

Health professionals should be well trained in the principles of evidence-based practice. Principles of evidence-based practice help health professionals select the right intervention for the right person at the right time. When implemented with fidelity, evidence-based practice yields the greatest return on the investment of time, money, and other scarce resources in clinical settings. Additionally, using evidence to inform practice can help practitioners avoid ineffective or harmful interventions.

As noted previously, the NCIOM Early Childhood Obesity Prevention (ECOP) Task Force was charged with developing strategies to implement the recommendations of prior state and national task forces that have examined evidence-based and evidence-informed strategies for preventing or reducing early childhood obesity. The clinical recommendations from these previous groups focused on two approaches. First, they recommended that health professionals measure a child's height and weight in order to calculate body mass index (BMI) as a part of every well-child visit, and that they should consider the parents' BMI in identifying potential risk factors. Second, they focused on the advice and information that health professionals should give parents and caretakers of young children to promote healthy weight. Information that should be provided includes counseling pregnant women on healthy weight gain, educating both pregnant women and new mothers on the importance of breastfeeding, and providing information to parents and other caretakers about healthy weight gain for infants and young children, age appropriate sleep durations, healthy eating and nutrition, the importance of physical activity, and eliminating or reducing screen time.

The ECOP Task Force acknowledged that there are many competing demands on health professionals' time, which makes it difficult to focus heavily on obesity prevention strategies. However the ECOP Task Force believes the strategies identified here increase the likelihood and ability of health professionals to focus on early childhood obesity prevention.

The clinical section of the ECOP Task Force's blueprint focuses on four strategies. These strategies are not presented in any priority order. Rather, Task Force members believed that all of these strategies would lead to greater involvement of clinicians in reducing overweight and obesity among young children.

Clinical Strategy 1: Increase and enhance the education of health professionals while in training (pre-service) or in residency programs.

Clinical Strategy 2: Expand education for practicing health professionals, which could be met through enhanced continuing education opportunities.



The strategies identified here increase the likelihood and ability of health professionals to focus on early childhood obesity prevention.

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).

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.

Clinical Strategy 1: Increase and enhance the education of health professionals while in training (pre-service) or in residency programs

Health Professional Pre-Service Education

Changing clinical practice will target the education of health professionals who are in training as well as those who have completed training. Obesity and overweight are multifaceted problems that should be addressed by many types of health professionals. The most successful programs that documented decreases in BMI percentiles and sustained changes over time have incorporated a variety of health providers including medical professionals, nutritionists, exercise professionals, and mental health clinicians.¹ In addition, research has shown that it often takes multiple interventions by different types of health professionals to support complex forms of health behavior change.² As we train the next generation of health professionals, education in the prevention and treatment of obesity and overweight is paramount. For the purposes of this discussion, we consider resident physicians to be pre-service health professionals because their training and curriculum is under relative control by their hospital, health system, or department.

Pregnancy Weight Gain

Pregnancy weight gain is clearly associated with newborn weight, and newborn weight is associated with that individual's BMI throughout childhood.³ It is important for health professionals who are in training or in practice to learn about ideal weight gain during pregnancy and how to share weight gain recommendations and information with pregnant women in a sensitive and culturally appropriate way. One study demonstrated that pregnancy associated weight gain was associated with birth weight; for every additional pound of weight gain during pregnancy, birth weight increased by about an eighth of an ounce.³ Though the incremental average increase is small, women who gained more than 52 pounds during pregnancy (compared to those that gained 18-22 pounds) were more than twice as likely to have babies weighing more than 9 pounds.³ Ideal pregnancy weight gain, which is based on a woman's pre-pregnancy BMI, can be determined at an initial visit or during the preconception period (see Table 3.1).

Obesity and overweight are multifaceted problems that should be addressed by many types of health professionals.

Table 3.1
Pre-pregnancy BMI and Associated Recommended Weight Gain

BMI Category	Recommended Weight Gain, in Pounds
Underweight (<18.5)	28-40
Normal weight (18.5-24.9)	25-35
Overweight (25.0-29.9)	15-25
Obese (\geq 30.0)	11-20

Source: Academy of Nutrition and Dietetics. Healthy weight during pregnancy. Academy of Nutrition and Dietetics website. <http://www.eatright.org/Public/content.aspx?id=10933>. Published January 2013. Accessed April 5, 2013.

