

## Clinical Strategies

### **Clinical Strategy 1: Increase and enhance the education of health professionals while in training (pre-service) or in residency programs. Funding amount: \$250,000.**

- a) **North Carolina and national funders should fund an inter-educational council to develop a systematic and ongoing plan focused on increasing the education and skills of health professional students and post-graduate trainees in North Carolina around obesity prevention and treatment. The council should include representation from the North Carolina Area Health Education Centers Program (AHEC); public and private schools of nursing, medicine, pharmacy, nutrition, public health, behavioral health, and allied health; and clinicians from across North Carolina. The council should review existing educational curricula and identify gaps or opportunities to strengthen health professional education and clinical training opportunities around early childhood obesity. The council needs to be broadly representative of health disciplines, geography, race/ethnicity, and gender. This education should include, but not be limited to:**
- 1) The importance of charting the child’s weight on a regular basis using the WHO Child Growth Standards for children ages 0-23 months, and CDC growth charts for ages 2-5 years during each well-child check; and information about measurement techniques and best practices, and the best way to communicate results of weight for height percentile and BMI percentile results (the use of color coded charts is one example of an effective communication tool).**
  - 2) Information about the role of family health history/behaviors, especially obesity and obesity related diseases, on children’s risk of obesity and its consequences.**
  - 3) Available obesity prevention clinical tools such as “5-3-2-1-Almost None.”**
  - 4) The importance of healthy weight gain during pregnancy and the benefits of breastfeeding.**
  - 5) Culturally sensitive information to support and educate new mothers in breastfeeding and exclusive breastfeeding.**
  - 6) Motivational interviewing.**

- 7) Evidence-based prevention, assessment, and treatment options.
- b) Health professionals should receive information to share with parents and caregivers about healthy weight at different stages of the child's life, satiety cues, healthy eating and nutrition, appropriate sleep durations, the importance of eliminating or limiting screen time (including televisions, computers, and other digital media devices), and strategies to increase physical activity.

**Clinical Strategy 2: Expand education for practicing health professionals, which could be met through enhanced continuing education opportunities.  
Funding amount: \$250,000.**

- a) North Carolina and national funders should provide funding to the Area Health Education Centers (AHEC) program and to CCNC to strengthen and expand the work of the quality improvement consultants to work with pediatric, family medicine, and obstetric practices to incorporate obesity prevention and treatment into clinical practice and systems (e.g. BMI coding and pediatric obesity prevention, assessments, and treatment). AHEC and CCNC should continue to develop a module for Maintenance of Certification (MOC) on early childhood obesity assessment, prevention, and treatment. Education should occur through learning collaboratives and through work with individual practices. The core curriculum of this educational program should be developed into a high-quality online continuing education (CE) course, which can be used by health professionals through one of the AHECs. To the extent possible, AHEC and CCNC should help practices gain continuing education and MOC credits. The practice-level goals should include, but not be limited to, education, skills, use of evidence-based or evidence-informed tools, work flow, toolkits, innovative delivery models, reimbursement options, and system changes (practice redesign) necessary to support practitioners in providing evidence-based or evidence-informed prevention, assessment, and treatment. This includes:
  - 1) Educating women of childbearing age and pregnant women about healthy weight gain during pregnancy and the health benefits of breastfeeding.
  - 2) Encouraging pregnant women and new mothers to breastfeed and helping women understand infant satiety cues.
  - 3) Performing universal screening and understanding the importance of charting the child's weight on a regular basis using the World Health

**Organization (WHO) Child Growth Standards for children ages 0-23 months, and CDC Growth Charts for children ages 2-5 years during each well-child check (and using color-coded BMI charts).**

- 4) Educating parents and caregivers about healthy weight at different stages of a child's life; healthy eating; appropriate sleep durations; the importance of eliminating or limiting screen time including televisions, computers, and other digital media devices; and strategies to increase physical activity.**
  - 5) Providing evidence-based/evidence-informed prevention, assessment, and treatment options.**
  - 6) Using motivational interviewing.**
- b) In addition, CCNC should ensure that prompts for regular BMI screening are built into the pediatric electronic health records (EHR) and BMI or weight for length percentiles are built into the EHR.**

**Clinical Strategy 3: Ensure adherence of insurers/ payers to the Affordable Care Act requirements for coverage of the prevention, diagnosis, and treatment of obesity (and as outlined in the American Academy of Pediatrics' Bright Futures guidelines). Funding amount: \$125,000.**

