Public Policy Strategies

Chapter 5

As noted in Chapter 2, most of the prior task forces and expert panels recommended making regulatory changes to improve early child nutrition, opportunities for physical activity, and breastfeeding support. Some of the prior policy recommendations were targeted to the federal level, such as establishing national dietary guidelines, or developing marketing and advertising standards for foods marketed to children. Others were targeted at states, such as changing state licensure rules to improve nutrition, enhance physical activity, support breastfeeding, and expand the outdoor learning environment in child care settings.

The NCIOM Early Childhood Obesity Prevention (ECOP) Task Force focused on those strategies that could be implemented at the state level, either through state regulatory or voluntary policy initiatives. An example of successful state legislative action to promote health is that which encourages the creation of joint use agreements between local boards of education and local governments.[1] Joint use agreements establish partnerships between schools and communities and permit the use of existing school recreational facilities for non-school use, use after school hours, and use by individuals not affiliated with the school. Physical activity can be promoted within a community by opening up these spaces to the community at large for non-school use.[2] Before the North Carolina General Assembly (NCGA) took action, communities around the state were hesitant to enter into joint use agreements due to concern over liability. However, the NCGA enacted legislation to encourage local school boards to enter into joint use agreements, and to give local boards of education the authority to adopt rules governing joint use of school property.[a] In addition, the NCGA enacted legislation that clarified that local school boards would not be liable for any personal injury that occurred on school property pursuant to the joint use agreement.

The Task Force focused on strategies that could be implemented at the state level, either through state regulatory or voluntary policy initiatives.

In the past, North Carolina has had a lot of success in improving the quality of care provided in child care programs by creating standards to be reached through voluntary efforts. For example, when the state began the North Carolina Star Rated License system in 1999, all licensed child care programs automatically received a rating of 1 star. Higher ratings (2-5, with 5 being the highest) could only be obtained through voluntary efforts. Since higher ratings are linked to financial incentives, most licensed child care programs now qualify as 4 or 5 star licensed programs.

In addition to the voluntary star rating system, North Carolina currently has multiple initiatives aimed at improving nutritional standards, increasing physical activity, enhancing outdoor learning environments, and supporting breastfeeding in child care programs. Some of these initiatives were discussed in Chapter 4. The ECOP Task Force wanted to build on these voluntary initiatives.

a NCGS §§115C-12, 115C-524

The goal is to reach the "tipping point" so that these enhanced standards are the rule, not the exception.

Therefore, this chapter focuses primarily on voluntary efforts that the state can make to improve early childhood nutrition, increase physical activity, enhance the outdoor learning environment, and support breastfeeding. These "voluntary" efforts are not typically considered "policies," as policies are generally a regulatory or legislative action that mandates—rather than encourages—actions. However, because these efforts build on an existing regulatory or publicly funded programmatic structure, the ECOP Task Force included these strategies in the policy section.

This chapter focuses primarily on voluntary efforts that the state can make to improve early childhood nutrition, increase physical activity, enhance the outdoor learning environment, and support breastfeeding.

In addition, the ECOP Task Force included strategies aimed at changing insurance payment policies. Changes in Medicaid or North Carolina Health Choice for Children (North Carolina's State Children's Health Insurance Program) would be considered policy changes, in the more traditional use of the term "public policy."

The policy section of the ECOP Task Force's blueprint focuses on six strategies:

Policy Strategy 1: Create a voluntary recognition program for child care programs and early education programs that meet enhanced physical activity and nutrition standards.

Policy Strategy 2: Enhance family education about early childhood healthy weight and obesity prevention strategies through existing maternal, infant, and early childhood home visiting and family strengthening programs.

Policy Strategy 3: Expand the focus of state agencies to include early childhood health, physical activity, and nutrition through healthy community design.

Policy Strategy 4: Improve the collection and reporting of physical activity and nutrition data in multiple settings to more fully promote healthy weight among young children.

Policy Strategy 5: Improve the collection of body mass index (BMI) data for young children and make the information available to policymakers, health professionals, and the public to evaluate existing programmatic and policy initiatives and to inform future ones.

Policy Strategy 6: Promote breastfeeding for more North Carolina infants through Medicaid.

Policy Strategy 1: Create a voluntary recognition program for child care programs and early education programs that meet enhanced physical activity and nutrition standards

The ECOP Task Force felt that the creation of a voluntary recognition program was the ideal approach to encourage child care programs to further improve the nutrition of food served in the programs, increase breastfeeding support, increase the amount of age appropriate physical activity, and expand the naturalized outdoor learning environment. This recognition system would be voluntary, not mandatory, (more like a "Good Housekeeping Seal of Approval") and could lead to system change over time. This is similar to the process that the state used in developing the star rating system (using a 1-5 rating system, with 5 being the highest) for child care programs. As mentioned previously, when this program was first developed, all licensed child care programs were assigned a star rating of 1 as part of licensure, and meeting higher quality standards was voluntary for programs, but necessary in order to obtain a higher star rating. However, programs were given financial incentives such as grants and increased payments for improving quality. More recently, in the 2011-2012 state budget, the North Carolina General Assembly limited child care subsidies only to those programs that had achieved a 3, 4, or 5 star rating. With this system, which combines voluntary quality improvement, public recognition (as measured through the star rating system), and financial incentives, 70% of all children in early education in North Carolina currently attend a 4 or 5 star program, compared to just 33% in 2001.

Creation of a voluntary recognition program could lead to system change over time.