Universal Screening

BMI screening is necessary in order to identify those who are overweight or obese and is the first step toward intervention. Clinicians and parents are poor judges of overweight, especially among younger children.^{4,5} The use of appropriate screening tools enhances the identification of children at unhealthy weights. In addition, it increases the number of children and families that receive information and brief interventions, as well as the number of children who are referred for more intensive services.⁶

Family History

Obesity is often a family problem, with predisposing factors related to genetic history and familial behavior patterns around nutrition and physical activity. Studies have consistently demonstrated that parental overweight, obesity, and diabetes are strong risk factors for pediatric obesity. In fact, parental BMI has been demonstrated to explain as much as 70% of the variance in child BMI.^{7,8} There are many reasons for this association; however, the majority of this association was shown to be genetic in a study that compared twins separated at birth with twins raised together.⁹ Though a genetic predisposition may increase an individual's risk of becoming obese, access to healthy foods, learned behaviors such as portion control, and an active lifestyle may decrease the genetically inferred risk.¹⁰ Therefore, behavioral interventions may be more important in children and families at risk for obesity because of their genetic risk.¹¹

A family's history may be reason for concern when it comes to the long-term health of a child. For example, if a child had a grandparent who lost a leg to diabetes, the family might be more motivated to work on obesity prevention or treatment. Some family behaviors, such as eating a majority of meals away from home or eating fast food several times a week, may also prompt specific prevention interventions from providers.

Developmentally Appropriate Information

Parents need developmentally appropriate obesity prevention information, and clinicians of all types need to understand this information to best help families. Dietary recommendations, sleep needs, appropriate physical activity levels,

BMI screening is necessary in order to identify those who are overweight or obese.

and weight gain/loss goals need to be individualized based on the child's age and current BMI percentile. This includes information about age appropriate portions and decreased fat intake, as well as guidance on satiety cues and alternative forms of comfort and soothing for young children. Many studies have also shown an association between shorter sleep duration and higher BMI percentiles among children including young children.¹² Parents need age-specific information on sleep duration, as well as advice on best practices for sleep, bedtime routines, and sleep environments.

Clinical Prevention Tools

Many brief intervention tools have been developed to assist clinicians in supporting behavior change around pediatric nutrition. The underlying concept is that the tools allow the provider at the point of care to deliver a brief, tailored, age appropriate message about nutrition and weight. As stand-alone interventions, demonstrating effectiveness is challenging. However, as part of a comprehensive clinical, school-based, and community-based effort to prevent pediatric overweight and obesity, these interventions should help providers support change in an efficient and effective manner. One tool contains color-coded BMI charts that plot a child's BMI according to a stoplight motif (red, yellow, green) based on the child's level of risk for overweight. This tool is based on the CDC recommendation chart for children ages 2 and older included in Appendix A.^{13,14} Another tool, "5-3-2-1-Almost None," developed and promoted by Eat Smart, Move More North Carolina is a prescription-style hand-out with five simple pediatric obesity prevention messages: five or more servings of fruits and vegetables daily; three structured meals daily—eat breakfast, less fast food, and more meals prepared at home; two hours or less of TV or video games daily; one hour or more of moderate to vigorous physical activity daily; and limit sugar-sweetened drinks to "almost none." It can be handed out during check-ups or sick visits with almost no impact on visit time.¹⁵ Such tools should be used in conjunction with screening and referral for children with more severe problems and follow-up for children who are at risk of being overweight or obese.

Motivational Interviewing

Motivational interviewing refers to a set of skills that can be taught and practiced with a relatively small investment in training. It has increasingly become the mainstay of behavior change interventions related to a variety of health risks including substance abuse, non-adherence to treatment, and obesity.¹⁶⁻¹⁸ Motivational interviewing seeks to elicit intrinsic motivation for change, and it seeks to help patients understand and address ambivalence to change, understand their motivation or resistance to change, and understand how their behaviors affect their ability to achieve goals. Motivational interviewing has been studied for the prevention and treatment of pediatric obesity and shows promising results.^{19,20}

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Community Resources

Practitioners should be educated in identifying and utilizing community resources. Not all types of clinical practices will have the same in-house access to all kinds of services (medical nutrition therapy, exercise therapy, and behavioral therapy to name a few). However, many community-based resources are available and more are becoming available each year. These may include programs at schools, community centers, community agencies, and public health departments. In addition to partnering with community agencies, it is important that local communities identify resources available to them, including statewide resources such as the Eat Smart, Move More North Carolina website.²¹

