Relationships and Environments (SSNRs & Es) grant from CDC. This five-year grant aims to support sustainable, multi-sector collective impact efforts that promote SSNRs & Es for North Carolina's children. The primary outcomes of E4C include: 1) increased number of strategic collaborations between state level traditional and non-traditional partners; 2) increased number of activities in the E4C goal areas (i.e., a) raise awareness and commitment to promote safe, stable, nurturing relationships and environments and prevent child maltreatment, b) use

data to inform actions, c) create the context for healthy children and families through norms change, programs, and policies); 3) objectively measured changes in awareness, commitment, norms, programs and policies; and 4) identification of promising practices and lessons learned on E4C content, implementation strategies and measurement approaches. United behind the vision of assuring safe, stable, nurturing relationships and environments for all children and preventing child maltreatment, the NCE4C Task Force developed a state plan which was released in March 2015. The report, including the Issue Brief, is available at: <http://www.nciom.org/task-forces-and-projects/?e4c>. The NCE4C Initiative uses a public health and collective impact approach to align and enhance collaborative efforts across systems, leveraging existing assets and resources which mitigate the effects of adverse childhood experiences. Currently, NCE4C has four workgroups and a number of subcommittees, comprised of partners, stakeholders and community members. Strategies planned for FY17 include:

- educate and motivate key stakeholders on brain science, Adverse Childhood Experiences (ACEs) and resilience;
- systems and services transformation to prevent and mitigate the impact of trauma;
- align systems to enable family-centered service provision;
- support community ownership, impact and action;
- improve data sharing and use across systems; and
- spark innovative policy and financing solutions.

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 at the child's birth. Identification and early intervention of overweight and obesity is critical in preventing or delaying the onset of chronic diseases. State data gathered through the NC-Pediatric Nutrition Surveillance System (NC-PedNSS) for two former measures (NPM#14: Percentage of children, ages 2 to 5 years, receiving WIC services with a BMI  $\geq 85^{\text{th}}$  percentile and SPM#3: Percent of children 2-18 who are overweight [ $\geq 95^{\text{th}}$  percentile]) show that while trends seem to be moving in the right direction, NC still has much room for improvement in preventing obesity. In 2010, 31.6% of children ages 2 to 5 years old seen in WIC and child health clinics in LHDs had BMIs  $\geq 85^{\text{th}}$  percentile, but that decreased to 29.7% in 2014. The sample size of the WIC population used in this calculation has increased as more children have more complete anthropometric data collected through the newly implemented Crossroads data system. For children ages 2 to 18, there were 16.1% who were overweight in 2010 and that decreased to 14.8% in 2014. Children diagnosed with obesity may be enrolled in the school nurse case management program and receive services to improve their BMI. In the 2014-15 school year, 52% of children who received school nurse case management services for obesity showed an improved BMI and 54% showed improved grades at the end of the year. Students are often case managed over several school years as needed. Therefore, as improvement for those students occurs and is maintained, outcome measures may decline.

Title V funds support a Pediatric Nutrition Consultant position specifically for the C&Y Branch who helps provide a variety of interventions including partnering with the NSB, WHB, and CDI Section to promote the Breastfeeding Friendly Child Care Center initiative; providing education sessions in the Enhanced Role Nursing (ERN) training and at regional child health nurse trainings about pediatric nutrition assessment, health and nutrition related red flags, nutrition counseling the use of evidence-based federal dietary guidance and anticipatory guidance; and monitoring a special nutrition project Agreement Addendum for the Durham County Health Department that furnishes medical nutrition therapy (MNT) and nutrition consultation services for children referred to the LHD with no other funding source. In addition, the consultant provides credentialing oversight for nutrition programs and services at School Health Centers (SHCs) and maintains a communication network among school nutritionists. The person in this position retired in May 2016, but the C&Y Branch is recruiting to fill the position soon to continue these interventions. Additional plans for this position in FY17 include consolidating efforts with the NC Cooperative Extension's Expanded Food and Nutrition Education Program (EFNEP) to develop and implement nutrition education (including

breastfeeding) and support services to local MIECHV program staff and clients through on-site group sessions and individualized home visits. assisting the NC Farm to School Steering Committee in implementing the statewide farm to school initiative; participating in monthly School Health Matrix meetings, quarterly Same Page School Health meetings and statewide quarterly Eat Smart Move More Leadership meetings; and working in collaboration with C&Y staff members to ensure nutrition education, guidance and resources are available to families with children and adolescents who have disabilities and special health care needs impacted by diet and nutrition status. Lastly, the consultant will work in partnership with the C&Y Branch's Behavioral Health Clinical Consultant (BHCC), school nurse consultants, child health nurses, SHCs and other internal and external partners, to promote awareness of the linkage between weight bias and bullying; support size diversity, acceptance and weight normalization for adolescents.

In FY14, the NSB implemented the Crossroads data system in all local WIC agencies to provide a comprehensive process for documenting certifications including issuance of food benefits, nutrition education tailored to families and individuals, and setting and tracking health behavior goals for participants. In FY17, the NSB will continue to provide ongoing technical assistance with the use of the Crossroads data system. Educational resources in English and Spanish will continue to be provided for local WIC agency staff to promote healthy weight for families and children. The Pediatric Nutrition Course will continue to be offered online to NC public health nutritionists and open to other interested parties as space allows. The NC WIC Conference targeted to local WIC agency staff will include sessions on breastfeeding, childhood obesity and motivational interviewing. NC-PedNSS data will continue to be used to monitor pediatric overweight. The WIC Program continues to provide only 1% or skim milk to children 2 years of age and older.

The 2005 NCIOM Child Maltreatment Reduction study outlined a number of recommendations that have since been addressed by the C&Y Branch and WHB. A few of these include:

1. Working closely with the ECCS Initiative in the development of an integrated and comprehensive early childhood system that promotes the health and well-being of young children birth through age five. Several years ago the C&Y Branch gained representation on the NCECAC by creating the ECAC Grants Review Workgroup, a sub-committee of the NCECAC to review progress across multiple grants within DPH that support early childhood services. The goal is to bring all early childhood services together in an integrated system of care.
2. The NC DPH and the NC DMA strengthening the Pregnancy Care Management and CC4C programs with regard to child maltreatment prevention. This work has been successfully accomplished by integrating the LHD care managers with the CCNC networks. In addition to the medical care management provided by the CCNC networks, the CC4C care managers provide additional support for CSHCN, children in the foster care system, and children exposed to toxic stress or adverse childhood experiences.
3. The NC DHHS should ensure that a strengthening parenting component is included across state programs that serve families, including culturally appropriate programmatic strategies that will support and strengthen parent-child relationships, especially during pregnancy and the first two years of the child's life. Both the WHB and the C&Y Branch are funding NFP, Triple P, and Healthy Families America (HFA) programs to meet this goal.

The C&Y Branch is part of the NFP Funders Alliance in NC, and the Branch has agreed to be the lead agency for NFP for the state. To support the non-MIECHV sites, the Branch has hired a NFP State Nurse Consultant. The Consultant will be providing technical assistance and nursing consultation for 11 non-MIECHV sites. Title V-funded NFP local implementing sites will be invited to participate in a statewide central intake/referral system and a Home Visiting Learning Library (based on core competencies of knowledge, skills and abilities necessary for home visitors to be successful). The core competencies will be supported by training modules (archived webinars, articles, DVDs, and other resources). In addition, Title V-funded sites will be able to participate in training opportunities that include, but are not limited to: Mental Health First Aid, trauma-informed therapy, infant mental health and family-centered practice. These resources are being developed by the MIECHV Grant Program, but are being made available to Title V-funded sites at no additional cost to the MIECHV grant.

In FY17, the C&Y Branch will be working with the NFP sites to strengthen their Community Advisory Boards (CABs). The CABs currently focus on developing referrals for the NFP program. Having developed good referral systems in each county, the Branch staff will request that CABs 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 involved 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.

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:

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

Three ICO4MCH project sites (covering eight counties) selected Triple P as one of their evidence-based strategies to improve health among children aged 0 to 5. An additional site chose to expand their Family Connects Home Visiting Program.

The Triple P State Learning Collaborative will continue to provide a learning environment in which coordinators from the 33 participating counties will meet to learn, share, and plan to determine 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 and Triple P America will continue to offer support to the Collaborative. It is expected that the Collaborative will work with the Branch to develop a statewide sustainability plan, a plan for billing Medicaid for Triple P services, and produce a statewide Triple P conference for coordinators, practitioners, and parents. Consultation and technical assistance will continue to be provided by both the C&Y Branch's Triple P Coordinator and Data/QI Specialist. There will continue to be a strong focus on the statewide data collection and reporting system and use of data for program planning and evaluation, including state and local continuous quality improvement projects. The state Triple P Coordinator will continue developing a Triple P Implementation Manual which will be used by newly funded sites. One focus for FY17 will be practitioner training for Teen Triple P and Stepping Stones (for families of CSHCN). A member of the C&Y BFP attends and provides technical assistance at each of the quarterly Collaborative meetings. The Triple P Family Partner has also become a certified Triple P practitioner and serves as the liaison between the Triple P Program and the BFP. As a trained practitioner, she also delivers Triple P to parents and promotes Triple P through local parent organizations.

The Triple P Program has several challenges moving forward. One is the continued interest in partnering with the Division of Social Services (DSS), which supports Incredible Years and Strengthening Families cohorts in local communities. These initiatives are very compatible and integrate well with the Triple P program. The C&Y Branch's goal is to have DSS add Triple P to their menu of approved family strengthening programs that can be supported by local DSS funds. Progress has been made with this challenge with DSS offering TANF funding to support Triple P in FY17. A second challenge will be expansion beyond the ability of Title V funding. A Triple P funders alliance will continue to be developed to identify other sources of funding (other partner agencies, such as the NC Partnership for Children) who will join with the Branch to expand Triple P in NC. Another challenge is to expand Triple P to NC's significant military community, and this will best be met by partnering with Triple P America. Lastly, the collection of data from practitioners and local implementing sites will continue to be a challenge as Triple P expands to additional

counties. Memorandums of agreement will need to be executed to assure that the statewide data collection and reporting system includes all Triple P services.

The Duke Endowment has funded an implementation study of two local Triple P sites. The study has determined how closely the Triple P Implementation Framework was followed during initial implementation of the programs. The Triple P Implementation Framework is based on the same implementation science research that supported the development of the National Implementation Research Network (NIRN) at the University of North Carolina at Chapel Hill. The study will continue investigating the implementation of Triple P with a second round of funding from Duke Endowment.

Sites fully funded by Title V for implementation in FY14 will be reduced to a maintenance level in FY17, with the funding being rolled forward to support new maintenance of Triple P work in all the currently funded counties. The C&Y Branch is providing maintenance (or base funding) of the program with a regional coordinator who will lead newly formed regional sites. The regional sites will consist of two or three previous sites combined to form seven regions across the state.

During FY17, measures will be initiated to reduce turnover and increase job stability of the Child Care Health Consultants (CCHCs) serving child care centers. Furthermore, relationships will be built with local non-CCHC counties to establish these services. The state Child Care Nurse Consultant will explore means by which temporary grant-funded positions can be converted to permanent funded positions within LHDs and will provide workshops for early educators in counties without CCHC services on medication administration, emergency preparedness and response (EPR), vaccine preventable diseases, asthma, and allergies. A hiring/supervision manual will be developed for agencies and supervisors of CCHCs to be used by the NC Partnership for Children, local Smart Start partnerships, and Resource and Referral Centers.

The C&Y Branch will continue to use Title V funds to support the NC Child Care Health and Safety Resource Center (CCHSRC). The Center will provide support to the more than 7,000 licensed child care centers and 150 local CCHCs across the state. Two cohorts of 20 newly hired local CCHCs will be trained and certified. A database of licensed child care facilities will be maintained, and the online learning center will be enhanced to include information on the latest rules and regulations for child care facilities.

Funding has been increased to provide broader coverage of vision screening for both school-age and preschool age children with Title V funding the preschool services. 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 471,051 school age children had their vision screened in 2015 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 FY15, 30,182 children were screened and 10% were referred for further care. School nurses work with children and their families to secure appropriate follow-up care. Educational materials will be provided statewide on eye and vision health. Vouchers for services and eye glasses for children who do not qualify for other assistance through public or private insurances will also be provided.

### **Child Health - Annual Report**

The following services and programs, while described separately, represent the components of a system of care for young children supported by Title V funding in FY15 in an effort to improve the health of all children and decrease child deaths and morbidity.

Additional topics included in the regional trainings included updates on clinical policies and procedures; early brain development, toxic stress, and resiliency; Adverse Early Childhood Experiences (ACEs); the importance of nutrition

and physical activity in early childhood; and serving the adolescent and special needs populations.

Trainings have also been developed by the PMC as part of the ERN training program about the use of two evidence-based parent-completed developmental screening tools – the Parents' Evaluation of Developmental Status (PEDS) and Ages & Stages Questionnaires<sup>®</sup>, Third Edition (ASQ-3<sup>™</sup>). Both trainings were archived for ongoing training by LHD staff. The PMC also provided webinar training to LHDs on the M-CHAT-R/F<sup>™</sup> screening tool for autism spectrum disorders in the winter of 2015. LHD nurses are required to administer the MCHAT as part of well child check-ups. In addition, the PMC developed a training module on vision screening in partnership with Prevent Blindness NC that continues to be used in the training of ERNs. The training has been archived and is available as needed.

General developmental screening has been included as part of the Kindergarten Health Assessment which has been required for all children no earlier than 12 months before entering kindergarten. Ninety-seven percent of children received kindergarten health assessments prior to entering kindergarten for the first time in 2014. These children are followed closely by school nurses to assure that requirements are met that allow them to enroll in schools in a timely way.

Work within the NC Child Fatality Prevention System was continued in FY15. The CFPT Coordinator conducted over 35 site visits to monitor contracts with local CFPTs and facilitated three webinars for the members of the 100 County CFPTs entitled: Suicide and Self-Inflicted Injury Among Youth in North Carolina (in collaboration with the NC Injury and Violence Unit); Education About Emergency Preparedness for all Children (with the NC Office on Disability and Health); and Distracted Driving: Improving Highway Safety Among Youth in NC (with guest speakers from the Catawba County CFPT and the UNC Highway Safety Research Center). A training needs assessment was completed by local CFPTs in FY15. Of the 15 categories represented in the assessment, these webinar topics were the top three training needs identified. Over 150 local CFPT members participated in these webinars including staff members from LHDs, law enforcement agencies, and Guardian Ad Litem. CFPT refresher trainings were presented to 168 members of 21 local teams via site visits and telephone conference calls which focused on the role of the local teams in the state child death review system and components of well-written system problem descriptions and recommendations for prevention of future fatalities.

Local CFPTs were involved in a myriad of educational programs to inform their communities about child fatality prevention and child safety. One example includes an eastern county which participated in the development of a two-day Suicide Prevention Symposium as a collaborative project that was adopted by the CFPTs and Community Child Protection Teams in eight counties across northeastern North Carolina. Over 150 people attended this symposium. In this same county, the local EMS, County Sheriff's Office, NC Highway Patrol and the local W82TXT (wait-to-text) Campaign provided information on driving safety to members of the local high school one week before prom activities in 2015. A local team in the southern part of the state partnered with a Fire Chief's Association and the Fire Marshall's Office to implement the Bright Idea-Fire Safety Program. This program purchased and installed combination smoke/carbon monoxide detectors to 250 participants in the WIC Program who were without these safety devices in their homes. This local team also sponsored a National Poison Prevention Week in March 2015 with a focus on raising awareness through social media on medication safety, prevention of prescription drug abuse among teenagers, and the dangers of laundry detergent pods to young children who sometimes mistake them for candy.

Work done by the C&Y Branch Pediatric Nutrition Consultant to help prevent obesity and to promote healthy living in FY15 was highlighted by work with partners. The consultant partnered with the Farm to School Coalition of NC and presented at a statewide conference on expanding and strengthening farm to school initiatives across the state and partnered with EFNEP to present regional child health nurse trainings. Training topics included differentiating appropriate stages for readiness to change and use of motivational interviewing strategies to supplement and sustain health and nutrition behavior modification efforts of clients (ages 2-17) and their families. Another topic was

using the Dietary Guidelines for Americans and the Nutrition Facts Panel to develop effectual pediatric nutrition program policies, execute proficient pediatric nutrition assessments and give reliable health and nutrition guidance to clients and their families. The consultant also evaluated the nutrition guidance included in NC's Plan for Promoting the Health of People with Disabilities 2010-2020 – Physical Activity and Nutrition section (10-year strategic plan). 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.

Two presentations were developed as part of a Maintenance of Certification Part IV Quality Improvement board certification activity that was launched in the spring of 2015 about early childhood obesity by the PMC in partnership with the Pediatric Nutrition Consultant and NSB. The activity was part of an effort by CCNC, the NCPS, and the NC Academy of Family Physicians as a means to provide continuing medical education for pediatricians and family physicians. The presentations focused on the national recommendations about providing care in the primary care setting for infants birth to two years and children two to five years of age using national recommendations.

The three Title V funded NFP sites (Buncombe, Wake and Rutherford/Polk/McDowell) completed 5,725 home visits, received 718 referrals into the program, enrolled 217 families (13% enrollment rate), and graduated 87 families in FY15. As of June 30, 2015 they had a combined program capacity of 400 families and served 480 families. The local implementing sites participated in the following trainings: CQI 101; Family Engagement and Retention; Data Collection and Reporting; Better Results for Children and Families Through Systems Integration; Responding to Behavioral Health Needs of Families in Home Visiting Through Systems Integration; Addressing Parental Depression Through Home Visiting; Recognizing and Responding to Trauma: The ACE Study and Trauma-Informed Care; Working Together to Provide Stability for Families: Home Visiting and Homeless Service Systems; and Intimate Partner Violence. They strengthened their CABs and enhanced connections with other community groups such as community action groups and local media outlets to promote programs and build avenues for support, sustainability, and increased referrals. Local NFP sites have made local agreements with PCM, CC4C, WIC programs, local OB/GYN's, schools, and other agencies to increase the number of referrals into the program. The program has shown improvement in breastfeeding, better birth spacing, increased appropriate and completed referrals for community-based services, better birth outcomes, and reduction in abuse and neglect.

Challenges in the NFP programs included flat funding, lack of mental/behavioral health resources and providers, family retention once enrolled, maintaining consistent case documentation, and maintaining service levels through staff vacancies and extended leave. The local CABs were challenged to identify local resources. As a result, several local governments included NFP in their budgets. Additional funding came from local grants and businesses who contributed in-kind donations such as cribs, strollers, diapers, and formula, etc.

The C&YB supported 33 counties across NC for the implementation of Triple P. In those counties, 1,843 practitioners have been trained to date with 11,589 families being served, which has impacted 14,053 children. NC has been recognized by Triple P America for developing a Triple P State Learning Collaborative, comprised of all the local Triple P coordinators, C&Y Branch Triple P central office staff, and Triple P America implementation specialists. In addition, internal and external stakeholders were invited to attend each Collaborative. The Collaborative provided quarterly opportunities for training, program planning, continuous quality improvement initiatives, peer-to-peer support for the local coordinators, and identification of efficiencies in purchasing materials and media buys in bulk. The Triple P Stay Positive Campaign was purchased for the entire state, which included print materials and a parent/provider website in English and Spanish. In addition to the over 3,000 Triple P Online (TPOL) access codes that had been purchased previously, an additional 856 codes were purchased in 2015. These access codes are available to any NC family, which allows families to work through Triple P in eight online modules. A trained Triple P practitioner has been hired to manage the TPOL program, assigning the access codes and providing support services to parents. 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.

The Triple P Program has experienced several challenges in rural counties including 1) identifying appropriate practitioners to train in cohorts of 20 participants per training session; 2) establishing peer-to-peer support networks across multiple sectors; 3) reaching families with Triple P services because of distance and lack of transportation; 4) assisting families with finding the appropriate trained practitioner to meet their level of need; and 5) engaging trained practitioners in delivering Triple P to parents. In FY15, additional specialized workshops (refresher courses for practitioners) were offered to help reengage them in delivering Triple P and participating in peer-to-peer support networks. These workshops were to strengthen implementation and encourage creative initiatives to bolster provider participation in peer-assisted supervision and support. Data collection and evaluation tools were revised to offer stronger analysis for the Triple P Program.

The State Child Care Nurse Consultant position supported by Title V worked in conjunction with three regional child care health consultants supported by the Race to the Top—Early Learning Challenge grant. Together these staff members trained on medication administration and emergency preparedness. In addition, the NC CCHSRC, jointly funded with Title V and Child Care and Development Block Grants, was able to train and qualify two cohorts of CCHCs totaling 22 participants with the assistance of the State Child Care Nurse Consultant. The Family Child Care Home Health bulletin was distributed three times during the year to over 7,000 child care sites and 150 local child health care consultants. The State Child Care Nurse Consultant contributed an article for the bulletin entitled "Emergency Medication in Child Care." Title V funding also supported the annual conference of CCHCs, with an attendance of over 80 participants. In addition, the NC CCHSRC maintained an online database of all the licensed child care facilities in the state which allows families to search and pre-select centers based on available services and their quality rating (star rating system, with five-star being the best). The NC CCHSRC also maintains an online training center that included modules on health and safety issues, licensure requirements, state/federal laws relating to child care, medication administration, and safe sleep.

Through The Race to the Top-Early Learning Challenge program, in collaboration with NC Partnership for Children and the NC CCHSRC, the CCHC Model was developed and implemented in FY15 to standardize the practice of child care health consultation across North Carolina. The NC Health and Safety Checklist was developed and implemented with the intention of turning the Excel-based tool into an application for tablets. A "coaching" framework for delivering CCHC services was established that effected a change in skills, knowledge, behavior and attitude among the early care and education community. An Orientation Manual was developed and distributed to new CCHCs (those who have not yet started the CCHC Training). The NC CCHC Association provided workshops on toxic stress in child care at regional meetings. Thirty welcome packages were sent monthly to new child care facilities in NC which included information on vaccine preventable diseases, CSHCN, illness prevention and safety in the child care environment and referrals to local county CCHCs.

The C&Y Branch Supports 1 FTE as a Family Liaison Specialist with the role to help facilitate the parent/professional engagement in all programmatic levels. The C&Y Branch parent engagement model is built on three constructs: 1) build and maintain relationships with families of CYSHCN and ensure Branch programs and services are family-centered; 2) recognize and respect the knowledge, skills and expertise that parents of CYSHCN possess; and 3) assure that family members are actively engaged in program planning, implementation and evaluation. These constructs are fulfilled via parents functioning as co-trainers, mentoring other parents, providing outreach to specific populations, reviewing material or documents for public distribution, and/or participating in advisory committees or focus groups. Parents are matched to expressed activity interest (e.g., co-trainer) and topic (e.g., CYSHCN, school health) via an annual C&Y Branch interest survey. Successful engagement models include parents co-training with pediatric medical consultant on health literacy or adolescent to adult health transitions. Other

engagement examples include the parent peer training model. Using the nationally researched Parents as Collaborative Leaders curriculum developed by the University of Vermont and the PACER Center, a cadre of parent trainers lead parents through the curriculum which focuses on leadership development skills for application within the local community. In FY15, five groups of parents (n=39) located throughout the state participated in the initial rollout of this endeavor. Parents also have opportunities to participate in time limited committees. As a result of the recent strategic planning process, three committees were formed to review practices across all Branch programs related to Branch communication, training and quality assurance efforts. Committees, which meet on a monthly basis, are made up of staff members and parents to ensure a broad range of feedback and perspectives. During FY15, at least 68 parents contributed over 734 hours of parent feedback, support, and experience toward improving child outcomes among C&Y Branch programming.

## Adolescent Health

### State Action Plan Table

#### State Action Plan Table - Adolescent Health - Entry 1

##### Priority Need

Promote healthy schools and students who are ready to learn

##### NPM

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

##### Objectives

1. By 2020, increase the percent of adolescents who receive annual well visits to a minimum of 86% as measured by NSCH.

##### Strategies

1. Increase outreach for insurance enrollment through exhibits/presentations at state conferences or other events for school personnel, adolescents or families of adolescents.
2. Participate on advisory boards of Migrant Head Start Health Advisory Board and other adolescent focused groups to increase access to care for the adolescent population.
3. The School Health Center Program will collect data on academic achievement of students served by SHCs and analyze for changes in academic outcomes relative to health services received. Plan for data collection will be collaborative within C&Y Branch, DPI and NCSCHA
4. Collaborate with key stakeholders (i.e. DPI, DSS, Juvenile Justice, NCCHC, school health nurses, school health centers, child nutrition services, etc.) for planning, standardization, collection and reporting of data on key health and learning indicators.
5. Expand C&Y Branch capacity to provide school health technical assistance to the rapidly growing number of charter schools across the state.
6. Child Health Agreement Addenda will be reconfigured to support increased evidence-based services for adolescents based on county need and data.

## ESMs

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

## 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 with a mental/behavioral condition who receive treatment or counseling

NOM 19 - Percent of children in excellent or very good health

NOM 20 - Percent of children and adolescents who are overweight or obese (BMI at or above the 85th percentile)

NOM 22.2 - Percent of children 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

## State Action Plan Table - Adolescent Health - Entry 2

### Priority Need

Promote healthy schools and students who are ready to learn

### SPM

The ratio of school health nurses to the public school student population

## Objectives

By 2020, the ratio of school health nurses to students will improve to 1:1000

## Strategies

1A. Support the maintenance of local school nurse positions through the school State Nurse Funding Initiative. 1B. Hold the annual NC School Nurse Conference offering a variety of continuing education opportunities to the state's school nurses. 1C. The School Health Nurse Consultant (SHNC) Team will continue to improve and promote health for children and adolescents at both the individual student and program level in all NC schools including public, charter, independent and resource schools through the provision of consultation and technical assistance, the development and offering of related continuing education, and monitoring and guidance related to requirements and best practice.

## Measures

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

Annual Objectives						
	2016	2017	2018	2019	2020	2021
Annual Objective	79	81	83	85	86	86

**Data Source: National Survey of Children's Health (NSCH)**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2011_2012	78.2 %	2.7 %	589,174	753,357
2007	84.3 %	1.8 %	613,290	727,130
2003	72.0 %	2.0 %	511,251	709,966

**Legends:**

- 🚩 Indicator has an unweighted denominator <30 and is not reportable
- ⚡ Indicator has a confidence interval width >20% and should be interpreted with caution

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

Annual Objectives					
	2017	2018	2019	2020	2021
Annual Objective	5,764.0	5,879.0	5,997.0	6,117.0	6,239.0

**Adolescent Health - Plan for the Application Year**

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 DHHS. The C&Y Branch houses the State and Regional School Health Nurse Consultants who are responsible for planning, training, and consulting all the school nurse positions located in LHDs, schools, and hospitals throughout the state. School health programs are coordinated across different state agencies through a matrix model, which focuses on the development, and implementation of a comprehensive school health system of care, including collaboration with key partners in school health, both within the DPH and DPI and with other agencies to improve the health status of students. This matrix team brings together representatives of programs and services for school age children all across DPH and at DPI. The team meets five times a year and brings a focus on school age, preadolescent and adolescent children. Team members receive regular program updates and enjoy opportunities to network and assist each other in their strategies to service school age children and adolescents. Educational and informational topics are offered at each meeting, some examples of which are: suicide prevention, school health outcomes from the School Nurse Case Management initiative, SHC data and outcomes, environmental issues for schools and communities, and other presentations. Because the Matrix Team focused on the collective impact of bullying during FY16, the team will continue to build consensus and consider how bullying prevention can be implemented through contractual language where it makes sense in an effort to reduce bullying through our work with contractors during FY17.

DPH funds 32 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. SHCs are considered to be one of the most effective and efficient ways to provide preventive health care to children. Few programs are as successful in delivering health care to children at low or no cost to the patient, and 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. According to the 2011/12 NSCH, only 78.2% of adolescents received a preventive medical visit in the past year, and this was down from 84.3% in the 2007 NSCH. More YSCHN (98.1%) had a visit than non-YSCHN (71.1%) and more non-Hispanic White youth (81.5%) had a visit than non-Hispanic Black youth (77.6%) or Hispanic youth (69.6%), although the confidence intervals for Black and Hispanic youth survey data were wide, so should be interpreted with caution.

In one effort to help increase this percentage, the WCHS chose the following ESM for this NPM: number of adolescents receiving a preventive medical visit in the past year at a LHD. While the number of adolescents seen for any reason at a LHD is small, encouraging them to return for an annual preventive medical visit is important. The number of adolescents receiving a preventive medical visit in LHDs has fluctuated greatly over the past five years as there were 6,064 in 2011, a jump up to 6,771 in 2013, and decline to 5,540 in 2015. North Carolina SHC Data (FY15) demonstrates that 12,447 student enrollees received a preventive medical visit, including 1,652 students at SHCs located in LHDs. To increase the number of youth receiving well visits in LHDs, Title V funds will be used to

encourage development of teen clinics, outreach to teens for annual visits, and outreach about immunizations necessary for adolescents. C&Y Branch program staff will provide education at quarterly regional child health nursing trainings and through ongoing technical assistance to LHDs about the importance and quality of the annual well adolescent visit with an emphasis on resiliency. Training topics will include the use of motivational interviewing, promoting self-management of care, and supporting health care transition of all adolescents. Enhanced role nursing trainings will continue to include a focus on quality adolescent health services and the need for an annual adolescent preventive health visit including the use of motivational interviewing to promote shared decision making and positive youth development.

In addition to the ESM, the WCHS decided to continue to retain former SPM #6: Ratio of school health nurses to the public school student population as a SMP since it is an important measure of health services for school age children and adolescents. This ratio was 1:1,112 for school year 2014-2015, thus a slight drop from the 2013-2014 ratio of 1: 1,160, but nowhere near the goal of 1:750 students. This was viewed as a success since student enrollment increases each year. All districts face budgetary challenges that require decisions related to staffing. NC 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. The School Health Nurse Consultant (SHNC) Team monitors district compliance with this requirement at three separate times during the school year and works with local school districts to address staffing issues. Information related to school nurse positions and ratio will continue to be collected via the NC Annual School Health Services Report.

Parents and teens participate in the planning and implementation of policies for SHCs through their membership in the School Based Health Center Association 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. SHCs have been involved locally in providing information sessions and updates relating to emerging trends in adolescent behavioral health issues such as bullying and suicide. Behavioral health professionals also provide a vast array of educational information to help adolescents cope with anxieties common to adolescents today.

The Program Consultant for SHCs is the NC Adolescent Health Coordinator who works in collaboration with the National Adolescent Health Coordinators. This collaboration informs and strengthens NC's programs for adolescent health. Data collection from SHCs provides a baseline for planning services that target adolescents. Credentialing/Re-Credentialing in partnership with DMA will be expanded to include SHCs that are not currently funded by DPH in an effort to improve the quality of school based health clinical services to adolescents statewide. The NC SHC program has learned through data collection and observation of SHC models that "on-site" clinical services fare better in terms of return on investment, as well as the ratio between funds utilized and students served. The C&Y Branch will continue to place a high priority on funding sites with demonstrated capacity for serving the highest potential number of students for the funding they receive. During 2017, the Adolescent Advisory Group will continue to convene parents, students, and SHC professionals for the purpose of shaping adolescent health services in NC. As a first step to creating this advisory group and an Adolescent Health Resource Center (AHRC), the Adolescent Health Coordinator completed research including investigation of other states' programs, literature reviews, and focus groups of teens to determine the best practices and advice from adolescents. The AHRC, which

is to be established within the C&Y Branch, will support 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. In the frame of Positive Youth Development, the AHRC aims to engage youth in their own health and empower a culture of collaboration among the state's adolescent/young adult population and the programs that serve them.

In addition to working with the SHCs, the School Health Unit makes available the service of one state school health nurse consultant and six regional school health nurse consultants to provide leadership, training, and consultation services to school nurses. The SHNC Team promotes and improves health for adolescents at both the individual student and program level in all NC schools including public, charter, independent and resource schools. This work has and will continue through the provision of consultation and technical assistance, the development and offering of related continuing education, and monitoring and guidance related to requirements and best practice. Utilization of the services of the consultant team has continued to increase as numbers of students, schools and health concerns grow.

The annual growth in NC Charter Schools continues. The position of Charter School Health Consultant was hired in November 2015 and has been involved in orientation and position development, as this is a new position. At this time a contact list of school staff responsible for student health needs has been developed to allow direct provision of information and updates to Charter Schools. A basic Charter School Health Survey was developed and distributed in spring 2016. Planning has begun for regional Charter School updates related to student health for the start of the SY17. The Charter School Health Consultant is now directly engaged by school staff for assistance which has assisted with work load issues for the SHNC Team.

For the past 32 years, DPH has planned, sponsored and provided an Annual School Nurse Conference which is attended by at least 50% of the state's 1,200 school nurses. Families participate in the conference planning and also in presentations to the audience of school nurses. Parents are supported to attend the conference which focuses on nursing education and collaboration between schools, families and the healthcare community. NC has the highest percentage of nationally certified school nurses in the US and the School Nursing Program works hard to continue that high level of excellence to assure high quality health care services to children and adolescents in schools and communities across the state through training and support for nurses in achieving certification and by requiring certification in the nursing positions funded by DPH.