Last year, the North Carolina Child Care Commission adopted new nutrition standards for licensed child care facilities. These enhanced nutrition standards were based, in part, on recommendations that the Division of Public Health (DPH) made to the Legislative Task Force on Childhood Obesity on strategies to reduce early childhood overweight and obesity. DPH recommended that the standards be implemented in two phases. Phase one of its recommendations was included in the most recent set of North Carolina Child Care Commission nutrition rules. The new standards ensure that meals and snacks served to children in child care settings comply with the Meal Patterns for Children in Child Care Programs from the United States Department of Agriculture (10 A NCAC 09.0901, .1706). Programs must comply with these rules if they receive subsidies to help pay for meals and snacks through the Child and Adult Care Food Program (CACFP). The new licensure rules also limit the types of beverages served in child care programs to breast milk, formula, water, unflavored milk, and six ounces of 100% fruit juices per day. The rules also require child care programs to provide accommodations for women while they are breastfeeding or expressing milk. Parents can opt out of these nutrition standards if they

provide all meals, snacks, and drinks to be served to their children at appropriate times. Parents can also bring special foods and beverages for medical, religious, or cultural reasons. Phase two of DPH's recommended early childhood nutrition standards would limit the number of grains served that contain added sugars, increase the number served that contain whole grains, and limit foods high in fat and salt. Phase two has not yet been implemented, as these changes require additional collaboration between DPH and the North Carolina Division of Child Development and Early Education (NC DCDEE) to develop training materials and resources, as well as additional work with food vendors to ensure availability of healthy options.

The existing child care licensure rules also encourage physical activity and limited screen time (10A NCAC 09.1718). The rules require a minimum of one hour of outdoor play throughout the day, if weather permits. They also limit screen time to two and a half hours per week for children who are two years old or older. Child care facilities should have appropriate space for vigorous activities both outdoors and indoors.

North Carolina has demonstrated past success with voluntary quality improvement efforts through the North Carolina Star Rated Licence system.

Expert panels suggest that children should receive more than one hour a day of moderate to vigorous physical activity. Recommendations for increased physical activity are based on studies that report substantial physical activity is necessary for young children's motor development and studies that demonstrate young children are active for an average of 15 minutes per hour of observation.[3] The Institute of Medicine of the National Academies (IOM) recommends that young children have an opportunity for physical activity for at least 15 minutes per hour.[3] This recommendation doubles the current licensure requirement to an average of two hours in a given eight hour day.

The existing state child care licensure rules provide a solid basis on which to promote healthy weight for infants and young children. Yet more can be done to further improve nutrition, support breastfeeding, and expand opportunities for vigorous physical activity—both indoors and in appropriate outdoor learning environments. As discussed in Chapter 4, Preventing Obesity by Design (POD), a project of the Natural Learning Initiative at North Carolina State University, helps promote improved outdoor learning environments in child care programs to encourage more active play.

North Carolina has demonstrated past success with voluntary quality improvement efforts through the North Carolina Star Rated Licence system. In addition, efforts have already been made to begin a voluntary certification program for child care programs that develop breastfeeding-friendly environments. The Carolina Global Breastfeeding Institute (CGBI) received grant funding to research breastfeeding support in Wake County child care programs in collaboration with the child care health consultants and Smart Start and to develop 10 steps for breastfeeding-friendly child care. Based on these 10 steps, the Special Nutrition Program through the Division of Public Health is developing a breastfeeding-friendly designation for North Carolina

child care programs.[b] The program model was based on DPH's North Carolina Maternity Center Breastfeeding-Friendly Designation. CGBI and DPH's experience in developing and offering training and voluntary certification could be used to pilot this effort and provide the groundwork for including other aspects of healthy child care. In fact, the inclusion of additional aspects should be relatively seamless, given that CGBI has patterned its materials and approach after NAP SACC, a highly successful nutrition and physical activity enhancement and promotion program for child care settings.

Child care programs that receive these enhanced standards could include this recognition in their marketing materials. In addition, the ECOP Task Force recommends that NC DCDEE seek private or other funding to provide financial incentives to child care programs that meet the voluntary standards for enhanced health and wellness recognition.

Policy Strategy 1: Create a voluntary recognition program for child care programs and early education programs that meet enhanced physical activity and nutrition standards

The North Carolina Division of Child Development and Early Education (NC DCDEE), the Child and Adult Care Food Program (CACFP), the North Carolina Partnership for Children (NCPC), the Carolina Global Breastfeeding Initiative (CGBI), Child Care Resource and Referral Network, and the North Carolina Child Care Health and Safety Resource Center should develop a voluntary recognition program for licensed child care programs, family care homes, Head Start, North Carolina Pre-K, and other child care and early education settings that meet enhanced nutrition, including breastfeeding, physical activity, and naturalized outdoor learning environment standards for infants and young children.

a) The standards for recognition should include:

1) Evidence-based or other validated measures that have been shown to improve nutrition, physical activity, and overall health, and promote a healthy weight for young children, beginning in infancy.

2) Requirements that teachers have received enhanced training and certification on health and wellness, including training on how to educate parents about early childhood nutrition and physical activity.

b Sullivan, C. State Breastfeeding Coordinator, Nutrition Services Branch, Division of Public Health, North Carolina Department of Health and Human Services. Written communication. June 10, 2013.

b) The groups listed in Strategy 1 should seek public input into the voluntary recognition standards before implementing the program.

c) NC DCDEE should seek additional funding to provide financial incentives to child care programs that meet the voluntary standards for enhanced health and wellness recognition.

Lead organization and partners: NC DCDEE should take the lead and pull together other appropriate organizations to develop the voluntary recognition program including incentive funding strategy for enhanced health and wellness programs and policies in licensed child care settings. NC DCDEE should involve other key organizations, including but not limited to: CACFP, NCPC, CGBI, Child Care Resource and Referral Network, and the North Carolina Child Care Health and Safety Resource Center.

Funding and new resources required: New funding is not needed to create the voluntary recognition system.

While funding is not needed to create the voluntary recognition system, incentive funding would be helpful to incentivize child care facilities to reach these higher standards. NC DCDEE and partners should seek public and/or private funding to support financial incentives to help child care facilities achieve the voluntary recognition.

Performance measures and evaluation: By the end of 2018, North Carolina would have developed its voluntary recognition program, and at least 75 licensed child care programs would have received this recognition.