- a) All payers should review their coverage policies to ensure that pediatric obesity prevention and treatment can be delivered by the most appropriate and qualified professionals in pediatric, family, ob/gyn, and specialty practices. Coverage policies should cover individual and group visits, and adequate time to assess, educate, diagnosis, counsel, and/or treat parents or caregivers about breastfeeding, healthy weight gain, nutrition, exercise, sleep, and reduced screen time; lactation counseling from a trained lactation consultant; and nutritional counseling visits, when medically necessary, from a registered dietitian.**
- b) In addition, all members of the North Carolina Association of Health Plans, as well as public insurers, should design payment models that allow providers to treat patients effectively and efficiently when treatment relates to obesity prevention and treatment.**
- c) Insurers should evaluate benefit design and work with employers and others to encourage members to take advantage of healthy lifestyle programs and covered benefits.**

**Clinical Strategy 4: Convene a group to identify and catalog core statewide and local services, resources, and supports for health professionals to refer families and children for additional support or intervention to enhance clinical recommendations. Funding amount: No additional funding required.**

- a) **The Local Health Departments should collaborate with the appropriate partners to identify core services, resources, and supports available statewide. These should include, but not be limited to, organizations that provide evidence-based and evidence-informed nutrition and physical activity services, resources, and supports including parenting education to help prevent and reduce young childhood obesity. Examples include Women, Infants, and Children (WIC) program services; North Carolina Cooperative Extension services; information from Eat Smart, Move More North Carolina; and YMCAs/YWCAs.**
- b) **The North Carolina Association of State Health Directors, in collaboration with the North Carolina Partnership for Children, North Carolina Child Care Resource and Referral Council, Community Care of North Carolina, and East Smart Move More should work together to create a template to identify the various local services, resources, and supports that are available at the county level to prevent or reduce early childhood obesity. Together, they should develop a method that enables health professionals to connect families and children with the identified services, resources, and supports.**

## Community and Environment Strategies

**Community/Environment Strategy 1: Expand the use of evidence-based and evidence-informed strategies for physical activity and nutrition in pilot child care centers. Funding amount: No additional funding required.**

- a) **The BCBSNC Foundation, along with other funders and state agencies with shared missions and goals, should develop incentives to incorporate evidence-based and evidence-informed obesity prevention strategies into programs and policies in child care centers located in counties with high obesity rates among children. This effort should be coordinated with, and expand the ongoing efforts of, the four Shape NC hubs including the obesity prevention work that will occur in Bertie County as part of the Transformation Zone.**
- b) **As part of this initiative, child care teachers and directors should be educated and coached about obesity trends, healthy food preparation, best nutrition practices, age appropriate physical activity strategies, the outdoor learning environment, limited or no screen time, and the importance of breastfeeding and infant feeding.**

**Community/Environment Strategy 2: Provide pre-service and in-service education for child care providers on evidence-based and evidence-informed strategies for physical activity and nutrition. Funding amount: \$70,000.**

- a) **To expand the availability of pre-service education for child care providers on evidence-based and evidence-informed strategies to promote healthy weight for young children, the North Carolina Center for Health and Wellness (NCCHW), in partnership with Eat Smart, Move More North Carolina, should survey administrators in North Carolina’s public and private two- and four-year colleges and universities that offer child care and early education degree programs about the existing curricula used to teach upcoming child care and early education professionals about early childhood health and obesity prevention strategies.**
  - 1) **The survey should seek information about whether the current curricula conveys information on topics such as, but not necessarily limited to, the following:**

- i) Obesity trends among infants and young children**
  - ii) The impact of obesity on health**
  - iii) Infant feeding and signs of satiety**
  - iv) Healthy food and beverage procurement and preparation and best nutrition practices**
  - v) Strategies to promote healthy and appropriate sleep duration**
  - vi) The importance of reducing screen time**
  - vii) Age appropriate movement and physical activity**
  - viii) Outdoor learning environments and edible landscapes**
  - ix) Breastfeeding support**
  - x) Staff wellness to support role modeling**
  - xi) Effective strategies to educate parents and other caregivers about best practices to implement at home in order to promote healthy weight**
- 2) The survey should seek information both on the content, the amount of time spent on the topics, teaching methods, whether information is integrated throughout the curricula (both in classroom and in-service learning), and whether the students are tested to ensure competency in the content area. In addition, the survey should collect information on the curricula used to teach prospective child care and early education professionals about educating parents about early childhood obesity prevention practices. NCCHW should evaluate the existing curricula to identify best practices and, if necessary, seek curricula from other colleges and universities outside of North Carolina.**
- b) NCCHW should host a summit for North Carolina child care and early education professionals to identify strategies to enhance the curricula offered at community colleges, colleges, and universities for prospective early childhood professionals about health and wellness for young children ages 0-5 years, and obesity prevention strategies such as those listed earlier.**
- c) Using the findings from the survey and the summit, the North Carolina Institute for Child Development Professionals, in collaboration with**