The SHNC Team 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 included SHCs, The North Carolina Collaborative for Children and Youth, NC DPI Regional Roundtables, School Health Advisory Councils and many others. Parents and teens are important contributing members in many of these collaborative groups. Services delivered to these 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 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.

Survey results and participant evaluations from past continuing education offerings continue to support planning for opportunities to cover topics related to adolescent health for FY17. A session about self-management of care and other aspects of health care transition based on case studies facilitated by a school nurse, parent, youth and the PMC is being developed. The school nurse who is part of the panel has developed a curriculum and toolkit for school nurses that will also be shared to advance care management around health care transition. Continuing education related to anxiety in adolescence is also being offered at spring regional updates. Additional focus on current adolescent health needs also resulted in seven adolescent health specific offerings for the school nurse annual

conference in the fall of 2015.

C&Y Branch staff will continue to work with CCNC Pediatrics and DMA to expand outreach to increase both the number of visits and the quality of the care provided during the annual well adolescent visits provided to Medicaid and Health Choice (NC CHIP) enrollees. The importance of annual surveillance using the HEADSS, Bright Futures, or GAPS tools will be emphasized. The need for additional screening for mental health using a depression screening tool will be promoted and the CCNC Adolescent Depression Screening toolkit will be promoted. The C&Y Branch will increase their work with the WHB to increase the number of adolescents receiving family planning services in LHDs that also get annual preventive visits. The C&Y Branch also plans to work more with the Communicable Disease Branch in the Epidemiology Section of DPH to increase the number of preventive visits provided to adolescents that present for treatment of sexually transmitted diseases locally. The issues about addressing adolescent confidentiality in all LHD settings will continue to be addressed with the health of DPH legal counsel and staff at the UNC School of Government. Strategies related to maintaining confidentiality in the patient portal, electronic health record, billing and claims will continue to be explored.

An evidence-based parenting program funded in NC, Triple P, has an adolescent component to help families manage behavioral problems which has been implemented in selected areas of the state. 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. Another evidence-based program, NFP, provides services to teen moms in 22 counties statewide, plus the Eastern Band of Cherokee located in Western North Carolina. This program offers intensive home visiting to teen moms from pregnancy to the child's second birthday and is vital for intervening in early childhood trauma consequences and teaching parenting skills in order to grow young children into successful adolescents and beyond. In FY15, there were 83 additional practitioners trained in Teen Triple P, (one in Level 2 Teen Seminar, 20 in Level 2 Brief Primary Care Teen, 47 in Level 3 Primary Care, and 15 in Level 4 Standard) and 642 families of teens were served. This ensures a growing support base for adolescent appropriate services in the communities across NC. As access to Triple P has now become web-based, families statewide can learn and receive support for positive parenting of teens.

Having more parents and teens at the table will improve the adolescent-friendly services provided by school health programs. Students and parents serve on the local School Health Advisory Councils (SHACs) and provide collaborative input into local policies and implementation strategies. In addition, parents working with the C&Y Branch will continue to provide collaboration and training assistance on health care transition for adolescents along with C&Y Branch professional staff.

An emphasis on bullying prevention and caring for adolescents who are victims of bullying will continue to serve as strategic priorities for the upcoming year in school health programs. The ongoing collective impact process will consider strategies that should be implemented, including contractual language to address bullying at the local level, and will include input from parents, community partners, SHACs and adolescents on how to best approach bullying prevention in schools and the community. Continued collaboration with DPI will be critical in linking strategies from both departments for the best coordinated outcomes at the local level. In addition, the C&Y Branch is working on a series of high quality trainings to be made available widely by webinar that impact adolescent health including adolescent brain development in relation to risky behavior, bullying prevention, and system interactions affecting services for this population group.

### **Adolescent Health - Annual Report**

In November 2012, the NCIOM released their 2012 Update to the NCIOM Task Force on Adolescent Health which provided information on progress made towards implementing the recommendations presented in the 2009 Healthy Foundations for Healthy Youth 10-year plan. The original task force developed 32 recommendations, with ten being

selected as priority recommendations. One of those was to establish an Adolescent Health Resource Center within DPH. The C&Y Branch has done a lot of leg work to establish this center. During 2014, the State Adolescent Health Coordinator conducted six focus groups of diverse adolescent populations to get their input on how they view health, what they see as issues affecting youth, and how youth access health information. The top concerns included lack of access to health information, stress/mental health, nutrition and healthy living, smoking, sexual health-birth control, and insurance information. They emphasized the need for a social media presence and that most youth access health information on the Internet. The Coordinator also completed a proposal for an Adolescent Advisory Council which, under the purview of a newly assigned Coordinator, has been developed and a launch date assigned. Advisory Council members recruited are representative of SHC Coordinators, DPI, Students, Parents, and NC School Based Health Alliance. The Advisory Council will be implemented via webinar and will seek guidance regarding SHC Quality Assurance, Credentialing, Data, and other emerging trends in health care delivery. Conversations with the MCHB Adolescent advisors and the state adolescent specialists have been ongoing. The C&Y BMT has identified the area of adolescence as a priority area in which to broaden services in the upcoming year with a great deal of interest in bullying intervention.

The 2014 fall regional child health meetings had a session on adolescent health which addressed barriers to care, ways for clinics to make their facilities more teen friendly, strategies about how to engage adolescents more in their health care and in health care transition. Bright Futures services for adolescents and the required and recommended screenings were also reviewed, as well as adolescent screening tools, immunizations, and confidentiality issues for adolescents. The fall provider webinars also addressed these adolescent health issues. The spring 2015 regional child health meetings had a session that include issues about toxic stressors for children and included information about addressing positive youth development in adolescents during well visits even though the focus of the session was on young children.

As youth suicide remains a critical concern, activity within NC around suicide prevention has increased. Trend data show that the rate (per 100,000) of suicide deaths among youths 15-19 (former NPM#16) dropped from 9.4 in 2009 to 6 in 2013, but then rose again to 10.3 in 2014. The lead agency for injury prevention, including suicide prevention, is the IVPB, and C&Y Branch staff members partner with them 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 has reviewed youth suicides and homicides and presented specific findings and recommendations about youth suicides to both the Intentional Death Committee of the NC CFTF and the NC CFTF as a whole. 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 take action on those recommendations. Five local CFPTs participated in team or community training programs about suicide and suicide prevention. Based on case reviews, local CFPTs made recommendations to be shared with the state CFPT and NC CFTF during this period such as a) invite a local speaker to present a program on NC's firearm safe storage laws; b) family, friends and others should take all suicide threats seriously and seek help for family members and teens contemplating suicide; c) increase mental health resources for each county; and d) if a student has a history of suicide attempts, the school staff should meet with the parents to inform them of the resources available. The local CFPT will continue to review the deaths of children including child deaths due to suicide. Based on a needs assessment from last year, the CFPT Coordinator will facilitate a webinar targeting all 100 county CFPTs on the topic of youth suicide prevention in FY16.

The C&Y Branch's BHCC was trained as an instructor in Youth Mental Health First Aid (YMHFA) in 2014 and conducted nine classes across the State, resulting in course completion by approximately 240 school health nurses. YMHFA is an evidence-based program that includes training on recognizing early symptoms of mental health issues and referring appropriately. The systematic feedback received from the participants was overwhelmingly positive with the vast majority endorsing that they felt better equipped to handle behavioral health situations in their schools as

a result of the training received. Additionally, the BHCC trained LHD Enhanced Role Nurse candidates in recognition/prevention of youth suicidal behavior and anxiety in children. The BHCC achieved additional training via webinars on the subject of youth suicide and informed the Regional School Health Nurse Consultants and the State School Health Center Consultant of numerous training opportunities. The BHCC maintains contact and collaborates with the Injury and Violence Prevention Branch at DPH. Behavioral/Mental Health services have become one of the most utilized services among NC school health centers with 12,397 student enrollees receiving behavior/mental health services in the Branch's funded SHC sites during FY15. Nationally and in NC, mental health services are the fastest-growing component of school-based health care. In the last ten years, the number of school-based health centers with mental health professionals on staff has more than doubled. The BHCC Clinical Consultant will continue to attend events directed towards coordinating NC's efforts to reduce suicide and suicide attempts among youth, including introducing approximately 16 classes (320 participants) in YMHFA, dependent upon adequate funds. Additional YMHFA classes will be held for school health nurses, training at least an additional 140 persons.

The state supported NC SHC Programs report that during FY15, there were 13,348 unduplicated students served during FY15 who received the following services: 32,268 – medical; 12,447 – preventive; 12,397 - behavior/mental health; and 3,068 – nutrition. SHCs generally do not turn patients away for lack of insurance or ability to pay for services. Of youth served in school health centers, 57% were covered by public Medicaid/Health Check/Health Choice insurance, 23.5% had private insurance, and 19.5% were uninsured. SHCs 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. Newly drafted 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 DMA and DPH to improve and ensure the quality of services to adolescents and to facilitate efficient Medicaid billing. To further enhance quality health services for adolescents, LHDs continued to use Bright Futures standards and forms to support evidence-based adolescent care as part of annual adolescent preventive medical visits. Audits of LHDs by the child health monitoring nurse and technical assistance from the regional child health nurses continued to monitor compliance with the DMA requirement for an annual adolescent visit and the other required components of the adolescent visit. All of the requirements for an adolescent visit continued to be included in the 2013 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.

During FY15, 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 was 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 included the following topics: Protecting Today's Children from Skin Cancer in Adulthood, School as a Safe Haven for Struggling Students, Drug and Alcohol Addiction in Teens, Important School Support Roles for NC Students, Preventing Suicide, Working with Noncompliant Teens, NC Youth Drug Trends, Understanding Addiction and Trauma in Students, Adolescent Eating Disorders Update, and Serving LGBTIQ Youth in Schools. The *Building the Core Elements for Health Care Transition for All Adolescents* presentation from the school health annual conference was developed into a stand-alone topic and is currently being offered at spring regional updates by the Regional School

Health Nurse Consultants, with plans to continue through all regions during FY16. Other educational sessions were completed through conferences and regional offerings. Consultant Team members also provided individual district continuing education on request related to emerging local adolescent needs and issues. Successes of note included an 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.

The 2014-2015 North Carolina public school population of 1,433,592 students included approximately 53% of students aged 10 to 18 years. Services that were delivered to these students were reported in the North Carolina Annual School Health Services Report Survey, with 100% participation. Those services included repeated health education presentations by school nurses on alcohol and drug abuse (50 districts), tobacco use (49 districts), reproductive/sexual health issues (94 districts), and other health topics for groups of students with a total of 25,100 individual sessions delivered on these and other topics. The consultant team worked with school nurses to identify serious adolescent health concerns for referral and future prevention including pregnancy (2485), prevention of pregnancy related school dropout, and suicide attempt (750). Student counseling related to these types of issues by school nurses was an important factor in providing treatment and ameliorative services. School nurses and school staff utilized the consultant team for recommendations and resources related to this work. The total number of student counseling sessions in the adolescent grades was 175,283, up from 123,000 in the last school year. Counseling sessions included both physical and mental health concerns. Successes of note included a continued decline in the number of pregnant adolescents and greatly increased opportunities for counseling and health education reported during FY15.

## Children with Special Health Care Needs

### State Action Plan Table

#### State Action Plan Table - Children with Special Health Care Needs - Entry 1

##### Priority Need

Improve the health of children with special needs

##### NPM

Percent of children with and without special health care needs having a medical home

##### Objectives

1. By 2020, increase by 10% the percent of children with and without special health care needs that are satisfied with their medical home.
2. By 2020, increase the percent of providers by 30% who are educated on the importance of providing transition services for adolescents with and without special health care needs to adult medical care.

## Strategies

1A. Attend meetings and outreach activities with the Affordable Care Act agencies that hire navigator and certified-application-counselors as well as FQHC, ORR Farmworker Outreach Clinics to ensure families with children aging out of Medicaid/NCHC are aware of coverage available through the Marketplace 1B. Improve systems of care such as Innovative Approaches Initiatives and share/replicate best practices and lessons learned across the state. 1C. Child health programs will use available data to identify children not assigned to a medical home, connect and educate children and families on the importance of establishing a medical home and assist with appropriate linkages. 1D. CH program will continue efforts to promote medical home through regional training meetings, technical assistance on best practices and use of a QI model to improve medical home outcomes.

1E. Advertise the CYSHCN Help Line at conferences, festivals and trainings to increasingly link parents of children with special needs to available resources and services, including medical homes 1F. Through monitoring and credentialing, the NC School Health Center Program will credential and re-credential state funded school health centers to assure quality of health services for adolescents. Data measured includes children with medical and dental homes

2A. Establish a baseline starting in FY17. 2B. Facilitate communication and sharing of information among providers and families across the state and related to health care transition using emails, conference calls, webinars, or face to face meetings at least four times a year. This will be done through an email list of pediatric and adult health care providers and other professionals (i.e., social work) from the six academic centers, CCNC, and several community practices across the state with an interest in health care transition, as well as the Branch Family Partners network. 2C. School Health Center Program will collect data on transition services being carried out in SHCs that are state funded. 2D. School Health Center Program will collect data on transition services being carried out in SHCs that are non-state funded through credentialing activities

2E. School nurses will be trained to increase their knowledge of transition issues and implement procedures for improving transition skills and planning by students needing transition support. 2F. Child Health Regional Meetings will provide discussion and training about the importance of providers assisting adolescents with transition to adult care.

## ESMs

ESM 11.1 - Number of policies, practices, and resources changed to support improved outcomes for CYSHCN by counties implementing Innovative Approaches strategies.

## NOMs

NOM 17.2 - Percent of children with special health care needs (CSHCN) receiving care in a well-functioning system

NOM 19 - Percent of children in excellent or very good health

NOM 22.1 - Percent of children ages 19 through 35 months, who completed the combined 7-vaccine series (4:3:1:3\*:3:1:4)

NOM 22.2 - Percent of children 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

## State Action Plan Table - Children with Special Health Care Needs - Entry 2

### Priority Need

Provide timely and comprehensive early intervention services for children with special developmental needs and their families.

### SPM

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)

### Objectives

1. By 2020 demonstrate improvement in at least 30% of the counties in using a coordinated approach to local and state planning for early childhood and early intervention services. Partners include NC Partnership for Children, Early Intervention Branch, Women's Health Branch, families, Prevent Child Abuse and others as appropriate.
2. By 2020, demonstrate improvement on all indicators in the Part C State Performance Plan/Annual Performance Report

## Strategies

1A. Early Childhood Comprehensive System (ECCS) Program Manager will facilitate bi-monthly Early Childhood Matrix Team Meetings that includes early childhood staff from C&Y, WH and EI Branches. 1B. Replicate the MIECHV Learning Center model to include training for Branch staff and child health providers/partners across the state based on identified core competencies 1C. Early Childhood Matrix Team will convene every two months to facilitate communication, partnerships and planning among early childhood programs. 1D. Deploy the centralized intake and referral system for early childhood and early intervention services to interested counties. 1E. The C&Y, WH and EI branches will collaborate in the selection and implementation of evidence-based practices to support social/emotional health of infants and toddlers with disabilities and their families.

2A. Fully implement the multi-year State Systemic Improvement Plan (SSIP) to improve the outcomes for children with disabilities and their families by assisting CDSAs and community providers with implementing evidence-based practices focused on improved social/emotional outcomes; ensuring children and families are served in natural learning environments using family identified routines as the basis for supporting families; developing a comprehensive personnel development system; expanding the integration of child global outcomes into the Individualized Family Service Planning process; and examining the ITP's family outcomes survey and better utilization of the data collected to improve family engagement and child/family outcomes.

## Measures

### NPM 11 - Percent of children with and without special health care needs having a medical home

Annual Objectives						
	2016	2017	2018	2019	2020	2021
Annual Objective	58	59	60	60	60	60

Data Source: National Survey of Children's Health (NSCH) - CSHCN

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2011_2012	51.4 %	3.8 %	249,505	485,505
2007	55.7 %	3.6 %	262,267	470,854

**Legends:**

- 🚩 Indicator has an unweighted denominator <30 and is not reportable
- ⚡ Indicator has a confidence interval width >20% and should be interpreted with caution

**Data Source: National Survey of Children's Health (NSCH) - NONCSHCN**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2011_2012	56.2 %	2.1 %	962,280	1,712,102
2007	62.4 %	1.9 %	1,022,160	1,638,313

**Legends:**  
 Indicator has an unweighted denominator <30 and is not reportable  
 Indicator has a confidence interval width >20% and should be interpreted with caution

**ESM 11.1 - Number of policies, practices, and resources changed to support improved outcomes for CYSHCN by counties implementing Innovative Approaches strategies.**

Annual Objectives					
	2017	2018	2019	2020	2021
Annual Objective	20.0	25.0	30.0	20.0	25.0

**Children with Special Health Care Needs - Plan for the Application Year**

As detailed in the Child Health Domain, the WCHS supports a comprehensive, coordinated, family-centered system of care for children regardless of whether they are CSHCN or not. Several 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.

Promoting the medical home concept is a core message within all C&Y Branch programs, so much work is being done to improve NPM#2 (Number of children with and without special health care needs, ages 0 through 17, who meet the criteria for having a medical home). The 2011-12 NSCH indicates that in NC, 51.4% of CYSHCN had a medical home as compared to 56.2% of children without special health care needs. According to the survey, older CYSHCN, ages 12 to 17, are more likely to have a medical home than children in the 0-5 or 6-11-year age groups, but the CIs are so wide for these data that there may not be a real difference. For non-CYSHCN, the CIs are smaller and the reverse is true, with children ages 0-5 years more likely to have a medical home than older children.

In FY17, information to support the medical home approach and partnering with medical homes will be included in two regional child health trainings, reaching more than 300 LHD clinical staff. The trainings will include improving medical homes for children in foster care and for children with concerns for and with ADHD. Trainings are also planned that will address adolescent sexuality and reproductive health choices for youth with and without special health care needs using a medical home approach and family engagement in the clinic setting and health department. Bright Futures forms continue to be used in all LHDs to support comprehensive care of CSHCN using the medical home approach and the identification of children as CYSHCN. Audits of services in LHDs 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.

Another major effort is the Care Coordination for Children (CC4C) program, a population management program for

children ages 0-5 years. The CC4C 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 toxic stressors 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. One other strength of this program is that it promotes the medical home approach. Care managers will continue to be required to develop relationships with medical homes in their communities in order to identify children for CC4C program services. Once a child is identified and engaged in CC4C services, the care managers will continue to be required to involve the medical home in the care planning process for that child and family. The CC4C program manager will continue to be 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. Ongoing monthly conference calls with WCHS, DSS, and CCNC staff representation are held to discuss systems issues and challenges of working with medical homes. Webinars will continue to be developed and made available for CC4C care managers to help them partner with medical homes to care for children with a variety of conditions such as sickle cell and neonatal abstinence syndrome, as well as strengthening resiliency or protective factors.

State funded SHCs are required to report the number of children seen who have medical and dental homes and assist families in obtaining access if they are not currently receiving services. SHC staff will continue to share information with a student's medical home or identify one if an enrolled student does not have a medical home. In addition, the C&Y Branch's four regional genetic counselors continue to assess whether children seen for genetic services have a medical home and facilitate establishment of one. Pediatric and prenatal medical home checklists will be shared with families with CYSHCN to improve their ability to identify the characteristics of an optimal medical home for children with genetic conditions.

The NC Innovative Approaches (IA) Initiative supports the development of community-based and family-focused systems of care for 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. IA uses a systems change approach rather than a program based approach to address community improvements for families of CYSHCN. IA requires a strong collaborative partnership LHDs, local CCNC networks, and families of CYSHCN as leaders improving the system of care for CYSHCN. Based on data from the Help Line and other data sources, the C&Y Branch developed the IA Initiative as a community approach to help families of CYSHCN. The C&Y Branch and the IA counties are partners in finding and sharing the innovative solutions to reducing the complexity and improve health outcomes for CYSHCN.

In FY 17, the C&Y Branch will support five LHDs (serving fourteen counties) to assess and improve the local systems of care for CYSHCN through its IA Initiative. FY17 marks the beginning of the three year grant cycle (2016-2019) for the third cohort of IA counties. IA has expanded its reach from four pilot counties in cohort 1 to fourteen counties in cohort 3. Collectively, nineteen counties (almost 1/5 of the state) have participated in IA since its inception in 2010. Counties in all regions of the state are represented in cohort 3 with the mountain region having three IA sites (Alleghany, Ashe, and Watauga counties), the Piedmont region having five IA sites (Cabarrus, Granville, Rowan, Union, and Vance counties), and the Coastal Plains region six IA sites (Bladen, Camden, Columbus, Robeson, Pasquotank, and Perquimans counties). Counties were selected for participation based on a competitive RFA process that is open to all LHDs.

In close partnership with families of CYSHCN, all fourteen IA counties will continue to address community level systems of care issues including building strong medical homes for families. Thus, the WCHS 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. Data for this measure will be provided by the State Director of the IA Initiative collected via the Innovative Approaches Strategic Results Framework. During FY15, the IA

State Director worked with the Rensselaerville Institute (formerly The Center for What Works) and the IA projects to develop a results framework with a collaborative impact project design and strategy. The framework was used by all IA sites in FY16 and allows for defining and verifying project results, tracking success, and matching to metrics. Baseline data for FY16 for this measure is provisional as it is based on 3<sup>rd</sup> quarter reports, but at that time there were 31 policy, practice, and/or resource changes achieved by the IA projects.

IA counties will partner with staff from the University of North Carolina at Chapel Hill including Dr. Becky Pretzel who is the NC Act Early Ambassador and Dr. Betsy Crais from the UNC Division of Speech and Hearing on an AMCHP Learn the Signs, Act Early (LTSAE) grant over the next two fiscal years (FY17 & 18). NC is one of 12 states selected to participate in the LTSAE grant project. The purpose of the grant is to increase parent-engaged developmental monitoring by promoting the adoption and integration of LTSAE materials and training resources into programs and statewide systems that serve young children and their families. The project will allow IA counties to design a system of dissemination and integration of the LTSAE campaign materials and messages into the five regional (14 counties) NC IA sites. The AMCHP LTSAE grant project is directly in line with IA goal #2 that all children will be screened early and continuously for special health care needs.

With the focus on CYSHCN integrated into the entire C&Y Branch, efforts such as the following will continue in hopes of improving the additional former NPMs (#2, 4-6) that impact CYSHCN. To help increase the percent of CSHCN whose families partner in decision-making (former NPM#2), the C&Y Branch supports 1 FTE as the Family Liaison Specialist. The C&Y Branch parent engagement model is built on three constructs: 1) build and maintain relationships with families of CYSHCN and ensure Branch programs and services are family-centered; 2) recognize and respect the knowledge, skills and expertise that parents of CYSHCN possess; and 3) assure that family members are actively engaged in program planning, implementation and evaluation. These constructs are fulfilled via parents functioning as co-trainers, mentoring other parents, providing outreach to specific populations, reviewing material or documents for public distribution, and/or participating in advisory committees or focus groups. The Branch Family Partnership (BFP) Steering Committee consists of six members of Branch management and seven family representatives. This group provides direct feedback and offers recommendations to enhance the parent/professional partnerships among all C&Y programmatic efforts. There are six BFP meetings scheduled for FY17. Parents also have opportunities to participate in time limited committees. As a result of the recent strategic planning process, three committees were formed to review practices related to Branch communication, training and quality assurance efforts. Committees are made up of staff and parents to ensure a broad range of feedback and perspectives.

Each year the C&Y Branch sponsors two parents to attend the national AMCHP conference. Applicants are selected from parents who have participated in local leadership efforts implemented by Branch program strategies (e.g., Innovative Approaches, Parent Share Panels). Parents who have expressed a desire to further their skills in mobilizing communities to support positive outcomes and identify creative strategies to enhance service partnerships for CYSHCN are selected. Parents who attend the AMCHP conference enhance their knowledge about federal and state partnerships via Title V funding initiatives and have opportunities to foster connections with parent leaders among other states. Upon returning to their local community, these parents become stronger mentors for other parent leaders and typically expand their efforts in working collaboratively with the Branch (e.g., join state committees, become co-trainers with staff).

During FY17, C&Y Branch staff members will increase co-training with parents and youth at several events including the Annual School Nurse Conference, the child health nurse regional meetings with local health departments, and other training webinars. Family members will also be co-presenters in newly developed CC4C trainings and the CC4C program will continue to promote that local care managers use a family partnership approach in providing services to individual families. The Branch will continue to explore opportunities to specifically engage non-English speaking families and other minority families to solicit feedback about CYSHCN issues. In addition, the EIB has been invited to utilize and rejoin the BFP Steering Committee. This new opportunity will improve family connections

for birth to three year olds and strengthen collaboration between the two branches.

The C&Y Branch continues to train family representatives to conduct parent leadership trainings across the state. A parent cadre has been trained to deliver the Parents as Collaborative Leaders curriculum, developed and field tested by University of Vermont, the PACER Center, and several national parent and advocacy organizations, with funding support via the US Department of Special Education Programs. The curriculum includes ten modules that support leadership development among parents of children and youth with disabilities. The training modules serve to increase leadership and advocacy skills in educational, medical, and community settings. The C&Y Branch will continue to expand and develop parent trainer opportunities. Proposed topics include teen/young adult transitions, bullying, chronic health issues, and a focus on foster care youth.

The BFP include Parent Share Partners (PSP) support groups which were piloted to facilitate an opportunity for parents to discuss medical, behavioral, and psychosocial issues that accompany genetic disorders. PSP genetic related forums will continue to be offered in FY17 by parent ambassadors who will be trained to plan, advertise, and facilitate forums. A list of PSP will be kept to link willing parents who have children with similar genetic diagnosis. PSP support parents or parent ambassadors will also be encouraged to be involved in other C&Y Branch activities such as BFP.

All C&Y Branch sponsored committees are required to include one or more parent representatives as members. 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 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 also has 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 meet monthly with service providers and agencies to promote collaboration and make recommendations as appropriate to the IA Steering Committee. The Parents as Collaborative Leaders training modules were piloted by the C&Y Branch in all IA sites in FY16. The training modules will continue to be utilized by the IA expansion sites in FY17 to enhance the capacity and build the skillset of the PAC. In addition, all IA sites will utilize a part-time Parent Outreach Coordinator position in FY17. The primary purpose of the IA Parent Outreach Coordinator position 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 access/navigate the service system.

As discussed earlier in the Child Health Domain, the C&Y Branch currently uses multiple modalities to assist uninsured families to enroll in Medicaid, Health Choice (NC CHIP), or private insurance through the ACA Marketplace, thereby improving former NPM#4: percent of CSHCN whose families have adequate private and/or public insurance to pay for the services they need. Per the 2003-10 NS-CSHCN, only 58.5% of CSHCN in NC had adequate insurance.

A toll-free Help Line for CYSHCN provides information and links families and providers to local and state services. The Help Line is staffed by a 1.0 FTE, and backup is provided by the CYSHCN Access to Care Specialist and the Family Liaison Specialist. Help Line requests focus on how to apply for Medicaid/ Health Choice or SSI and resources to help pay for medications, medical equipment, and utilities. Families contact the Help Line for resources when there is a loss of public or private insurance coverage. The most challenging calls are from the families who do not qualify for SSI due to income, but need alternative resources to help pay for medical procedures, equipment or medications.

For FY17, C&Y Branch staff will provide outreach through at least 16 major community events annually targeting minority populations and families of CYSHCN. Outreach materials have been developed about the Help Line to increase knowledge and use of this resource for NC families. Staff will continue to include and discuss access to Health Check and Health Choice insurance options via scheduled presentation and exhibits across the state. Staff will prioritize outreach events using estimated Medicaid eligibility versus enrollment data. Specific target groups include Department of Social Services, Smart Start, and faith-based groups.

School nurses and SHCs are a rich source of referrals for increased insurance coverage. The required School Health Assessment is an opportunity for physicians, LHDs, and school nurses to focus on enrolling families with no insurance who are new to NC public schools. All IA counties promote Health Check and Health Choice through distribution of public education materials, and through websites.

Efforts to collaborate with Latino and refugee community based organizations, support groups and community health workers (promotores de salud) to ensure an understanding of services for CYSHCN will continue. Collaborative trainings will be planned to work with faith-based initiatives addressing inclusion of families with CYSHCN. Staff member have been involved with a statewide collaborative on developing core competencies and certification protocol for use of Community Health Workers (CHW) within clinical settings in NC. Guidelines will be presented to stakeholders at a Summit scheduled for November 2016.

The CC4C care managers will continue to use data reports to identify children who are receiving CC4C services that are not enrolled in Medicaid, so that those children can be assessed for Medicaid eligibility.

Branch staff 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.

Results from the 2009-10 NS-CSHCN indicate that 70.3% of families of CSHCN age 0 to 18 report the community-based services are organized so they can use them easily (former NPM#5). To increase this percentage, the C&Y Branch plans to continue a number of programs and activities during FY17. IA sites will continue to work directly with families to implement action plans addressing community systems of care for CYSHCN. For example, Watauga IA has worked with the TEACCH<sup>®</sup> Autism Program based at the University of North Carolina – Chapel Hill and the Blue Cross Blue Shield Institute on Health and Human Services clinic at Appalachian State University to form a partnership where TEACCH would have a satellite clinic once per month in Boone. The following services are being proposed for the satellite clinic in Boone for FY17: Early intervention (ages 3-5), individual intervention sessions (school-age, college students, adults), diagnostic evaluation for all ages, consultations for parents and service providers, and groups focused on social understanding/social skills. Families who live in Watauga and currently need TEACCH services have to travel at a minimum 2 hours each way to access services.

A web-based intake and referral mechanism for parents and providers at a statewide level was developed and pilot tested in several communities. Initial roll-out of the system was begun in FY16, with full roll-out scheduled for FY17. This system will generate referrals for early childhood and pregnancy services and include a searchable web-based directory of community organizations and agencies that provide early childhood services. Initial roll-out was with MIECHV and other home visiting counties, followed by roll-out across the state.

Also, working at the county-level, the C&Y Branch has supported the development of Stepping Stones Triple P to help improve the connection between service providers and families of CYSHCN. This module has been evaluated with families of children with a range of disabilities (e.g., intellectual disability, autism spectrum disorders, cerebral palsy, and elevated levels of disruptive behavior). The practitioner meets with the parent(s) for up to four sessions over a period of six weeks and assists parents to develop parenting plans to prevent the problem behavior, teach needed skills, and manage misbehavior. Next year, Title V funds will be used in Mecklenburg County to expand use of the Stepping Stones curriculum (specifically for CYSHCN) and plans are to increase the focus on CYSHCN in 17 Tier One counties in eastern NC through use of the Stepping Stones module. Additionally, the Branch plans to

expand Triple P sites across the state through a web-based training module developed by the National Triple P Office.

The 2009/10 NC-CSHCN data for former NPM#6 (The percent of YSHCN who received the services necessary to make transitions to all aspects of adult life) showed a bit of improvement as the percentage rose from 39.9 in the 2005/06 survey to 43.7% in 2009/10, but that still means that more than half of the respondents are not receiving appropriate transition services. The C&Y Branch continues to work to improve this rate and makes transition information and resources available through many Branch programs.

The Help Line for CYSHCN links families to the Exceptional Children's Assistance Center (ECAC), GotTransition.org, and the AAP for transition information and resources. The School Health Center 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 in DMAs billing guide.

Training on health care transition was provided at the 2014 Annual School Nurse Conference. A BFP co-presented at these meetings about the role of school nurses to support health care transition for all adolescents and especially for YSHCN. Two School Nurse Association of NC meetings were held about health care transition in FY16. Trainings on health care transition will be provided for all internal staff.

An email group of approximately 30 NC pediatricians has been developed, combining pediatric, adult health care providers and other professionals from the six academic centers, CCNC, and community practices with an interest in health care transition. Two phone meetings were facilitated to discuss data as a transition baseline for NC. One face to face meeting was also held in August 2015 and another is going to be held in the summer of 2016.

CCNC wants their network care managers to address health care transition with youth who have specific chronic health conditions and are enrolled in Medicaid. The BFP will develop trainings with CCNC to increase the knowledge and skills of care managers and to help medical homes improve their health care transition efforts with YSHCN.

As part of the IA Initiative, Robeson IA will continue to work with the University of North Carolina at Pembroke (UNC-P) to expand the ATLAS (Adolescents Transitioning to Leadership and Success) program. ATLAS was first pilot in FY16 at UNC-P to serve as an advocacy group within the university and community to improve transition outcomes of teens and college students with SHCN. ATLAS aims to prepare adolescents for transition to educational options during adulthood. ATLAS brings together teenagers with chronic illness who live in Robeson County with college student mentors from the UNC-P Accessible Resource Center who also have chronic illness, and UNC-P Social Work students who are trained to facilitate small groups. As chronic illness affects the entire family, parents meet in a parallel ATLAS Parent Council during the same time period the youth and mentors meet. The UNCP ATLAS project is a replication of Dr. Gary Maslow's ATLAS project at Duke University. As a result of ATLAS, UNC-P is looking at options for a Think College. Think College promotes college options for individuals with developmental disabilities and is dedicated to developing, expanding, and improving inclusive higher education options.