Policy Strategy 2: Enhance family education about early childhood healthy weight and obesity prevention strategies through existing maternal, infant, and early childhood home visiting and family strengthening programs

North Carolina has a number of different family strengthening and home visitation programs. For example, the Affordable Care Act (ACA) provided funding to states to implement evidence-based or evidence-informed maternal, infant, and early childhood evidence-based visitation models. The goals of these programs are to improve prenatal, maternal, and newborn health; child health and development; parenting skills; school readiness; and family economic self-sufficiency, and also to reduce juvenile delinquency.[4] In June 2011, North Carolina was awarded $3.2 million per year for three years to implement the

North Carolina Maternal, Infant, and Early Childhood Home Visiting Program. Two evidence-based home visiting models are supported: the Nurse Family Partnership (NFP) and Healthy Families America (HFA), which are operated through the Women's and Children's Health Section in the North Carolina Division of Public Health. NFP provides nurses to educate and support low-income, first-time mothers throughout their pregnancy and the first two years of motherhood. The NFP is supported in a variety of ways including The Duke Endowment, the Kate B. Reynolds Charitable Trust, the Blue Cross and Blue Shield of North Carolina Foundation, the North Carolina Division of Public Health, and Smart Start. The ACA is an additional source of support. HFA is an evidence-based home visiting program for low-income families at risk of child abuse or neglect. The program's goals include developing nurturing relationships, promoting healthy child development and growth, and building the foundation for a strong family. Some of the HFA sites are incorporating Parents as Teachers (PAT) into the HFA home visiting program. PAT is also an evidence-based program that provides family education and support to families with young children. This support includes home visits by parent educators, parent group meetings, developmental and health screenings, and linkages to community resources. While PAT is supported by Smart Start, the Women's and Children's Health Section works with Smart Start to coordinate support for this and any home visiting program.

North Carolina has a number of different family strengthening and home visitation programs.

In addition, the state is also helping to support implementation of Positive Parenting Program (Triple P). Triple P is a multilevel, evidence-based parenting and family support program that promotes positive and nurturing parent-child relationships in order to prevent behavioral, emotional, and developmental problems in children.[5,6] Triple P aims to increase protective factors including parental confidence, the use of positive parenting practices, community capacity, interagency collaboration, and the capacity and confidence of service providers. It also aims to reduce risk factors such as harmful or ineffective parenting practices, parental stress, depression, conflict, and child abuse and neglect. A final goal of Triple P is to reduce the prevalence of behavioral and emotional problems among young children.[5]

All of these programs rely on trained professionals who work directly with at-risk families, and have an opportunity to provide valuable information on healthy weight and obesity.

Children ages 0-5 years who have certain risk factors may be eligible for care coordination through Care Coordination for Children (CC4C), which is administered jointly by Community Care of North Carolina (CCNC), DPH, and the North Carolina Division of Medical Assistance (DMA). The goal of CC4C is to improve young children's health outcomes while reducing their medical costs. Children with special health care needs or those who are exposed to toxic stress, in the foster care system, or transitioning out of the neonatal intensive care unit may receive CC4C services. Families referred to CC4C receive a comprehensive evidence-based health assessment, including measures of the parents' life skills, that help a family achieve a healthy level of functioning. A care manager then works with the family to develop a plan of care to meet the desired outcomes. CC4C care managers help families connect with needed

support services such as health insurance, child care, behavioral health, early intervention, medical care, and transportation. CC4C began in 2011 and is still being developed and implemented in CCNC networks through health departments across the state.[7]

In addition to these home visiting programs, DMA covers a postnatal home visit by a registered nurse. This visit provides the opportunity to follow up with the mother on her health; provide counseling for family planning and infant care; and arrange for needed appointments for the mother and/or child.[8] Head Start also has a federally funded home-based program for pregnant women and low-income families with infants and toddlers. Home visiting is one component of Early Head Start, a child and family development program. The home-visiting program offers weekly home visits in addition to playgroups with other children and parents several times per month.[9,10]

The Task Force wanted to build on the existing home visiting and family strengthening programs by including parent education on strategies to support healthy weight.

All of these programs rely on trained professionals who work directly with at-risk families, and thus have an opportunity to provide valuable information on healthy weight and obesity. Providing healthy weight information and obesity prevention strategies to families in the home extends the current US Preventive Services Task Force recommendation to screen and provide counseling to children ages 6 years and older who are obese to very young children (ages 0-5 years).[11] Further, an article in the *New England Journal of Medicine* (January 2013) noted that interventions that include parental involvement and the home setting are likely to result in better weight outcomes than programs provided only in the school environment or other non-home settings.[12]

The ECOP Task Force wanted to build on the existing home visiting and family strengthening programs by including parent education on strategies to support healthy weight. The North Carolina Division of Public Health is involved in the oversight and/or funding of many of these initiatives. For some of these programs, DPH may be limited in how much it can change program requirements because the state received federal funding to implement these evidence-based programs. Evidence-based programs should be implemented with fidelity to the program design in order to achieve the same results.[13] However, while the NFP, HFA, and PAT programs have specific content—some of which addresses healthy weight, physical activity, nutrition, and food access/security—DPH and NCPC believe there is an opportunity to provide additional resources and data specificity to the home visiting programs while maintaining fidelity to the models. The content of visits is currently recorded within the NFP and HFA client record, but is not reported or collected as part of the data system. This additional data collection would need to occur at the national NFP and HFA level. The Children and Youth Branch within DPH has a child nutrition consultant on staff who could provide additional and formal training to NFP and HFA, and who could coordinate training with NCPC for the PAT parent educators on early childhood nutrition, healthy weight, and obesity prevention.