Breastfeeding

As previously noted, the ECOP Task Force relied upon the work of six previous entities that focused on obesity prevention to guide its work. These efforts included those of the Institute of Medicine of the National Academies (IOM) Early Childhood Obesity Prevention Policies Committee (2011),²² the White House Task Force (WHTF) on Childhood Obesity (2010),²³ the North Carolina Legislative Task Force on Childhood Obesity (2010),²⁴ the North Carolina Division of Public Health (DPH) (2010),²⁵ the North Carolina Institute of Medicine (NCIOM) Prevention Task Force (2009),²⁶ and the North Carolina Health and Wellness Trust Fund Commission (NC HWTF) Study Committee on Childhood Obesity (2005).²⁷ The recommendations from these bodies identified evidence-based or evidence-informed strategies to prevent or reduce childhood obesity. As noted in Chapter 1, the connection between breastfeeding duration and exclusivity and obesity prevention may not be as strong as was once thought. However, it may offer modest protection against obesity, and the literature on the general benefits of breastfeeding is clear and consistent. Breastfeeding protects babies from a variety of poor health conditions including, but not limited to, respiratory infections, otitis media, gastrointestinal tract infections, necrotizing enterocolitis, sudden infant death syndrome, and allergic diseases such as asthma and eczema.²⁸ Due to the many benefits of breastfeeding and the possible modest protection against obesity that breastfeeding offers,²⁹ health professional students should be educated on the extensive benefits of breastfeeding and how to best promote and support breastfeeding.

Practitioners should be educated in identifying and utilizing community resources.

Clinical Strategy 1: Increase and enhance the education of health professionals while in training (pre-service) or in residency programs

- 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.**

Lead organization and partners: AHEC should take the lead in the development of the inter-agency council. AHEC should work with academic and community-based health professionals and health departments in the development of the inter-educational council and the curricula.

Funding and new resources required: This new inter-agency council and associated work, including AHEC administrative and curricular support and small grants to stakeholder schools, departments, and programs, would cost approximately \$250,000 annually and should be raised from North Carolina funders.

The inter-agency academic council should examine other curricula to identify model curricula that could be included in health professional educational courses. The inter-agency council should focus on the critical elements needed to implement these new curricula within existing health professional training programs.

Performance measures and evaluation: Within five years of initial funding, North Carolina should have created an inter-agency council, and this council should have developed the model curricula. The curricula should have been implemented in 25% of schools or degree granting programs within two years of rolling out the different modules (e.g. nursing, medical students, nutritionists, etc.). Knowledge gained would be measured through pre- and post-curricula delivery and/or through nutrition counseling delivered to standardized patients in clinical performance exams. Results of local program evaluation should be reported to the inter-educational council and used to inform refinements in curriculum.

Clinical Strategy 2: Expand education for practicing health professionals, which could be met through enhanced continuing education opportunities

North Carolina received a five-year Children’s Health Insurance Program Reauthorization Act (CHIPRA) grant that is focused on quality improvement for children’s health care. There are a number of different initiatives included in this grant—several of which focus on childhood obesity prevention. For example, the CHIPRA grant is helping to fund 14 part-time quality improvement consultants in the 14 Community Care of North Carolina (CCNC) networks. As part of their work, they will be helping pediatric practices improve clinical care including BMI coding and pediatric obesity prevention. The CCNC practices receive a toolkit with color-coded BMI charts, lists of resources to help address obesity, treatment guides, and handouts to help families understand healthy choices and assess their progress. These conversations with patients and families are challenging due to the complexity of the topics and time constraints. Thus, some practices needed additional support to address

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overweight and obesity among their patients and families. The CHIPRA grant is also helping to fund 26 practices in 8 CCNC networks to participate in a more intensive learning collaborative. Learning collaboratives have been used in North Carolina to improve population management and enhance the primary care medical home.³⁰ These practices will receive training on a number of different topics including childhood obesity prevention. Currently CCNC has six registered dietitians working in networks and hopes to expand to all networks. These dietitians have developed low-literacy training materials based on motivational interviewing techniques for use with patients and families. The National Initiative for Children’s Healthcare Quality has a similar initiative called Collaborate for Healthy Weight.^a In addition, North Carolina and Pennsylvania have been funded, as part of their CHIPRA grants, to work with the Centers for Medicare and Medicaid Services, Agency for Healthcare Research and Quality, the American Academy of Pediatrics (AAP), and other partners to help implement and evaluate a pediatric electronic health record format.³¹ The CHIPRA grant activities are not focused specifically on obesity prevention for young children (ages 0-5 years); instead the overall CHIPRA grant is aimed at improving care for children from ages 0-20 years.