In FY15, census estimates report 358,227 infants and toddlers (zero to-three years of age) were living in NC. A total of 19,022 infants and toddlers, or 5.3% of NC's population younger than three years old, were enrolled in the Infant-Toddler Program (ITP) in FY15. The ITP is comprised of sixteen regional CDSAs located across the state. The CDSAs conduct evaluations and/or assessments, provide service coordination, and ensure enrolled children and families have Individualized Family Service Plans (IFSPs) and receive appropriate services through a network of providers to address family identified needs that are routines-based and build on child/family strengths. 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 statutory and legislatively identified established conditions that lead or are known to result in developmental delays. The EIB provides oversight and monitors the CDSAs' implementation of the ITP programs. In FY14, state appropriations were reduced by approximately 30% for the ITP. The ITP is monitoring enrollment data, service data, and other critical data points to determine the impact of the reductions on the ITP and service delivery system.

In an effort to help monitor how well the WCHS is meeting the selected priority need 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). Compliance with this indicator is determined via a self-assessment record review of all children in the ITP who had services added to their IFSP in the month of January each year. The target set for this indicator is 100%, and the ITP had a compliance rate of 98.11% in 2015 which is down just a bit from the rates for 2013 (98.29%) and 2014 (98.31%). The reasons cited for the CDSA-specific delays in meeting this indicator in 2015 included: "delays in providers initiating services"; "inadequate follow-up"; "lack of appropriately qualified community-based providers"; and "other CSDA delays." This reduction can be attributed directly to two factors: budgetary cuts that led to reduction of staff and increased caseloads for service coordinators, and national clinical personnel shortages.

The NC ITP submitted the second of a three phase report on a multi-year State Systemic Improvement Plan (SSIP) in April 2016. The SSIP is a five-year plan which focuses on improving the outcomes for children with disabilities and their families. An emphasis on behavioral health services has been included in the plan. In FY17, work on the SSIP will continue as internal and external stakeholders continue to implement strategies to improve the social/emotional development of young children. Improvement activities to be implemented over the next five years include: assisting CDSAs and community providers with implementing evidence-based practices focused on improving social/emotional outcomes; ensuring children and families are served in natural learning environments using family identified routines as the basis for supporting families; developing a comprehensive personnel development system; expanding the integration of child global outcomes into the Individualized Family Service Planning process; and examining the ITP's family outcomes survey, distribution methods to yield more representative responses and increased response rates, and increasing utilization of the data collected to improve family engagement and child/family outcomes. The family survey response rates have been declining for several years to below acceptable standards. In FY17, the Family Outcomes Workgroup will be tasked with assessing the survey instrument itself as well as with identifying strategies to increase response rates in an on-going effort to improve the representativeness of the data.

IA sites are also engaging systems of care for young children to reduce the effects of developmental delay, emotional disturbance, and chronic illness. Watauga IA has worked with clinical staff of the CDSA (Speech Therapist and Clinical Supervisor, Occupational Therapy, Physical Therapist, Licensed Clinical Social Worker, Psychologist, and Nutritionist) to provide quarterly training sessions to Blue Ridge Pediatric (BRP) nursing staff on developmental topics chosen by nursing staff. As a result of these efforts, referrals in Watauga County from BRP have increase for the past year. This training opportunity will continue in FY17 in an effort to strengthen the ability for CYSHCN to receive ongoing care and access to referrals. The Cabarrus IA site has worked with the Physician Education Office at Carolinas Medical Center – NorthEast to incorporating screening for SHCN into continuing medical education training for medical providers. Further technical assistance is offered to medical practices through Community Care of Southern Piedmont, regarding the administration and scoring of specific screening tools and incorporating the screening process into their office work flow. This training and technical assistance serves to improved screening protocols in primary care practices.

The CC4C Program has several activities planned for FY17 including implementation of a new building upon its care

manager training plan to orient new staff and support current staff in serving priority populations. Currently CC4C is rolling out six new orientation trainings and one training on asthma. CC4C is working to implement an effective care management process via webinars and orientation trainings which will include support care managers in developing measurable client goals and activities to achieve self-management and build resiliency. As mentioned earlier in this report, the CC4C program plans to include the family perspective in the development of all new trainings, which will include a family engagement presentation by a BFP. CC4C will continue to provide trainings that will provide baseline content on supporting families dealing with specific illnesses or situations in partnership with the medical home.

The Carolina Children's Communicative Disorders Program (CCCDP) Financial Assistance Program provides hearing aids, cochlear implant supplies and equipment. They also provide the unique clinical care required to use, maintain and enable progress with this specialized technology. These activities will continue in FY17. 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. The state utilizes Title V funding for this service and pays for children with no other payment options.

### **Children with Special Health Care Needs - Annual Report**

In FY15, 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 two regional trainings reaching 250 LHD staff, two live webinars reaching 120 LHD staff, and one archived webinar. Most of these trainings included a co-presentation with parents of CYSHCN. Audits of charts from 30 LHDs were conducted to assure linkages with medical homes occurred for children as required in the NC Health Check (Medicaid) Billing Guide.

In August 2014 an initial training by the PMC was provided to orient CC4C care managers to the issues for children in foster care based on a survey conducted by the CC4C program of care managers about gaps in knowledge and skills in providing care for children in foster care. The August 2014 training addressed the role of care managers to work with medical homes and DSS to provide quality care for children in foster care based on AAP national recommendations. Strategies to identify infants and children in foster care were shared in order to increase the number of children being served using the AAP national guidelines for care of children in foster care by medical homes. Since CC4C managers work directly or are closely linked with medical home providers, they often receive referrals for care management from medical homes. However, many medical homes are not aware of children in foster care in their practice, and many foster children are not linked with a medical home. In partnership with CCNC and DPH, a statewide series of four webinar trainings were held in the spring of 2015, with 150-240 care managers participating in each webinar. The trainings addressed the role of CC4C and CCNC care managers as members of the medical homes team to address early brain development, social-emotional risk, toxic stress and resiliency in children in foster care. The CC4C program manager also was 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. The CC4C program also released a CC4C Medical Home Guidance training which emphasizes the requirement for care managers to work with local medical homes on a systems and client level.

In 2014, regional genetic counselors had contact with more than 600 children in need of genetic counseling services. Parents of CYSHCN seen in genetic clinics who did not have a medical home were encouraged to establish one and offered assistance if needed.

Also working with CYSHCN and their families, the IA projects addressed systems of care to help improve the coordination of care within a medical home. Specifically, Buncombe IA worked with Community Care of Western North Carolina (CCWNC) and Mountain Area Health Education Center (MAHEC) to integrate utilization of the Adverse Childhood Experiences (ACE) Resource Guide for Medical Providers with the practices that CCWNC serves. All new OB/GYN patients are screened with the ACE Screening Tool, and ACE Scores are tracked within

their electronic medical records/charting. The Cabarrus IA Medical Home Subcommittee, in collaboration with Community Care of Southern Piedmont, developed the Mental Health Navigator Training Series for referral/clinical staff in primary care offices to assist physicians with linking patients to mental health services and connecting patients to the right service the first time. After being piloted in Cabarrus County, the training series has been adapted for providers in surrounding counties allowing the Mental Health Navigator model to be utilized on a larger scale.

Over FY15 & FY16, North Carolina State University conducted an evaluation of the IA initiative with a specific focus on the following research questions: 1) to what extent and in what ways has the IA Initiative strengthened county capacity to engage in systems change work; and 2) in what ways has the IA Initiative led to significant changes in the community system for serving CYSHCN? A mid evaluation report produced by NCSU at the end of FY15 indicated that overall evidence suggests that IA is having a positive impact in increasing community capacity for systems change. Participants reported IA had the greatest impacts improving their skills in the areas of how to use community data to identify strategic priorities for change, how to use systems thinking to identify barriers to systems change, and how to identify and engage key stakeholders in creating systems change. The final evaluation report will be available at the end of FY16.

The IA counties also reported many successful initiatives to improve the organization of services in their communities. Collaboration among Robeson County Parks and Recreation Department, the Robeson County Board of Commissioners, and the Robeson County Health Department's IA Initiative has led to the development of new programming and resource allocation that lends itself to improving the health and well-being of CYSHCN and their families. Specifically, the Robeson County Parks and Recreation Department has implemented Therapeutic Recreational Activities for special populations in Robeson County. In FY15, Robeson IA was formally recognized in a variety of ways for community efforts targeting CYSHCN including receiving the Outstanding Public Health Award at Eastern District Public Health Association meeting, being selected as a NC GlaxoSmithKline Child Health Recognition Award Winner, receiving a Wolfe Mini Grant in the amount of \$5,000 for SPIRIT (Special Projects Inspired by Recreation and Innovative Teamwork) from the NCPHA, and receiving the SPARKLE Award presented by the NCPHA Wellness and Prevention Section for the Summer Playground Day Camp. The Sparkle Project Award recognizes a model project of two years or less duration or a one-time event that is creative, innovative and can serve as a model for other NC counties.

The BFP Steering Committee met every other month during FY15. A parent training cadre of nine parents representing varied geographic regions, race/ethnicity and conditions of CYSHCN were trained to implement the peer training Parents as Collaborative Leaders: Improving Outcomes for Children with Disabilities curriculum. The BFP Steering Committee further recommended a training targeting the C&Y staff to reintroduce the constructs of the Branch's parent engagement model with BFP Committee members serving as co-trainers. The Branch supports a contract with ECAC, the state's Family-to Family partner, to provide travel reimbursement and hourly stipends for parents engaged with Branch activities. One hundred percent of parents responding to a feedback survey indicated the stipend helped them participate in family involvement activities without financial hardship, and they indicated their reimbursement was processed within 21 days. Parent comments regarding the stipend included: "This has been a great experience, allowing me the opportunity to share my voice without creating a financial hardship in waiting weeks or longer for reimbursement."

A survey was distributed to all parent reimbursement recipients to develop an interest inventory of parent engagement levels with various Branch initiatives. Recipients were asked to identify the type of activity (e.g., co-trainer, review material or documents for public distribution, serve on a committee, etc.) in which they were interested in participating. A respondent report was developed that identified geographic location, child age/disability, activity interests, and contact information that Branch staff can access for parent engagement activities as needed. During FY15, sixty-eight parent partners contributed over 734 hours toward Branch program and service efforts.

The Branch developed specific parent engagement activities targeting the non-English speaking populations. Three resource “cafes” were conducted and facilitated by the Branch’s Minority Outreach Coordinator in the spring of 2014. The “café” model allowed caregivers to move among tables in a socially inviting manner to discuss select topics related to CSHCN. Results from the café were shared with local and state level stakeholders to assist in service resource awareness and planning. Minority Outreach staff continues to support a Resource Café developed by the Cabarrus Health Alliance, IA team as well as other CYSHCN Latino support groups across the state in partnership with the NC Autism Society and UNC-CASTLE Latino Retreats.

The IA Latino Parent Advisory Council in Cabarrus, Stanly, and Rowan counties engaged Latino families of CYSHCN in the development of a local support group. As a result of leadership training and technical assistance (TA), these Spanish speaking parents of CYSHCN are able to effectively communicate their story to others, advocate for CYSHCN, engage other Latino parents in support group activities, and serve as mentors for other parents to assist them in accessing needed services. Access to services that are linguistically and culturally competent is a priority for all families, and involvement of Latino parents in improving the system of care for CYSHCN is valued. In addition, the IA Latino Parent Advisory Council worked collaboratively with the local Latino Faith Health Promoter Coordinator at CMC-Northeast to include CYSHCN in their training curriculum.

PSP forums were held in Wilmington and Winston Salem in May 2014 and in Asheville, Charlotte and Raleigh in April 2015. This initiative allowed parents to give feedback on CYSHCN services and encouraged them to consider involvement in future forums, reviewing patient literature or policy documents, or serving on committees.

Also, the NC ITP administers a yearly survey to the parents of children ages 0-3 years old who are receiving ITP services for six months or longer. In FY15, a total of 798 family survey responses were received, with 80% reporting that EI services have helped the family know their rights, 77% effectively communicate their children’s needs, and 86% help their children develop and learn. A challenge with the family survey has been low response rates (15%) which have led to concerns about the representativeness of respondents. Another challenge is that the survey is currently the only method of collecting information on family involvement and satisfaction with EI services.

The CSHCN Help Line call volume remained constant with 358 calls in FY15, with 76% of calls from families/caregivers. Help Line Outreach efforts include three main strategies: 1) direct outreach to parents/caregiver and the professionals who work with them; 2) the development/revision of promotional items; and 3) direct notification to Supplemental Security Income (SSI) applicants, ages birth to 18 years. Two new promotional materials were developed including a bilingual half sheet outlining the key purpose of the Help Line with contact information. This item was also added to the state’s website for electronic access. Second, a tri-fold brochure highlighting the various general resource “pathways” based on a child’s age and condition was developed. English and Spanish brochure versions are available. This brochure was based on a successful model developed by a local IA project. A Help Line email address was added to accept and respond inquiries in addition to the dedicated phone line. In FY15, over 4,300 children and youth SSI applicants received a letter explaining how the Help Line can be a resource for them in locating needed services regardless of their SSI eligibility determination.

In an effort to promote the Help Line to minority communities, in FY15, the CYSHCN Help Line Coordinator and CYSHCN Access to Care Coordinator conducted 45 outreach efforts which includes: Exhibits at local or statewide events (n=21), Presentations to families /caregivers or professionals directly working with families /caregivers (n=7) and direct consultation/collaboration with community stakeholders (n=17) to promote benefits of the Help Line. Targeted populations and groups for outreach included: American Indian families and communities, early intervention programs, family support services, NICUs and child service coordination programs. Staff set-up exhibits 45 at Pow-Wow’s, Back to School Events, Community for Unity Festival, Perinatal Conference, American Indian Women’s Conference, Intellectual Developmental Disabilities Conference, International Festival and NC Assistive Technology Conference. Specialists collaborated with James & Connie Maynard Children’s Hospital (Greenville), Nash Healthcare NICU, Wake Med Special Infant Care Unit, local mental health/managed care organizations (Cardinal

Innovations), Local Interagency Coordinating Councils and local Family Support Networks to exchange resources and discuss Help Line resources. An estimated 6,000 people participated in these events.

C&Y staff members worked in collaboration with ACA navigators and certified-application-counselors. NC enrolled 47,920 Medicaid/CHIP eligible individuals during the 2014-15 open enrollment period.

All IA counties have identified health insurance as an important systems change and provide information on how to navigate the network of eligibility including insurance and Medicaid. For example, Robeson IA is using PhotoVoice (a group analysis method) in which participants are asked to represent their point of view by photographing scenes that highlight research themes. One of the themes to be highlighted via this project is challenges faced by parents who have private insurance versus Medicaid. Also, Watauga IA has worked with BRP to ensure insurance billing codes were in place so that BRP staff could bill accordingly for the enhanced screening schedule (AAP guidelines) and well child visit schedule of foster care children.

In addition to IA and Triple P, other staff and programs work closely with providers to improve the organization of services. At the state level, C&Y Branch staff worked closely with the NCECAC to review all early childhood services and assess gaps, overlaps and priorities in development of recommendations for the Governor. Also the C&Y Branch's PMC presented to a graduate student class at the ECU School of Public Health with a Branch Family Partner about partnering with families to improve the health of CYSHCN. The PMC and BFP shared examples of how NC and other states partner with families, organize community based services so families can use them easily (the Ease of Use Framework model was shared) and how to address health care transition.

Health care transition for all adolescents, and especially YSHCN in partnership with a medical home continued as a focus for the Branch and its partners. As a result of an ongoing collaboration among the C&Y Branch and leadership in the CCNC Pediatric Program, care management efforts started to address the importance of health care transition starting at age 14 years in YSHCN. Adolescent with certain health conditions (i.e., autism, hearing loss, cognitive delay, sickle cell) started to appear on CCNC care manager priority lists of Medicaid patients to assess and manage in partnership with pediatric medical homes. This focus has led to increased interest by CCNC care managers for additional training and increased efforts from CCNC. CCNC, in partnership with the Branch, developed two live trainings that were also recorded about the role of care managers in partnership with medical homes to support health care transition. One training session included a panel of community agencies who work with YSHCN. The second training included a presentation by a pediatric hematologist from Duke who shared a curriculum to address health care transition with adolescents with sickle cell. School nurses also have a key role in addressing health care transition in YSHCN. The PMC and two different BFPs provided presentations in April and May 2015 about health care transition at three regional school nurse meetings and a state conference for SHCs. The PMC arranged a presentation about health care transition for the sickle cell educator counselors by a provider at Duke. The PMC and a BFP presented to the regional genetic counselors about strategies to address health care transition with their patients.

Further, IA sites have been finding new ways to strengthen transitions in their community systems of care. Buncombe IA developed a Transition to Adult Living Directory and Youth Workbook in partnership with Family Support Network. The development and implementation of this tool serves to help CYSHCN access the services they need to make appropriate transitions into adulthood. Cabarrus, Rowan, and Stanly Counties IA worked with Suburban Pediatric Clinic to develop standardized process for implementation of their Health Care Transition policy and worked with primary care providers to modify their practice to include a transition checklist to insure that foster care youth successfully transition into adult health care. Finally, Watauga IA worked with the county school system to change protocol during transition planning meetings to include a Transition Notebook/CD, created by IA families, as well as to distribute during annual transition fairs. In addition, Watauga IA has worked with BRP to modify their current transition to adult care protocol to include the Transition CD at each meeting. Parent to Parent Family Support Network – High Country has incorporated the Transition CD into their current resource library.

During FY15, the results of a CC4C care manager survey conducted in the spring of 2014 was used to develop a training plan to meet the needs of care managers working with children in foster care and those diagnosed with asthma. The foster care training series was rolled out in March 2015, and the asthma training was rolled in June 2015. In addition to these trainings, a series of 11 basic care management on-demand modules were also rolled out in June 2015. These modules were required to be completed by all new CC4C case managers prior to engaging patients. They could also be used individually by experience staff for professional development.

An emphasis on performance improvement was implemented in CC4C during FY 15 that included: 1) development of a performance improvement strategies document based on locally-submitted ideas; 2) implementation of a statewide Performance Improvement Process that identified 21 local agencies to whom intense, targeted technical assistance was provided; and 3) special focus on supervisors, which included a webinar targeted to supervisors.

To reduce the effects of developmental delay and emotional disturbance among children with craniofacial conditions, hearing loss, and/or metabolic conditions, in FY15 the C&Y Branch contracted with major medical centers across the state. A total of 236 children were served by the CCCDP Financial Assistance Program in FY15. The Children's Cochlear Implant Center at UNC continues to experience tremendous growth, making it one of the largest centers in the country. In FY15, 115 surgeries were performed. These included children receiving their first or second side devices, 10 revision surgeries and one Auditory Brainstem Implant as part of a pioneering feasibility study. The center celebrated a major milestone by implanting its 1000<sup>th</sup> child in FY15.

Title V MCH funding is used to support genetic and other services at the Medicaid established fee for service rates and are documented by assignment of appropriate Current Procedural Terminology codes. These services are provided to North Carolinians who are uninsured or under-insured as payment of last resort. Services are provided only up to the contract limits for five major medical centers funded to provide genetic services. In FY15, \$853,721 of Title V funds were allocated to five genetic services contracts. A total of 7,761 unduplicated children received services. The net effect of benefits from the ACA health insurance for many families who previously had no insurance, coupled with ongoing level funding from Title V, has made it possible to maintain a high level of access to genetic counseling services for CSHCN and other children and families with heritable disorders prior to FY15.

The UNC Craniofacial Center (CFC) facilitates early intervention and improved care coordination for North Carolinians with craniofacial anomalies with efficient use of limited resources. The FY15 CFC contract totaled \$287,071. Services are provided statewide to North Carolinians with congenital craniofacial anomalies that require extensive, long-term treatment and meet funding criteria as payment of last resort. Approximately 374 patients were served. Of those receiving services, 112 were new, unduplicated patients with craniofacial disorders and 262 were returning follow-up patients.

## Cross-Cutting/Life Course

### State Action Plan Table

#### State Action Plan Table - Cross-Cutting/Life Course - Entry 1

##### Priority Need

Improve healthy behaviors in women and children and among families incorporating the life course approach

##### NPM

A) Percent of women who smoke during pregnancy and B) Percent of children who live in households where someone smokes

##### Objectives

1. By 2020, reduce the percentage of women who smoke during pregnancy to 9%.
2. By 2020, increase the percentage of adults who are neither overweight nor obese to 79.2%(Healthy NC 2020 Objective)
3. By 2020, decrease the percent of children who live in households where someone smokes to 26%.
4. By 2020, increase the percentage of children aged 19-35 months who receive the recommended vaccines to 91.3% (Healthy NC 2020 Objective)
5. By 2020, increase the percentage of adults aged 18 and older who are vaccinated annually against seasonal influenza by 5%.
6. By 2020, increase the percentage of families of CSHCN who are prepared for responding to an emergency or disaster by 2%.

## Strategies

1A. Continue the work of the Women and Tobacco Coalition for Health (WATCH).1B. Provide evidence-based clinical standards in prenatal care (e.g., tobacco cessation) (PHSP Strategy 3B)1C. Update the evidence-based curriculum Guide for Helping to Eliminate Tobacco Use and Exposure for Women (formerly Guide for Counseling Women Who Smoke)

2A. Provide weight management counseling and intervention through CC4C care management, child health and home visiting programs to decrease the birth to 21 years population who are overweight.2B. Provide evidence-based clinical standards in prenatal care (e.g., chronic disease management) (PHSP Strategy 3B)2C. IA Coordinators in partnership with local Active Routes to Schools Coordinators promote accessibility, inclusion, and increased physical activity opportunities for CYSHCN. 2D. Implement childhood obesity prevention strategies through the School Nutrition Network, School Nurse Case Management on Obesity, and nutritional services offered in school health centers.2E. Implement the North Carolina Preconception Health Strategic Plan and Supplement (PHSP Strategy 2D).

3A. The C&Y Branch will improve its partnership with WHB and TPCB to increase smoking cessation efforts3B. Provide care management/home visiting services which include tobacco cessation3C. Implement asthma prevention activities statewide through school nursing.3D. Provide care management/home visiting services which include use of an evidence based tobacco cessation model3E. Require use of EB model for tobacco cessation in LHD child health clinics.

4A. Continue to provide technical assistance and education to program staff and local partners in an effort to promote immunizations across the lifespan4B. Promote access to and utilization of immunizations according to the American Committee on Immunization Practice (ACIP) guidelines4C. Track and report compliance with Kindergarten Health Assessments statutes for all children entering public kindergarten.4D. Encourage well child exams in the 19-35 month old children to assure up-to-date immunization administration.

5A. Continue to provide technical assistance and education to program staff and local partners in an effort to promote immunizations across the lifespan5B. Promote access to and utilization of immunizations according to the ACIP guidelines (PHSP Strategy 4E)5C. School Health Centers providing primary care will participate in influenza vaccination activities.

6A. The NCODH selects IA sites to assess the inclusiveness of CYSHCN in local and county efforts in planning for, responding to, and recovering from a disaster or emergency6B. IA/NCODH determine whether CYSHCN, their families/caregivers, care providers, and emergency responders are adequately and appropriately prepared for a disaster or emergency and disseminate appropriate information and tools as needed.

## ESMs

ESM 14.1 - 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

## NOMs

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

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

NOM 4.1 - Percent of low birth weight deliveries (<2,500 grams)

NOM 4.2 - Percent of very low birth weight deliveries (<1,500 grams)

NOM 4.3 - Percent of moderately low birth weight deliveries (1,500-2,499 grams)

NOM 5.1 - Percent of preterm births (<37 weeks)

NOM 5.2 - Percent of early preterm births (<34 weeks)

NOM 5.3 - Percent of late preterm births (34-36 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 9.5 - Sleep-related Sudden Unexpected Infant Death (SUID) rate per 100,000 live births

NOM 19 - Percent of children in excellent or very good health

## State Action Plan Table - Cross-Cutting/Life Course - Entry 2

### Priority Need

Increase access to care for women, children, and families, especially in uninsured populations and where disparities exist

### NPM

Percent of children ages 0 through 17 who are adequately insured

## Objectives

1. By 2020, increase percent of children, ages birth through 17, who are adequately insured by 15%.
2. By 2020, increase the percentage of women seen at LHDs using LARCs by 10%.

## Strategies

1A. Provide ongoing training to all child service providers on the importance of insurance coverage and the need to incorporate assistance with enrollment in their work with families, 1B. C&Y Best Practices Unit will receive quarterly or biannual DMA enrollment (HC & NCHC) data to identify trends for targeted outreach efforts 1C. Maintain involvement in the new DMA configuration and reimbursement model in order to provide families and children with current information for future enrollment.

2A. Expand the college-based Preconception Peer Education (PPE) Program to reach additional post-secondary women and men in colleges, universities, graduate schools, community colleges and adult learning program 2B. Integrate preconception health care messages into primary care for women of reproductive age 2C. Educate providers, community leaders, and families on Preventive Health Services for Women available through the ACA. 2D. Improve/develop guidelines for the inclusion of men in preconception, prenatal, and interconception health services (PHSP Strategy 5C).

## ESMs

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

## NOMs

NOM 17.2 - Percent of children with special health care needs (CSHCN) receiving care in a well-functioning system

NOM 21 - Percent of children without health insurance

**Measures**

**NPM-14 A) Percent of women who smoke during pregnancy**

Annual Objectives						
	2016	2017	2018	2019	2020	2021
Annual Objective	9.8	9.6	9.4	9.2	9.0	9.0

**Data Source: National Vital Statistics System (NVSS)**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2014	9.8 %	0.1 %	11,893	120,816
2013	10.4 %	0.1 %	12,303	118,819
2012	10.7 %	0.1 %	12,771	119,511
2011	11.0 %	0.1 %	13,103	119,594

**Legends:**

-  Indicator has a numerator <10 and is not reportable
-  Indicator has a numerator <20, a confidence interval width >20%, or >10% missing data and should be interpreted with caution

**NPM-14 B) Percent of children who live in households where someone smokes**

Annual Objectives						
	2016	2017	2018	2019	2020	2021
Annual Objective	28.5	28.0	27.5	27.0	26.5	26.0

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2011_2012	28.9 %	1.7 %	645,254	2,233,656
2007	28.9 %	1.6 %	632,947	2,192,025
2003	35.4 %	1.4 %	638,786	1,806,944

**Legends:**  
 Indicator has an unweighted denominator <30 and is not reportable  
 Indicator has a confidence interval width >20% and should be interpreted with caution

**ESM 14.1 - 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**

Annual Objectives					
	2017	2018	2019	2020	2021
Annual Objective	2,500.0	2,550.0	2,600.0	2,650.0	2,700.0

**NPM 15 - Percent of children ages 0 through 17 who are adequately insured**

Annual Objectives						
	2016	2017	2018	2019	2020	2021
Annual Objective	78	80	82	84	85	85

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2011_2012	77.2 %	1.5 %	1,655,715	2,145,668
2007	78.6 %	1.4 %	1,584,967	2,016,563

**Legends:**  
 Indicator has an unweighted denominator <30 and is not reportable  
 Indicator has a confidence interval width >20% and should be interpreted with caution

**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**

Annual Objectives					
	2017	2018	2019	2020	2021
Annual Objective	220.0	231.0	242.0	254.0	266.0

**Cross-Cutting/Life Course - Plan for the Application Year**

The life course approach has been of interest to WCHS for some time, as a Life Course Perspective Conference was held in 2011 to educate Section staff members about the approach and through the state team’s participation in AMCHP’s Life Course Metrics Project and the WHB’s continued work with the CoIIN to Reduce Infant Mortality and the Infant Mortality CoIIN Collaboratory. Life course theory is a fundamental concept shaping both the C&YBSP and the PHSP. Putting the theory into concrete action remains difficult, but the Section continues to strive to do so.

The WCHS is working hard to decrease the percent of women who smoke during pregnancy (NPM#14a and similar to former NPM#15) and the percent of children who live in households where someone smokes (NPM#14b). 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 9.8% in 2014. Women with less education and those who are between 20 to 24 years of age are more likely to smoke in NC than their counterparts. Per 2014 National Vital Statistics System data for NC, Hispanic women were least likely to smoke during pregnancy (1.7%) and American Indian women were most likely to smoke (25%). Black women (9.22%) were less likely than White women (1212.5%) or women of multiple races (1212.3%). The 2011-12 NSCH indicated that 28.9% of children in NC lived in households where someone smoked.

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. 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 also produced Billing Guidelines and Standing Orders for Tobacco Cessation Counseling in LHDs. In collaboration with WATCH, the WHB has updated the *Guide for Helping to Eliminate Tobacco Use and Exposure for Women* (formerly *Guide for Counseling Women Who Smoke*) provider resource. WATCH will continue to support webinars and other training to keep providers abreast of emerging issues around tobacco, including electronic nicotine devices.

In FY17, the WHB will continue to partner with the Tobacco Prevention and Control Branch (TPCB) to support continuing education training for health and human service providers and will work 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 will continue to provide prenatal care which is inclusive of provision of tobacco cessation counseling for pregnant women in FY17. The staff in these clinics utilize the evidenced-based best practice 5 A’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.quitline.com website also has web coaches available and includes resources about helping others quit and secondhand smoke. Pregnant callers are enrolled in an intensive 10-call coaching series provided by a team of dedicated pregnancy quit coaches. As part of the ICO4MCH Initiative, five counties (Alleghany/Ashe/Watauga/Wilkes/Avery and Durham) selected to increase the capacity of staff to provide tobacco cessation services in the clinical setting as one of their evidence-based strategies.

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#14: 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 this number dropped slightly to 2,293 in FY15. In FY15, 4.3% of the women receiving counseling were pregnant and 94.7% were in the preparation stage of change. Also, most of the women who received counseling used cigarettes only (86.6%), but 11.8% used cigarettes and other tobacco products (includes e-cigarettes, cigars, smokeless, and pipe). A little more than a quarter of these women (27.9%) heard about QuitlineNC from their health provider, 25.8% heard about it through a television commercial, and 15.8% heard about it from a family member or friend.

With tobacco use during pregnancy being a prevalent risk factor for preterm birth, emphasis on interventions to assist women with tobacco cessation will continue to be a priority for Pregnancy Care Managers in FY16. All pregnant Medicaid recipients who smoke (and/or quit smoking after finding out that they were pregnant) are eligible for PCM services. Among all of the priority risk factors for PCM, tobacco use is the most prevalent. The PMH program published a companion piece for prenatal care providers in January 2015 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 and will continue to serve as a resource. Additionally, Pregnancy Care Managers will continue utilizing Healthwise patient education tools and assessing other patient education information on tobacco use/cessation to ensure it is evidenced-based and aligns with program standards. Additional 5 A's training for Pregnancy Care Managers is being planned for FY17.

The WHB will also continue to embed tobacco prevention efforts into overall preconception health promotion efforts in FY17, including the evidence-informed Ready, Set, Plan training provided to health care providers and community-based organizations statewide. WHB will work with the universities participating in the Preconception Peer Educator Program to advocate for smoke-free colleges and universities. The Healthy Beginnings program will conduct assessments on all newly enrolled pregnant women for tobacco use and secondhand smoke exposure for women as part of the case management services provided. Program staff will provide education and brief smoking cessation counseling during monthly care coordination contacts, home visits, and group education sessions. Additional smoking cessation resources will be provided for pregnant women who are willing to quit.

New state funding will also be utilized to support *You Quit, Two Quit* as part of the UNC CIMH. The goal of *You Quit, Two Quit* 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.

Through a contractual relationship with NCHSF, the WHB will continue to produce and distribute educational materials (both in English and Spanish) targeting various ethnic populations regarding smoking cessation before and during pregnancy and the dangers of secondhand smoke to babies. NCHSF will continue to reinforce smoking and secondhand smoke as Sudden Infant Death Syndrome (SIDS) risk factors in Baby's Easy Safe Sleep Trainings (BESST) regarding safe sleep environments. At least one regional training will be conducted and training materials and props will be given to participants in order to conduct opportunities in their communities. An online option for training is also available. NCHSF will continue to maintain interactive pages on the "Resources" pages of www.nchealthystart.org and www.mamasana.org (the Foundation's Spanish website) with items focused on

maintaining safe environments as it pertains to smoking and pregnancy. They will also continue to post video clips and podcasts on safe environments for infants.

Other efforts to reduce the percent of children who live in households where someone smokes will also continue in FY17. Ten Healthy Beginnings program sites will conduct assessments through monthly contacts and at least six home visits for all enrolled pregnant women and women up to two years postpartum for tobacco use and secondhand smoke exposure in the home. Program staff will provide participants with education on the risks of secondhand smoke exposure for the child and the mother.

Title V fund are used to support LHDs in the delivery of clinical and community child health services. Bright Futures guidance is used as the standard for clinical services and child health regional nurse consultants train regularly on these standards. Bright Futures forms are used in all LHDs and include assessments for second-hand smoke exposure as part of well child care for all ages and is part of the well child exams. In FY17, the C&Y Branch plans to increase its partnership with the WHB and TPCB on training about the 5 A's and CEASE approaches. There are plans to expand the TA and targeted consultation to LHDs who work with children whose parent smokes. Richmond, Montgomery, Hoke, Cumberland and Robeson counties have grant funding to work on CEASE as part of the ICO4MCH Initiative. An archived webinar on the 5A's, CEASE, and other tobacco cessation strategies is posted online and will be made available to all LHDs, school health centers, school nurses and case managers. The state Child Health Nurse Consultant worked with staff from the TPCB and the DPH administrative consultants to develop and disseminate billing guidance about smoking counseling and cessation for families and youth seen in LHDs. This guidance will continue to be disseminated widely. An archived training about asthma and the need to assess for smoke exposure via tobacco products and e-cigarettes from the Spring regional child health meetings will be made available to all child health staff at local health departments.