Policy Strategy 2: Enhance family education about early childhood healthy weight and obesity prevention strategies through existing maternal, infant, and early childhood home visiting and family strengthening programs

a) The Children and Youth Branch in the North Carolina Division of Public Health should train the NFP and HFA parent educators it funds about early childhood physical activity, nutrition, healthy weight, and obesity prevention. This training should include appropriate parent education on healthy weight, breastfeeding, nutrition, physical activity, and sleep into existing home visiting or family strengthening programs.

b) NCPC should collaborate with DPH to ensure PAT parent educators receive similar training.

c) DPH should examine possibilities to track this information in the home visiting data systems for the programs funded through DPH.

Lead organization and partners: DPH, NCPC, and CCNC should take the lead on determining how to best implement this strategy.

Funding and new resources required: There would be no need for new funding associated with this strategy since the Children and Youth Branch at DPH has a nutrition consultant who will provide the training directly to NFP and HFA sites and coordinate with NCPC in the provision of this type of training to the PAT sites. They should also incorporate materials from the modules developed for child care providers, consultants, and technical support in community/environment strategies 2 and 3 from Chapter 4.

Performance measures and evaluation: Within three years of implementation, 80% of parent educators should be trained.

Policy Strategy 3: Expand the focus of state agencies to include early childhood health, physical activity, and nutrition through healthy community design

The concept of healthy community design is based on the tenet that both the physical built environment and the food environment are important ways to respond to the obesity epidemic and related chronic diseases. Increasing access to healthy foods and places to be active is an integral part of a larger strategic

plan to help individuals maintain healthy weight and reduce chronic diseases.

The built environment refers to the physical, human-made resources and infrastructure in the environment, including but not limited to homes, open spaces, buildings, streets, parks, restaurants, and open spaces.[14,15] The built environment is an important factor that influences physical activity levels among people of all ages.[16] Research shows that people with access to sidewalks and trails are more likely to be physically active than those without access, demonstrating that the built environment can either encourage activity or hinder it.[17] A lack of sidewalks, for example, reduces opportunity for physical activity. The Centers for Disease Control and Prevention states that children can benefit from healthy community design. For example, planning for parks in the design of communities creates spaces where children can be active and be nurtured.[18] In fact, promoting public health and healthy communities is one of six tenets of the American Planning Association's smart growth definition.[19] Further, to support physical activity in communities, the Guide to Community Preventive Services recommends community-scale and street-scale urban design land use policies and practices, as well as the creation of, or enhanced access to, places for physical activity.[20] The North Carolina Department of Transportation's Statewide Pediatrian and Bicycle Plan, WalkBike NC, was designed to improve walking and bicycling conditions statewide and can serve as a resource as communities develop a vision for the built environment in the future of the state.[c]

All North Carolina agencies that make decisions affecting the built environment and food environment should consider the impact their decisions have on the health and well-being of North Carolinians.

Another environmental factor that contributes to overweight and obesity is the food environment. Research shows that a lack of access to grocery stores as well as the high cost of healthier foods are barriers to healthy nutrition behaviors. Low-income, rural, and minority communities are less likely to have grocery stores, and similar disparities exist in the availability of healthier foods and beverages.[21] The American Planning Association developed a Policy Guide on Community and Regional Food Planning that can serve as a resource for communities planning to improve the health of their food environments while promoting local and regional food and stimulating their economies.[d]

All North Carolina agencies that make decisions affecting the built environment and food environment should consider the impact their decisions have on the health and well-being of North Carolinians. Ensuring equitable access to opportunities for physical activity, as well as to healthy and affordable food, should also be part of the planning process. The ECOP Task Force is interested in the needs of families with very young children, and is especially concerned about low-income families and at-risk groups with high rates of early childhood obesity. The intention of this strategy is to ensure the needs of very young children are specifically considered and addressed in the work of state agencies that impacts community design, and thus health.

c http://www.ncdot.gov/bikeped/planning/walkbikenc/
d http://www.planning.org/policy/guides/pdf/foodplanning.pdf

Policy Strategy 3: Expand the focus of state agencies to include early childhood health, physical activity, and nutrition through healthy community design

a) State agencies should adopt and promote policies and practices that focus on healthy community design to create opportunities for physical activity and access to healthy, affordable foods for families with young children ages 0-5 years, targeting at-risk communities.

b) As community design impacts all age groups, the 2013 North Carolina Statewide Pedestrian and Bicycle Plan should be used as a standard reference for designing communities with pedestrian mobility in mind, and with consideration at the local level to connectivity of neighborhoods, commercial/retail areas, schools (including child care and early learning programs), and recreation areas.

c) The American Planning Association's Policy Guide on Community and Regional Food Planning should be used as a standard reference for designing communities with healthy and affordable food access in mind, with consideration at the local and regional levels to support comprehensive food planning processes.

Lead organization and partners: The North Carolina Departments of Commerce, Transportation, Agriculture and Consumer Services, and Environment and Natural Resources, as well as the North Carolina Division of Public Health, the North Carolina Housing Finance Agency, and other appropriate agencies should collaborate as equal partners in this strategy.

Funding and new resources required: No new resources are required; however, if new programs are implemented or built environment elements are created, additional resources may be required.

Performance measures and evaluation: Five years after implementation, the North Carolina Alliance of State YMCAs should review all the policies and practices that have been put into operation at the state level that foster the health of very young children through the promotion of physical activity and good nutrition.

Policy Strategy 4: Improve the collection and reporting of physical activity and nutrition data in multiple settings to more fully promote healthy weight among young children

North Carolina is rich in health data, but there are some gaps and data needs. When it comes to breastfeeding data, the North Carolina Pregnancy Risk Assessment Monitoring System (PRAMS) collects data on a variety of measures including breastfeeding initiation, duration, cessation, and hospital support of breastfeeding.[22] However, using PRAMS data to fully understand breastfeeding duration in North Carolina is limited, as mothers are only surveyed two to three months postpartum.[23] In addition to PRAMS, the Child Health Assessment and Monitoring Program (CHAMP) collects data on breastfeeding. CHAMP data provide more information about breastfeeding length or duration (up to one or more years). CHAMP also collects data for nutrition and physical activity behaviors for children 17 years and younger.[24] Even though these data are collected and reported for children under age 5 years, or for children ages 2-4 years, the data are often deemed unreliable due to small sample sizes. Aggregating these data across several years would provide reliable data.