Health professionals are eligible for incentive grants from Medicare or Medicaid for implementing electronic health records and for using these systems in a meaningful way. The federal government has defined “meaningful use” as follows: in Stage 1 of meaningful use (through 2013), health professionals must measure and record BMI for 50% of their patients, at least once per year; in Stage 2 of meaningful use (2014 and beyond), health professionals must measure and record BMI for at least 80% of their patients at least once per year.³²

Clinical Strategy 2: Expand education for practicing health professionals, which could be met through enhanced continuing education opportunities

- 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)

a <http://www.collaborateforhealthyweight.org/About.aspx>

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.**

Lead organization and partners: (a) AHEC and CCNC should take the lead, and should partner with health professional associations (including but not limited to the North Carolina Pediatric Society, North Carolina Academy of Family Physicians, North Carolina Obstetrical and Gynecological Society, North Carolina Council of Nurse Practitioners, North Carolina Academy of Physician Assistants, North Carolina Affiliate of the American College of Nurse

Within five years of initial funding, more than 80% of primary care practitioners should record a BMI percentile or weight for height percentile.

Midwives, and North Carolina Dietetic Association), lactation consultants, payers/insurers, EHR vendors such as Epic and Allscripts, North Carolina Foundation for Advanced Health Programs, North Carolina Hospital Association, North Carolina Division of Public Health, and the Perinatal Quality Collaborative of North Carolina. AHEC and CCNC should continue to develop a module for MOC on early childhood obesity prevention/treatment.

(b) CCNC should continue its work on implementing a pediatric EHR format. The pediatric EHR should include prompts to measure weight, height, and BMI percentile on at least an annual basis. In addition, the EHR should include decision prompts to ensure that families receive counseling about healthy weight.

Funding and new resources required: To accomplish this increased use of quality improvement consultants and the expansion of learning collaboratives and other training opportunities, North Carolina AHEC and CCNC will require approximately \$250,000 in one-time funding from state and national funders.

AHEC will require an additional estimated \$10,000 one-time from state or national foundations to develop high-quality, enduring, online CMEs focused on early childhood obesity.

Performance measures and evaluation: Within five years of initial funding, North Carolina educational institutions and professional societies should offer at least two new MOC modules targeting childhood obesity, including early childhood obesity prevention and treatment. Within five years, 10% of family practitioners or pediatricians would have completed a MOC that includes a focus on childhood obesity.

In addition to MOCs, physicians and other health professionals have continuing education requirements. AHEC reports credit for 1,942 CE contact-hours related to childhood obesity in 2011–2012. This includes 758 credits to registered nurses, 329 to physicians, 133 to pharmacists, and 119 to dietitians. The North Carolina Pediatric Society also maintains information about their continuing education offerings. They offered a 0.5 CME credit session at its 2011 annual meeting to 192 physicians and 62 other health professionals and, more recently, a 1.5 hour CME credit session to 40 physicians and 14 other health professionals at the 2013 Spring Open Forum. However, similar data is not maintained for other health professional organizations that offer continuing education courses, such as the NC Nurses Association, NC Academy of Physician Assistants, or the NC Academy of Family Physicians. Although available data on continuing education are limited, the North Carolina Institute of Medicine should periodically inventory AHEC and the North Carolina Pediatric Society in order to determine what CE courses have been offered in the state that address early childhood obesity prevention and treatment. Within five years, there should be a 25% increase in the number of health professionals who attend CE courses that focus on childhood obesity.

Within five years of initial funding, more than 80% of primary care practitioners should record a BMI percentile or weight for height percentile (for 0-2 year olds) or a BMI percentile at least once per year for children age 3 or older in electronic health records (see Policy Strategy 5). The electronic health record should include documentation of nutrition or physical activity counseling. To facilitate clinical planning, decision supports should be incorporated into the electronic health record.

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)

Given the high rates of early childhood overweight and obesity and the limited resources for prevention and treatment available in most communities, it is clear that most children will need to be served, at least initially, in the primary care medical home. The ECOP Task Force recognized a staged approach to this problem, which should start with universal screening and messaging about healthy diet and physical activity. Families of children who are overweight or obese and not yet committed to change should be offered more extended services within the medical home. Children with more severe problems, problems that cannot be addressed in limited medical office-based interventions, and children in those families committed to change should be referred to nutrition and lifestyle-based interventions.