Air quality in the home, including the impact of smoking, was a known trigger issue for many students with asthma. The SHNC Team members will continue to provide training and information at both the individual student and program level for all NC schools including public, charter, independent and resource schools about students with asthma who have air quality issues. Although the school nurses are paid for by a variety of funding types, five of the school health nurse consultants are supported through Title V dollars. These consultants will continue to provide consultation and technical assistance, develop and offer related continuing education, and monitor and provide guidance related to requirements and best practice. Utilization of the services of the consultant team has continued to increase as numbers of students, schools and health concerns grow. Services that are delivered to these students and impacted by the work of the consultant team will again be reported on the North Carolina Annual School Health Services Report Survey due June 2016. These survey results are used to influence policy and resource use at the state level and to identify local needs for service at the district level. The consultant team will continue to collaborate with related task forces and work groups that include goals related to air quality in the home for children with asthma as well as to include air quality issues in planning continuing education programming. These groups include the North Carolina Asthma Alliance, North Carolina Health Alliance, North Carolina Pediatric Society Asthma Workgroup, and WATCH.

The SHNC Team also continues to work locally across the state to help reduce the barriers to successful school nurse care/case management for students with chronic disease, including asthma. Continued growth in formal care management programs by school nurses is an objective for FY17. Slow growth continues in the number of NC school districts with a formalized care/case management program has been achieved and is viewed as a success, as approximately 47% of all the local education agencies currently support a care management system that has been categorized as a promising practice through research completed by East Carolina University. Continuing challenges in this work area are related to local barriers which include lack of local data collection systems, lack of nursing leadership, poor nurse to student ratio for service, and continued need for education in the process. Districts continue to be assisted to expand the number of schools providing care management and therefore to increase the number of children with specific follow-up plans for care and education to help parents eliminate smoking in the

home environment among other problems.

Also in FY17, genetic counselors will disseminate smoking cessation information to families with children who have genetic conditions with pulmonary involvement identified through the cystic fibrosis screening or satellite clinics.

The C&Y Branch has many efforts focused on increasing the percent of children age 0 through 17 who are adequately insured (NPM#15 and similar to former NPM#13). According to the 2011-12 NSCH, only 77.2% of parents in NC responded that their children were adequately insured. Younger children (less than five years of age) appear to be a bit better insured than older children. There was very little difference noted regarding adequacy of insurance by parents of CSHCN (76.3%) and non-CSHCN (77.4%). Eighty-four percent of parents of children receiving Medicaid responded that their insurance was adequate, while only 72.1% of parents of children with private insurance did. According to data from the US Census Bureau 2014 American Community Survey, 5.2% of all children aged 0 to 17 were uninsured in NC and 6.2% of children below 200% of poverty were uninsured.

The C&Y Branch develops, obtains reviews and disseminates all the materials for both Health Check (Medicaid for Children) and Health Choice (NC CHIP) to providers and families across the state. Beginning in May 2016, new educational brochures in English and Spanish will be disseminated through our partners in schools, community- and faith-based-organizations, and local health departments. In past years, over 200,000 brochures have been distributed in health fairs, conferences, and mailings. There are three positions in the Branch (Minority Outreach Coordinator, CYSHCN Help Line Coordinator, and YSHCN Access to Care Coordinator) that concentrate efforts on minority outreach for insurance enrollment, which is an increase of two positions during FY14. The Minority Outreach Coordinator is Latina and bi-lingual and, as she has been in the position for many years, presents a trusted voice to the many partners with whom she works. The CYSHCN Help Line Coordinator position was filled by an individual who is both African-American and American Indian, and she will continue to expand outreach efforts to focus more specifically on the different tribes residing in the state. She will attend the powwows and provide specialized outreach for health insurance and other services to this specific population. All of the positions are funded through a Federal Financial Participation agreement with DMA, and they promote outreach and enrollment of minority populations, including those with limited English proficiency, and CSHCN in a variety of insurance programs by:

- a. Utilizing state, regional and local partners focused on public and private not-for-profit organizations, minority owned businesses, faith communities, Family Support Network and other community-based initiatives;
- b. Partnering with a network of key leaders within minority communities to help with this work; and
- c. Providing direct outreach to targeted populations through cultural events and festivals, mobile consulates, and through Latino, Hmong, Tribal and other community organizations.

To help increase the percent of CSHCN whose families partner in decision-making, numerous efforts to increase this parent/professional relationship. Branch Family Partnerships occur via several venues. The BFP Steering Committee meets six times a year and provides direct feedback and offers recommendations to enhance the parent/professional partnerships among all C&Y programmatic efforts. The Parent Leadership Cadre is made up of 9 parents of CYSHCN who implement the nationally researched curriculum "Parents as Collaborative Leaders." The curriculum focuses on empowering parents in leadership development skills they can use to promote improved services and supports for CYSHCN. Parents also are becoming more engaged as co-trainers with staff or becoming involved in Branch initiated, time-limited committees.

WCHS selected an ESM for NPM#15 that highlights this 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 Minority Outreach Coordinator, CYSHCN Help Line Coordinator, and YSHCN Access to Care Coordinator. In late 2014, a quarterly electronic reporting system was implemented for these staff members to capture their activities. The 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. In 2015, there were 203 activities reported reaching an estimated 14,300 people. The type and frequency of outreach activities include: exhibits at local or statewide events (26%); presentations to families /caregivers or professionals directly working with families /caregivers (25%); and direct consultation/collaboration with community stakeholders to promote benefits of Medicaid/NC Health Choice enrollment (49%). Forty 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 (60%) were inclusive in targeting all populations who may be unserved or under-served regarding Medicaid/NC Health Choice enrollment opportunities.

The Outreach Specialists will continue to work with the Federally Facilitated Marketplace Navigator Entities across the state and the Department of Insurance to help assure that specialized outreach is provided to the various racial groups represented in NC, different cultural groups, military and families of children with special health care needs. These groups include Latino, African American, American Indian, refugees from Africa, Indochina, Latin America and Middle East. One of the outreach specialists co-chairs, along with the Executive Director of the NCPS, the NC Coalition to Promote Health Insurance for Children which provides a quarterly forum for statewide collaboration on outreach strategies and services among governmental and non-profit organizations. Moreover, the NC Community Health Center Association (FQHC) is awaiting confirmation of a three-year Connecting Kids to Coverage grant. They will be working within six counties to facilitate better enrollment of farmworker and minority populations in rural counties. The Coalition will work collaboratively to ensure that families of the uninsured are being reached.

In FY17, the C&Y Branch Outreach Specialists plan to exhibit in at least 16 events on access to NC child health insurance resources using materials that target the minority and limited English proficient populations and participate in at least 12 outreach events annually targeting CYSHCN, minority and limited English proficient populations. They will present at a minimum of 16 conferences/meetings/events annually to promote access to NC child health insurance resources to communities and providers. They will also plan and deliver at least one targeted outreach event with DMA to educate local Health Check Coordinators through training, consultation and updates. They will incorporate messages about the importance of choosing a quality medical home and making the most of health insurance benefits in all outreach/enrollment activities by:

- a. Promoting regular, periodic participation in preventive health services;
- b. Promoting the importance of having a consistent source of primary care;
- c. Promoting the importance of a medical home for all children, especially those with special needs; and
- d. Recommending policy and procedural changes that impact favorably on enrollment in publically funded health insurance and access to care.

The C&Y Branch will continue to maintain a state toll-free Help Line to assist families and providers with services for CYSHCN. The Help Line receives nearly 400 inquiries annually targeting children and youth ages birth up to 21, with 82% of inquiries related to access to community services and resources. Help Line staff have access to interpreters to converse with Spanish speaking and other limited English speaking individuals. The Help Line operates Monday through Friday from 8:00am to 5:00 pm and includes an email address for inquiries. Staff members also monitor program and legislative changes and consults with DMA and others to redirect activities and planning as needed. Monthly CYSHCN Help Line reports will be used to evaluate the call volume and Help Line inquiry characteristics. Typically, 30% of the calls focus on access and assistance related to health insurance. Staff members will continue to support the Commission for Children with Special Health Care Needs and its related committees (Oral Health and Behavioral 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 Help Line Coordinator and CYSHCN Access to Care Specialist will also continue to include and discuss access to Health Check and Health

Choice insurance options via scheduled presentations and exhibits using materials that are translated to fit the diverse racial/ethnic groups in NC. Targeted populations for outreach in the upcoming fiscal year include Children's Developmental Services Agencies; Local Interagency Coordinating Councils; Regional Family Support Networks; Local DSSs; minority populations in NC including Hispanic, African American, American Indian, refugees and military families.

Additional activities planned for FY17 to increase adequate insurance for children include the PMC increasing efforts to encourage private practices to enroll children in health insurance and to share strategies for enrollment among practices across the state. The child health programs in LHDs will also review their ongoing strategies to enroll more children in health insurance programs. The genetic counselors, audiologists, speech pathologists, school health nurses, family partners and child health nurses will provide information on Health Check and Health Choice for uninsured families with whom they are working and provide referrals to assist in the enrollment procedures. Case managers for children birth to five years of age also provide this information to families who are uninsured or under insured. FBPs will continue to co-present with staff and work with families in local areas of the state to help them obtain appropriate and comprehensive coverage for their children.

Family partners who assist with community outreach and partner in service planning stress the availability and options for CSHCN to obtain needed insurance. The BFP Steering Committee provides direct feedback and offers recommendations to enhance the parent/professional partnerships which help strengthen the understanding of service supports for CYSHCN. Additional BFPs are being identified (ex. parent trainers, committee members) to extend the efforts into local communities.

The NC Office on Disability and Health (NCODH), housed in the C&Y Branch, works to integrate the health concerns of persons with disabilities into state and local public health programs. This integration helps create sustainable infrastructure, build capacity, maximize resources, and promote inclusive policy initiatives. The goals of the NCODH are to:

- Increase awareness and understanding of the health related needs of individuals with disabilities
- Improve access to health services and involvement in health promotion programs, including emergency preparedness
- Conduct and report on research and data collection, and
- Affect sustainable system changes in policies, procedures, and practices related to health and disability.

NCODH anticipates grant funding from CDC for the new grant cycle beginning in July 2016. Through the new cooperative agreement with CDC, the NCODH will focus on three CDC-identified goals to improve the health of people with mobility limitations and intellectual disabilities: 1) physical activity; 2) tobacco prevention and control; and 3) chronic disease. NCODH will continue to collaborate with the Child Health Nurse Consultant to conduct accessibility reviews of local health departments and provide them with an individual plan of action and ongoing technical assistance. NCODH will work with the Chronic Disease and Injury Section to ensure inclusion of CYSHCN in programs, websites and print materials. The Active Routes to School program will continue its work with NCODH to implement the disability accessibility checklist at all sites to identify and address specific areas of concern. In its ongoing collaboration with the C&Y Branch, NCODH will develop a dental practice accessibility checklist to be used by consumers and families of CSHCN and will conduct disability access reviews of dental clinics.

The National Immunization Survey (NIS) childhood immunization coverage rates were released in August 2015 for the 2014 calendar year. Fiscal year rates, which had been used in NC for former NPM#7, were not released. NC's 2014 rate for the 4:3:1:3:3:1 series (against Measles, Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, Haemophilus Influenza, and Hepatitis B) was 83%, up from the 2013 rate of 76.6%. The percent of children age 13 to 17 who have received 1 or more doses of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap) since the age of ten years (former SPM#9) was 89.4 in 2013 and increased to 92.3 in 2014. While most of the

funding for childhood immunizations does not come from Title V, the WCHS as a whole supports the work of the IB to raise immunization rates across the lifespan. The C&Y Branch works closely with the IB to increase access to vaccines for CYSHCN since their routine health is sometimes lost while dealing with specialty care. Home visitors, maternal and child health clinic staff, school nurses and care managers are all instrumental in assuring access to appropriate vaccinations for children. As for activities of the IB, NC Immunization Program (NCIP) staff will continue to conduct childhood and adolescent Assessment, Feedback, Incentive, and eXchange (AFIX) visits to providers. They will also continue to train providers on the utilization of the North Carolina Immunization Registry (NCIR) reminder/recall tool during Vaccine for Children (VFC) site visits and AFIX visits. Greater use of these tools by providers should help to increase the overall completion rate of the 4:3:1:3:3:1 series in NC. The IB will host several regional workshops during April, May, and June 2016. Providers throughout the state are invited to attend. In addition, the IB will continue to collaborate with outside entities such as the NC Immunization Coalition, the NCPS, and the NC Academy of Family Physicians to improve rates among the required and recommended childhood vaccines.

### **Cross-Cutting/Life Course - Annual Report**

The WHB continued distribution of smoking cessation materials to LHDs, hospitals, and private providers. These materials include “If You Smoke and Are Pregnant” (maternal smoking brochure), “Oh Baby! We Want to Keep You Safe From Secondhand Smoke” (secondhand smoke brochure), and “You Quit, Two Quit” (postpartum brochure). The Guide for Counseling Women Who Smoke (training manual) was hosted on the WHB webpage and on the You Quit, Two Quit webpage. These materials are also available for download on the WHB website and partnering organizations’ websites (e.g., mombaby.org and NCHSF). WHB partnered with the TPCB to provide 5 A’s tobacco cessation counseling training for LHDs.

The three NC Healthy Start Projects – Eastern, Northeastern and Triad Baby Love Plus – have combined into one project serving six counties: Pitt, Nash, Halifax, Edgecombe, Forsyth, and Guilford. The NC Baby Love Plus Program conducted community wide outreach and education specifically focused on smoking cessation to preconception, pregnant and interconception women during community baby showers, health fairs, and other locally sponsored educational events during FY15. Nine Community Health Advocates participated in 706 events, reaching 6,161 women of childbearing age covering the six counties. During the interconceptional period, ten Family Care Coordinators screened all newly enrolled program participants for prenatal tobacco use at the initial assessment and at each subsequent client contact. As warranted, referrals were made to tobacco cessation programs and to QuitlineNC.

The statewide 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. Of the 2014-15 NC public school population of 1,433,592 students, 93,106 students with asthma diagnoses received school nursing services during FY15. Services that were delivered to these students were facilitated by the work of the SHNC Team and were reported to the state program on the North Carolina Annual School Health Services Report Survey. During FY15, services included the development and sharing of 53,326 asthma related Individual Health Care Plans and the development of 839 Section 504 Plans. In addition, 17 presentations were delivered through student and family asthma education programs such as Open Airways, three services through Managing Asthma Triggers, and three through other related curricula. A total of 1,240 students/families participated in school nurse led asthma education programs. School nurses also used consultant team resources in providing asthma education to school staff in 37 districts.

Air quality in the home, including the impact of smoking, was a known trigger issue for many students with asthma. The school health nurse consultant team, through school nurses, worked to reduce the impact of this trigger. School nurses completed 8,455 home visits during FY15 to address student health issues in the home environment. These were often completed as a component of local School Nurse Care/Case Management programs directed to

students and families with asthma diagnoses.

In FY15, in the 32 SHCs funded by state dollars, 17% of the children seen age 10-19 were uninsured or self-pay. 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.

NCODH recommended the hiring of a full time employee to address the needs of emergency management and individuals with intellectual and developmental disabilities, and, in the fall of 2013, through a grant funded by the NC Council on Developmental Disabilities, the position was established. This staff member reached additional families and CYSHCN in FY15 through trainings and other partnership opportunities. NCODH, in conjunction with NC Public Health Preparedness and Response Branch, also provided training to regional coordinators on making their efforts more inclusive of all people with access and functional limitations.

As a result of NCODH's participation in the regional Child Health Nurse Consultant meetings, NCODH conducted accessibility reviews of five LDHs. To reach an even wider audience of pediatricians, NCODH presented at the 2015 meeting of the NCPS and worked with the Society to schedule an additional training via webinar. Five pediatric practices contacted NCODH to conduct accessibility reviews. Centers of Independent Living or other disability partner organizations take part in reviews and continue to serve as ongoing local resources. Results will be measured through ongoing monitoring of practice changes that improve overall accessibility.

NCODH also worked with the IA initiative to improve emergency preparedness for CYSHCN through improvements in community-wide systems of care for CYSHCN and their families in FY15. NCODH provided funding to Cabarrus, Rowan and Stanly counties and expanded its partnership to include Watauga to provide similar emergency preparedness training to families of CYSHCN. Additional IA counties were invited to learn from these counties and use their results and training materials to similarly educate their constituents about emergency preparedness.

The IB conducted 315 childhood and 91 adolescent AFIX visits during 2015 for a total of 406 visits. In FY15 the IB again had adequate funding and, based on the success of its 2014 campaign, incorporated the following media mix: TV (local news programs), cable TV (utilized specific targeted cable networks to increase media campaign), internet/online (mobile-smartphones and tablets, desktops, banner ads, TV station websites), and movie theater ads.

### **Other Programmatic Activities**

No content was entered for Other Programmatic Activities in the State Action Plan Narrative section.

### **II.F.2 MCH Workforce Development and Capacity**

With the ongoing reductions in operating budgets and restrictions on travel and attendance to conferences, the opportunities for ongoing education and training opportunities became subsequently harder to access. A number of strategies were put into place and will continue to expand in the future. Staff was assessed for perceived training needs and education and training resources were matched to those areas. Excellent training resources were brought to the WCHS through partnerships with UNC's Leadership Education in Neurodevelopmental Disabilities and Related Disorders (LEND) program, NIRN, Early Childhood Advisory Councils, partnerships with universities and medical schools, etc. Trainings were recorded and offered to new staff as they come on board or to key partners as needed. Examples include Motivational Interviewing, systems development and integration, how to implement and sustain evidence-based programs with model fidelity, data analysis, early childhood and adolescent brain development, quality improvement assessments, SCID, congenital heart screening, Trauma-informed Services and Secondary Trauma.

In addition, all C&YB staff members are required to make use of the MCH Navigator to assess their knowledge and skills, and to develop an annual professional development plan.

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

Monthly “Lunch and Learn” sessions have been reinitiated 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.

The MIECHV grant requires that core competencies of home visitors be determined and training offered to meet those competencies. An Online Training Library and Learning Modules resource was developed and designed to meet the educational and professional development needs of NC’s home visitors. This resource contains content organized into eleven Core Competency Areas. The library portion contains links to Webinars, PowerPoints, Podcasts, Educational Resources, Community Resources, Tool Kits, Screening Tools, and other resources in PDF format. Through this individualized and secure access portal, home visitors can also access the resource’s Learning Modules, which attempt to highlight and reinforce key learning points, to record the participant’s efforts, and to allow for reflective supervision in professional development. At the end of each training module there is a test of the material information and, if successful, the individual is provided a certificate of completion. These certificates can be made available to supervisors and others. Since different agencies, universities, the LEND program, and parents all have areas where they provide specialty training and education, the C&Y Branch is currently in discussion on how to broaden the Online Training Library to include trainings from the early childhood and adolescent health care providers, agencies and parents, with the modules accessible across the state and free of charge. Each group would be responsible for assuring current and accurate information in their specific training expertise, but an interagency network would allow the Branch to broaden the educational opportunities, reach more parents and providers and avoid development of redundancies in trainings across the state.

Both Healthy Start Baby Love Plus and the NC SCP provide consumer-driven trainings at least annually. This is inclusive of family members serving on the planning team. APP also holds an annual graduation and skill-building meeting for all teens who participate in the program and also graduate from high school which is one of the highlights of the program year.

The WHB also leads a regular Reading Circle focused on cultural awareness. 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 CoIN team focused on social determinants of health, all team members were invited to attend the foundational 2-day training on racism lead by the Racial Equity Institute during FY15 and FY16. A follow-up training is being planned for FY17. As part of the PHSP, this team has made the bold decision to focus on institutional racism.

### **II.F.3. Family Consumer 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. The C&YB continues to use Title V funding to support the Branch Family Partners who meet quarterly, and other times as needed, with the C&Y BMT for program planning, implementation and evaluation. In turn, the Branch Family Partners have established local networks of families across the state that participate on committees and councils, co-train with WCHS staff, and serve on local committees and councils. Participation by family members on the Branch Family Partners and other activities is supported by travel assistance and stipends to compensate them for their time and

effort. As two of the core constructs of the C&Y Strategic Plan deal specifically with including families and being family centered, the C&Y 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. One of the priority needs highlighted in the PHSP was to increase family driven service provision.

There are several NC DHHS 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 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, Young Families Connect program, Healthy Beginnings, and NC Healthy Start Baby Love Plus; through work with PPE counselors at universities and community colleges; and through focus groups held while developing the Preconception Health Strategic Plan and SCP guidance. LHDs are required to routinely survey their clients for feedback which is reviewed during monitoring visits by WCHS Regional Consultants.

As highlighted in the needs assessment, the C&Y Branch also formed a BFP several years ago. Through a survey, family members involved in the BFP designate the programs to which they are most interested in contributing and are paired with the appropriate staff in that area for ongoing parent professional partnering. Parents are reimbursed for their time at \$20.00/hour plus travel expenses for such activities as presentations, panel members, facilitators, grant reviewers (including the MCH Block Grant), and participants on advisory boards, work groups, task forces, and policy groups. Areas of focus for these groups may include strategic and program planning, quality improvement, workforce development, and review of education materials.

The BFP Steering Committee met every other month during FY15. The purpose of the committee is to provide ongoing guidance to the C&Y BMT on assuring family-driven processes and programs. The steering committee has bimonthly conversations with the BMT to ensure the family voice is heard. Guidance from families will help the Branch to:

Develop and enhance long-term and meaningful relationships with parents/families,

- Collaborate with families in planning, training and evaluation,
- Engage new partners who also serve families,
- Regularly articulate the expectation that families be involved in policy decisions and collaborative activities,
- Model collaboration with families and family-run organizations, and
- Explore new ways in which families can be involved in system-level policy and advocacy efforts

One parent recently reported to the YSHCN Access to Care Coordinator her appreciation of the reimbursement support and stated "This process helps and encourages us to participate; so many places talk about family engagement and involvement but want families to do so at their own expense when everyone else at the table is receiving some type of compensation for the work they are doing around the same table. We appreciate the Branch seeing and valuing our input. Thanks."

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.

#### **II.F.4. Health Reform**

The US Supreme Court decision preserving subsidized health insurance coverage in states with federal exchanges will help improve access to care for low and moderate-income women and families in NC. To date, North Carolina has elected not to expand Medicaid.

One of the primary goals of the NC DHHS is to reform the Medicaid program. Legislation to transform and reorganize NC's Medicaid and NC Health Choice programs was passed in September 2015. On June 1, 2016 Governor Pat McCrory submitted North Carolina's Medicaid Reform plan (Section 1115 demonstration) application to the federal Centers for Medicare & Medicaid Services (CMS) after three years of stakeholder engagement and planning. As part of the reform process, the state's Medicaid team and partners within the Department of Health and Human Services have held a dozen public hearings across the state to collect feedback from the public, including health care providers, patients, beneficiaries and advocates. In all, nearly 1,600 people attended the public hearings. Additionally, written comments were received from 750 citizens during the public comment period. The demonstration will test and evaluate five broad-based initiatives and their program proposals: 1) Build a System of Accountability for Outcomes; 2) Create Person-Centered Health Communities; 3) Support Providers through Engagement and Innovations; 4) Connect Children and Families in the Child Welfare System to Better Health; and 5) Implement Capitation and Care Transformation through Payment Alignment. CMS is expected to spend at least 18 months reviewing the waiver request. If approved, it would take another 18 months to implement the changes.

#### **II.F.5. Emerging Issues**

In addition to the proposed state Medicaid reform mentioned above, there are several other emerging issues for the WCHS to pay close attention to.

DPH is beginning preparation for its initial application for "accredited status" from the national Public Health Accreditation Board (PHAB). The first step required by PHAB is the development of a comprehensive State Health Assessment in collaboration with multiple partner groups and organizations that also impact or have the potential to impact our state's health. The WCHS Chief is a member of the State Health Assessment Team. Once the State Health Assessment Team determines the state's priorities, a Health Improvement Plan will be created as well as the Health Department Strategic Plan.

The threat of Zika virus is taken seriously in North Carolina. While the focus of planning to address this threat is in the Epidemiology Section of the DPH, the WCHS is involved in the response. Specifically, the WHB will support the tracking of pregnant women who are diagnosed with Zika in the state. In addition, other branches who have programs serving pregnant women or women of child bearing age will support messages to their clients describing the risks and advising them on preventive measures.

As mentioned above, the new Secretary of the NC DHHS has made infant mortality reduction a priority of the department. To that end the WCHS is developing a proposal for state funding in the next biennial budget (FY 17-19) that addresses this issue through the Perinatal Health Strategic Plan, which was released in March 2016. This plan includes a broad array of initiatives that address not only personal health care, but also systems change and social determinants of health. The WCHS hopes that the funding provided by the legislature described earlier will grow into a statewide initiative.

#### **II.F.6. Public Input**

Public input on the MCH Block Grant Application/Annual Report is obtained in several ways. It is posted on the WCHS website (<http://ncdhhs.gov/dph/wch/>) in July and partnering agencies (including the NCHSF, March of Dimes state chapter, Area Health Education Centers, etc.) are asked to review it and provide feedback to the Section Office. While comments on the block grant application itself are minimal, ongoing communication with these

agencies impacts policies and activities carried out by the WCHS. Also since NC's application is predicated on the work of the Perinatal Health and the C&Y Branch Strategic Plans, 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.

#### **II.F.7. Technical Assistance**

Potential areas of needed technical assistance for the WCHS are:

1. Successful examples of programs addressing institutional racism and its effect on MCH populations
2. Increasing cultural competency
3. Improving mental health services for young children (infant through 5<sup>th</sup> grade)
4. Quality improvement science
5. Program sustainability and public health finance
6. Examples of evidence-based MCH strategies that can be implemented within the state
7. Return on investment
8. System improvement evaluation
9. Health equity
10. Collective impact
11. Implementation science

### III. Budget Narrative

	2013		2014	
	Budgeted	Expended	Budgeted	Expended
<b>Federal Allocation</b>	\$16,434,955	\$16,271,437	\$16,578,863	\$17,374,299
<b>Unobligated Balance</b>	\$0	\$0	\$0	\$0
<b>State Funds</b>	\$37,478,306	\$33,456,478	\$37,823,722	\$32,310,857
<b>Local Funds</b>	\$0	\$0	\$0	\$0
<b>Other Funds</b>	\$65,390,524	\$62,883,548	\$65,390,696	\$59,642,654
<b>Program Funds</b>	\$57,536,376	\$71,953,462	\$83,572,373	\$59,973,895
<b>SubTotal</b>	\$176,840,161	\$184,564,925	\$203,365,654	\$169,301,705
<b>Other Federal Funds</b>	\$391,516,377	\$341,153,361	\$382,810,346	
<b>Total</b>	\$568,356,538	\$525,718,286	\$586,176,000	\$169,301,705

Due to limitations in TVIS this year, States are not able to report their FY14 Other Federal Funds Expended on Form 2, Line 9. States are encouraged to provide this information in a field note on Form 2.

	2015		2016	
	Budgeted	Expended	Budgeted	Expended
<b>Federal Allocation</b>	\$16,973,824	\$16,606,131	\$17,130,221	
<b>Unobligated Balance</b>	\$0	\$0	\$0	
<b>State Funds</b>	\$36,611,550	\$33,091,071	\$34,217,232	
<b>Local Funds</b>	\$0	\$0	\$0	
<b>Other Funds</b>	\$65,478,430	\$59,015,505	\$65,420,970	
<b>Program Funds</b>	\$71,953,462	\$64,363,771	\$59,973,895	
<b>SubTotal</b>	\$191,017,266	\$173,076,478	\$176,742,318	
<b>Other Federal Funds</b>	\$390,328,151	\$332,621,013	\$388,209,087	
<b>Total</b>	\$581,345,417	\$505,697,491	\$564,951,405	

	2017	
	Budgeted	Expended
<b>Federal Allocation</b>	\$17,278,043	
<b>Unobligated Balance</b>	\$0	
<b>State Funds</b>	\$37,082,666	
<b>Local Funds</b>	\$0	
<b>Other Funds</b>	\$65,430,679	
<b>Program Funds</b>	\$64,363,771	
<b>SubTotal</b>	\$184,155,159	
<b>Other Federal Funds</b>	\$383,608,362	
<b>Total</b>	\$567,763,521	

### III.A. Expenditures

The NC General Assembly 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.

In FY15 federal Maternal and Child Health Block Grant expenditures were \$16,606,131, a decrease of \$768,168 over the previous year. This reflected a \$939,848 decrease in the state plan amount between FY13-14 and 14-15.

Expenditures of state funds were up by \$780,214, explained mainly as greater efficiency of expenditures across most programs versus additional state appropriations being approved. Expenditures of program income increased by \$4,389,876. This income is what local health departments report for maternal and child health services paid by the Medicaid program. However, the reliability of these data have been questioned as more of the local health departments are using alternate systems for reporting. Some of the increase is due to payments for case management for Coordinated Care for Children and Pregnancy Care Management. These figures are reliable.

### III.B. 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.

#### 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 budgets available funds in a series of cost centers called RCC's. These centers are used to group dollars intended for certain types of programs and services. The RCC's 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 service 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 as shown in Form 2 is \$37,082,666. This includes state funds used for matching Title V funds, which for the FY15 application is \$12,960,044.

#### **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.pdf](#)

## V. Supporting Documents

The following supporting documents have been provided to supplement the narrative discussion.

Supporting Document #01 - [Glossary of Acronyms FY17 NC MCHBG Application.pdf](#)

## VI. Appendix

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**Form 2**  
**MCH Budget/Expenditure Details**

**State: North Carolina**

	<b>FY17 Application Budgeted</b>	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	\$ 17,278,043	
A. Preventive and Primary Care for Children	\$ 5,731,110	(33.2%)
B. Children with Special Health Care Needs	\$ 5,238,160	(30.3%)
C. Title V Administrative Costs	\$ 555,070	(3.2%)
2. UNOBLIGATED BALANCE (Item 18b of SF-424)	\$ 0	
3. STATE MCH FUNDS (Item 18c of SF-424)	\$ 37,082,666	
4. LOCAL MCH FUNDS (Item 18d of SF-424)	\$ 0	
5. OTHER FUNDS (Item 18e of SF-424)	\$ 65,430,679	
6. PROGRAM INCOME (Item 18f of SF-424)	\$ 64,363,771	
7. TOTAL STATE MATCH (Lines 3 through 6)	\$ 166,877,116	
A. Your State's FY 1989 Maintenance of Effort Amount \$ 29,063,379		
8. FEDERAL-STATE TITLE V BLOCK GRANT PARTNERSHIP SUBTOTAL (Same as item 18g of SF-424)	\$ 184,155,159	
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)	\$ 383,608,362	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	\$ 567,763,521	

OTHER FEDERAL FUNDS	FY17 Application Budgeted
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	\$ 108,337
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Community-Based Integrated Service Systems (CISS)	\$ 132,872
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Healthy Start	\$ 3,021,394
US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC)	\$ 238,008,731
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Essentials for Childhood	\$ 272,480
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Early Hearing Detection and Intervention (EHDI) State Programs	\$ 172,882
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Vaccines For Children/Immunizations	\$ 9,403,301
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > State Disability and Health Programs	\$ 308,941
US Department of Education > Office of Early Learning (OEL) > Race to the Top - Early Learning Challenge	\$ 2,458,337
Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > Title X Family Planning	\$ 6,937,489
Department of Health and Human Services (DHHS) > Substance Abuse and Mental Health Services Administration > Project LAUNCH	\$ 775,346
Department of Health and Human Services (DHHS) > Centers for Medicare & Medicaid Services (CMS) > Title XIX -- Grants to States for Medical Assistance Programs	\$ 2,272,699
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > Temporary Assistance for Needy Families (TANF)	\$ 2,950,000
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Universal Newborn Hearing Screening and Intervention	\$ 331,127
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > ACA Maternal, Infant and Early Childhood Home Visiting Program	\$ 4,401,667

OTHER FEDERAL FUNDS	FY17 Application Budgeted
Department of Health and Human Services (DHHS) > Centers for Medicare & Medicaid Services (CMS) > Children's Health Insurance Program Reauthorization Act (CHIPRA)	\$ 232,292
US Department of Agriculture (USDA) > Food and Nutrition Services > Child and Adult Care Food Program (CACFP)	\$ 107,474,429
Department of Health and Human Services (DHHS) > Office of Adolescent Health > Support for Pregnant and Parenting Teens	\$ 2,711,144
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	\$ 1,634,894

	FY15 Application Budgeted		FY15 Annual Report Expended	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	\$ 16,973,824		\$ 16,606,131	
A. Preventive and Primary Care for Children	\$ 6,338,140	(37.3%)	\$ 5,119,903	(30.8%)
B. Children with Special Health Care Needs	\$ 5,216,640	(30.7%)	\$ 4,997,759	(30.1%)
C. Title V Administrative Costs	\$ 552,571	(3.3%)	\$ 429,415	(2.6%)
2. UNOBLIGATED BALANCE (Item 18b of SF-424)	\$ 0		\$ 0	
3. STATE MCH FUNDS (Item 18c of SF-424)	\$ 36,611,550		\$ 33,091,071	
4. LOCAL MCH FUNDS (Item 18d of SF-424)	\$ 0		\$ 0	
5. OTHER FUNDS (Item 18e of SF-424)	\$ 65,478,430		\$ 59,015,505	
6. PROGRAM INCOME (Item 18f of SF-424)	\$ 71,953,462		\$ 64,363,771	
7. TOTAL STATE MATCH (Lines 3 through 6)	\$ 174,043,442		\$ 156,470,347	
A. Your State's FY 1989 Maintenance of Effort Amount \$ 29,063,379				
8. FEDERAL-STATE TITLE V BLOCK GRANT PARTNERSHIP SUBTOTAL (Same as item 18g of SF-424)	\$ 191,017,266		\$ 173,076,478	
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)	\$ 390,328,151		\$ 332,621,013	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	\$ 581,345,417		\$ 505,697,491	

OTHER FEDERAL FUNDS	FY15 Annual Report Expended
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	\$ 121,833
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Healthy Start	\$ 1,720,595
US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC)	\$ 198,263,687
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Essentials for Childhood	\$ 166,461
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > State Disability and Health Programs	\$ 233,146
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Early Hearing Detection and Intervention (EHDI) State Programs	\$ 139,384
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Vaccines For Children/Immunizations	\$ 6,708,022
US Department of Education > Office of Early Learning (OEL) > Race to the Top - Early Learning Challenge	\$ 2,113,463
Department of Health and Human Services (DHHS) > Substance Abuse and Mental Health Services Administration > Project LAUNCH	\$ 898,649
Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > Title X Family Planning	\$ 6,078,569
Department of Health and Human Services (DHHS) > Centers for Medicare & Medicaid Services (CMS) > Title XIX -- Grants to States for Medical Assistance Programs	\$ 1,808,738
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > Temporary Assistance for Needy Families (TANF)	\$ 2,374,771
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Universal Newborn Hearing Screening and Intervention	\$ 211,913
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Community-Based Integrated Service Systems (CISS)	\$ 25,557
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > ACA Maternal, Infant and Early Childhood Home Visiting Program	\$ 1,130,661

OTHER FEDERAL FUNDS	FY15 Annual Report Expended
Department of Health and Human Services (DHHS) > Centers for Medicare & Medicaid Services (CMS) > Children's Health Insurance Program Reauthorization Act (CHIPRA)	\$ 53,289
US Department of Agriculture (USDA) > Food and Nutrition Services > Child and Adult Care Food Program (CACFP)	\$ 107,606,553
Department of Health and Human Services (DHHS) > Office of Adolescent Health > Support for Pregnant and Parenting Teens	\$ 1,531,342
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	\$ 1,434,380

**Form Notes for Form 2:**

None

**Field Level Notes for Form 2:**

None

**Data Alerts:**

1.	The value in Line 1A, Preventive And Primary Care Expended, Annual Report Expended is greater or less than 10% of the Annual Report Budgeted. Please correct or add a field level note indicating the reason for the discrepancy.
2.	The value in Line 1C, Title V Administrative Costs, Annual Report Expended is greater or less than 10% of the Annual Report Budgeted. Please add a field level note indicating the reason for the discrepancy.
3.	The value in Line 6, Program Income, Annual Report Expended is greater or less than 10% of the Annual Report Budgeted. Please add a field level note indicating the reason for the discrepancy.