Using existing data sources, North Carolina can generate a better profile of weight status and predictors of weight status in young children.

In addition, more information is needed to understand the extent to which licensed child care programs are implementing best practices for nutrition and physical activity. In North Carolina, child care programs receive an announced visit by the North Carolina Division of Child Development and Early Education (NC DCDEE) licensing inspectors annually. Licensing inspectors may also make one unannounced visit each year. NC DCDEE contracts with third party consultants to inspect centers once every three years as part of the star rating assessment. These consultants are highly trained in administration of the Early Childhood Environment Rating Scale (ECERS) and the Infant/Toddler Environment Rating Scale (ITERS), the North Carolina Star Rated License system's assessment instruments. These instruments measure aspects of physical activity and food.[25,26] In addition, other data are collected through multiple agencies. The North Carolina Child and Adult Care Food Program collects information on nutrition from the many child care programs that receive funding from this program to provide nutritious foods in child care programs. More detailed information about nutrition, physical activity, and outdoor learning environments is collected on a subset of child care programs participating in Shape NC. Using existing data sources, North Carolina can generate a better profile of weight status and predictors of weight status in young children.

Finally, collecting data about places that provide opportunities for young children and their families to be active would be a valuable addition to the body of data available to help support healthy, active lifestyles among very young children. This information would enable identification of locations where resources are lacking and also help to inform the resource information needed for Clinical Strategy 4.

Policy Strategy 4: Improve the collection and reporting of physical activity and nutrition data in multiple settings to more fully promote healthy weight among young children

a) The North Carolina Partnership for Children (NCPC), NC DCDEE, and the Child and Adult Care Food Program within DPH should collect data on the extent to which child care programs are implementing best practices related to nutrition and physical activity. Specifically:

1) The North Carolina Child and Adult Care Food Program should continue to collect information about the nutritional content of foods served in child care programs for meals or snacks.

2) NC DCDEE should continue to collect information on physical activity, screen time, meal/snack practices, music and movement, and health practices as part of the North Carolina Star Rated License system.

3) NCPC should use physical activity, nutrition, and outdoor learning environment data from current and future iterations of the Shape NC assessment tool for centers that want to implement additional best practices not captured by other assessments.

This information should be provided to NCPC in order to gain a better understanding of current nutrition and physical activity practices in child care programs.

b) The North Carolina State Center for Health Statistics (SCHS) should aggregate data across multiple years on young children, ages 0-5 years, to obtain reliable data on physical activity, nutrition, and other data that would provide information about activities that influence healthy weight.

Lead organizations and partners: (a) NCPC should convene all the collaborating partners mentioned in a), b), and c) to review the data needs. (b) SCHS will determine how many years of data are needed in order to produce reliable CHAMP data for children ages 0-5 years.

Funding and new resources required: (a) NCPC would need an estimated $15,000 in one-time funding from North Carolina and national funders to convene the partner agencies. (b) No additional funding is needed for this.

Performance measures and evaluation: (a) NCPC should convene the funders within one year after initial funding. (b) Reliable CHAMP data for these

measures should be available once SCHS has determined the number of years of data needed. (Note: Data collected from 2011 and beyond have been collected under a new methodology; therefore, data from years prior to 2011 cannot be used in aggregate with more recent data.) (c) Within two years of initial funding, Recreation Resources Service should have this information.

Policy Strategy 5: Improve the collection of body mass index (BMI) data for young children and make the information available to policymakers, health professionals, and the public to evaluate existing programmatic and policy initiatives and to inform future ones

North Carolina providers, policymakers, and the general public need better information about the number of children who are overweight or obese in order to determine whether state and community policies and practices are helping to promote healthy weight and reduce overweight and obesity among young children.

Currently we use the data from the North Carolina Pediatric Nutrition Surveillance System (NC PedNSS) to assess the level of overweight and obesity among young children. However, the NC PedNSS is a limited dataset; it only collects information on low-income children who are receiving services through the WIC program, which is only 18.5% of the 753,690 children ages 0-5 years in the state (in 2011).[e] We need information on all children—not just children from low-income families. In addition, we need trend data to determine whether strategies that we adopt are making a difference in improving healthy weight among young children.

Community Care of North Carolina (CCNC) has a special initiative focused on reducing childhood obesity as part of its Children's Health Insurance Program Reauthorization Act (CHIPRA) quality improvement grant. As part of this initiative, pediatric quality improvement coaches in every CCNC network are encouraging pediatric and family practices to calculate BMI at each visit, and to report a child's BMI percentile into the claims data for all children ages 0-20 years and older (using a "V code"). There are four V codes that correspond with a child's BMI percentage: under 5th percentile (failure to thrive), 5th to 85th percentile (healthy weight), 85th to 95th percentile (overweight), and at or above 95th percentile (obese).[27] These data are reported back to practices on a quarterly basis. Currently only about 11% of practices routinely report the child's BMI percentile using a V code (an increase from 0% of the practices in

e Knight K. North Carolina Division of Public Health. Written (email) communication. April 3, 2013.

2011).[f] CCNC quality improvement coaches are actively working with practices to increase the number of practices reporting the BMI percentile and to document that they have been counseled about healthy nutrition and physical activity. Through this effort, data are being collected on a large proportion of children ages 0-5 years and, in particular, children who may be at higher risk for overweight and obesity. These data will be analyzed by age ranges, networks, and practices. Medicaid currently covers about two-thirds of young children in the state (ages 0-5 years) with family incomes no greater than 200% of the federal poverty guideline.[g],[h] Another source of data is needed to obtain information for children who do not receive Medicaid or for older children who receive North Carolina Health Choice.

