Development of a Movement and State Plan for Obesity Prevention, *Eat Smart, Move More North Carolina*

Carolyn Dunn, PhD, RD, LDN¹; Kathryn M. Kolas, PhD, RD, LDN²

**ABSTRACT**

This report outlines the evolution of the *Eat Smart, Move More North Carolina* movement and publications in support of the movement, including *North Carolina’s Plan to Address Obesity: Healthy Weight and Healthy Communities, 2013–2020*. This evidence-based plan guides the efforts of many organizations as they work to fulfill the mission of *Eat Smart, Move More North Carolina*: to reverse the rising tide of obesity and chronic disease among North Carolinians by helping them to eat smart, move more, and achieve a healthy weight.

**Key Words:** obesity, public health, environment, policy (*J Nutr Educ Behav. 2013;45:690-695.)*

**INTRODUCTION**

The *Eat Smart, Move More North Carolina* (ESMM NC) Leadership Team released *North Carolina’s Plan to Address Obesity: Healthy Weight and Healthy Communities, 2013–2020*¹ on January 24, 2013. The plan outlines strategies to reverse the rising tide of obesity and chronic disease among North Carolinians by helping adults, children, and youth eat smart, move more, and achieve a healthy weight. This plan is both similar and strikingly different from the first plans released in 2002²,³ and 2006.⁴ This report describes past state plans, the evolution of the ESMM NC movement, and the new plan that currently guides the work of the movement.

**THREE PLANS RELEASED IN 2002**

In 2002, over 400 partners representing public health, academia, not-for-profit organizations, and business gathered for the 1-day *Eat Smart, Move More North Carolina, Finding the Will and the Way* conference. The conference included the release of *North Carolina’s Blueprint for Changing Policies and Environments in Support of Healthy Eating,*² *North Carolina’s Blueprint for Changing Policies and Environments in Support of Physical Activity,*³ and *Moving Our Children Toward a Healthy Weight—Finding the Will and the Way.*⁵ These 3 plans were made possible in part by funding from the Centers for Disease Control and Prevention (CDC). The plans were developed under the leadership of the NC Division of Public Health, with input from multiple partners working in the area of overweight and obesity. They were among the first state plans in the nation to create awareness of and encourage efforts to address what is now called the obesity epidemic. The plans were for community leaders and policy makers at the local and state level, educators and health care providers, researchers and industry, and anyone who was moved to have a role in helping individuals eat healthy and be physically active. The plans recognized that traditional health promotion efforts that focused on educating individuals about the benefits of following a healthy lifestyle had only moderate success, and suggested a more comprehensive approach to support the public’s health.

Most partners working in the area of overweight and obesity prevention were comfortable doing education programs and demonstrations, counseling clients, and conducting screenings and health fairs. However, nutrition professionals and the authors’ public health colleagues increasingly employed the socioecological model (SEM)⁶ to create environments and policies that support the behaviors they hoped individuals and families would adopt, because educating individuals and then placing them in an environment that is not conducive to healthy eating and physical activity will not yield the successes that are sought. Although the SEM is not new, nor was it new in 2002, the model had not been fully embraced as a way to address healthy eating and physical activity. As such, these plans provided background and specific details about policy and environmental change. The authors pointed to national documents that called for changes in environments and policies to address chronic diseases.⁷ The NC plans²-⁴ included definitions and examples of environmental and policy changes, as well as achievable outcomes at the local level. The plans provided the sparse available evidence describing strategies that experts thought might affect the obesity epidemic. Most important, the plans provided tools

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¹Department of 4-H Youth Development and Family and Consumer Sciences, North Carolina State University, Raleigh, NC
²Department of Family Medicine and of Pediatrics, Brody School of Medicine, East Carolina University, Greenville, NC

Address for correspondence: Carolyn Dunn, PhD, RD, LDN, Box 7606, 512 Brickhaven, North Carolina State University, Raleigh, NC 27695; Phone: (919) 515-9142; Fax: (919) 515-2786; E-mail: Carolyn_Dunn@ncsu.edu

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for communities to begin to be engaged in this work.