**Form 3a**  
**Budget and Expenditure Details by Types of Individuals Served**  
**State: North Carolina**

**I. TYPES OF INDIVIDUALS SERVED**

IA. Federal MCH Block Grant	FY17 Application Budgeted	FY15 Annual Report Expended
1. Pregnant Women	\$ 3,155,621	\$ 3,141,412
2. Infants < 1 year	\$ 1,029,060	\$ 680,184
3. Children 1-22 years	\$ 5,494,860	\$ 5,158,056
4. CSHCN	\$ 5,238,160	\$ 4,959,606
5. All Others	\$ 1,858,490	\$ 2,437,991
Federal Total of Individuals Served	\$ 16,776,191	\$ 16,377,249

IB. Non Federal MCH Block Grant	FY17 Application Budgeted	FY15 Annual Report Expended
1. Pregnant Women	\$ 40,034,149	\$ 38,504,971
2. Infants < 1 year	\$ 18,870,349	\$ 16,547,755
3. Children 1-22 years	\$ 64,080,938	\$ 59,807,030
4. CSHCN	\$ 27,257,673	\$ 26,614,395
5. All Others	\$ 15,708,472	\$ 14,437,729
Non Federal Total of Individuals Served	\$ 165,951,581	\$ 155,911,880
Federal State MCH Block Grant Partnership Total	\$ 182,727,772	\$ 172,289,129

**Form Notes for Form 3a:**

None

**Field Level Notes for Form 3a:**

None

**Data Alerts:**

1.	Children 1 to 22 Years, Application Budgeted does not equal Form 2, Line 1A, preventive and Primary Care for Children Application Budgeted. Please add a field level note to explain.
2.	Children 1 to 22 Years, Annual Report Expended does not equal Form 2, Line 1A, preventive and Primary Care for Children, Annual Report Expended. Please add a field level note to explain.
3.	CSHCN, Annual Report Expended does not equal Form 2, Line 1B, Children with Special Health Care Needs, Annual Report Expended. Please add a field level note to explain.

**Form 3b**  
**Budget and Expenditure Details by Types of Services**  
**State: North Carolina**

**II. TYPES OF SERVICES**

IIA. Federal MCH Block Grant	FY17 Application Budgeted	FY15 Annual Report Expended
1. Direct Services	\$ 10,942,440	\$ 11,045,009
A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One	\$ 6,079,605	\$ 6,332,170
B. Preventive and Primary Care Services for Children	\$ 3,693,604	\$ 3,609,518
C. Services for CSHCN	\$ 1,169,231	\$ 1,103,321
2. Enabling Services	\$ 4,458,884	\$ 3,832,191
3. Public Health Services and Systems	\$ 1,876,719	\$ 1,728,931
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		
Physician/Office Services		
Hospital Charges (Includes Inpatient and Outpatient Services)		
Dental Care (Does Not Include Orthodontic Services)		
Durable Medical Equipment and Supplies		
Laboratory Services		
Other		
Other		\$ 11,045,009
Direct Services Line 4 Expended Total		\$ 11,045,009
<b>Federal Total</b>	<b>\$ 17,278,043</b>	<b>\$ 16,606,131</b>

IIB. Non-Federal MCH Block Grant	FY17 Application Budgeted	FY15 Annual Report Expended
1. Direct Services	\$ 103,260,460	\$ 96,315,854
A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One	\$ 20,876,128	\$ 20,113,377
B. Preventive and Primary Care Services for Children	\$ 79,388,846	\$ 72,885,911
C. Services for CSHCN	\$ 2,995,486	\$ 3,316,566
2. Enabling Services	\$ 56,770,986	\$ 54,281,242
3. Public Health Services and Systems	\$ 6,845,670	\$ 5,873,252
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		
Physician/Office Services		
Hospital Charges (Includes Inpatient and Outpatient Services)		
Dental Care (Does Not Include Orthodontic Services)		
Durable Medical Equipment and Supplies		
Laboratory Services		
Other		
Other		\$ 96,315,854
Direct Services Line 4 Expended Total		\$ 96,315,854
<b>Non-Federal Total</b>	\$ 166,877,116	\$ 156,470,348

**Form Notes for Form 3b:**

None

**Field Level Notes for Form 3b:**

---

1.	<b>Field Name:</b>	<b>IIA. - Other - Other</b>
	<b>Fiscal Year:</b>	<b>2017</b>
	<b>Column Name:</b>	<b>Annual Report Expended</b>
	<b>Field Note:</b>	The state accounting system is not structured in a way that this type of breakdown is available.

---

2.	<b>Field Name:</b>	<b>IIB. - Other - Other</b>
	<b>Fiscal Year:</b>	<b>2017</b>
	<b>Column Name:</b>	<b>Annual Report Expended</b>
	<b>Field Note:</b>	The state accounting system is not structured in a way that this type of breakdown is available.

---

**Form 4**  
**Number and Percentage of Newborns and Others Screened Cases Confirmed and Treated**  
**State: North Carolina**

**Total Births by Occurrence: 122,556**

**1. Core RUSP Conditions**

Program Name	(A) Number Receiving at Least One Screen	(B) Number Presumptive Positive Screens	(C) Number Confirmed Cases	(D) Number Referred for Treatment
Core RUSP Conditions	117,800 (96.1%)	601	226	226 (100.0%)

Program Name(s)				
Propionic acidemia	Methylmalonic acidemia (methylmalonyl-CoA mutase)	Methylmalonic acidemia (cobalamin disorders)	Isovaleric acidemia	3-Methylcrotonyl-CoA carboxylase deficiency
3-Hydroxy-3-methylglutaric aciduria	Holocarboxylase synthase deficiency	β-Ketothiolase deficiency	Glutaric acidemia type I	Carnitine uptake defect/carnitine transport defect
Medium-chain acyl-CoA dehydrogenase deficiency	Very long-chain acyl-CoA dehydrogenase deficiency	Long-chain L-3 hydroxyacyl-CoA dehydrogenase deficiency	Trifunctional protein deficiency	Argininosuccinic aciduria
Citrullinemia, type I	Maple syrup urine disease	Homocystinuria	Classic phenylketonuria	Tyrosinemia, type I
Primary congenital hypothyroidism	Congenital adrenal hyperplasia	S,S disease (Sickle cell anemia)	S, β-thalassemia	S,C disease
Biotinidase deficiency	Critical congenital heart disease	Cystic fibrosis	Classic galactosemia	

## 2. Other Newborn Screening Tests

Program Name	(A) Number Receiving at Least One Screen	(B) Number Presumptive Positive Screens	(C) Number Confirmed Cases	(D) Number Referred for Treatment
Newborn Hearing	121,642 (99.3%)	2,914	225	195 (86.7%)

## 3. Screening Programs for Older Children & Women

None

## 4. Long-Term Follow-Up

NC provides long-term follow-up for people with Sickle Cell disease through the Women's Health Branch. NC 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:**

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1.	<b>Field Name:</b>	<b>Newborn Hearing - Referred For Treatment</b>
	<b>Fiscal Year:</b>	<b>2015</b>
	<b>Column Name:</b>	<b>Other Newborn</b>

---

**Field Note:**

Newborn hearing screening reports on occurrent live births. Of the 30 cases without documented intervention, 16 families declined services, three families were residents of another state, and three families moved out of state prior to initiating intervention services. The remainder were lost to follow-up.

**Data Alerts: None**

**Form 5a**  
**Unduplicated Count of Individuals Served under Title V**  
**State: North Carolina**

**Reporting Year 2015**

		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	38,480	34.0	0.0	2.0	18.0	46.0
2. Infants < 1 Year of Age	120,948	57.0	0.0	35.0	8.0	0.0
3. Children 1 to 22 Years of Age	45,191	44.0	0.0	4.0	15.0	37.0
4. Children with Special Health Care Needs	59,219	90.0	0.0	0.0	0.0	10.0
5. Others	30,818	23.0	0.0	4.0	30.0	43.0
<b>Total</b>	<b>294,656</b>					

**Form Notes for Form 5a:**

None

**Field Level Notes for Form 5a:**

---

1.	<b>Field Name:</b>	<b>Pregnant Women Total Served</b>
	<b>Fiscal Year:</b>	<b>2015</b>
	<b>Field Note:</b>	Taken from Health Information System data for FY15 which is probably an underestimate as not all local health departments are submitting complete data to HIS.

---

2.	<b>Field Name:</b>	<b>Infants Less Than One YearTotal Served</b>
	<b>Fiscal Year:</b>	<b>2015</b>
	<b>Field Note:</b>	The percentage in the Medicaid category for the primary source of coverage is based on the percent of infants on Medicaid from the linked birth certificate and Medicaid claims file. The percentage for None is the Kaiser Family Foundation data for Health Insurance Coverage of Children 0-18 in NC which is based on the US Census Bureaus's March 2015 Current Population Survey: Annual Social and Economic Supplement. Private/Other is the remainder of infants.

---

3.	<b>Field Name:</b>	<b>Children 1 to 22 Years of Age</b>
	<b>Fiscal Year:</b>	<b>2015</b>
	<b>Field Note:</b>	Taken from Health Information System data for FY15 which is probably an underestimate as not all local health departments are submitting complete data to HIS.

---

4.	<b>Field Name:</b>	<b>Children with Special Health Care Needs</b>
	<b>Fiscal Year:</b>	<b>2015</b>
	<b>Field Note:</b>	This is based on CC4C data from the CCNC CMIS and CYSHCN Help Line calls. The CC4C data is only available by Medicaid or non-Medicaid status (which are counted as unknown), and the insurance status of people making Help Line calls doesn't change the overall status due to such small numbers (358 total).

---

5.	<b>Field Name:</b>	<b>Others</b>
	<b>Fiscal Year:</b>	<b>2015</b>
	<b>Field Note:</b>	This is a prorated count of women served in local health department Family Planning clinics through Title V funding and taken from Health Information System data for FY15 which is probably an underestimate as not all local health departments are submitting complete data for HIS.



**Form 5b**  
**Total Recipient Count of Individuals Served by Title V**  
**State: North Carolina**

**Reporting Year 2015**

<b>Types Of Individuals Served</b>	<b>Total Served</b>
1. Pregnant Women	120,948
2. Infants < 1 Year of Age	120,948
3. Children 1 to 22 Years of Age	184,754
4. Children with Special Health Care Needs	82,936
5. Others	179,124
<b>Total</b>	<b>688,710</b>

**Form Notes for Form 5b:**

None

**Field Level Notes for Form 5b:**

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1.	<b>Field Name:</b>	<b>Pregnant Women</b>
	<b>Fiscal Year:</b>	<b>2015</b>
	<b>Field Note:</b>	Total births in 2014

---

2.	<b>Field Name:</b>	<b>Infants Less Than One Year</b>
	<b>Fiscal Year:</b>	<b>2015</b>
	<b>Field Note:</b>	Total births in 2014

---

3.	<b>Field Name:</b>	<b>Children 1 to 22 Year of Age</b>
	<b>Fiscal Year:</b>	<b>2015</b>
	<b>Field Note:</b>	Includes: Health Information System FY15 total, School Health Center SY14-15 total, and 5 year old population in 2014 (per NC Child database from US Census) as they have received kindergarten health assessment and immunization histories have been reviewed.

---

4.	<b>Field Name:</b>	<b>Children With Special Health Care Needs</b>
	<b>Fiscal Year:</b>	<b>2015</b>
	<b>Field Note:</b>	Includes: CC4C, Helpline, Cranofacial UNC contract, and Early Intervention Infant Toddler Program

---

5.	<b>Field Name:</b>	<b>Others</b>
	<b>Fiscal Year:</b>	<b>2015</b>
	<b>Field Note:</b>	Family Planning data from Health Information System for FY15

---

**Form 6**  
**Deliveries and Infants Served by Title V and Entitled to Benefits Under Title XIX**

**State: North Carolina**

**Reporting Year 2015**

**I. Unduplicated Count by Race**

	(A) Total All Races	(B) White	(C) Black or African American	(D) American Indian or Native Alaskan	(E) Asian	(F) Native Hawaiian or Other Pacific Islander	(G) More than One Race Reported	(H) Other & Unknown
1. Total Deliveries in State	120,948	68,761	28,097	1,528	4,287	158	3,378	14,739
Title V Served	120,101	68,280	27,900	1,517	4,257	157	3,354	14,636
Eligible for Title XIX	65,781	27,967	21,697	1,221	1,288	86	1,990	11,532
2. Total Infants in State	120,948	68,761	28,097	1,528	4,287	158	3,378	14,739
Title V Served	120,101	68,280	27,900	1,517	4,257	157	3,354	14,636
Eligible for Title XIX	69,034	29,328	22,402	1,238	1,377	89	2,098	12,502

**II. Unduplicated Count by Ethnicity**

	(A) Total Not Hispanic or Latino	(B) Total Hispanic or Latino	(C) Ethnicity Not Reported	(D) Total All Ethnicities
1. Total Deliveries in State	103,099	17,778	71	120,948
Title V Served	102,377	17,654	70	120,101
Eligible for Title XIX	52,493	13,259	29	65,781
2. Total Infants in State	103,099	17,778	71	120,948

	(A) Total Not Hispanic or Latino	(B) Total Hispanic or Latino	(C) Ethnicity Not Reported	(D) Total All Ethnicities
Title V Served	102,377	17,654	70	120,101
Eligible for Title XIX	54,628	14,376	30	69,034

**Form Notes for Form 6:**

Data on the number of deliveries and infants in the state and how many are eligible for Title XIX are obtained from the 2014 NC Composite Linked Birth File. The number of Title V served by race is obtained by multiplying the percentage of newborns screened for hearing (99.3% from Form 4) 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	2017 Application Year	2015 Reporting Year
1. State MCH Toll-Free "Hotline" Telephone Number	(800) 737-3028	(800) 737-3028
2. State MCH Toll-Free "Hotline" Name	CYSCHN Help Line	CYSHCN Help Line
3. Name of Contact Person for State MCH "Hotline"	Stacy Rosser	Stacy Rosser
4. Contact Person's Telephone Number	(919) 707-5675	(919) 707-5675
5. Number of Calls Received on the State MCH "Hotline"		358

B. Other Appropriate Methods	2017 Application Year	2015 Reporting Year
1. Other Toll-Free "Hotline" Names		
2. Number of Calls on Other Toll-Free "Hotlines"		
3. State Title V Program Website Address	<a href="https://www2.ncdhhs.gov/dph/wch/">https://www2.ncdhhs.gov/dph/wch/</a>	<a href="https://www2.ncdhhs.gov/dph/wch/">https://www2.ncdhhs.gov/dph/wch/</a>
4. Number of Hits to the State Title V Program Website		479,000
5. State Title V Social Media Websites	<a href="https://twitter.com/ncpublichealth">https://twitter.com/ncpublichealth</a>	<a href="https://twitter.com/ncpublichealth">https://twitter.com/ncpublichealth</a>
6. Number of Hits to the State Title V Program Social Media Websites		1,239,200

**Form Notes for Form 7:**

WCHS does not have its own social media website, but contributes to the twitter account for the NC DPH. The number of hits listed for the twitter account is actually the number of impressions (potential number of times followers saw out tweets).

**Form 8**  
**State MCH and CSHCN Directors Contact Information**  
**State: North Carolina**

1. Title V Maternal and Child Health (MCH) Director	
Name	Peter Andersen
Title	Interim WCHS Chief, Section Operations Manager
Address 1	WCHS/DPH/MSC 1928
Address 2	
City/State/Zip	Raleigh / NC / 27699
Telephone	(919) 707-5513
Extension	
Email	peter.andersen@dhhs.nc.gov

2. Title V Children with Special Health Care Needs (CSHCN) Director	
Name	Marshall Tyson
Title	Acting Children & Youth Branch Head
Address 1	WCHS/DPH/MSC 1928
Address 2	
City/State/Zip	Raleigh / NC / 27699
Telephone	(919) 707-5640
Extension	
Email	marshall.tyson@dhhs.nc.gov

### 3. State Family or Youth Leader (Optional)

Name	Christopher Bryant
Title	Adolescent Health Coordinator
Address 1	WCHS/DPH/MSC 1928
Address 2	
City/State/Zip	Raleigh / NC / 27699
Telephone	(919) 707-5662
Extension	
Email	christopher.bryant@dhhs.nc.gov

**Form Notes for Form 8:**

None

**Form 9**  
**List of MCH Priority Needs**

**State: North Carolina**

**Application Year 2017**

No.	Priority Need
1.	Improve the health of women of childbearing age with a special focus on health equity
2.	Reduce infant mortality with a special focus on social determinants of health
3.	Increase the number of newborns screened for genetic and hearing disorders and prevent birth defects
4.	Prevent child deaths
5.	Improve the health of children with special needs
6.	Provide timely and comprehensive early intervention services for children with special developmental needs and their families.
7.	Promote healthy schools and students who are ready to learn
8.	Increase developmental screenings for children and adolescents
9.	Increase access to care for women, children, and families, especially in uninsured populations and where disparities exist
10.	Improve healthy behaviors in women and children and among families incorporating the life course approach

**Form 9 State Priorities-Needs Assessment Year - Application Year 2016**

<b>No.</b>	<b>Priority Need</b>	<b>Priority Need Type (New, Replaced or Continued Priority Need for this five-year reporting period)</b>	<b>Rationale if priority need does not have a corresponding State or National Performance/Outcome Measure</b>
1.	Improve the health of women of childbearing age with a special focus on health equity	Continued	
2.	Reduce infant mortality with a special focus on social determinants of health	Continued	
3.	Increase the number of newborns screened for genetic and hearing disorders and prevent birth defects	Continued	The corresponding National Outcome Measure for this priority need is #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).
4.	Prevent child deaths	Continued	There are a number of National Outcome Measures related to this priority need, including # 9.1-5 (infant deaths, SUID, etc.); 15: Child mortality rate ages 1 through 9; and 16.1-3 (adolescent deaths - total, from motor vehicle crashes, and by suicide).
5.	Improve the health of children with special needs	Continued	
6.	Provide timely and comprehensive early intervention services for children with special developmental needs and their families.	Continued	
7.	Promote healthy schools and students who are ready to learn	Continued	

No.	Priority Need	Priority Need Type (New, Replaced or Continued Priority Need for this five-year reporting period)	Rationale if priority need does not have a corresponding State or National Performance/Outcome Measure
8.	Increase developmental screenings for children and adolescents	New	
9.	Increase access to care for women, children, and families, especially in uninsured populations and where disparities exist	Continued	
10.	Improve healthy behaviors in women and children and among families incorporating the life course approach	Continued	

**Form Notes for Form 9:**

None

**Field Level Notes for Form 9:**

None

**Form 10a  
National Outcome Measures (NOMs)**

**State: North Carolina**

**Form Notes for Form 10a 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
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%, 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: State Inpatient Databases (SID)

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2013	169.0	4.0 %	1,853	109,646
2012	166.5	3.9 %	1,851	111,179
2011	168.1	3.9 %	1,883	112,042
2010	155.7	3.7 %	1,785	114,666
2009	150.6	3.6 %	1,791	118,903
2008	142.9	3.4 %	1,763	123,407

**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**

**FAD Not Available for this measure.**

**NOM 3 - Notes:**

None

**Data Alerts: None**

**NOM 4.1 - 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
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%, or >10% missing data and should be interpreted with caution

**NOM 4.1 - Notes:**

None

**Data Alerts: None**

**NOM 4.2 - Percent of very low birth weight deliveries (<1,500 grams)**

**Data Source: National Vital Statistics System (NVSS)**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2014	1.7 %	0.0 %	1,997	120,903
2013	1.7 %	0.0 %	2,001	118,913
2012	1.7 %	0.0 %	2,035	119,749
2011	1.7 %	0.0 %	2,084	120,309
2010	1.7 %	0.0 %	2,081	122,271
2009	1.8 %	0.0 %	2,263	126,773

**Legends:**  
📌 Indicator has a numerator <10 and is not reportable  
⚡ Indicator has a numerator <20, a confidence interval width >20%, or >10% missing data and should be interpreted with caution

**NOM 4.2 - Notes:**

None

**Data Alerts: None**

**NOM 4.3 - Percent of moderately low birth weight deliveries (1,500-2,499 grams)**

**Data Source: National Vital Statistics System (NVSS)**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2014	7.2 %	0.1 %	8,723	120,903
2013	7.1 %	0.1 %	8,431	118,913
2012	7.1 %	0.1 %	8,528	119,749
2011	7.3 %	0.1 %	8,755	120,309
2010	7.4 %	0.1 %	9,028	122,271
2009	7.3 %	0.1 %	9,191	126,773

**Legends:**

- 📄 Indicator has a numerator <10 and is not reportable
- ⚡ Indicator has a numerator <20, a confidence interval width >20%, or >10% missing data and should be interpreted with caution

**NOM 4.3 - Notes:**

None

**Data Alerts: None**

**NOM 5.1 - Percent of preterm births (<37 weeks)**

**Data Source: National Vital Statistics System (NVSS)**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
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%, or >10% missing data and should be interpreted with caution

**NOM 5.1 - Notes:**

None

**Data Alerts: None**

## NOM 5.2 - Percent of early preterm births (<34 weeks)

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2014	3.0 %	0.1 %	3,625	120,907
2013	3.2 %	0.1 %	3,834	118,896
2012	3.1 %	0.1 %	3,759	119,723
2011	3.2 %	0.1 %	3,820	120,264
2010	3.2 %	0.1 %	3,849	122,302
2009	3.3 %	0.1 %	4,193	126,810

**Legends:**

- 📄 Indicator has a numerator <10 and is not reportable
- ⚡ Indicator has a numerator <20, a confidence interval width >20%, or >10% missing data and should be interpreted with caution

### NOM 5.2 - Notes:

None

**Data Alerts: None**

**NOM 5.3 - Percent of late preterm births (34-36 weeks)**

**Data Source: National Vital Statistics System (NVSS)**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2014	6.8 %	0.1 %	8,156	120,907
2013	6.7 %	0.1 %	7,966	118,896
2012	6.9 %	0.1 %	8,297	119,723
2011	7.0 %	0.1 %	8,458	120,264
2010	7.3 %	0.1 %	8,909	122,302
2009	7.3 %	0.1 %	9,244	126,810

**Legends:**

- 📄 Indicator has a numerator <10 and is not reportable
- ⚡ Indicator has a numerator <20, a confidence interval width >20%, or >10% missing data and should be interpreted with caution

**NOM 5.3 - 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
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%, 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
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:**  
📅 Indicator results were based on a shorter time period than required for reporting

**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
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
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
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
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
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	328.8	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 - Sleep-related 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
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 - The percent of infants born with fetal alcohol exposure 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
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 has a confidence interval width that is inestimable or >20% and should be interpreted with caution

**NOM 10 - Notes:**

None

**Data Alerts: None**

**NOM 11 - The rate of infants born with neonatal abstinence syndrome per 1,000 delivery hospitalizations**

Data Source: State Inpatient Databases (SID)

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2013	10.5	0.3 %	1,154	109,647
2012	8.9	0.3 %	989	111,181
2011	6.7	0.2 %	748	112,043
2010	5.5	0.2 %	625	114,666
2009	4.3	0.2 %	511	118,903
2008	3.0	0.2 %	374	123,407

**Legends:**  
📄 Indicator has a numerator  $\leq 10$  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)**

**FAD Not Available for this measure.**

**NOM 12 - Notes:**

None

**Data Alerts: None**

**NOM 13 - Percent of children meeting the criteria developed for school readiness (DEVELOPMENTAL)**

**FAD Not Available for this measure.**

**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 12 months**

**Data Source: National Survey of Children's Health (NSCH)**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2011_2012	17.2 %	1.4 %	367,351	2,130,436

**Legends:**  
 Indicator has an unweighted denominator <30 and is not reportable  
 Indicator has a confidence interval width >20% 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
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
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
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
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**

**Data Source: National Survey of Children's Health (NSCH)**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2011_2012	21.6 %	1.5 %	493,462	2,287,997
2007	21.9 %	1.4 %	481,725	2,201,857
2003	17.4 %	1.0 %	362,622	2,080,668

**Legends:**

- 🚩 Indicator has an unweighted denominator <30 and is not reportable
- ⚡ Indicator has a confidence interval width >20% 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) receiving care in a well-functioning system**

**Data Source: National Survey of Children with Special Health Care Needs (NS-CSHCN)**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2009_2010	19.8 %	1.8 %	70,804	358,411

**Legends:**

- 🚩 Indicator has an unweighted denominator <30 and is not reportable
- ⚡ Indicator has a confidence interval width >20% and should be interpreted with caution

**NOM 17.2 - Notes:**

None

**Data Alerts: None**

**NOM 17.3 - Percent of children 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
2011_2012	2.6 %	0.7 %	48,923	1,913,563
2007	0.8 %	0.3 %	14,866	1,826,432

**Legends:**

- 🚩 Indicator has an unweighted denominator <30 and is not reportable
- ⚡ Indicator has a confidence interval width that is inestimable or >20% and should be interpreted with caution

**NOM 17.3 - Notes:**

None

**Data Alerts: None**

**NOM 17.4 - Percent of children 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
2011_2012	10.8 %	1.3 %	206,782	1,911,129
2007	11.9 %	1.2 %	215,027	1,814,983

**Legends:**

-  Indicator has an unweighted denominator <30 and is not reportable
-  Indicator has a confidence interval width that is inestimable or >20% and should be interpreted with caution

**NOM 17.4 - Notes:**

None

**Data Alerts: None**

**NOM 18 - Percent of children 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
2011_2012	54.3 % ⚡	6.1 % ⚡	106,152 ⚡	195,467 ⚡
2007	61.7 % ⚡	5.9 % ⚡	119,947 ⚡	194,470 ⚡
2003	64.9 % ⚡	5.5 % ⚡	67,372 ⚡	103,883 ⚡

**Legends:**  
 🚩 Indicator has an unweighted denominator <30 and is not reportable  
 ⚡ Indicator has a confidence interval width >20% and should be interpreted with caution

**NOM 18 - Notes:**

None

**Data Alerts: None**

**NOM 19 - Percent of children 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
2011_2012	84.7 %	1.4 %	1,937,842	2,287,997
2007	86.6 %	1.2 %	1,905,359	2,201,569
2003	85.5 %	1.0 %	1,777,943	2,080,668

**Legends:**

- 🚩 Indicator has an unweighted denominator <30 and is not reportable
- ⚡ Indicator has a confidence interval width that is inestimable or >20% and should be interpreted with caution

**NOM 19 - Notes:**

None

**Data Alerts: None**

**NOM 20 - Percent of children and adolescents who are overweight or obese (BMI at or above the 85th percentile)**

**Data Source: National Survey of Children's Health (NSCH)**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2011_2012	31.4 %	2.5 %	310,910	990,123
2007	33.5 %	2.3 %	315,254	940,456
2003	33.9 %	1.9 %	311,217	917,192

**Legends:**  
 Indicator has an unweighted denominator <30 and is not reportable  
 Indicator has a confidence interval width >20% and should be interpreted with caution

**Data Source: WIC**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2012	27.6 %	0.2 %	25,620	92,929

**Legends:**  
 Indicator has a denominator <50 or a relative standard error ≥30% and is not reportable  
 Indicator has a confidence interval width >20% and should be interpreted with caution

**Data Source: Youth Risk Behavior Surveillance System (YRBSS)**

**Multi-Year Trend**

Year	Annual Indicator	Standard Error	Numerator	Denominator
2013	27.7 %	1.3 %	117,022	421,815
2011	28.8 %	2.1 %	119,663	415,433
2009	27.6 %	1.6 %	112,206	406,168
2007	29.7 %	1.6 %	109,017	367,524
2005	29.0 %	1.8 %	110,086	380,019

**Legends:**

 Indicator has an unweighted denominator <100 and is not reportable

 Indicator has a confidence interval width >20% and should be interpreted with caution

**NOM 20 - Notes:**

None

**Data Alerts: None**

## NOM 21 - Percent of children without health insurance

Data Source: American Community Survey (ACS)

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
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 that is inestimable or >20% and should be interpreted with caution

### NOM 21 - Notes:

None

Data Alerts: None

**NOM 22.1 - Percent of children ages 19 through 35 months, who completed the combined 7-vaccine series (4:3:1:3\*:3:1:4)**

**Data Source: National Immunization Survey (NIS)**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2014	80.8 %	3.5 %	142,190	176,001
2013	72.0 %	3.8 %	127,625	177,251
2012	75.4 %	3.3 %	136,371	180,904
2011	65.6 %	4.1 %	123,537	188,399
2010	52.1 %	3.2 %	100,406	192,724
2009	40.2 %	3.8 %	76,346	189,945

**Legends:**

-  Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval half-width/estimate > 0.6
-  Estimates with 95% confidence interval half-widths > 10 might not be reliable

**NOM 22.1 - Notes:**

None

**Data Alerts: None**

**NOM 22.2 - Percent of children 6 months through 17 years who are vaccinated annually against seasonal influenza**

Data Source: National Immunization Survey (NIS)

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2014_2015	60.7 %	2.1 %	1,285,333	2,118,216
2013_2014	61.3 %	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 95% confidence interval half-width/estimate > 0.6
-  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) - Female**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2014	71.1 %	4.1 %	225,419	317,223
2013	59.3 %	4.8 %	185,870	313,620
2012	53.3 %	5.0 %	164,752	309,185
2011	54.4 %	5.0 %	167,219	307,495
2010	51.9 %	4.7 %	154,019	296,760
2009	50.3 %	4.8 %	149,569	297,328

**Legends:**  
 Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval half-width/estimate > 0.6  
 Estimates with 95% confidence interval half-widths > 10 might not be reliable

**Data Source: National Immunization Survey (NIS) - Male**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2014	45.2 %	4.5 %	149,448	330,725
2013	33.2 %	4.5 %	108,745	327,464
2012	18.8 %	3.6 %	60,869	324,535
2011	NR 	NR 	NR 	NR 