The ECOP Task Force explored the possibility of capturing data on BMI from electronic health records. Physicians and other health care providers are increasingly moving to incorporate electronic health records (EHRs) into their practices. Eligible primary care practitioners can qualify for incentive payments from the federal government if they adopt certified EHR technology in their practice and they use the EHRs in a meaningful manner ("meaningful use"). Physicians can qualify for up to $63,750 (over six years) from Medicaid if they have a large Medicaid patient panel (20% Medicaid for pediatricians and 30% for all other providers) and meet other requirements (including meaningful use). Certain physicians who do not have a large enough Medicaid patient population can qualify for smaller Medicare incentive payments. The federal government has defined the criteria to meet the meaningful use requirements in three stages. One of these measures is to record and report changes in the patient's vital signs, including BMI, and to plot and display growth charts for children ages 3-20 years (including BMI).[i] In the first stage, practitioners must show that they recorded BMI information on at least 50% of their patients into the EHRs. (Note: Eligible providers are only required to report that they recorded the BMI, not the actual BMI percentile itself.) Individual practitioners can obtain incentive payments for up to two years by meeting Stage 1 requirements. In order to continue to receive incentive payments thereafter, they would have to meet Stage 2 requirements. In the second stage of meaningful use, they must show that they obtained these data for 80% of their patients.[28]

We need better information about the number of children who are overweight or obese in order to determine whether state and community policies and practices are helping to promote healthy weight and reduce overweight and obesity among young children.

Theoretically, data from EHRs could provide the state with more complete

f Earls MF. Community Care of North Carolina. Written (email) communication. May 8, 2013.

g North Carolina Department of Health and Human Services. Health Check (EPSDT) Program Year-To-Year Comparisons Report. North Carolina Department of Health and Human Services website. http://www.ncdhhs.gov/dma/healthcheck/hcsfy2012states.pdf. Published December 18, 2012. Accessed May 30, 2013.

h North Carolina Office of State Budget and Management. July 1, 2012 County total age groups - standard. North Carolina Office of State Budget and Management website. http://www.osbm.state.nc.us/demog/countytotals_agegroup_2012.html. Updated April 18, 2013. Accessed May 30, 2013.

i Originally, CMS required most eligible providers to record vital signs, including BMI, on children ages 2-20, but more recent regulations, starting in calendar year 2013, only required participating providers to capture data on children ages 3-20. Some providers can seek exemptions from this requirement—for example, if the provider does not routinely see children in their practice, or is a specialist or other type of practitioner (such as a dentist) who does not normally collect vital signs.

information about the BMI percentile for young children (ages 3-5 years), once more practitioners actively use EHRs. However existing EHR systems were designed for adults, not children. Thus, the EHRs calculate a BMI (rather than the BMI percentile), which is not an appropriate measure for children. As noted earlier, North Carolina received a CHIPRA quality grant. It was one of only two states that focused, in part, on working with pediatric electronic health vendors to change the data that is collected for children. As part of this effort, CCNC is working with electronic health vendors to incorporate obesity-related data and data prompts for BMI percentile, evidence of counseling, and blood pressure percentiles.[29] Once properly designed, the pediatric EHRs could include prompts for practitioners to encourage practitioners to more actively counsel their patients and families about the child's weight.

The ECOP Task Force explored the possibility of capturing data on BMI from electronic health records.

While redesigning pediatric EHRs to capture meaningful BMI data may encourage more practitioners to counsel their patients, the current Health Information Exchange is not designed to capture or warehouse population health data that exists in individual EHRs. There is an effort in Western North Carolina to try to collect BMIs through EHRs. With combined support from The Duke Endowment, the Community Foundation of Western North Carolina, and The Kate B. Reynolds Charitable Trust, the Western North Carolina (WNC) Health Network has implemented a pilot program called WNC Healthy Kids, which is designed to reduce and prevent childhood obesity in 16 rural counties in Western North Carolina. Through WNC Healthy Kids, hospitals and local health departments collaborate to track outcomes by collecting BMI through EHRs.[30] We should be able to learn from the WNC Health Network's pilot program. The goal is to design a population health data system that could collect aggregate data—such as BMI percentiles—to use in monitoring the state's health.

Another potential source of data is the Kindergarten Entry Assessment (KEA).

Another potential source of data is the Kindergarten Entry Assessment (KEA) process, which is being developed by the North Carolina Department of Public Instruction with funding through the Race to the Top—Early Learning Challenge Grant. With a whole-child perspective, the KEA process will construct a child profile for every child at kindergarten entry to include data on various developmental domains including health, social-emotional indicators, and academic readiness. The KEA will incorporate the existing Kindergarten Health Assessment, which captures height and weight data collected at the child's medical home (pediatric or health department) prior to entering school. The Kindergarten Health Assessment (KHA) is mandated by law and required by all schools. Currently the KHA is paper-based, which limits the ability to aggregate captured data. Thus, height and weight data, which could be used to calculate BMI, are not aggregated at the state or district level.[j] These data would be incredibly valuable to policymakers and others working to ensure healthy weight among young children.

j Pruette J. Office of Early Learning, North Carolina Department of Public Instruction. Oral communication. April 10, 2013.

Policy Strategy 5: Improve the collection of body mass index (BMI) data for young children and make the information available to policymakers, health professionals, and the public to evaluate existing programmatic and policy initiatives and to inform future ones

a) CCNC should continue to encourage primary care professionals to measure weight and height (to calculate BMI percentile) for all Medicaid recipients at least once annually. This information should be included as part of the data collected by the CCNC Informatics Center, and should be included in quality improvement reports provided back to the networks and CCNC health professionals. Within three years, aggregate information about BMI at the state and at the network levels should be made publicly available, including information for young children ages 0-5 years.

b) The North Carolina Division of Public Health (DPH) should explore the possibility of capturing BMI data from electronic health records.

c) The Kindergarten Entry Assessment (KEA) should capture BMI data for each child entering kindergarten. To do so, the Kindergarten Health Assessment, which captures height and weight data and which will inform the KEA, should be submitted electronically to schools enrolling kindergarten-aged students with data to be aggregated at the district and state level. These data will provide the state with BMI data for all children in the state entering kindergarten.