**NCCHW, the North Carolina Child Care Health and Safety Resource Center, the North Carolina Child Care Resource and Referral Council, North Carolina Pediatric Society, and two and four-year college and university representatives, should lead the development of education modules and materials that can be incorporated into existing curricula. The education materials should be pilot-tested in select higher education institutions. If they are successful in enhancing workforce and student knowledge about obesity in this age group and skills using evidence-based and evidence-informed strategies to reduce early childhood overweight and obesity, the curricula should be disseminated across the state.**

- d) To expand the availability of evidence-based and evidence-informed training for existing child care professionals, these education modules and materials should also be used for continuing education credits offered through the North Carolina Child Care Resource and Referral Council, Smart Start partnerships, child care health consultants' networks, and the North Carolina Child Care Health and Safety Resource Center to certified early educators.**

### **Community/Environment Strategy 3: Cross train all child care consultants and other support personnel on evidence-based and evidence-informed strategies for physical activity and nutrition. Funding amount: \$125,000.**

**All child care consultants and other support personnel who provide training and technical assistance to child care and early education programs should be cross trained in evidence-based and evidence-informed strategies to support early educators in promoting healthy weight among young children. Using the education modules and materials developed in Community/Environment Strategy 2 as a starting point, the North Carolina Child Care Health and Safety Resource Center should take the lead in developing the cross training curricula and promoting it among the different child care consultants including, but not limited to, child care health consultants, Shape NC consultants, Smart Start quality enhancement specialists, Child Care Resource and Referral technical assistance specialists, Head Start consultants, Child and Adult Care Food Program consultants, infant/toddler specialists, and the staff at NC DCDEE who provide training and technical assistance to licensed child care programs.**

- a) Training should cover, but not be limited to, the following topics:**

- 1) Obesity trends among infants and young children**

- 2) **The impact of obesity on health**
  - 3) **Infant feeding and signs of satiety**
  - 4) **Healthy food and beverage procurement and preparation and best nutrition practices**
  - 5) **Strategies to promote healthy and appropriate sleep duration**
  - 6) **The importance of reducing screen time**
  - 7) **Age appropriate movement and physical activity**
  - 8) **Outdoor learning environments and edible landscapes**
  - 9) **Breastfeeding support**
  - 10) **Staff wellness to support role modeling**
  - 11) **Effective strategies to educate parents and other caregivers about best practices to implement at home to promote healthy weight**
- a) **The modules and materials for this cross training should be developed and/or modified if need be such that they can be delivered through multiple mediums, including but not limited to computer-based webinars, training curricula that can be included as part of ongoing trainings and packaged learning modules. The training should be incorporated into existing trainings and updated as new information and evidence become available.**
  - b) **Organizations that employ consultants and other support personnel should require this cross training as part of their professional training requirements.**

**Community/Environment Strategy 4: Increase the focus of Eat Smart, Move More North Carolina on young children and their families. Funding amount: \$100,000.**

- a) **Eat Smart, Move More North Carolina (ESMM) should increase the focus of its community engagement efforts to implement evidence-based and evidence-informed strategies to promote healthy weight among young children and their families.**



- 1) **ESMM should survey member organizations to collect information on existing early childhood initiatives and programs.**
  - 2) **ESMM should also work with other appropriate organizations, including but not limited to, the Physical Activity and Nutrition Branch, Women and Children’s Health Section, and Nutrition Services Branch within the North Carolina Division of Public Health; as well as local health departments, Center for Training and Research Translation at the University of North Carolina at Chapel Hill, Shape NC, the Carolina Global Breastfeeding Institute, and the Natural Learning Initiative at North Carolina State University, to identify and create an inventory of evidence-based and evidence-informed tools, policies, programs, and practices to improve healthy nutrition and physical activity for young children.**
- b) **ESMM should educate member organizations about the importance of intervening to improve nutrition and physical activity among young children ages 0-5 years and their families, and should promote the availability of evidence-based and evidence-informed tools, policies, programs, and practices across the state. Specifically, ESMM should help connect member organizations and others who use their resources with additional information on:**
- 1) **Obesity trends among infants and young children**
  - 2) **The impact of obesity on health**
  - 3) **Infant feeding and signs of satiety**
  - 4) **Healthy food preparation and best nutrition practices**
  - 5) **Strategies to promote healthy sleep**
  - 6) **The importance of reducing screen time**
  - 7) **Age appropriate movement and physical activity**
  - 8) **Outdoor learning environments and edible landscapes**
  - 9) **Effective strategies to educate parents and other caregivers about best practices to implement at home in order to promote healthy weight**
  - 10) **Breastfeeding support**