**Legends:**  
 Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval half-width/estimate > 0.6  
 Estimates with 95% confidence interval half-widths > 10 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)**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
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 half-width/estimate > 0.6
-  Estimates with 95% confidence interval half-widths > 10 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)

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
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 half-width/estimate > 0.6
-  Estimates with 95% confidence interval half-widths > 10 might not be reliable

**NOM 22.5 - Notes:**

None

**Data Alerts: None**

**Form 10a**  
**National Performance Measures (NPMs)**  
**State: North Carolina**

**NPM 1 - Percent of women with a past year preventive medical visit**

Annual Objectives						
	2016	2017	2018	2019	2020	2021
Annual Objective	71.0	72.0	73.0	74.0	75.0	76.0

**Data Source: Behavioral Risk Factor Surveillance System (BRFSS)**

Multi-Year Trend					
Year	Annual Indicator	Standard Error	Numerator	Denominator	
2014	71.3 %	1.5 %	1,257,832	1,764,465	
2013	71.8 %	1.5 %	1,263,629	1,761,210	
2012	72.2 %	1.2 %	1,257,441	1,740,636	
2011	73.0 %	1.5 %	1,244,857	1,705,017	
2010	73.4 %	1.5 %	1,235,091	1,683,636	
2009	70.8 %	1.6 %	1,189,845	1,681,582	

**Legends:**

-  Indicator has an unweighted denominator <30 and is not reportable
-  Indicator has a confidence interval width >20% and should be interpreted with caution

**Field Level Notes for Form 10a 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)**

Annual Objectives						
	2016	2017	2018	2019	2020	2021
Annual Objective	90.0	90.0	90.0	90.0	90.0	90.0

**FAD not available for this measure.**

**Field Level Notes for Form 10a NPMs:**

None

**NPM 4 - A) Percent of infants who are ever breastfed**

Annual Objectives						
	2016	2017	2018	2019	2020	2021
Annual Objective	78.0	79.0	80.0	81.0	81.9	81.9

**Data Source: National Immunization Survey (NIS)**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2012	78.7 %	3.3 %	90,330	114,797
2011	77.2 %	3.4 %		
2010	72.1 %	3.9 %		
2009	69.1 %	3.4 %		
2008	70.6 %	2.7 %		
2007	72.4 %	2.9 %		

**Legends:**

-  Indicator has an unweighted denominator <50 and is not reportable
-  Indicator has a confidence interval width >20% and should be interpreted with caution

**Field Level Notes for Form 10a NPMs:**

None

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

Annual Objectives						
	2016	2017	2018	2019	2020	2021
Annual Objective	22.0	23.0	24.0	25.0	25.5	25.5

**Data Source: National Immunization Survey (NIS)**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2012	23.1 %	3.5 %	26,275	113,939
2011	20.7 %	3.2 %		
2010	19.1 %	3.3 %		
2009	13.9 %	2.3 %		
2008	9.9 %	1.6 %		
2007	10.2 %	1.6 %		

**Legends:**

-  Indicator has an unweighted denominator <50 and is not reportable
-  Indicator has a confidence interval width >20% and should be interpreted with caution

**Field Level Notes for Form 10a NPMs:**

None

**NPM 6 - Percent of children, ages 10 through 71 months, receiving a developmental screening using a parent-completed screening tool**

Annual Objectives						
	2016	2017	2018	2019	2020	2021
Annual Objective	60.0	61.0	62.0	63.0	64.0	65.0

**Data Source: National Survey of Children's Health (NSCH)**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2011_2012	58.0 %	3.5 %	336,004	579,404
2007	47.0 %	3.4 %	290,840	618,709

**Legends:**  
 Indicator has an unweighted denominator <30 and is not reportable  
 Indicator has a confidence interval width >20% and should be interpreted with caution

**Field Level Notes for Form 10a NPMs:**

None

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

Annual Objectives						
	2016	2017	2018	2019	2020	2021
Annual Objective	79.0	81.0	83.0	85.0	86.0	86.0

**Data Source: National Survey of Children's Health (NSCH)**

Multi-Year Trend					
Year	Annual Indicator	Standard Error	Numerator	Denominator	
2011_2012	78.2 %	2.7 %	589,174	753,357	
2007	84.3 %	1.8 %	613,290	727,130	
2003	72.0 %	2.0 %	511,251	709,966	

**Legends:**

-  Indicator has an unweighted denominator <30 and is not reportable
-  Indicator has a confidence interval width >20% and should be interpreted with caution

**Field Level Notes for Form 10a NPMs:**

None

**NPM 11 - Percent of children with and without special health care needs having a medical home**

Annual Objectives						
	2016	2017	2018	2019	2020	2021
Annual Objective	58.0	59.0	60.0	60.0	60.0	60.0

**Data Source: National Survey of Children's Health (NSCH) - CSHCN**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2011_2012	51.4 %	3.8 %	249,505	485,505
2007	55.7 %	3.6 %	262,267	470,854

**Legends:**  
 Indicator has an unweighted denominator <30 and is not reportable  
 Indicator has a confidence interval width >20% and should be interpreted with caution

**Data Source: National Survey of Children's Health (NSCH) - NONCSHCN**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2011_2012	56.2 %	2.1 %	962,280	1,712,102
2007	62.4 %	1.9 %	1,022,160	1,638,313

**Legends:**  
 Indicator has an unweighted denominator <30 and is not reportable  
 Indicator has a confidence interval width >20% and should be interpreted with caution

**Field Level Notes for Form 10a NPMs:**

None

**NPM 14 - A) Percent of women who smoke during pregnancy**

Annual Objectives						
	2016	2017	2018	2019	2020	2021
Annual Objective	9.8	9.6	9.4	9.2	9.0	9.0

**Data Source: National Vital Statistics System (NVSS)**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2014	9.8 %	0.1 %	11,893	120,816
2013	10.4 %	0.1 %	12,303	118,819
2012	10.7 %	0.1 %	12,771	119,511
2011	11.0 %	0.1 %	13,103	119,594

**Legends:**

-  Indicator has a numerator <10 and is not reportable
-  Indicator has a numerator <20, a confidence interval width >20%, or >10% missing data and should be interpreted with caution

**Field Level Notes for Form 10a NPMs:**

None

**NPM 14 - B) Percent of children who live in households where someone smokes**

Annual Objectives						
	2016	2017	2018	2019	2020	2021
Annual Objective	28.5	28.0	27.5	27.0	26.5	26.0

**Data Source: National Survey of Children's Health (NSCH)**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2011_2012	28.9 %	1.7 %	645,254	2,233,656
2007	28.9 %	1.6 %	632,947	2,192,025
2003	35.4 %	1.4 %	638,786	1,806,944

**Legends:**

-  Indicator has an unweighted denominator <30 and is not reportable
-  Indicator has a confidence interval width >20% and should be interpreted with caution

**Field Level Notes for Form 10a NPMs:**

None

**NPM 15 - Percent of children ages 0 through 17 who are adequately insured**

Annual Objectives						
	2016	2017	2018	2019	2020	2021
Annual Objective	78.0	80.0	82.0	84.0	85.0	85.0

**Data Source: National Survey of Children's Health (NSCH)**

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2011_2012	77.2 %	1.5 %	1,655,715	2,145,668
2007	78.6 %	1.4 %	1,584,967	2,016,563

**Legends:**  
 Indicator has an unweighted denominator <30 and is not reportable  
 Indicator has a confidence interval width >20% and should be interpreted with caution

**Field Level Notes for Form 10a NPMs:**

None

**Form 10a  
State Performance Measures (SPMs)**

**State: North Carolina**

**SPM 1 - Percent of infants with confirmed hearing loss who are enrolled for intervention services no later than age 6 months**

Annual Objectives					
	2017	2018	2019	2020	2021
Annual Objective	50.0	55.0	60.0	67.0	73.0

**Field Level Notes for Form 10a SPMs:**

None

**SPM 2 - Number of substantiated reports of child abuse and/or neglect**

Annual Objectives					
	2017	2018	2019	2020	2021
Annual Objective	10,000.0	10,000.0	10,000.0	10,000.0	10,000.0

**Field Level Notes for Form 10a SPMs:**

None

**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)**

Annual Objectives					
	2017	2018	2019	2020	2021
Annual Objective	100.0	100.0	100.0	100.0	100.0

**Field Level Notes for Form 10a SPMs:**

None

**SPM 4 - The ratio of school health nurses to the public school student population**

Annual Objectives					
	2017	2018	2019	2020	2021
Annual Objective	1,067.0	1,047.0	1,026.0	1,005.0	985.0

**Field Level Notes for Form 10a SPMs:**

None

**Form 10a  
Evidence-Based or-Informed Strategy Measures (ESMs)**

**State: North Carolina**

**ESM 1.1 - Number of local health department staff members and other women's health providers who participate in webinar explaining the preventive services for women covered through the Affordable Care Act (ACA)**

Annual Objectives					
	2017	2018	2019	2020	2021
Annual Objective	3,000.0	3,000.0	3,000.0	3,000.0	3,000.0

**Field Level Notes for Form 10a ESMs:**

None

**ESM 3.1 - Percent of birthing hospitals who complete the CDC Levels of Care Assessment Tool (CDC LOCATe) annually**

Annual Objectives					
	2017	2018	2019	2020	2021
Annual Objective	40.0	90.0	90.0	90.0	90.0

**Field Level Notes for Form 10a ESMs:**

None

**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**

Annual Objectives					
	2017	2018	2019	2020	2021
Annual Objective	50.0	60.0	70.0	80.0	85.0

**Field Level Notes for Form 10a ESMs:**

None

**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**

Annual Objectives					
	2017	2018	2019	2020	2021
Annual Objective	10.0	10.0	10.0	10.0	10.0

**Field Level Notes for Form 10a ESMs:**

None

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

Annual Objectives					
	2017	2018	2019	2020	2021
Annual Objective	5,764.0	5,879.0	5,997.0	6,117.0	6,239.0

**Field Level Notes for Form 10a ESMs:**

None

**ESM 11.1 - Number of policies, practices, and resources changed to support improved outcomes for CYSHCN by counties implementing Innovative Approaches strategies.**

Annual Objectives					
	2017	2018	2019	2020	2021
Annual Objective	20.0	25.0	30.0	20.0	25.0

**Field Level Notes for Form 10a ESMs:**

None

**ESM 14.1 - 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**

Annual Objectives					
	2017	2018	2019	2020	2021
Annual Objective	2,500.0	2,550.0	2,600.0	2,650.0	2,700.0

**Field Level Notes for Form 10a ESMs:**

None

**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**

Annual Objectives					
	2017	2018	2019	2020	2021
Annual Objective	220.0	231.0	242.0	254.0	266.0

**Field Level Notes for Form 10a ESMs:**

None

**Form 10b**  
**State Performance Measure (SPM) Detail Sheets**  
**State: North Carolina**

**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**

<b>Goal:</b>	To increase the percent of infants with confirmed hearing loss who are enrolled for intervention services no later than age 6 months									
<b>Definition:</b>	<table border="1"> <tr> <td><b>Numerator:</b></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><b>Denominator:</b></td> <td>Number of infants with confirmed hearing loss in the calendar year</td> </tr> <tr> <td><b>Unit Type:</b></td> <td>Percentage</td> </tr> <tr> <td><b>Unit Number:</b></td> <td>100</td> </tr> </table>	<b>Numerator:</b>	Percent of infants with confirmed hearing loss who are enrolled for intervention services no later than age 6 months	<b>Denominator:</b>	Number of infants with confirmed hearing loss in the calendar year	<b>Unit Type:</b>	Percentage	<b>Unit Number:</b>	100	
<b>Numerator:</b>	Percent of infants with confirmed hearing loss who are enrolled for intervention services no later than age 6 months									
<b>Denominator:</b>	Number of infants with confirmed hearing loss in the calendar year									
<b>Unit Type:</b>	Percentage									
<b>Unit Number:</b>	100									
<b>Healthy People 2020 Objective:</b>	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									
<b>Data Sources and Data Issues:</b>	WCSWeb Hearing Link, North Carolina’s web-based data tracking and surveillance system for newborn hearing screening									
<b>Significance:</b>	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.									

**SPM 2 - Number of substantiated reports of child abuse and/or neglect**

**Population Domain(s) – Child Health**

<b>Goal:</b>	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									
<b>Definition:</b>	<table border="1"> <tr> <td><b>Numerator:</b></td> <td>Point in time number of substantiated reports of abuse and/or neglect in a given fiscal year</td> </tr> <tr> <td><b>Denominator:</b></td> <td>N/A</td> </tr> <tr> <td><b>Unit Type:</b></td> <td>Count</td> </tr> <tr> <td><b>Unit Number:</b></td> <td>20,000</td> </tr> </table>		<b>Numerator:</b>	Point in time number of substantiated reports of abuse and/or neglect in a given fiscal year	<b>Denominator:</b>	N/A	<b>Unit Type:</b>	Count	<b>Unit Number:</b>	20,000
<b>Numerator:</b>	Point in time number of substantiated reports of abuse and/or neglect in a given fiscal year									
<b>Denominator:</b>	N/A									
<b>Unit Type:</b>	Count									
<b>Unit Number:</b>	20,000									
<b>Healthy People 2020 Objective:</b>	IVP-37 Reduce child maltreatment deaths and IVP-38 Reduce nonfatal child maltreatment									
<b>Data Sources and Data Issues:</b>	<p>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 &amp; 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 &amp; 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: <a href="http://ssw.unc.edu/ma/">http://ssw.unc.edu/ma/</a></p>									
<b>Significance:</b>	<p>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 (<a href="http://www.cdc.gov/violenceprevention/pdf/understanding-cm-factsheet.pdf">http://www.cdc.gov/violenceprevention/pdf/understanding-cm-factsheet.pdf</a>), 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.</p>									

**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**

<b>Goal:</b>	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)									
<b>Definition:</b>	<table border="1"> <tr> <td style="background-color: #2e75b6; color: white;"><b>Numerator:</b></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 style="background-color: #2e75b6; color: white;"><b>Denominator:</b></td> <td>Number of infants and toddlers who had services added to their IFSPs during the month of January</td> </tr> <tr> <td style="background-color: #2e75b6; color: white;"><b>Unit Type:</b></td> <td>Percentage</td> </tr> <tr> <td style="background-color: #2e75b6; color: white;"><b>Unit Number:</b></td> <td>100</td> </tr> </table>		<b>Numerator:</b>	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	<b>Denominator:</b>	Number of infants and toddlers who had services added to their IFSPs during the month of January	<b>Unit Type:</b>	Percentage	<b>Unit Number:</b>	100
<b>Numerator:</b>	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									
<b>Denominator:</b>	Number of infants and toddlers who had services added to their IFSPs during the month of January									
<b>Unit Type:</b>	Percentage									
<b>Unit Number:</b>	100									
<b>Healthy People 2020 Objective:</b>	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									
<b>Data Sources and Data Issues:</b>	NC Health Information System									
<b>Significance:</b>	<p>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.</p>									

**SPM 4 - The ratio of school health nurses to the public school student population**  
**Population Domain(s) – Adolescent Health**

<b>Goal:</b>	To decrease the ratio of school health nurses to the public school student population.									
<b>Definition:</b>	<table border="1"> <tr> <td><b>Numerator:</b></td> <td>The ratio of school health nurses to the public school student population in a given school year</td> </tr> <tr> <td><b>Denominator:</b></td> <td>N/A</td> </tr> <tr> <td><b>Unit Type:</b></td> <td>Ratio</td> </tr> <tr> <td><b>Unit Number:</b></td> <td>1</td> </tr> </table>		<b>Numerator:</b>	The ratio of school health nurses to the public school student population in a given school year	<b>Denominator:</b>	N/A	<b>Unit Type:</b>	Ratio	<b>Unit Number:</b>	1
<b>Numerator:</b>	The ratio of school health nurses to the public school student population in a given school year									
<b>Denominator:</b>	N/A									
<b>Unit Type:</b>	Ratio									
<b>Unit Number:</b>	1									
<b>Healthy People 2020 Objective:</b>	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									
<b>Data Sources and Data Issues:</b>	North Carolina Annual School Health Services Report for Public Schools									
<b>Significance:</b>	A licensed practical nurse or registered nurse is an essential component of a healthy school. Current models of school health services reflect an 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 10b**  
**State Outcome Measure (SOM) Detail Sheets**  
**State: North Carolina**

No State Outcome Measures were created by the State.

**Form 10c  
Evidence-Based or –Informed Strategy Measure (ESM) Detail Sheets**

**State: North Carolina**

**ESM 1.1 - Number of local health department staff members and other women's health providers who participate in webinar explaining the preventive services for women covered through the Affordable Care Act (ACA)**

**NPM 1 – Percent of women with a past year preventive medical visit**

<b>Goal:</b>	To increase the percent of women with a past year preventive medical visit by raising awareness of the preventive services for women covered through the ACA									
<b>Definition:</b>	<table border="1"> <tr> <td><b>Numerator:</b></td> <td>Number of participants in webinar explaining the preventive services for women covered through the ACA</td> </tr> <tr> <td><b>Denominator:</b></td> <td>N/A</td> </tr> <tr> <td><b>Unit Type:</b></td> <td>Count</td> </tr> <tr> <td><b>Unit Number:</b></td> <td>5,000</td> </tr> </table>	<b>Numerator:</b>	Number of participants in webinar explaining the preventive services for women covered through the ACA	<b>Denominator:</b>	N/A	<b>Unit Type:</b>	Count	<b>Unit Number:</b>	5,000	
<b>Numerator:</b>	Number of participants in webinar explaining the preventive services for women covered through the ACA									
<b>Denominator:</b>	N/A									
<b>Unit Type:</b>	Count									
<b>Unit Number:</b>	5,000									
<b>Data Sources and Data Issues:</b>	Survey tool included as part of the ACA webinar which will track the number of participants who viewed it and requested a certificate of attendance.									
<b>Significance:</b>	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. Women who are covered by the ACA are provided well woman visits without cost-sharing among the majority of health plans, but many women and their providers are not aware of this coverage.									

**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)**

<b>Goal:</b>	To accurately identify the neonatal and maternal level of care provided at the birthing hospitals in North Carolina									
<b>Definition:</b>	<table border="1"> <tr> <td><b>Numerator:</b></td> <td>Number of birthing hospitals who complete the CDC Levels of Care Assessment Tool (CDC LOCATe) annually</td> </tr> <tr> <td><b>Denominator:</b></td> <td>Number of birthing hospitals in North Carolina</td> </tr> <tr> <td><b>Unit Type:</b></td> <td>Percentage</td> </tr> <tr> <td><b>Unit Number:</b></td> <td>100</td> </tr> </table>	<b>Numerator:</b>	Number of birthing hospitals who complete the CDC Levels of Care Assessment Tool (CDC LOCATe) annually	<b>Denominator:</b>	Number of birthing hospitals in North Carolina	<b>Unit Type:</b>	Percentage	<b>Unit Number:</b>	100	
<b>Numerator:</b>	Number of birthing hospitals who complete the CDC Levels of Care Assessment Tool (CDC LOCATe) annually									
<b>Denominator:</b>	Number of birthing hospitals in North Carolina									
<b>Unit Type:</b>	Percentage									
<b>Unit Number:</b>	100									
<b>Data Sources and Data Issues:</b>	The Women’s Health Branch will keep an internal log of hospitals that complete the LOCATe tool within each calendar year.									
<b>Significance:</b>	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 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 and B) Percent of infants breastfed exclusively through 6 months**

<b>Goal:</b>	To increase the amount of breastfeeding promotion and support provided to women receiving maternal health care in local health departments									
<b>Definition:</b>	<table border="1"> <tr> <td><b>Numerator:</b></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><b>Denominator:</b></td> <td>Number of local health departments (100 – counties in district health departments are considered individually for this measure)</td> </tr> <tr> <td><b>Unit Type:</b></td> <td>Percentage</td> </tr> <tr> <td><b>Unit Number:</b></td> <td>100</td> </tr> </table>	<b>Numerator:</b>	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	<b>Denominator:</b>	Number of local health departments (100 – counties in district health departments are considered individually for this measure)	<b>Unit Type:</b>	Percentage	<b>Unit Number:</b>	100	
<b>Numerator:</b>	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									
<b>Denominator:</b>	Number of local health departments (100 – counties in district health departments are considered individually for this measure)									
<b>Unit Type:</b>	Percentage									
<b>Unit Number:</b>	100									
<b>Data Sources and Data Issues:</b>	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.									
<b>Significance:</b>	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.									

**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 10 through 71 months, receiving a developmental screening using a parent-completed screening tool**

<b>Goal:</b>	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									
<b>Definition:</b>	<table border="1"> <tr> <td><b>Numerator:</b></td> <td>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</td> </tr> <tr> <td><b>Denominator:</b></td> <td>N/A</td> </tr> <tr> <td><b>Unit Type:</b></td> <td>Count</td> </tr> <tr> <td><b>Unit Number:</b></td> <td>100</td> </tr> </table>		<b>Numerator:</b>	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	<b>Denominator:</b>	N/A	<b>Unit Type:</b>	Count	<b>Unit Number:</b>	100
<b>Numerator:</b>	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									
<b>Denominator:</b>	N/A									
<b>Unit Type:</b>	Count									
<b>Unit Number:</b>	100									
<b>Data Sources and Data Issues:</b>	The Pediatric Medical Consultant in the Children & Youth Branch will collect this information annually as she provides the majority of these trainings.									
<b>Significance:</b>	<p>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.</p> <p>Early referral for diagnosis and intervention helps to:</p> <ul style="list-style-type: none"> <li>• prevent or reduce the impact of developmental delays</li> <li>• identify, build and reinforce developmental strengths in the child and family</li> <li>• prevent fully developed developmental conditions or disorders; and</li> <li>• support school readiness.</li> </ul>									

**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.**

<b>Goal:</b>	To increase the percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year									
<b>Definition:</b>	<table border="1"> <tr> <td><b>Numerator:</b></td> <td>Number of adolescents receiving a preventive medical visit in the past year at a local health department</td> </tr> <tr> <td><b>Denominator:</b></td> <td>N/A</td> </tr> <tr> <td><b>Unit Type:</b></td> <td>Count</td> </tr> <tr> <td><b>Unit Number:</b></td> <td>10,000</td> </tr> </table>		<b>Numerator:</b>	Number of adolescents receiving a preventive medical visit in the past year at a local health department	<b>Denominator:</b>	N/A	<b>Unit Type:</b>	Count	<b>Unit Number:</b>	10,000
<b>Numerator:</b>	Number of adolescents receiving a preventive medical visit in the past year at a local health department									
<b>Denominator:</b>	N/A									
<b>Unit Type:</b>	Count									
<b>Unit Number:</b>	10,000									
<b>Data Sources and Data Issues:</b>	North Carolina Health Information System (data pulled through the Client Services Data Warehouse)									
<b>Significance:</b>	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 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 having a medical home**

<b>Goal:</b>	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									
<b>Definition:</b>	<table border="1"> <tr> <td><b>Numerator:</b></td> <td>Number of policy/practice/resource changes achieved using Innovative Approaches strategies for CYSHCN</td> </tr> <tr> <td><b>Denominator:</b></td> <td>N/A</td> </tr> <tr> <td><b>Unit Type:</b></td> <td>Count</td> </tr> <tr> <td><b>Unit Number:</b></td> <td>100</td> </tr> </table>	<b>Numerator:</b>	Number of policy/practice/resource changes achieved using Innovative Approaches strategies for CYSHCN	<b>Denominator:</b>	N/A	<b>Unit Type:</b>	Count	<b>Unit Number:</b>	100	
<b>Numerator:</b>	Number of policy/practice/resource changes achieved using Innovative Approaches strategies for CYSHCN									
<b>Denominator:</b>	N/A									
<b>Unit Type:</b>	Count									
<b>Unit Number:</b>	100									
<b>Data Sources and Data Issues:</b>	Data provided by the State Director of the Innovative Approaches Initiative collected via the Innovative Approaches Strategic Results Framework									
<b>Significance:</b>	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.									

**ESM 14.1 - 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**

**NPM 14 – A) Percent of women who smoke during pregnancy and B) Percent of children who live in households where someone smokes**

<b>Goal:</b>	To decrease the percent of women who smoke during pregnancy and decrease the percent of children who live in households where someone smokes									
<b>Definition:</b>	<table border="1"> <tr> <td style="background-color: #2e75b6; color: white;"><b>Numerator:</b></td> <td>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</td> </tr> <tr> <td style="background-color: #2e75b6; color: white;"><b>Denominator:</b></td> <td>N/A</td> </tr> <tr> <td style="background-color: #2e75b6; color: white;"><b>Unit Type:</b></td> <td>Count</td> </tr> <tr> <td style="background-color: #2e75b6; color: white;"><b>Unit Number:</b></td> <td>5,000</td> </tr> </table>		<b>Numerator:</b>	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	<b>Denominator:</b>	N/A	<b>Unit Type:</b>	Count	<b>Unit Number:</b>	5,000
<b>Numerator:</b>	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									
<b>Denominator:</b>	N/A									
<b>Unit Type:</b>	Count									
<b>Unit Number:</b>	5,000									
<b>Data Sources and Data Issues:</b>	QuitlineNC Data Report									
<b>Significance:</b>	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.									

**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**

**NPM 15 – Percent of children ages 0 through 17 who are adequately insured**

<b>Goal:</b>	To increase the number of children who are adequately insured									
<b>Definition:</b>	<table border="1"> <tr> <td style="background-color: #2e75b6; color: white;"><b>Numerator:</b></td> <td>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</td> </tr> <tr> <td style="background-color: #2e75b6; color: white;"><b>Denominator:</b></td> <td>N/A</td> </tr> <tr> <td style="background-color: #2e75b6; color: white;"><b>Unit Type:</b></td> <td>Count</td> </tr> <tr> <td style="background-color: #2e75b6; color: white;"><b>Unit Number:</b></td> <td>500</td> </tr> </table>		<b>Numerator:</b>	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	<b>Denominator:</b>	N/A	<b>Unit Type:</b>	Count	<b>Unit Number:</b>	500
<b>Numerator:</b>	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									
<b>Denominator:</b>	N/A									
<b>Unit Type:</b>	Count									
<b>Unit Number:</b>	500									
<b>Data Sources and Data Issues:</b>	Quarterly Outreach Report submitted by the Children and Youth Branch’s Minority Outreach Coordinator, CYSHCN HelpLine Coordinator, and YSHCN Access to Care Coordinator									
<b>Significance:</b>	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 10d  
National Performance Measures (NPMs) (Reporting Year 2014 & 2015)**

**State: North Carolina**

**Form Notes for Form 10d NPMs and SPMs**

None

**NPM 01 - The percent of screen positive newborns who received timely follow up to definitive diagnosis and clinical management for condition(s) mandated by their State-sponsored newborn screening programs.**

	2011	2012	2013	2014	2015
Annual Objective	100.0	100.0	100.0	100.0	100.0
Annual Indicator	100.0	100.0	100.0	100.0	100.0
Numerator	220	196	211	202	226
Denominator	220	196	211	202	226
Data Source	NC State Laboratory of Public Health				
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d NPMs:**

1. **Field Name:** 2015

**Field Note:**

Appropriate follow-up as defined by NC is provided to all newborns who are screened and confirmed with conditions mandated through the NC Metabolic Screening Program.

2. **Field Name:** 2014

**Field Note:**

Appropriate follow-up as defined by NC is provided to all newborns who are screened and confirmed with conditions mandated through the NC Metabolic Screening Program. These data are for CY12 and include testing for the following: Phenylketonuria, Congenital Hypothyroidism, Galactosemia, Sickle Cell Disease, Congenital Adrenal Hyperplasia (CAH), Medium Chain AcylCo-A Dehydrogenase (MCAD), 3-MCC, Biotinidase Deficiency, GA-I, VLCAD, and other diseases.

3. **Field Name:** 2013

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**Field Note:**

Appropriate follow-up as defined by NC is provided to all newborns who are screened and confirmed with conditions mandated through the NC Metabolic Screening Program. These data are for CY12 and include testing for the following: Phenylketonuria, Congenital Hypothyroidism, Galactosemia, Sickle Cell Disease, Congenital Adrenal Hyperplasia (CAH), Medium Chain AcylCo-A Dehydrogenase (MCAD), 3-MCC, Biotinidase Deficiency, Short Chain AcylCo-A Dehydrogenase (SCAD), GA-I, VLCAD, and other diseases.

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4. **Field Name:** 2012

**Field Note:**

Appropriate follow-up as defined by NC is provided to all newborns who are screened and confirmed with conditions mandated through the NC Metabolic Screening Program. These data are for CY11 and include testing for the following: Phenylketonuria, Congenital Hypothyroidism, Galactosemia, Sickle Cell Disease, Congenital Adrenal Hyperplasia (CAH), Medium Chain AcylCo-A Dehydrogenase (MCAD), 3-MCC, Biotinidase Deficiency, Short Chain AcylCo-A Dehydrogenase (SCAD), GA-I, VLCAD, and other diseases. In 2011, there were 2 cases of MCAD confirmed, but one died prior to the diagnosis being made.

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5. **Field Name:** 2011

**Field Note:**

Appropriate follow-up as defined by NC is provided to all newborns who are screened and confirmed with conditions mandated through the NC Metabolic Screening Program. These data are for CY10 and include testing for the following: Phenylketonuria, Congenital Hypothyroidism, Galactosemia, Sickle Cell Disease, Congenital Adrenal Hyperplasia (CAH), Medium Chain AcylCo-A Dehydrogenase (MCAD), 3-MCC, Biotinidase Deficiency, Short Chain AcylCo-A Dehydrogenase (SCAD), GA-I, VLCAD, IVA, MSUD, IBDD, TFPD, and HPA.