Lead organization and partners: (a) CCNC should continue its efforts to encourage primary care professionals to measure a child's BMI percentile and to counsel families on nutrition and exercise. (b) DPH should explore the possibility of capturing BMI data from electronic health records. In Stages 1 and 2 of meaningful use, health professionals receive incentives to report certain population health measures to DPH (including immunization and reportable diseases). As DPH sets up the systems to capture these data from EHRs, it should also explore the feasibility of capturing other population health measures, such as BMI. (c) The North Carolina Department of Public Instruction should continue its efforts to develop the Kindergarten Health Assessment, and should capture data on BMI as part of the health related core elements.

Funding and new resources required: (a) New resources are not required to capture the information on BMI percentile as part of the CCNC claims data,

as the Medicaid data system is already set up to capture that data. (b) North Carolina and national funding may be required to capture statewide data on BMI through a statewide Health Information Exchange. Additional funding may also be required to capture population health measures, including BMI, within the State Center for Health Statistics. (c) Funding for the Kindergarten Entry Assessment is part of the Race to the Top—Early Learning Challenge Grant.

Performance measures and evaluation: (a) Within the next five years, CCNC should have a sufficient number of primary care providers who report the V codes for obesity as part of the claims submission. Once sufficient data is collected, CCNC should make aggregate data available to the public (by age, network, race, and ethnicity). (b) By 2015, DPH should know whether or not capturing BMI data through electronic health records is a feasible option. (c) Within five years, electronic data on BMI should be made available through the Kindergarten Entry Assessment.

Policy Strategy 6: Promote breastfeeding for all North Carolina infants

The association between breastfeeding and obesity prevention was first discussed in Chapter 1. In that chapter, results from a recently published study were cited, which found breastfeeding duration and exclusivity offered no protection against obesity.[31] In addition, recent literature reviews suggest that breastfeeding is not a major determinant for healthy weight, but may offer a modest protective effect against overweight and obesity.[12,32] The ECOP Task Force learned of this information at the conclusion of its work, but elected to retain the strategies pertaining to breastfeeding that it developed for two reasons: 1) a modest protective factor may in fact exist and future scientific research will help elucidate the association, if there is one, and 2) the many known benefits of breastfeeding are clear and include protection against a multitude of infections, allergic disease, and sudden infant death syndrome.[33]

Children who have been breastfed are less likely to develop acute disease in childhood or chronic illness, such as diabetes and heart disease, later in life.[34] Despite the known benefits of breastfeeding exclusively for the first six months of life and continued breastfeeding for the first year of life, mothers' decisions to breastfeed and continue breastfeeding can be influenced by the presence or lack of social support offered by hospital maternity practices, health care professionals, child care settings, and employers.[34] Providing counseling and support in clinical settings, as well as in other community venues, has been shown to promote breastfeeding. For example, the US Preventive Services Task Force review of the research literature found that coordinated clinical interventions including counseling throughout pregnancy, birth, and infancy can help increase breastfeeding initiation, duration, and exclusivity.[35] The

American Association of Pediatrics (AAP), the American Academy of Family Physicians (AAFP), and the American College of Obstetricians and Gynecologists all recommend that pregnant women receive breastfeeding counseling and education. AAP and AAFP also recommend that women receive ongoing breastfeeding support.

The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) developed the Baby-Friendly Hospital Initiative (BFHI) in 1991 to guide institutions in promoting breastfeeding.[36] The intention of this effort is to increase the number of babies who receive breastmilk and all of the related benefits. BFHI outlines 10 steps to successful breastfeeding that a hospital or birthing center must implement to receive the "Baby Friendly" designation. Steps include helping mothers initiate breastfeeding within half an hour of birth and showing mothers how to breastfeed and how to maintain lactation, even if they should be separated from their infants.[34] Since 2010, four North Carolina facilities have achieved the "Baby Friendly" designation: Mission Hospital in Asheville, Women's Birth and Wellness Center in Chapel Hill, Vidant Medical Center in Greenville, and North Carolina's Women's Hospital in Chapel Hill. Several others are in the process of implementing the necessary steps.[34] The steps involve policy change, mother instruction, and staff training and education.

Children who have been breastfed are less likely to develop acute disease in childhood or chronic illness later in life.

In 2006, the North Carolina Department of Health and Human Services released Promoting, Supporting, and Protecting Breastfeeding: A North Carolina Blueprint for Action.[k] The Blueprint reviews the benefits of and barriers to breastfeeding then makes recommendations for various groups including communities, the health care system, workplaces, and child care facilities. The Blueprint can serve as a resource for communities and professionals as they plan a healthy start for the children of North Carolina.

The Affordable Care Act (ACA) includes several provisions aimed at promoting breastfeeding. First, the law requires private insurers to provide coverage of preventive services without cost sharing. As part of this requirement, insurers must provide "comprehensive lactation support and counseling, by a trained provider during pregnancy and/or in the postpartum period, and costs for renting breastfeeding equipment."[37] This provision applies to all private insurers (except grandfathered plans).[l] While the ACA requires that lactation counseling be provided by a "trained provider" it does not specify the specific particular type of training needed. The International Board of Lactation Consultant Examiners (IBLCE) set requirements for certification in the United States, and, while not

k http://www.nutritionnc.com/breastfeeding/PDFS/bf-stateplanFINAL.pdf

l A grandfathered plan is a health plan that was in existence since March 23, 2010, and that has not been substantially changed since that time. Health plans can lose grandfathered status for many reasons, including but not limited to: changes in health insurance carriers or covered benefits, or a substantial increase in deductibles or copayments. Department of the Treasury, Department of Labor, Department of Health and Human Services. Group Health Plans and Health Insurance Coverage Relating to Status as a Grandfathered Health Plan Under the Patient Protection and Affordable Care Act; Interim Final Rule and Proposed Rule. 2010;75(116):34538-34570. http://www.gpo.gov/fdsys/pkg/FR-2010-06-17/pdf/2010-14488.pdf. Accessed February 18, 2013.