**Community/Environment Strategy 5: Form an ECOP Communications Committee to develop a communications campaign to support policy and behavior change to reduce early childhood obesity. Funding amount: No additional funding required.**

- a) **The North Carolina Institute of Medicine (NCIOM) should convene an ECOP Communications Committee comprising North Carolina funders; communications professionals; the North Carolina Division of Public Health; Eat Smart, Move More North Carolina; representatives from North Carolina colleges and universities with expertise in communications, obesity, and/or young children; and other appropriate groups such as grocery stores, hospitals, and others to develop a carefully crafted communications campaign to promote healthy weight in very young children. This group should specifically examine opportunities for communications activities that would best support the ECOP Task Force’s blueprint.**
  - 1) **Once these activities have been determined, North Carolina health funders should provide support to the School of Journalism and Mass Communication at the University of North Carolina at Chapel Hill to conduct an analysis of the relevant peer-reviewed and “gray” literature to determine what messages have been effective in influencing individuals, organizations, or policymakers to make changes needed to reduce the risk of overweight and obesity among very young children. Other states’ efforts that are similar should be reviewed as well.**
  - 2) **The ECOP Communications Committee’s campaign development process should follow the seven steps to developing a successful communications campaign and should specifically consider audience segmentation, channel selection, and opportunities for partnering with existing efforts (e.g. farmers markets accepting EBT cards, existing school efforts) to boost overall campaign effectiveness, minimize costs, and ensure that the campaign is culturally and linguistically appropriate.**

## Policy 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. Funding amount: Additional funding not required.**

The North Carolina Division of Child Development and Early Education (DCDEE), Division of Public Health 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 NC Childcare Health and Safety Resource Center should develop a voluntary recognition program for licensed child care programs, family care homes, Head Start, NC Pre-K, and other early care and 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) The groups listed in Strategy 1a should seek public input into the voluntary recognition standards before implementing the program.
- c) NCPC should seek additional funding to provide financial incentives to child care programs that meet the voluntary standards for enhanced health and wellness 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. Funding amount: Additional funding not required.**

- 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 the Division of Public Health.**

**Policy Strategy 3: Expand the focus of state agencies to focus on early childhood health, physical activity, and nutrition through healthy community design. Funding amount: Additional funding not required.**

- 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, targeting at-risk communities.**
- b) **As community design impacts all age groups, the 2013 Statewide Walk Bike NC 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.**

**Policy Strategy 4: Improve collection and reporting of physical activity and nutrition data in multiple settings to more fully promote healthy weight among young children. Funding amount: \$15,000.**

- a) **The North Carolina Partnership for Children, North Carolina Division of Child Development and Early Education, and the Child and Adult Care Food Program within the North Carolina Division of Public Health 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) **The Division of Child Development and Early Education should continue to collect information on physical activity, screen time, and meal/snack practices, and music and movement and health practices as part of the Star Rated License system.**
  - 3) **The North Carolina Partnership for Children should use physical activity, nutrition, and outdoor learning environment data from the 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 the North Carolina Partnership for Children to gain a better understanding of current nutrition and physical activity practices in child care programs.**
- b) **The North Carolina Division of Public Health, State Center for Health Statistics, should aggregate data across multiple years on young children, ages 0 to 5, to obtain reliable data on physical activity, nutrition, and other data that would provide information about activities that influence healthy weight.**

- c) **The Recreation Resources Service at North Carolina State University should collect information about available active play opportunities for young children and their families, including but not limited to parks, outdoor learning environments, walking and bicycle trails.**

**Policy Strategy 5: Improve the collection of body mass index (BMI) data for young children and make the information available to policy makers, health professionals, and the public to evaluate existing programmatic and policy initiatives and to inform future ones. Funding amount: Additional funding not required.**

- a) **Community Care of North Carolina should continue to encourage primary care professionals to measure weight and height (to calculate Body Mass Index (BMI) percentile) for all Medicaid recipients at least once annually. This information should be included as part of the data collected by the 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 through 5.**
- b) **The North Carolina Division of Public Health 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 Entry 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.**

## **Policy Strategy 6: Promote Breastfeeding for All North Carolina Infants. Funding amount: Additional funding not required.**

**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 IBCLC certification, and pay to rent or purchase breastfeeding equipment.**