**Data Alerts: None**

**NPM 02 - The percent of children with special health care needs age 0 to 18 years whose families partner in decision making at all levels and are satisfied with the services they receive. (CSHCN survey)**

	2011	2012	2013	2014	2015
Annual Objective	75.0	75.0	75.0	75.0	75.0
Annual Indicator	74.6	74.6	74.6	74.6	74.6
Numerator					
Denominator					
Data Source	2009-10 CSHCN SLAITS Survey				
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d NPMs:**

1. **Field Name:** 2015

**Field Note:**

For 2011-2015, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. This survey was first conducted in 2001. The same questions were used to generate this indicator for both the 2001 and the 2005-06 CSHCN survey. However, in 2009-2010 there were wording changes and additions to the questions used to generate this indicator. The data for 2009-2010 are NOT comparable to earlier versions of the survey.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

2. **Field Name:** 2014

**Field Note:**

For 2011-2015, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. This survey was first conducted in 2001. The same questions were used to generate this indicator for both the 2001 and the 2005-06 CSHCN survey. However, in 2009-2010 there were wording changes and additions to the questions used to generate this indicator. The data for 2009-2010 are NOT comparable to earlier versions of the survey.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

3. **Field Name:** 2013

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**Field Note:**

For 2011-2015, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. This survey was first conducted in 2001. The same questions were used to generate this indicator for both the 2001 and the 2005-06 CSHCN survey. However, in 2009-2010 there were wording changes and additions to the questions used to generate this indicator. The data for 2009-2010 are NOT comparable to earlier versions of the survey. All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

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4. **Field Name:** **2012**

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**Field Note:**

For 2011-2014, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. This survey was first conducted in 2001. The same questions were used to generate this indicator for both the 2001 and the 2005-06 CSHCN survey. However, in 2009-2010 there were wording changes and additions to the questions used to generate this indicator. The data for 2009-2010 are NOT comparable to earlier versions of the survey.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

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5. **Field Name:** **2011**

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**Field Note:**

For 2011-2014, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. This survey was first conducted in 2001. The same questions were used to generate this indicator for both the 2001 and the 2005-06 CSHCN survey. However, in 2009-2010 there were wording changes and additions to the questions used to generate this indicator. The data for 2009-2010 are NOT comparable to earlier versions of the survey.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

**Data Alerts: None**

**NPM 03 - The percent of children with special health care needs age 0 to 18 who receive coordinated, ongoing, comprehensive care within a medical home. (CSHCN Survey)**

	2011	2012	2013	2014	2015
Annual Objective	75.0	75.0	75.0	75.0	75.0
Annual Indicator	45.1	45.1	45.1	45.1	45.1
Numerator					
Denominator					
Data Source	2009-10 CSHCN SLAITS Survey				
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d NPMs:**

1. **Field Name:** **2015**

**Field Note:**

For 2011-2015, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. Compared to the 2001 CSHCN survey, there were wording changes, skip pattern revisions, and additions to the questions used to generate this indicator for the 2005-06 CSHCN survey. The data for the 2001 and 2005-2006 surveys are not comparable for NPM 3. However, the same questions were used to generate the NPM 3 indicator for both the 2005-2006 and 2009-2010, therefore these two surveys are comparable.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

2. **Field Name:** **2014**

**Field Note:**

For 2011-2015, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. Compared to the 2001 CSHCN survey, there were wording changes, skip pattern revisions, and additions to the questions used to generate this indicator for the 2005-06 CSHCN survey. The data for the 2001 and 2005-2006 surveys are not comparable for NPM 3. However, the same questions were used to generate the NPM 3 indicator for both the 2005-2006 and 2009-2010, therefore these two surveys are comparable.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

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3. **Field Name:** 2013

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**Field Note:**

For 2011-2015, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. Compared to the 2001 CSHCN survey, there were wording changes, skip pattern revisions, and additions to the questions used to generate this indicator for the 2005-06 CSHCN survey. The data for the 2001 and 2005-2006 surveys are not comparable for NPM 3. However, the same questions were used to generate the NPM 3 indicator for both the 2005-2006 and 2009-2010, therefore these two surveys are comparable. All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

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4. **Field Name:** 2012

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**Field Note:**

For 2011-2014, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. Compared to the 2001 CSHCN survey, there were wording changes, skip pattern revisions, and additions to the questions used to generate this indicator for the 2005-06 CSHCN survey. The data for the 2001 and 2005-2006 surveys are not comparable for NPM 3. However, the same questions were used to generate the NPM 3 indicator for both the 2005-2006 and 2009-2010, therefore these two surveys are comparable.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

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5. **Field Name:** 2011

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**Field Note:**

For 2011-2014, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. Compared to the 2001 CSHCN survey, there were wording changes, skip pattern revisions, and additions to the questions used to generate this indicator for the 2005-06 CSHCN survey. The data for the 2001 and 2005-2006 surveys are not comparable for NPM 3. However, the same questions were used to generate the NPM 3 indicator for both the 2005-2006 and 2009-2010, therefore these two surveys are comparable.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

**Data Alerts: None**

**NPM 04 - The percent of children with special health care needs age 0 to 18 whose families have adequate private and/or public insurance to pay for the services they need. (CSHCN Survey)**

	2011	2012	2013	2014	2015
Annual Objective	80.0	80.0	80.0	80.0	80.0
Annual Indicator	58.5	58.5	58.5	58.5	58.5
Numerator					
Denominator					
Data Source	2009-10 CSHCN SLAITS Survey				
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d NPMs:**

1. **Field Name:** 2015

**Field Note:**

For 2011-2015, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. This survey was first conducted in 2001. The same questions were used to generate the NPM 4 indicator for the 2001, 2005-06, and 2009-2010 CSHCN surveys.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

2. **Field Name:** 2014

**Field Note:**

For 2011-2015, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. This survey was first conducted in 2001. The same questions were used to generate the NPM 4 indicator for the 2001, 2005-06, and 2009-2010 CSHCN surveys.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

3. **Field Name:** 2013

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**Field Note:**

For 2011-2015, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. This survey was first conducted in 2001. The same questions were used to generate the NPM 4 indicator for the 2001, 2005-06, and 2009-2010 CSHCN surveys. All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

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4. **Field Name:** **2012**

**Field Note:**

For 2011-2014, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. This survey was first conducted in 2001. The same questions were used to generate the NPM 4 indicator for the 2001, 2005-06, and 2009-2010 CSHCN surveys.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

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5. **Field Name:** **2011**

**Field Note:**

For 2011-2014, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. This survey was first conducted in 2001. The same questions were used to generate the NPM 4 indicator for the 2001, 2005-06, and 2009-2010 CSHCN surveys.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

**Data Alerts: None**

**NPM 05 - Percent of children with special health care needs age 0 to 18 whose families report the community-based service systems are organized so they can use them easily. (CSHCN Survey)**

	2011	2012	2013	2014	2015
Annual Objective	90.0	90.0	90.0	90.0	90.0
Annual Indicator	70.3	70.3	70.3	70.3	70.3
Numerator					
Denominator					
Data Source	2009-10 CSHCN SLAITS Survey				
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d NPMs:**

1. **Field Name:** 2015

**Field Note:**

For 2011-2015, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. Compared to the 2001 CSHCN survey, there were revisions to the wording, order, and number of questions used to generate this indicator for the 2005-06 CSHCN survey. The questions were also revised extensively for the 2009-2010 CSHCN survey. Therefore, none of the three rounds of the surveys are comparable.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

2. **Field Name:** 2014

**Field Note:**

For 2011-2015, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. Compared to the 2001 CSHCN survey, there were revisions to the wording, order, and number of questions used to generate this indicator for the 2005-06 CSHCN survey. The questions were also revised extensively for the 2009-2010 CSHCN survey. Therefore, none of the three rounds of the surveys are comparable.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

3. **Field Name:** 2013

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**Field Note:**

For 2011-2015, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. Compared to the 2001 CSHCN survey, there were revisions to the wording, order, and number of questions used to generate this indicator for the 2005-06 CSHCN survey. The questions were also revised extensively for the 2009-2010 CSHCN survey. Therefore, none of the three rounds of the surveys are comparable.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

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4. **Field Name:** **2012**

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**Field Note:**

For 2011-2014, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. Compared to the 2001 CSHCN survey, there were revisions to the wording, order, and number of questions used to generate this indicator for the 2005-06 CSHCN survey. The questions were also revised extensively for the 2009-2010 CSHCN survey. Therefore, none of the three rounds of the surveys are comparable.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

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5. **Field Name:** **2011**

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**Field Note:**

For 2011-2014, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. Compared to the 2001 CSHCN survey, there were revisions to the wording, order, and number of questions used to generate this indicator for the 2005-06 CSHCN survey. The questions were also revised extensively for the 2009-2010 CSHCN survey. Therefore, none of the three rounds of the surveys are comparable.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

**Data Alerts: None**

**NPM 06 - The percentage of youth with special health care needs who received the services necessary to make transitions to all aspects of adult life, including adult health care, work, and independence.**

	2011	2012	2013	2014	2015
Annual Objective	50.0	50.0	50.0	50.0	50.0
Annual Indicator	43.7	43.7	43.7	43.7	43.7
Numerator					
Denominator					
Data Source	2009-10 CSHCN SLAITS Survey				
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d NPMs:**

1. **Field Name:** **2015**

**Field Note:**

For 2011-2015, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. Compared to the 2001 CSHCN survey, there were wording changes, skip pattern revisions, and additions to the questions used to generate this indicator for the 2005-06 CSHCN survey. There were also issues around the reliability of the 2001 data because of the sample size. The data for the 2 surveys are not comparable for NPM 6, and findings from the 2005-06 survey may be considered baseline data. However, the same questions were used to generate the NPM 6 indicator for the 2009-2010 survey. Therefore, the 2005-2006 and 2009-2010 surveys can be compared.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

2. **Field Name:** **2014**

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**Field Note:**

For 2011-2015, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. Compared to the 2001 CSHCN survey, there were wording changes, skip pattern revisions, and additions to the questions used to generate this indicator for the 2005-06 CSHCN survey. There were also issues around the reliability of the 2001 data because of the sample size. The data for the 2 surveys are not comparable for NPM 6, and findings from the 2005-06 survey may be considered baseline data. However, the same questions were used to generate the NPM 6 indicator for the 2009-2010 survey. Therefore, the 2005-2006 and 2009-2010 surveys can be compared.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

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3. **Field Name:** **2013**

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**Field Note:**

For 2011-2015, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. Compared to the 2001 CSHCN survey, there were wording changes, skip pattern revisions, and additions to the questions used to generate this indicator for the 2005-06 CSHCN survey. There were also issues around the reliability of the 2001 data because of the sample size. The data for the 2 surveys are not comparable for NPM 6, and findings from the 2005-06 survey may be considered baseline data. However, the same questions were used to generate the NPM 6 indicator for the 2009-2010 survey. Therefore, the 2005-2006 and 2009-2010 surveys can be compared.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

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4. **Field Name:** **2012**

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**Field Note:**

For 2011-2014, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. Compared to the 2001 CSHCN survey, there were wording changes, skip pattern revisions, and additions to the questions used to generate this indicator for the 2005-06 CSHCN survey. There were also issues around the reliability of the 2001 data because of the sample size. The data for the 2 surveys are not comparable for NPM 6, and findings from the 2005-06 survey may be considered baseline data. However, the same questions were used to generate the NPM 6 indicator for the 2009-2010 survey. Therefore, the 2005-2006 and 2009-2010 surveys can be compared.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

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5. **Field Name:** **2011**

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**Field Note:**

For 2011-2014, indicator data come from the National Survey of Children with Special Health Care Needs (CSHCN), conducted by the U.S. Health Resources and Services Administration and the U.S. Centers for Disease Control and Prevention in 2009-2010. Compared to the 2001 CSHCN survey, there were wording changes, skip pattern revisions, and additions to the questions used to generate this indicator for the 2005-06 CSHCN survey. There were also issues around the reliability of the 2001 data because of the sample size. The data for the 2 surveys are not comparable for NPM 6, and findings from the 2005-06 survey may be considered baseline data. However, the same questions were used to generate the NPM 6 indicator for the 2009-2010 survey. Therefore, the 2005-2006 and 2009-2010 surveys can be compared.

All estimates from the National Survey of CSHCN are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes.

**Data Alerts: None**

**NPM 07 - Percent of 19 to 35 month olds who have received full schedule of age appropriate immunizations against Measles, Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, Haemophilus Influenza, and Hepatitis B.**

	2011	2012	2013	2014	2015
Annual Objective	90.0	90.0	90.0	90.0	90.0
Annual Indicator	79.5	72.8	78.6	76.6	83.0
Numerator					
Denominator					
Data Source	National Immunization Survey				
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d NPMs:**

1. **Field Name:** 2015  
**Field Note:**  
Data are from the National Immunization Survey for CY2013. As this is a weighted estimate, data for the numerator and denominator are omitted.

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2. **Field Name:** 2014  
**Field Note:**  
Data are from the National Immunization Survey for CY2013. As this is a weighted estimate, data for the numerator and denominator are omitted.

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3. **Field Name:** 2013  
**Field Note:**  
Data are from the National Immunization Survey for the Q3 2012 to Q2 2013 time period (July 2012 through June 2013). As this is a weighted estimate, data for the numerator and denominator are omitted.

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4. **Field Name:** 2012  
**Field Note:**  
Data are from the National Immunization Survey for the Q3 2011 to Q2 2012 time period (July 2011 through June 2012). As this is a weighted estimate, data for the numerator and denominator are omitted. This NIS data is the first to include a measure of the full Hib series since the Hib recall and subsequent shortage which began in 2007.

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5. **Field Name:** 2011

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**Field Note:**

Data are from the National Immunization Survey for the Q3 2010 to Q2 2011 time period (July 2010 to June 2011). As this is a weighted estimate, data for the numerator and denominator are omitted.

The NIS data released in April 2012 for the June 2009 to July 2010 time period excluded Hib in the 4:3:1:3:3:1 measure (4:3:1:0:3:1) to allow for an equitable measure despite the Hib shortage or Hib product being used. The WCHS has chosen to continue to use the 4:3:1:0:3:1 measure as its indicator as it provides a more accurate assessment of vaccine coverage, particularly as the CDC is moving towards including both Varicella (1 dose) and Prevnar (4 doses) in the performance measure series. NC does not require Prevnar. Hib will continue to be excluded from measures through calendar year 2012 to provide an equitable measure despite the Hib shortage.

**Data Alerts: None**

**NPM 08 - The rate of birth (per 1,000) for teenagers aged 15 through 17 years.**

	2011	2012	2013	2014	2015
Annual Objective	22.5	19.0	17.0	16.0	14.0
Annual Indicator	19.9	16.6	15.5	13.1	12.2
Numerator	3,702	3,054	2,829	2,422	2,300
Denominator	185,570	183,455	182,776	184,396	188,014
Data Source	NC Vital Records. State Demographer Pop Estimates				
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d NPMs:**

1. **Field Name:** 2015

**Field Note:**

The data source for the numerator is vital records as reported in the Basic Automated Birth Yearbook for 2014 on the NC State Center for Health Statistics (SCHS) website. The source for the denominator is the State Demographer's Population Estimates obtained through the SCHS data query system on the SCHS website.

FY year data are actually the prior calendar year, e.g. FY15 is really CY14.

2. **Field Name:** 2014

**Field Note:**

The data source for the numerator is vital records as reported in the Basic Automated Birth Yearbook for 2013 on the NC State Center for Health Statistics (SCHS) website. The source for the denominator is the State Demographer's Population Estimates obtained through the SCHS query system on the SCHS website.

FY year data are actually the prior calendar year, e.g. FY14 is really CY13.

3. **Field Name:** 2012

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**Field Note:**

The data source for the numerator is vital records as reported in the Basic Automated Birth Yearbook for 2010 on the NC State Center for Health Statistics (SCHS) website. The source for the denominator is the State Demographer's Population Estimates obtained through the SCHS query system on the SCHS website.

FY year data are actually the prior calendar year, e.g. FY12 is really CY11.

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4. **Field Name:** **2011**

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**Field Note:**

The data source for the numerator is vital records as reported in the Basic Automated Birth Yearbook for 2010 on the NC State Center for Health Statistics (SCHS) website. The source for the denominator is the State Demographer's Population Estimates obtained through the SCHS query system on the SCHS website.

FY year data are actually the prior calendar year, e.g. FY11 is really CY10.

**Data Alerts: None**

**NPM 09 - Percent of third grade children who have received protective sealants on at least one permanent molar tooth.**

	2011	2012	2013	2014	2015
Annual Objective	50.0	50.0	50.0	50.0	50.0
Annual Indicator	46.4	46.4	45.3	45.3	45.3
Numerator	29,630	29,630			
Denominator	63,826	63,826			
Data Source	DPH Oral Health Section Surveillance System	DPH Oral Health Section Surveillance System	CDC National Oral Health Surveillance System	CDC National Oral Health Surveillance System	CDC National Oral Health Surveillance System
Provisional Or Final ?				Provisional	Provisional

**Field Level Notes for Form 10d NPMs:**

1. **Field Name:** 2015  
**Field Note:**  
This indicator is a repeat of the 2013 data as the National Oral Health Survey was not conducted in NC in 2015. The survey will be done in 2017 according to current plans of the NC Oral Health Section.

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2. **Field Name:** 2014  
**Field Note:**  
This indicator is a repeat of the 2013 data as the National Oral Health Survey was not conducted in NC in 2014.

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3. **Field Name:** 2013  
**Field Note:**  
These data are on 3rd graders which is different from all previous years in NC (have been reporting data on 5th graders). Numerator and denominator data are not available.

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4. **Field Name:** 2012

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**Field Note:**

Due to ongoing development of a new database in the Oral Health Section, data for school year 2012 are not available at this time. Therefore, school year 2011 has been repeated here.

These data are based on fifth graders, not third graders. In North Carolina, the surveillance system used to measure the percentage of elementary school children who have received protective sealants on at least one permanent molar tooth was set up to measure fifth graders before the national standard was set at third graders. Data collected in an epidemiologic survey conducted in 1986-87 did not show a statistically significant difference between the percentage of third graders and the percentage of fifth graders.

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5. **Field Name:** **2011**

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**Field Note:**

These data are based on fifth graders, not third graders. In North Carolina, the surveillance system used to measure the percentage of elementary school children who have received protective sealants on at least one permanent molar tooth was set up to measure fifth graders before the national standard was set at third graders. Data collected in an epidemiologic survey conducted in 1986-87 did not show a statistically significant difference between the percentage of third graders and the percentage of fifth graders.

**Data Alerts: None**

**NPM 10 - The rate of deaths to children aged 14 years and younger caused by motor vehicle crashes per 100,000 children.**

	2011	2012	2013	2014	2015
Annual Objective	3.0	2.7	2.5	2.5	2.5
Annual Indicator	2.8	2.3	3.1	2.9	2.5
Numerator	54	43	59	55	47
Denominator	1,899,089	1,909,353	1,910,802	1,907,861	1,904,235
Data Source	NC Vital Records. State Demographer Pop Estimates				
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d NPMs:**

1. **Field Name:** 2015

**Field Note:**

Data source for the numerator is NC vital records obtained through the NC Data Query System for Leading Causes of Death on the NC State Center for Health Statistics (SCHS) website. The source for the denominator is the State Demographer's Population Estimates obtained through the same SCHS data query system.

Data are for the calendar year preceding the fiscal year (2015 data are for CY2014).

2. **Field Name:** 2014

**Field Note:**

Data source for the numerator is NC vital records obtained through the NC Data Query System for Leading Causes of Death on the NC State Center for Health Statistics (SCHS) website. The source for the denominator is the State Demographer's Population Estimates obtained through the SCHS query system on the SCHS website.

Data are for the calendar year preceding the fiscal year (2014 data are for CY2013).

3. **Field Name:** 2013

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**Field Note:**

Data source for the numerator is NC vital records obtained through the NC Data Query System for Leading Causes of Death on the NC State Center for Health Statistics (SCHS) website. The source for the denominator is the State Demographer's Population Estimates obtained through the SCHS query system on the SCHS website.

Data are for the calendar year preceding the fiscal year (2013 data are for CY2012).

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4. **Field Name:** **2012**

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**Field Note:**

Data source for the numerator is NC vital records obtained through the NC Data Query System for Leading Causes of Death on the NC State Center for Health Statistics (SCHS) website. The source for the denominator is the State Demographer's Population Estimates obtained through the SCHS query system on the SCHS website.

Data are for the calendar year preceding the fiscal year (2012 data are for CY2011).

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5. **Field Name:** **2011**

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**Field Note:**

Data source for the numerator is NC vital records obtained through the NC Data Query System for Leading Causes of Death on the NC State Center for Health Statistics (SCHS) website. The source for the denominator is the State Demographer's Population Estimates obtained through the SCHS query system on the SCHS website.

Data are for the calendar year preceding the fiscal year (2011 data are for CY2010).

**Data Alerts: None**

**NPM 11 - The percent of mothers who breastfeed their infants at 6 months of age.**

	2011	2012	2013	2014	2015
Annual Objective	17.5	17.5	19.0	20.0	20.0
Annual Indicator	17.6	18.5	20.0	20.0	10.4
Numerator	14,941	15,210	16,316	16,316	6,803
Denominator	84,780	82,385	81,644	81,644	65,434
Data Source	WIC data - NC Health Services Information System	WIC data - NC Health Services Information System	WIC data - NC Health Services Information System	WIC data - NC Health Services Information System	NC Crossroads WIC System
Provisional Or Final ?				Provisional	Final

**Field Level Notes for Form 10d NPMs:**

1. **Field Name:** 2015  
  
**Field Note:**  
Due to changes in the WIC Program System (implementation of NC Crossroads WIC System), these data are not comparable to previous years.

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2. **Field Name:** 2014  
  
**Field Note:**  
FY13 data are not available due to the change to the NC Crossroads WIC System, thus FY12 data has been repeated here.

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3. **Field Name:** 2013  
  
**Field Note:**  
Data are for FY12. FY13 data will be available in March 2015. Data are delayed due to waiting for the 6 month duration time and including time to verify the data. Data are on WIC participants only as population data are not available.

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4. **Field Name:** 2012  
  
**Field Note:**  
Data are for FY11. FY12 data will be available in March 2014. Data are delayed due to waiting for the 6 month duration time and including time to verify the data. Data are on WIC participants only as population data are not available.

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5. **Field Name:** 2011

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**Field Note:**

Data are for FY10. FY11 data will be available in March 2013. Data are delayed due to waiting for the 6 month duration time and including time to verify the data. Data are on WIC participants only as population data are not available.

**Data Alerts: None**

**NPM 12 - Percentage of newborns who have been screened for hearing before hospital discharge.**

	2011	2012	2013	2014	2015
Annual Objective	98.0	98.0	98.0	98.0	98.0
Annual Indicator	97.1	97.4	96.9	97.2	97.1
Numerator	119,475	117,985	117,591	116,880	119,088
Denominator	123,068	121,101	121,335	120,264	122,697
Data Source	WCSWeb Hearing Link				
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d NPMs:**

1. **Field Name:** **2015**

**Field Note:**

Prior to 2005, "before hospital discharge" was operationally defined by WCHS as within 48 hours of birth. However, this operational definition did not take into account babies born by cesarean section and infants admitted to a NICU who have hospital stays of longer than 48 hours. Based on this concern, the operational definition of "before hospital discharge" was changed to include all babies screened for hearing loss within 30 days of birth.

2. **Field Name:** **2014**

**Field Note:**

Prior to 2005, "before hospital discharge" was operationally defined by WCHS as within 48 hours of birth. However, this operational definition did not take into account babies born by cesarean section and infants admitted to a NICU who have hospital stays of longer than 48 hours. Based on this concern, the operational definition of "before hospital discharge" was changed to include all babies screened for hearing loss within 30 days of birth.

3. **Field Name:** **2013**

**Field Note:**

Prior to 2005, "before hospital discharge" was operationally defined by WCHS as within 48 hours of birth. However, this operational definition did not take into account babies born by cesarean section and infants admitted to a NICU who have hospital stays of longer than 48 hours. Based on this concern, the operational definition of "before hospital discharge" was changed to include all babies screened for hearing loss within 30 days of birth.

4. **Field Name:** **2012**

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**Field Note:**

Prior to 2005, "before hospital discharge" was operationally defined by WCHS as within 48 hours of birth. However, this operational definition did not take into account babies born by cesarean section and infants admitted to a NICU who have hospital stays of longer than 48 hours. Based on this concern, the operational definition of "before hospital discharge" was changed to include all babies screened for hearing loss within 30 days of birth.

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5. **Field Name:** **2011**

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**Field Note:**

Prior to 2005, "before hospital discharge" was operationally defined by WCHS as within 48 hours of birth. However, this operational definition did not take into account babies born by cesarean section and infants admitted to a NICU who have hospital stays of longer than 48 hours. Based on this concern, the operational definition of "before hospital discharge" was changed to include all babies screened for hearing loss within 30 days of birth.

**Data Alerts: None**

**NPM 13 - Percent of children without health insurance.**

	2011	2012	2013	2014	2015
Annual Objective	10.0	10.0	10.0	9.0	9.0
Annual Indicator	10.9	9.5	8.9	7.8	8.1
Numerator	266,105	234,800	217,800	187,400	197,800
Denominator	2,446,663	2,461,700	2,449,000	2,405,400	2,447,400
Data Source	Urban Institute & Kaiser Comm Medicaid & Uninsured	Urban Institute & Kaiser Comm Medicaid & Uninsured	Urban Institute & Kaiser Comm Medicaid & Uninsured	Kaiser Family Foundation estimates based on the Census Bureau's March 2014 Current Population Survey	Kaiser Family Foundation estimates based on the Census Bureau's March 2015 Current Population Survey
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d NPMs:**

1. **Field Name:** 2015  
  
**Field Note:**  
FY15 Data Source: Kaiser Family Foundation estimates based on the Census Bureau's March 2015 Current Population Survey (CPS: Annual Social and Economic Supplements) See <http://kff.org/other/state-indicator/children-0-18/?state=NC#> for notes and sources.

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2. **Field Name:** 2014  
  
**Field Note:**  
FY14 Data Source: Kaiser Family Foundation estimates based on the Census Bureau's March 2014 Current Population Survey (CPS: Annual Social and Economic Supplements) See <http://kff.org/other/state-indicator/children-0-18/?state=NC#> for notes and sources.

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3. **Field Name:** 2013  
  
**Field Note:**  
FY13 Data Source: Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates based on pooled March 2012 and 2013 Current Population Surveys for children <18. (CPS: Annual Social and Economic Supplements). Accessed at following url: <http://kff.org/other/state-indicator/children-0-18/?state=NC#table>

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4. **Field Name:** 2012

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**Field Note:**

FY12 Data Source: Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates based on pooled March 2011 and 2012 Current Population Surveys for children <18. (CPS: Annual Social and Economic Supplements). Accessed at following url: <http://kff.org/other/state-indicator/children-0-18/?state=NC#table>

**Data Alerts: None**

**NPM 14 - Percentage of children, ages 2 to 5 years, receiving WIC services with a Body Mass Index (BMI) at or above the 85th percentile.**

	2011	2012	2013	2014	2015
Annual Objective	25.0	25.0	25.0	25.0	25.0
Annual Indicator	31.6	31.9	29.7	29.2	29.7
Numerator	32,824	33,093	29,447	31,907	41,241
Denominator	103,874	103,716	99,135	109,280	138,788
Data Source	WIC Surveillance System				
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d NPMs:**

1. **Field Name:** 2015

**Field Note:**

Data for CY2015 are different from previous years as they include WIC participants and Child Health Services Program participants. The sample size of WIC population have increased as more children have better and complete anthropometric data collected through NC Crossroads WIC System. The sample size of Child Health Clinics data are from HIS Client Server Data Warehouse which mostly contains screened and treatment visits data. Only unique children with valid anthropometric data are retained in the NC-PedNSS.

2. **Field Name:** 2014

**Field Note:**

Data for CY2010 to CY2014 are different from previous years as they only include WIC participants, not all children in the NC-NPASS. The reason for this change was to get a larger selection of children. WIC records have valid height and weight information on all records as opposed to child health records. As a consequence of the previous methodology for record selection if a child health visit preceded WIC visit there was a greater likelihood of not picking that record because of an invalid height and weight data. So, CY10 data and beyond are not comparable to CY09 data and previous years.

3. **Field Name:** 2013

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**Field Note:**

Data for CY2010 to CY2013 are different from previous years as they only include WIC participants, not all children in the NC-NPASS. The reason for this change was to get a larger selection of children. WIC records have valid height and weight information on all records as opposed to child health records. As a consequence of the previous methodology for record selection if a child health visit preceded WIC visit there was a greater likelihood of not picking that record because of an invalid height and weight data. So, CY10 data and beyond are not comparable to CY09 data and previous years.

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4. **Field Name:** **2012**

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**Field Note:**

Data for CY2010, CY2011, and CY2012 are different from previous years as they only include WIC participants, not all children in the NC-NPASS. The reason for this change was to get a larger selection of children. WIC records have valid height and weight information on all records as opposed to child health records. As a consequence of the previous methodology for record selection if a child health visit preceded WIC visit there was a greater likelihood of not picking that record because of an invalid height and weight data. So, CY10 data and beyond are not comparable to CY09 data and previous years.

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5. **Field Name:** **2011**

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**Field Note:**

Data for CY2010 and CY2011 are different from previous years as they only include WIC participants, not all children in the NC-NPASS. The reason for this change was to get a larger selection of children. WIC records have valid height and weight information on all records as opposed to child health records. As a consequence of the previous methodology for record selection if a child health visit preceded WIC visit there was a greater likelihood of not picking that record because of an invalid height and weight data. So, CY10 data and beyond are not comparable to CY09 data and previous years.

**Data Alerts: None**

**NPM 15 - Percentage of women who smoke in the last three months of pregnancy.**

	2011	2012	2013	2014	2015
Annual Objective	10.0	10.0	9.0	8.5	8.0
Annual Indicator	10.2	8.7	8.4	8.1	7.5
Numerator	12,975	10,421	9,991	9,568	9,023
Denominator	126,785	120,084	119,485	118,680	120,635
Data Source	NC Vital Records - Birth Certificates				
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d NPMs:**

1. **Field Name:** 2015

**Field Note:**

North Carolina adopted the 2003 revision of the U.S. Standard Certificate of Live Birth beginning in August 2010. CY11 data are the first year for which the percent of women smoking during the last 3 months of pregnancy are available as opposed to just the percent of women who smoked at all during pregnancy. Data from CY11 on should not be compared to data from previous years.

2. **Field Name:** 2014

**Field Note:**

North Carolina adopted the 2003 revision of the U.S. Standard Certificate of Live Birth beginning in August 2010. CY11 data are the first year for which the percent of women smoking during the last 3 months of pregnancy are available as opposed to just the percent of women who smoked at all during pregnancy. Data from CY11 on should not be compared to data from previous years.

3. **Field Name:** 2013

**Field Note:**

North Carolina adopted the 2003 revision of the U.S. Standard Certificate of Live Birth beginning in August 2010. CY11 data are the first year for which the percent of women smoking during the last 3 months of pregnancy are available as opposed to just the percent of women who smoked at all during pregnancy. Data from CY11 on should not be compared to data from previous years.

4. **Field Name:** 2012

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**Field Note:**

North Carolina adopted the 2003 revision of the U.S. Standard Certificate of Live Birth beginning in August 2010. CY11 data are the first year for which the percent of women smoking during the last 3 months of pregnancy are available as opposed to just the percent of women who smoked at all during pregnancy. CY11 data should not be compared to data from previous years.

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5. **Field Name:** 2011

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**Field Note:**

North Carolina adopted the 2003 revision of the U.S. Standard Certificate of Live Birth beginning in August 2010. Birth data were collected according to the 1989 U.S. standards from January through July of 2010. Data items related to educational attainment, prenatal care initiation, and tobacco use were collected differently on the 1989 and 2003 revised certificates and are not comparable. As a result, 2010 data for this NPM are not available. CY09 has been repeated as data must be entered into the system. The CY09 data are for the percentage of women who smoked during pregnancy, not just in the last three months, according to birth certificate data obtained through vital records from the NC State Center for Health Statistics. The annual performance objectives are also based on women who smoked during pregnancy, not just in the last three months. For CY11, data on the number of women who smoked just in the last three months should be available.

**Data Alerts: None**

**NPM 16 - The rate (per 100,000) of suicide deaths among youths aged 15 through 19.**

	2011	2012	2013	2014	2015
Annual Objective	6.0	6.0	6.0	6.0	6.0
Annual Indicator	7.0	6.6	6.5	6.0	10.0
Numerator	46	44	43	40	67
Denominator	661,614	662,600	663,515	664,917	669,391
Data Source	NC Vital Records. State Demographer Pop Estimates				
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d NPMs:**

1. **Field Name:** 2015

**Field Note:**

Data source for the numerator is NC vital records obtained through the NC Data Query System for Leading Causes of Death on the NC State Center for Health Statistics (SCHS) website. The source for the denominator is the State Demographer's Population Estimates obtained through the same SCHS data query system.

FY year data are actually the prior calendar year, e.g. FY15 is really CY14.

2. **Field Name:** 2014

**Field Note:**

Data source for the numerator is NC vital records obtained through the NC Data Query System for Leading Causes of Death on the NC State Center for Health Statistics (SCHS) website. The source for the denominator is the State Demographer's Population Estimates obtained through the SCHS query system on the SCHS website.

FY year data are actually the prior calendar year, e.g. FY14 is really CY13.

3. **Field Name:** 2013

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**Field Note:**

Data source for the numerator is NC vital records obtained through the NC Data Query System for Leading Causes of Death on the NC State Center for Health Statistics (SCHS) website. The source for the denominator is the State Demographer's Population Estimates obtained through the SCHS query system on the SCHS website.

FY year data are actually the prior calendar year, e.g. FY13 is really CY12.

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4. **Field Name:** **2012**

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**Field Note:**

Data source for the numerator is NC vital records obtained through the NC Data Query System for Leading Causes of Death on the NC State Center for Health Statistics (SCHS) website. The source for the denominator is the State Demographer's Population Estimates obtained through the SCHS query system on the SCHS website.

FY year data are actually the prior calendar year, e.g. FY12 is really CY11.

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5. **Field Name:** **2011**

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**Field Note:**

Data source for the numerator is NC vital records obtained through the NC Data Query System for Leading Causes of Death on the NC State Center for Health Statistics (SCHS) website. The source for the denominator is the State Demographer's Population Estimates obtained through the SCHS query system on the SCHS website.

FY year data are actually the prior calendar year, e.g. FY11 is really CY10.

**Data Alerts: None**

**NPM 17 - Percent of very low birth weight infants delivered at facilities for high-risk deliveries and neonates.**

	2011	2012	2013	2014	2015
Annual Objective	83.0	83.0	83.0	83.0	83.0
Annual Indicator	75.9	78.8	77.3	80.8	79.6
Numerator	1,367	1,434	1,364	1,390	1,362
Denominator	1,801	1,820	1,765	1,721	1,712
Data Source	NC Vital Records - Birth Certificates				
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d NPMs:**

1. **Field Name:** 2015  
  
**Field Note:**  
The data source is NC Vital Records as reported in the 2014 North Carolina Infant Mortality Report, Table 10, Risk Factors and Characteristics for North Carolina Resident Live Births found on the NC State Center for Health Statistics website.

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2. **Field Name:** 2014  
  
**Field Note:**  
The data source is NC Vital Records as reported in the 2013 North Carolina Infant Mortality Report, Table 10, Risk Factors and Characteristics for North Carolina Resident Live Births found on the NC State Center for Health Statistics website.

---

3. **Field Name:** 2013  
  
**Field Note:**  
The data source is NC Vital Records as reported in the 2012 North Carolina Infant Mortality Report, Table 10, Risk Factors and Characteristics for North Carolina Resident Live Births found on the NC State Center for Health Statistics website.

---

4. **Field Name:** 2012  
  
**Field Note:**  
The data source is NC Vital Records as reported in the 2011 North Carolina Infant Mortality Report, Table 10, Risk Factors and Characteristics for North Carolina Resident Live Births found on the NC State Center for Health Statistics website.

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5. **Field Name:** 2011

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**Field Note:**

The data source is NC vital records as reported in the 2010 North Carolina Infant Mortality Report, Table 10, Risk Factors and Characteristics for North Carolina Resident Live Births found on the NC State Center for Health Statistics website.