legally mandated, it does provide assurance of appropriate training and skills. There are currently 557 lactation consultants in North Carolina who have received IBLCE recognized certification.[38]

In addition to the requirement to pay for lactation counseling and rental of breastfeeding equipment, the ACA requires employers with 50 or more employees to provide time and a private place for a female employee to express breastmilk for up to one year after the birth of a child.[39] This requirement also applies to smaller employers (with fewer than 50 employees), unless they can prove they have difficulty complying with the new provisions. Employers are not required to compensate the employee for this break time.

Current data suggests that Medicaid-eligible women are less likely to breastfeed than are women with other insurance coverage.

Although private insurers are required to provide coverage of lactation support and counseling, and help pay for breastfeeding equipment, this same mandate does not apply to Medicaid. Current data suggests that Medicaid-eligible women are less likely to breastfeed than are women with other insurance coverage. In 2010, 31% of Medicaid recipients reported in the North Carolina Pregnancy Risk Assessment Monitoring System Survey that they breastfed eight weeks after delivery, compared to 55% of women who were not Medicaid recipients.[40] This may be due, in part, to the lack of breastfeeding support for Medicaid-eligible women. The Centers for Medicare and Medicaid Services developed an issue brief that describes different ways in which states can cover lactation services and pay for breastfeeding equipment within the current Medicaid statute. Specifically, states can pay for lactation services as an allowable expense as part of inpatient or outpatient hospital services; early and periodic screening, diagnostic, and treatment services (EPSDT) for individuals who are under age 21 years; physician services; services for nurse-midwives; free standing birth center services; or services furnished by nurse practitioners and other licensed practitioners.[41] If North Carolina were to cover these expenses, the federal government would pay 65% of these costs. Currently the North Carolina Division of Medical Assistance (DMA) does not cover lactation support for its beneficiaries; however breastfeeding is generally promoted through the medical home model. Lactation support would be covered if identified as a health care need through an EPDST health screening for infants. However, this is not well known among primary care providers so is not generally ordered as part of the EPSDT screening. Ideally, lactation support by trained lactation consultants and breastfeeding equipment would be covered as part of the existing CCNC network infrastructure.

In 2008, the Kaiser Family Foundation and the George Washington University Department of Health Policy conducted a survey to determine whether state Medicaid agencies were providing coverage for breastfeeding education, individual lactation consultation, and equipment rentals. At the time, 25 states reported covering breastfeeding education, 15 states reported covering lactation consultations, and 31 states reported covering equipment rentals.[41] North Carolina was only one of eight states that did not provide support for any of these services.

Since 2008, DMA began an initiative that could be expanded to further support breastfeeding. DMA, DPH, and CCNC created the Pregnancy Medical Home (PMH) program, which provides pregnant Medicaid patients with coordinated, comprehensive maternity care.[42] The quality improvement measures include "reducing elective deliveries prior to 39 weeks, performing standardized initial risk screening, using 17P (progesterone injections) to prevent recurrent preterm birth, reducing primary c-section rates, and collaborating with pregnancy care management programs to serve high-risk patients."[42] The PMH program serves women through their pregnancy until 60 days postpartum.[6] The PMH does not officially promote breastfeeding; however participating physicians have an opportunity to discuss the benefits of breastfeeding throughout a patient's pregnancy and should be encouraged to do so. In addition, the 60-day postpartum period provides further opportunity to promote breastfeeding.

A few local networks are interested in incorporating breastfeeding support into the PMH program. These networks are exploring available community resources.[m] If the networks are successful and able to pilot this, DMA and CCNC should disseminate best practices to all CCNC networks.

The ECOP Task Force's intention with this strategy is to promote breastfeeding among all women. The new ACA provisions include new resources for women who have private health insurance coverage. The big gap is for Medicaid-eligible women, as the state does not currently pay for lactation consultants or breastfeeding equipment. Thus, the ECOP Task Force recommended that DMA change its policies to promote breastfeeding for pregnant and breastfeeding women who are Medicaid eligible.

Policy Strategy 6: Promote breastfeeding for all North Carolina infants

The North Carolina Division of Medical Assistance, in conjunction with Community Care of North Carolina, should:

a) Promote Baby-Friendly hospitals.

b) Promote breastfeeding as part of the Pregnancy Medical Home program.

c) Encourage pediatricians, family physicians, and other health care professionals to work with parents to promote breastfeeding and to provide referrals to lactation consultants, as needed.

d) Provide reimbursement to lactation consultants that have IBLCE certification, and pay to rent or purchase breastfeeding equipment.

m Berrien K. Community Care of North Carolina. Oral communication. March 20, 2013.

Lead organization and partners: DMA should work with North Carolina Community Care Network, Inc., the Carolina Global Breastfeeding Institute, North Carolina Hospital Association, North Carolina Pediatric Society, North Carolina Academy of Family Physicians, the North Carolina Obstetrical and Gynecological Society, North Carolina Affiliate of the American College of Nurse Midwives, North Carolina Council of Nurse Practitioners, and North Carolina Academy of Physician Assistants to review current Medicaid policies and determine how they can be changed to promote breastfeeding among mothers of Medicaid eligible infants and young children.

Funding and new resources required: DMA should study how to cover lactation support and services.

The ECOP Task Force recommended that DMA change its policies to promote breastfeeding for pregnant and breastfeeding women who are Medicaid eligible.

Performance measures and evaluation: Within five years, DMA should have changed its policy to pay for breastfeeding education, lactation consultants, and the purchase or rental of an electric breast pump, especially for women who work outside the home.

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