THE ESMM NC MOVEMENT
To ensure that the plans were not overlooked, in 2003, a group of partners from the state health department, NC Cooperative Extension Service, several universities, state medical societies, schools, and health care systems began meeting regularly to share information about obesity prevention efforts. This was the beginning of what would become the ESMM Leadership Team.

Members of the team in the fields of public health and nutrition joined together to create a movement designed to change the environment, which is often done by changing policies, and to create a North Carolina where healthy eating and physical activity are possible (Figure 1). The ESMM Leadership Team, which guided the movement, was a group of organizations and agencies from various professional sectors (i.e., health care, local government, nonprofit, education) who were all committed to obesity prevention. These organizations met quarterly to network and to hear local, state, and national leaders in obesity prevention share their strategies, stories, and recommendations. The Leadership Team’s Executive Committee, made up of officers elected by the Leadership Team, planned quarterly meetings and ensured that the team adhered to the by-laws, policies, and procedures. The Leadership Team, which began as an informal networking group of 20 or 30 partners, now has over 90 member organizations.

THE 2007–2012 PLAN
As the ESMM Movement continued to grow, it was evident that a plan to provide members a guide for their work was needed. In 2006, a group of nutrition and public health professionals was convened by the NC Division of Public Health as part of their CDC funding, to write a state plan. The plan, Eat Smart, Move More: North Carolina's Plan to Prevent Overweight, Obesity, and Related Chronic Diseases, 2007–2012, is a 25-page report written by a 15-member committee of the ESMM Leadership Team and reviewed by 32 professionals who were also members of the Leadership Team. This plan provided a unique opportunity for organizations working in obesity prevention to focus on common goals and objectives, and to use similar strategies. The SEM was again employed to address the need for broad changes in the environment to improve physical activity and healthy eating behaviors. The plan presented 4 goals with measurable objectives (Table 1). Strategies to increase awareness, change behavior, and create policies and environments that promote and support physical activity and healthy eating were outlined for individuals and families, community and schools, and policy and environmental change.

To continually involve members of the Leadership Team in the work of the movement, 2 progress reports on the 2007–2012 plan were released. The first used the unique format of a colorful state map, Eat Smart, Move More NC: Your Road Map to Health!, and included success stories, key obesity-related data points from the state’s surveillance systems, and information on parks and recreation facilities, state parks, and state farmer’s markets. The second was an annual report that shared partners’ success stories from 2009 and 2010, as well as updates on the Leadership Team.

To support implementation and evaluation of the 2007–2012 plan, the executive committee appointed 3 ad hoc committees in 2009: an advocacy committee, a key measures committee, and a surveillance committee. The advocacy committee created an ESMM Policy Strategy Platform that outlines current policy recommendations on obesity-related issues. The platform draws primarily upon policy recommendations from the following key reports: the NC Institute of Medicine Task Force on Adolescent Health; the NC Institute of Medicine Task Force on Prevention; the NC Task Force on Preventing Childhood Obesity; and the NC Legislative Task Force on Childhood Obesity. The ESMM Key Measures and the Surveillance Committees reviewed available data to determine the best indicators for measuring progress on the plan. The resulting Key Measures Report examined progress on key indicators of policy and environmental change, and the resulting Surveillance Plan outlined how existing surveillance systems should be used to monitor changes in population-level behavior, such as eating habits, physical activity levels, and weight status.

To support Leadership Team members and others in their work, ESMM maintains 2 Web sites, 1 for professionals and 1 for consumers. The professional Web site provides information about the Leadership Team, key documents such as electronic version of the plan; and downloadable tools for partners. The consumer Web site offers individuals tools to help them eat smart and move more.

Figure 1. Eat Smart, Move More North Carolina is a movement. Shown are the vision and mission of the Eat Smart, Move More North Carolina movement and a description of the 6 keys to the success of a movement.