The ECOP Task Force recognized that one of the problems with the universal and selected approaches is that pediatric and family physicians have limited time with patients and much to accomplish. Additional recommendations or requirements for well-child visits for unreimbursed services may be met with resistance by providers. However, the Affordable Care Act (ACA) will change the landscape of required preventive health services for children. The ACA requires coverage for services related to the prevention or treatment of early childhood obesity include assessment of weight for height and BMI percentile and obesity counseling as well as breastfeeding equipment and lactation support. Other related services that must be covered include screening for high blood pressure and high cholesterol.³³ While the ACA requires that these services be covered, it does not mandate how insurers pay for these services. Many insurers may be covering this as part of the well-child check-up, and may not be providing additional reimbursement to encourage health professionals to spend the time necessary for obesity counseling.

The ACA requires coverage for services related to the prevention or treatment of early childhood obesity.

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)

- 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.**

Lead organization and partners: The nonprofit organization North Carolina Prevention Partners (NCPP) should take the lead in collecting, reviewing, and reporting health plan services related to early childhood obesity prevention and treatment. NCPP is uniquely positioned to undertake this effort given its experience in collecting preventive benefits information from health insurers in the state over the course of many years.

Funding and new resources required: The amount of one-time funding required is approximately \$125,000 from state funders. This amount would cover the cost of gathering formative input from insurers, consumers, and other stakeholders; redesigning the instrument to be in accordance with ACA requirements and existing evidence-based prevention strategies; and automating the collection system (the previous data collection system was paper-based) through the creation of an interactive web-based application and database. (Note: The funding would cover the collection of information on a comprehensive set of preventive health benefits, not just childhood obesity.)

Performance measures and evaluation: The successful implementation of this strategy would be measured by the number of insurers that pay for primary care-based obesity prevention and treatment services, medical nutrition therapy, exercise and lifestyle or behavioral health-based programs, and multidisciplinary intensive programs (which include teams of physicians, dietitians, and behavioral health specialists) focused on early childhood at baseline, two, and four years after initial funding.

Clinical Strategy 4: Convene a group to identify and catalog core statewide and local services, resources, supports for health professionals to refer families and children for additional support or intervention to enhance clinical recommendations

One of the barriers identified during ECOP Task Force meetings was the lack of community referral resources. Physicians may not have sufficient expertise in either nutrition information or behavioral counseling, and time with patients is usually limited by practice constraints. Physicians noted that they were reluctant to focus on physical activity or nutrition, especially for low-income and other at-risk populations, when there were limited resources available in the family's immediate community that could support efforts to promote healthy eating and physical activity.

Local health departments, as part of their accreditation process, are required to identify community resources that help promote health. In addition, most of the health departments in the state are involved in implementing the Community Transformation Grant, a federally funded initiative that supports multifaceted interventions to support healthy eating and active living, among other prevention activities. As part of the CTG grant, local health departments are monitoring the number of organizations that allow access to physical activity facilities. The ECOP Task Force therefore recommended that local health departments identify and disseminate information about state and local services, resources, and supports that physicians can use to promote healthy eating and physical activity. The Kids in Parks program, which maintains an inventory of family-friendly trails in Western North Carolina is an example of a resource that could be included where available. The program is funded by the Blue Ridge Parkway Foundation, the Blue Ridge Parkway, and the Blue Cross and Blue Shield of North Carolina Foundation. As part of the National Park Service's Call to Action's "Take a Hike and Call Me in the Morning" initiative, the Kids in Parks program has begun pilot testing pediatrician office trailheads that are placed in the lobbies of pediatrician offices where large networks of TRACK Trails are present locally. These pediatrician office trailheads provide information about local TRACK Trails, helping inform kids and parents about

The Task Force recommended that local health departments identify and disseminate information about state and local services, resources, and supports that physicians can use to promote healthy eating and physical activity.

family friendly opportunities to get active outdoors near their home. This effort has been endorsed by the American Academy of Pediatrics and will become a focus of the program as the networks of trails expand into more regions.^b

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

- 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.**

Lead organization and partners: The North Carolina Association of Local Health Directors should take the lead in implementing this strategy, working with the appropriate partners.

Funding and new resources required: There is no additional cost for this project.

Performance measures and evaluation: Within two years of initial funding, Local Health Departments should have identified state and local services, resources, and supports within the service areas, as well as a system for health professionals to easily refer patients and their families to the array of services. If successful, the approach should be used throughout the state.

^b MacDougall, J. Healthy Active Communities Senior Program Officer, Blue Cross and Blue Shield of North Carolina. Written communication. May 31, 2013

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