**Data Alerts: None**

**NPM 18 - Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester.**

	2011	2012	2013	2014	2015
Annual Objective	87.0	87.0	80.0	80.0	80.0
Annual Indicator	83.3	71.2	71.3	70.3	68.2
Numerator	105,626	85,706	85,380	83,663	82,474
Denominator	126,785	120,403	119,767	118,983	120,948
Data Source	NC Vital Records				
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d NPMs:**

1. **Field Name:** 2015

**Field Note:**

North Carolina adopted the 2003 revision of the U.S. Standard Certificate of Live Birth beginning in August 2010. Birth data was collected according to the 1989 U.S. standards from January through July of 2010. Data items related to educational attainment, prenatal care initiation, and tobacco use were collected differently on the 1989 and 2003 revised certificates and are not comparable. As a result, 2010 data for this NPM are not available and data from 2011 on should not be compared to data from previous years.

2. **Field Name:** 2014

**Field Note:**

North Carolina adopted the 2003 revision of the U.S. Standard Certificate of Live Birth beginning in August 2010. Birth data was collected according to the 1989 U.S. standards from January through July of 2010. Data items related to educational attainment, prenatal care initiation, and tobacco use were collected differently on the 1989 and 2003 revised certificates and are not comparable. As a result, 2010 data for this NPM are not available and data from 2011 on should not be compared to data from previous years.

3. **Field Name:** 2013

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**Field Note:**

North Carolina adopted the 2003 revision of the U.S. Standard Certificate of Live Birth beginning in August 2010. Birth data was collected according to the 1989 U.S. standards from January through July of 2010. Data items related to educational attainment, prenatal care initiation, and tobacco use were collected differently on the 1989 and 2003 revised certificates and are not comparable. As a result, 2010 data for this NPM are not available and data from 2011 on should not be compared to data from previous years.

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4. **Field Name:** **2012**

**Field Note:**

North Carolina adopted the 2003 revision of the U.S. Standard Certificate of Live Birth beginning in August 2010. Birth data was collected according to the 1989 U.S. standards from January through July of 2010. Data items related to educational attainment, prenatal care initiation, and tobacco use were collected differently on the 1989 and 2003 revised certificates and are not comparable. As a result, 2010 data for this NPM are not available and 2011 data should not be compared to data from previous years.

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5. **Field Name:** **2011**

**Field Note:**

North Carolina adopted the 2003 revision of the U.S. Standard Certificate of Live Birth beginning in August 2010. Birth data was collected according to the 1989 U.S. standards from January through July of 2010. Data items related to educational attainment, prenatal care initiation, and tobacco use were collected differently on the 1989 and 2003 revised certificates and are not comparable. As a result, 2010 data for this NPM are not available. CY09 has been repeated as data must be entered into the system.

**Data Alerts: None**

**Form 10d**  
**State Performance Measures (SPMs) (Reporting Year 2014 & 2015)**  
**State: North Carolina**

**SPM 1 - Number of children affected in substantiated reports of abuse and/or neglect as compared with previous years.**

	2011	2012	2013	2014	2015
Annual Objective	11,000.0	11,000.0	11,000.0	11,000.0	10,500.0
Annual Indicator	11,562.0	11,341.0	10,030.0	10,669.0	10,187.0
Numerator					
Denominator					
Data Source	NC DSS CPS Central Registr	NC DSS CPS Central Registr	NC DSS CPS Central Registry	NC DSS CPS Central Registry	Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d SPMs:**

1. **Field Name:** 2015

**Field Note:**

Duncan, D.F., Kum, H.C., Flair, K.A., Stewart, C.J., Vaughn, J., Bauer, R, and Reese, J. (2013). Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina. Retrieved March 13, 2016 from University of North Carolina at Chapel Hill Jordan Institute for Families website. URL: <http://ssw.unc.edu/ma/>

NC implemented new Multi Responses System in 2007, so data prior to FY07 are not comparable.

2. **Field Name:** 2014

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**Field Note:**

Duncan, D.F., Kum, H.C., Flair, K.A., Stewart, C.J., Vaughn, J., Bauer, R, and Reese, J. (2013). Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina. Retrieved March 19, 2015 from University of North Carolina at Chapel Hill Jordan Institute for Families website. URL: <http://ssw.unc.edu/ma/>

NC implemented new Multi Responses System in 2007, so data prior to FY07 are not comparable.

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3. **Field Name:** 2013

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**Field Note:**

Duncan, D.F., Kum, H.C., Flair, K.A., Stewart, C.J., Vaughn, J., Bauer, R, and Reese, J. (2013). Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina. Retrieved February 11, 2014, from University of North Carolina at Chapel Hill Jordan Institute for Families website. URL: <http://ssw.unc.edu/ma/>

NC implemented new Multi Responses System in 2007, so data prior to FY07 are not comparable.

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4. **Field Name:** 2012

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**Field Note:**

Duncan, D.F., Kum, H.C., Flair, K.A., Stewart, C.J., Vaughn, J., Bauer, R, and Reese, J. (2013). Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina. Retrieved May 8, 2013, from University of North Carolina at Chapel Hill Jordan Institute for Families website. URL: <http://ssw.unc.edu/ma/>

NC implemented new Multi Responses System in 2007, so data prior to FY07 are not comparable.

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5. **Field Name:** 2011

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**Field Note:**

Data retrieved June 26, 2012 from the University of North Carolina at Chapel Hill Jordan Institute for Families website. URL: <http://ssw.unc.edu/ma/>

North Carolina has implemented the Multiple Response System (MRS) statewide. MRS is an effort to reform the entire continuum of child welfare in North Carolina- from intake through placement services. The goal of MRS is to bring services and supports more quickly to families in need, called "frontloading". Greater frontloading of services reduces the probability that a child would come back into the system within 6 months following an initial assessment finding services needed or a substantiation of abuse or neglect. In 2007 the recurrence of maltreatment did begin to decline by 27% (5.5% in SFY 2006-2007 as compared to 7.5% in 2001-2002).

**Data Alerts: None**

**SPM 2 - The number of children in the State less than three years old enrolled in early intervention services to reduce the effects of developmental delay, emotional disturbance, or chronic illness.**

	2011	2012	2013	2014	2015
Annual Objective	18,000.0	19,523.0	19,523.0	19,523.0	19,523.0
Annual Indicator	19,523.0	19,664.0	19,914.0	18,816.0	19,022.0
Numerator					
Denominator					
Data Source	EI Branch CECAS	EI Branch CECAS	EI Branch CECAS	EI Branch CECAS	NC Health Information System
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d SPMs:**

- 
1. **Field Name:** 2015
- 
- Field Note:**  
Manual indicator (count) is used in this state performance measure.  
  
Data are now obtained through the Health Information System.
- 
2. **Field Name:** 2014
- 
- Field Note:**  
Manual indicator (count) is used in this state performance measure.  
  
Data are now obtained through the Health Information System.
- 
3. **Field Name:** 2013
- 
- Field Note:**  
Manual indicator (count) is used in this state performance measure.  
  
Data are now obtained through the Health Information System.
- 
4. **Field Name:** 2012
- 
- Field Note:**  
Manual indicator (count) is used in this state performance measure.  
  
Data are now obtained through the Health Information System.

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5. **Field Name:** 2011

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**Field Note:**

Manual indicator (count) is used in this state performance measure.

**Data Alerts: None**

**SPM 3 - Percent of children 2-18 who are obese. Obese is defined as a body mass index (BMI) greater than or equal to the 95th percentile for gender and age.**

	2011	2012	2013	2014	2015
Annual Objective	15.0	15.0	15.0	15.0	14.5
Annual Indicator	16.1	20.8	15.0	15.0	14.8
Numerator	17,647	8,275	20,464	20,464	24,368
Denominator	109,925	39,701	136,041	136,041	164,112
Data Source	NC-NPASS	Health Information System	NC-NPASS	NC-NPASS	NC-PedNSS (formerly called NC-NPASS)
Provisional Or Final ?				Provisional	Final

**Field Level Notes for Form 10d SPMs:**

1. **Field Name:** 2015

**Field Note:**

The data source is NC-PedNSS, which is the newly renamed NC Nutrition and Physical Activity Surveillance System (NC-NPASS) and includes data from children who participate in Child Health and WIC in local health departments.

FY year data are actually the prior calendar year, e.g. FY15 is really CY14.

2. **Field Name:** 2014

**Field Note:**

FY14 data are not available due to the change to the new NC Crossroads WIC System, thus FY13 (CY12) data are repeated here.

3. **Field Name:** 2013

**Field Note:**

The data source is NC Nutrition and Physical Activity Surveillance System (NC-NPASS) which includes data from children who participate in Child Health and WIC in local health departments and children in School Based/School Linked Health Centers.

FY year data are actually the prior calendar year, e.g. FY13 is really CY12.

4. **Field Name:** 2012

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**Field Note:**

The data source for this indicator has changed so data for 2011 are not comparable to previous years. Due to recent changes to the NC Health Information System which is used by local health departments to collect data on child health clinic visits, there was not a common identifier field with the WIC data system to join the two data systems; therefore, the 2011 data do not include children ages 2 to 5 enrolled in WIC unless they received services in child health clinics. Efforts are underway to populate the two data systems with a common identifier, thus making it possible in future years to include the children who are exclusively seen in the WIC clinics.

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5. **Field Name:** 2011

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**Field Note:**

The data source is NC Nutrition and Physical Activity Surveillance System (NC-NPASS) which includes data from children who participate in Child Health and WIC in local health departments and children in School Based/School Linked Health Centers.

FY year data are actually the prior calendar year, e.g. FY11 is really CY10.

**Data Alerts: None**

**SPM 4 - The percent of women responding to the Pregnancy Risk Assessment Monitoring System (PRAMS) survey that they either wanted to be pregnant later or not then or at any time in the future.**

	2011	2012	2013	2014	2015
Annual Objective	39.0	40.0	40.0	40.0	45.0
Annual Indicator	45.2	42.6	47.3	47.3	47.3
Numerator					
Denominator					
Data Source	Pregnancy Risk Assessment Monitoring System				
Provisional Or Final ?				Provisional	Provisional

**Field Level Notes for Form 10d SPMs:**

1. **Field Name:** 2015

**Field Note:**

Provisional data for CY12 is repeated here as NC PRAMS data hasn't been finalized for 2012 yet and data for 2013 have not been received from the CDC. This indicator is not comparable to previous years because in the questionnaire used in 2012, the choice "not sure" was added to this question in PRAMS. The 2012 provisional data includes these responses in the Unintended category. PRAMS data are weighted to get the final state percentage, so numerator and denominator data are not available.

2. **Field Name:** 2014

**Field Note:**

Provisional data for CY12 is repeated here as NC PRAMS data hasn't been finalized for 2012 yet and data for 2013 have not been received from the CDC. This indicator is not comparable to previous years because in the questionnaire used in 2012, the choice "not sure" was added to this question in PRAMS. The 2012 provisional data includes these responses in the Unintended category. PRAMS data are weighted to get the final state percentage, so numerator and denominator data are not available.

3. **Field Name:** 2013

**Field Note:**

Provisional data for CY12 as NC PRAMS data hasn't been finalized for 2012 yet and data for 2013 have not been received from the CDC. This indicator is not comparable to previous years because in the questionnaire used in 2012, the choice "not sure" was added to this question in PRAMS. The 2012 provisional data includes these responses in the Unintended category. PRAMS data are weighted to get the final state percentage, so numerator and denominator data are not available.

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4. **Field Name:** 2012

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**Field Note:**

Data are for CY11. PRAMS data are weighted to get the final state percentage, so numerator and denominator data are not available.

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5. **Field Name:** 2011

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**Field Note:**

Data are for CY10. PRAMS data are weighted to get the final state percentage, so numerator and denominator data are not available.

**Data Alerts: None**

**SPM 5 - Percent of women of childbearing age taking folic acid regularly.**

	2011	2012	2013	2014	2015
Annual Objective	50.0	50.0	50.0	50.0	50.0
Annual Indicator	33.2	42.1	43.0	43.0	32.5
Numerator					
Denominator					
Data Source	NC BRFSS				
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d SPMs:**

1. **Field Name:** 2015  
**Field Note:**  
Note that due to methodology changes in BRFSS, data from 2011 and beyond is not comparable to data from prior years.

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2. **Field Name:** 2014  
**Field Note:**  
2014 data are not available, thus 2013 data are repeated here. Note that due to methodology changes in BRFSS, data from 2011 and beyond is not comparable to data from prior years.

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3. **Field Name:** 2013  
**Field Note:**  
Note that due to methodology changes in BRFSS, data from 2011 and beyond is not comparable to data from prior years.

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4. **Field Name:** 2012  
**Field Note:**  
2012 BRFSS data are not yet available, thus the data for 2011 is repeated here.

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5. **Field Name:** 2011  
**Field Note:**  
2011 data are not comparable to previous years due to BRFSS methodology changes (cell and land lines now being used) and changes to the way the question regarding folic acid was asked.

**Data Alerts: None**

**SPM 6 - The ratio of school health nurses to the public school student population.**

	2011	2012	2013	2014	2015
Annual Objective	1,100.0	1,100.0	1,100.0	1,100.0	1,100.0
Annual Indicator	1,201.4	1,179.4	1,177.3	1,160.4	1,112.0
Numerator	1,409,895	1,417,458	1,427,281	1,434,180	
Denominator	1,174	1,202	1,212	1,236	
Data Source	NC Annual School Health Services				
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d SPMs:**

1. **Field Name:** 2014

**Field Note:**

As colons are not allowed in the measure, the number listed in the objectives is the second number of the ratio (1:1225.4, etc.), i.e., the number of students per school health nurse.

School health nurse to student ratios were based upon full-time equivalencies of school nurse staff. The number of students and school health nurse FTEs from which the ratios were calculated are as follows:

FY10 Students: 1,402,269 School Nurse FTEs: 1183.36; ratio 1:1,185  
 FY11 Students: 1,409,895 School Nurse FTEs: 1173.5; ratio 1:1,201  
 FY12 Students: 1,417,458 School Nurse FTEs: 1201.8; ratio 1:1179  
 FY13 Students: 1,427,281 School Nurse FTEs: 1212.3; ratio 1:1,177  
 FY14 Students: 1,434,180 School Nurse FTEs: 1235.9; ratio 1:1,160

2. **Field Name:** 2013

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**Field Note:**

As colons are not allowed in the measure, the number listed in the objectives is the second number of the ratio (1:1225.4, etc.), i.e., the number of students per school health nurse.

School health nurse to student ratios were based upon full-time equivalencies of school nurse staff. The number of students and school health nurse FTEs from which the ratios were calculated are as follows:

FY09 Students: 1,410,497 School Nurse FTEs: 1169.04; ratio 1:1207  
FY10 Students: 1,402,269 School Nurse FTEs: 1183.36; ratio 1:1,185  
FY11 Students: 1,409,895 School Nurse FTEs: 1173.5; ratio 1:1,201  
FY12 Students: 1,417,458 School Nurse FTEs: 1201.8; ratio 1:1179  
FY13 Students: 1,42,7281 School Nurse FTEs: 1212.3; ratio 1:1,177

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**3. Field Name: 2012**

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**Field Note:**

As colons are not allowed in the measure, the number listed in the objectives is the second number of the ratio (1:1225.4, etc.), i.e., the number of students per school health nurse.

School health nurse to student ratios were based upon full-time equivalencies of school nurse staff. The number of students and school health nurse FTEs from which the ratios were calculated are as follows:

FY08 Students: 1,404,957 School Nurse FTEs: 1146.5; ratio 1:1225.4  
FY09 Students: 1,410,497 School Nurse FTEs: 1169.04; ratio 1:1207  
FY10 Students: 1,402,269 School Nurse FTEs: 1183.36; ratio 1:1,185  
FY11 Students: 1,409,895 School Nurse FTEs: 1173.5; ratio 1:1,201  
FY12 Students: 1,417,458 School Nurse FTEs: 1201.8; ratio 1:1179.4

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**4. Field Name: 2011**

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**Field Note:**

As colons are not allowed in the measure, the number listed in the objectives is the second number of the ratio (1:1225.4, etc.), i.e., the number of students per school health nurse.

School health nurse to student ratios were based upon full-time equivalencies of school nurse staff. The number of students and school health nurse FTEs from which the ratios were calculated are as follows:

FY07 Students: 1,386,363 School Nurse FTEs: 1034; ratio 1:1341  
FY08 Students: 1,404,957 School Nurse FTEs: 1146.5; ratio 1:1225.4  
FY09 Students: 1,410,497 School Nurse FTEs: 1169.04; ratio 1:1207  
FY10 Students: 1,402,269 School Nurse FTEs: 1183.36; ratio 1:1,185  
FY11 Students: 1,409,895 School Nurse FTEs: 1173.5; ratio 1:1,201

**Data Alerts: None**

**SPM 7 - Percent of women with live, term births who gain within the Institute of Medicine (IOM) Recommended Weight Gain Ranges.**

	2011	2012	2013	2014	2015
Annual Objective	38.0	35.0	35.0	35.0	35.0
Annual Indicator	30.5	28.9	28.8	29.2	29.3
Numerator	17,904	30,537	30,373	30,253	30,712
Denominator	58,647	105,576	105,623	103,456	104,975
Data Source	NC Pregnancy Nutrition Surveillance System(NCPNSS)	NC Vital Records	NC Vital Records	NC Vital Records	NC Vital Records
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d SPMs:**

1. **Field Name:** 2015

**Field Note:**

With the implementation of the 2003 revised standard birth certificate during 2010, NC can now report on this measure for all births, not just births to women who received WIC. The data reported for 2015 is really CY14 data. Data for 2011 on is not comparable to data from previous years.

2. **Field Name:** 2014

**Field Note:**

With the implementation of the 2003 revised standard birth certificate during 2010, NC can now report on this measure for all births, not just births to women who received WIC. The data reported for 2014 is really CY13 data. Data for 2011 on is not comparable to data from previous years.

3. **Field Name:** 2013

**Field Note:**

With the implementation of the 2003 revised standard birth certificate during 2010, NC can now report on this measure for all births, not just births to women who received WIC. The data reported for 2013 is really CY12 data. Data for 2011 on is not comparable to data from previous years.

4. **Field Name:** 2012

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**Field Note:**

With the implementation of the 2003 revised standard birth certificate during 2010, NC can now report on this measure for all births, not just births to women who received WIC. The data reported for 2012 is really CY11 data and is not comparable to data from previous years.

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5. **Field Name:** 2011

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**Field Note:**

Data are based on prior CY (FY11 is really CY10). As per the detail sheet, these data are only available for women receiving WIC services.

**Data Alerts: None**

**SPM 8 - Percent of non-pregnant women of reproductive age who are overweight/obese (BMI>25).**

	2011	2012	2013	2014	2015
Annual Objective	56.0	55.0	55.0	50.0	48.0
Annual Indicator	51.2	48.0	48.4	49.6	49.8
Numerator	30,021	57,773	58,004	58,997	60,250
Denominator	58,647	120,403	119,767	118,983	120,948
Data Source	NC Pregnancy Nutrition Surveillance System	NC Vital Statistics	NC Vital Statistics	NC Vital Statistics	NC Vital Statistics
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d SPMs:**

1. **Field Name:** 2015

**Field Note:**

With the implementation of the 2003 revised standard birth certificate during 2010, NC can now report on this measure for all women having a live birth, not just births to women who received WIC. The data reported for 2015 is really CY14 data. Data from 2011 on is not comparable to data from previous years. Data are based on pre-pregnancy BMI.

2. **Field Name:** 2014

**Field Note:**

With the implementation of the 2003 revised standard birth certificate during 2010, NC can now report on this measure for all women having a live birth, not just births to women who received WIC. The data reported for 2014 is really CY13 data. Data from 2011 on is not comparable to data from previous years. Data are based on pre-pregnancy BMI.

3. **Field Name:** 2013

**Field Note:**

With the implementation of the 2003 revised standard birth certificate during 2010, NC can now report on this measure for all women having a live birth, not just births to women who received WIC. The data reported for 2013 is really CY12 data. Data from 2011 on is not comparable to data from previous years. Data are based on pre-pregnancy BMI.

4. **Field Name:** 2012

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**Field Note:**

With the implementation of the 2003 revised standard birth certificate during 2010, NC can now report on this measure for all women having a live birth, not just births to women who received WIC. The data reported for 2012 is really CY11 data and is not comparable to data from previous years. Data are based on pre-pregnancy BMI.

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5. **Field Name:** 2011

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**Field Note:**

Data are based on the prior calendar year. The data source is the North Carolina Pregnancy Nutrition Surveillance System (PNSS) which links data from the WIC program, public maternity clinics, birth certificates and fetal death certificates. Data are based on the 2010 IOM BMI and Weight Gain During Pregnancy Guidelines. Data from 2008 on are not comparable to data from previous years.

**Data Alerts: None**

**SPM 9 - Percent of children age 13 to 17 who have received 1 or more doses of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap) since the age of ten years**

	2011	2012	2013	2014	2015
Annual Objective	90.0	90.0	90.0	90.0	90.0
Annual Indicator	67.7	77.8	87.9	89.4	92.3
Numerator					
Denominator					
Data Source	NIS-Teen	NIS-Teen	NIS-Teen	NIS-Teen	NIS-Teen
Provisional Or Final ?				Final	Final

**Field Level Notes for Form 10d SPMs:**

1. **Field Name:** 2015  
**Field Note:**  
Data are from the National Immunization Survey - Teen for CY14. As this is a weighted estimate, data for the numerator and the denominator are omitted.

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2. **Field Name:** 2014  
**Field Note:**  
Data are from the National Immunization Survey - Teen for CY13. As this is a weighted estimate, data for the numerator and the denominator are omitted.

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3. **Field Name:** 2013  
**Field Note:**  
Data are from the National Immunization Survey - Teen for CY12. As this is a weighted estimate, data for the numerator and the denominator are omitted.

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4. **Field Name:** 2012  
**Field Note:**  
Data are from the National Immunization Survey - Teen for CY11. As this is a weighted estimate, data for the numerator and the denominator are omitted.

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5. **Field Name:** 2011  
**Field Note:**  
Data are from the National Immunization Survey - Teen for CY10. As this is a weighted estimate, data for the numerator and the denominator are omitted.

Data Alerts: None

**Form 11**  
**Other State Data**  
**State: North Carolina**

While the Maternal and Child Health Bureau (MCHB) will populate the data elements on this form for the States, the data are not available for the current application/annual report.

## **State Action Plan Table**

**State: North Carolina**

Please click the link below to download a PDF of the full version of the State Action Plan Table.

[State Action Plan Table](#)

**Abbreviated State Action Plan Table**

**State: North Carolina**

**Women/Maternal Health**

State Priority Needs	NPMs	ESMs	SPMs
Improve the health of women of childbearing age with a special focus on health equity	NPM 1 - Well-Woman Visit	ESM 1.1	

**Perinatal/Infant Health**

State Priority Needs	NPMs	ESMs	SPMs
Reduce infant mortality with a special focus on social determinants of health	NPM 3 - Risk-Appropriate Perinatal Care	ESM 3.1	
Reduce infant mortality with a special focus on social determinants of health	NPM 4 - Breastfeeding	ESM 4.1	
Increase the number of newborns screened for genetic and hearing disorders and prevent birth defects			SPM 1

**Child Health**

State Priority Needs	NPMs	ESMs	SPMs
Prevent child deaths			SPM 2
Increase developmental screenings for children and adolescents	NPM 6 - Developmental Screening	ESM 6.1	

**Adolescent Health**

State Priority Needs	NPMs	ESMs	SPMs
Promote healthy schools and students who are ready to learn	NPM 10 - Adolescent Well-Visit	ESM 10.1	
Promote healthy schools and students who are ready to learn			SPM 4

### Children with Special Health Care Needs

State Priority Needs	NPMs	ESMs	SPMs
Improve the health of children with special needs	NPM 11 - Medical Home	ESM 11.1	
Provide timely and comprehensive early intervention services for children with special developmental needs and their families.			SPM 3

### Cross-Cutting/Life Course

State Priority Needs	NPMs	ESMs	SPMs
Improve healthy behaviors in women and children and among families incorporating the life course approach	NPM 14 - Smoking	ESM 14.1	
Increase access to care for women, children, and families, especially in uninsured populations and where disparities exist	NPM 15 - Adequate Insurance	ESM 15.1	

**Glossary of Acronyms Used in the FY17 NC MCHBG Application**

<b>#</b>	<b>ACRONYM</b>	<b>DEFINITION</b>
1	AAP	American Academy of Pediatrics
2	ABCD	Assuring Better Child Health and Development
3	ACA	Affordable Care Act
4	ACE	Adverse Childhood Events
5	ACOG/SMFM	American College of Obstetricians and Gynecologist/Society for Maternal-Fetal Medicine
6	AFIX	Assessment, Feedback, Incentive, eXchange
7	AH	Adolescent Health
8	AHRC	Adolescent Health Resource Center
9	AMCHP	Association of Maternal and Child Health Programs
10	APP	Adolescent Parenting Programs
11	APPP	Adolescent Pregnancy Prevention Programs
12	ASQ:SE	Ages and Stages Questionnaires: Social Emotional
13	ASQ-3™	Ages & Stages Questionnaires®, Third Edition
14	ATLAS	Adolescents Transitioning to Leadership and Success
15	BESST	Baby's Easy Safe Sleep Trainings
16	BFP	Branch Family Partnership
17	BFPC	Breastfeeding Peer Counselor
18	BHCC	Behavioral Health Clinical Consultant
19	BMT	Branch Management Team
20	BRFSS	Behavioral Risk Factor Surveillance System
21	BRP	Blue Ridge Pediatrics
22	C&Y	Children and Youth
23	C&YBSP	C&Y Branch Strategic Plan
24	CAB	Community Advisory Boards
25	CC4C	Care Coordination for Children
26	CCCDP	Carolina Children's Communicative Disorders Program
27	CCHC	Child Care Health Consultants
28	CCHD	Critical congenital heart disease
29	CCHSRC	NC Child Care Health and Safety Resource Center
30	CCLC	Cross-Cutting or Life Course
31	CCNC	Community Care of North Carolina
32	CDC	Centers for Disease Control and Prevention
33	CDSA	Children's Developmental Service Agency
34	CF	Cystic Fibrosis
35	CFC	Craniofacial Center
36	CFPT	Child Fatality Prevention Teams
37	CFTF	NC Child Fatality Task Force

**Glossary of Acronyms Used in the FY17 NC MCHBG Application**

<b>#</b>	<b>ACRONYM</b>	<b>DEFINITION</b>
38	CHAMP	Child Health Assessment Monitoring Program
39	CHIP	Child Health Insurance Program
40	CI	Confidence Intervals
41	CMIH	Center for Maternal and Infant Health
42	CMIS	Case Management Information System
43	CoIIN	Collaborative Improvement and innovation Network
44	CPS ASEC	Current Population Survey's Annual Social and Economic Supplement
45	CSHCN	Children with Special Health Care Needs
46	CYSCHN	Children and Youth with Special Health Care Needs
47	DCDEE	Division of Child Development and Early Education
48	DHHS	NC Department of Health and Human Services
49	DMA	NC Division of Medical Assistance
50	DMT	Division Management Team
51	DPH	NC Division of Public Health
52	DPI	NC Department of Public Instruction
53	DSS	Division of Social Services
54	ECAC	Exceptional Children's Assistance Center
55	ECCS	Early Childhood Comprehensive System
56	EFNEP	Expanded Food and Nutrition Education Program
57	EHDI	Early Hearing Detection and Intervention
58	EI	Early Intervention
59	EIB	Early Intervention Branch
60	EMR	Electronic Medical Record
61	EPR	Emergency Preparedness and Response
62	ERN	Enhanced Role Nursing
63	ESM	Evidence-Based or -Informed Strategy Measure
64	ESMMNC	Eat Smart, Move More NC
65	FLS	Family Liaison Specialist
66	FPL	Federal Poverty Level
67	FTE	Full-Time Equivalent
68	GALT	Galactose-1-phosphate uridylyltransferase
69	GNBS	Genetic and Newborn Screening
70	HBCU	Historically Black Colleges and Universities
71	HFA	Healthy Families America
72	HIT	Health Information Technology
73	HITCHUP	Hearing Impaired Toddlers and Children Have Unlimited Potential
74	HRSA	US Health Resources and Services Administration
75	IA	Innovative Approaches

**Glossary of Acronyms Used in the FY17 NC MCHBG Application**

<b>#</b>	<b>ACRONYM</b>	<b>DEFINITION</b>
76	IB	Immunization Branch
77	IDEA	Individuals with Disabilities Education Act
78	IMR	Infant Mortality Rate
79	IOM	Institute of Medicine
80	IRT	Immunoreactive Trypsinogen
81	ITP	Infant-Toddler Program
82	IVPB	Injury and Violence Prevention Branch
83	LARC	Long Acting Reversible Contraceptives
84	LEND	Leadership Education in Neurodevelopmental Disabilities and Related Disorders
85	LHD	Local Health Department
86	LOCATe	Levels of Care Assessment Tool
87	M/CDS	Minimum and Core Data Sets
88	MBA	Master of Business Administration
89	MCH	Maternal and Child Health
90	M-CHAT	Modified Checklist for Autism in Toddlers
91	MCHB	Maternal and Child Health Bureau
92	MCHBG	Maternal and Child Health Block Grant
93	MD	Medical Doctor
94	MI	Meconium Ileus
95	MIECHV	Maternal, Infant, and Early Childhood Home Visiting
96	MNT	Medical Nutrition Therapy
97	MOD	March of Dimes
98	MPH	Master of Public Health
99	MS	Master of Science
100	MSPH	Master of Science in Public Health
101	NBS	Newborn Screening
102	NC	North Carolina
103	NC DHHS	NC Department of Health and Human Services
104	NCALHD	NC Association of Local Health Directors
105	NCECAC	NC Early Childhood Advisory Council
106	NCHAM	National Center for Hearing Assessment and Management
107	NCHSF	NC Healthy Start Foundation
108	NCIOM	North Carolina Institute of Medicine
109	NCIP	North Carolina Immunization Program
110	NCIR	North Carolina Immunization Registry
111	NCODH	North Carolina Office of Disability and Health
112	NC-PedNSS	North Carolina Pediatric Nutrition Surveillance System

**Glossary of Acronyms Used in the FY17 NC MCHBG Application**

<b>#</b>	<b>ACRONYM</b>	<b>DEFINITION</b>
113	NCPS	North Carolina Pediatric Society
114	NC-VDRS	NC Violent Death Reporting System
115	NFP	Nurse Family Partnership
116	NH	Non-Hispanic
117	NICU	Neonatal Intensive Care Unit
118	NIRN	National Implementation Research Network
119	NIS	National Immunization Survey
120	NPM	National Performance Measure
121	NSB	Nutrition Services Branch
122	NSCH	National Survey of Children's Health
123	NS-CSHCN	National Survey of Children with Special Health Care Needs
124	NTD	Neural Tube Defects
125	OB/GYN	Obstetrics & Gynecology
126	OHS	Oral Health Section
127	ORH	Office of Rural Health
128	PBNC	Prevent Blindness NC
129	PCM	Pregnancy Care Management
130	PDF	Portable Document Format
131	PDSA	Plan-Do-Study-Act
132	PEDS	Parents' Evaluation of Developmental Status
133	PHSP	Perinatal Health Strategic Plan
134	PIH	Perinatal/Infant Health
135	PMC	Pediatric Medical Consultant
136	PMH	Pregnancy Medical Home
137	PPE	Preconception Peer Education
138	PQCNC	Perinatal Quality Collaborative of North Carolina
139	PRAMS	Pregnancy Risk Assessment Monitoring System
140	PREP	Personal Responsibility Education Program
141	PSP	Parent Share Partners
142	QI	Quality Improvement
143	SCHS	NC State Center for Health Statistics
144	SCID	Severe Combined Immunodeficiency Syndrome
145	SCP	Sickle Cell Program
146	SHAC	School Health Advisory Councils
147	SHC	School Health Center
148	SHIFT NC	Sexual Health Initiatives for Teens NC (formerly Adolescent Pregnancy Prevention Campaign of NC)
149	SHNC	School Health Nurse Consultant

**Glossary of Acronyms Used in the FY17 NC MCHBG Application**

<b>#</b>	<b>ACRONYM</b>	<b>DEFINITION</b>
150	SIDS	Sudden Infant Death Syndrome
151	SLPH	State Laboratory of Public Health
152	SMT	Section Management Team
153	SNFI	School Nurse Funding Initiative
154	SSDI	State Systems Development Initiative
155	SSI	E
156	SSIP	State Systemic Improvement Plan
157	STI	Sexually Transmitted Infection
158	TA	Technical Assistance
159	TANF	Temporary Assistance for Needy Families
160	TPCB	Tobacco Prevention and Control Branch
161	TPOL	Triple P Online
162	TPPI	Teen Pregnancy Prevention Initiative
163	UNC	University of North Carolina
164	UNC-CH	University of North Carolina at Chapel Hill
165	US	United States
166	VFC	Vaccines for Children
167	VLBW	Very Low Birth Weight
168	WATCH	Women and Tobacco Coalition for Health
169	WCHS	Women's and Children's Health Section
170	WCSWeb	Data System for Newborn Hearing Screening and Sickle Cell Programs
171	WHB	Women's Health Branch
172	WIC	Special Supplemental Nutrition Program for Women, Infants, and Children
173	WMH	Women/Maternal Health
174	YMHFA	Youth Mental Health First Aid
175	YRBSS	Youth Risk Behavior Surveillance System
176	YSHCN	Youth with Special Health Care Needs