THE 2013–2020 PLAN
The end of the 2007–2012 plan required that the ESMM movement begin crafting a new plan to guide Leadership Team members. The development of the new plan began in September, 2011 with an online survey. A total of 124 professionals from across the state responded to questions
Table 1. Goals: North Carolina’s Plan to Prevent Overweight, Obesity, and Related Chronic Diseases, 2007–2012

1. Increase healthy eating and physical activity opportunities for all North Carolinians by fostering supportive policies and environments.
2. Increase the percentage of North Carolinians who are at healthy weight.
3. Increase the percentage of North Carolinians who consume a healthy diet.
4. Increase the percentage of North Carolina adults and children age ≥ 2 years who participate in the recommended amounts of physical activity.

about the current obesity prevention plan to inform the development of the new plan. Questions were asked about the usefulness of the current plan, and professionals were asked to list critical elements to include in a new plan. The Executive Committee of ESMM established a writing team and a planning team to oversee the development and review of the plan. The past chair of ESMM led a 6-member writing team that was responsible for the overall writing and coordination of the plan development and review. The planning team consisted of members of the writing team plus 7 additional members from the ESMM NC Leadership Team. The planning team guided the development of the plan and provided feedback on its early drafts. The planning team met to outline how the new plan would be different from and similar to the current plan based on emerging science, as well as results from the online survey. The writing team used the guidance of the planning team in its work to create a new plan for ESMM.¹

The writing team identified the 6 evidence-based core behaviors for obesity prevention: increase physical activity; increase consumption of fruits and vegetables; decrease consumption of sugar-sweetened beverages; reduce consumption of energy-dense foods; and increase breastfeeding initiation, duration, and exclusivity.¹ They selected 8 settings and then assigned obesity prevention strategies to the appropriate setting. Obesity prevention strategies were selected based on the best available evidence from 18 key documents published during the previous 5 years. These included reports from the Institute of Medicine, the Surgeon General, the Guide to Community Preventive Services, and the CDC. Strategies were assigned to the appropriate setting but were not prioritized. Strategies were labeled with an icon(s) to correspond to the core behavior they addressed. Core behaviors, settings, and method of strategy selection were all vetted by the executive committee. In addition, the title of the plan, North Carolina’s Plan to Address Obesity: Healthy Weight and Healthy Communities, 2013–2020 (Figure 2), was vetted by the executive committee.

The Plan continued to use the socioecological model employed in earlier plans.⁶ The usefulness of the socioecological model remained sound and continued to be supported by CDC, National Institutes of Health, and others. However, the team thought a new graphic was needed to clearly summarize the change needed to shift from the current obesogenic environment to one that makes a healthy choice the easy (Figure 3). As before, this plan outlined the problem and associated health consequences of overweight and obesity. It also outlined health care and lost productivity cost for the state and nation associated with unhealthy weight. The plan included objectives based on existing data sources. Although they may not always be ideal from a programmatic viewpoint, using existing data sources has an element of sustainability that will serve the plan well moving forward. The targets were aligned with both Healthy North Carolina and Healthy People 2020 objectives whenever possible (for example, “By Jan 1, 2020, at least 29% of NC adults will consume > 5 servings fruits and vegetables/day [baseline in 2011 is 13.7%]).” For most of the 43 objectives, the target percentages were determined by changing the baseline percentages by half a percentage point per year (in either a positive or negative direction, whichever direction indicated improvement).

As with earlier plans, this plan¹ had as its intended audience professionals working in any of the following settings, who want to promote health and prevent obesity: health care, child care, schools, colleges and universities, workplaces, faith-based organizations and other community organizations, local government, and the food and beverage industry.

Figure 2. North Carolina’s Plan to Address Obesity: Healthy Weight and Healthy Communities, 2013–2020 is a plan to help all North Carolinians.
REVIEW PROCESS FOR THE 2013 PLAN

Buy-in of the plan by those working in the area of obesity prevention was critical to its success. With so few dollars available for obesity prevention interventions, it was critical that efforts known to appropriately affect eating and physical activity behaviors of children and adults be used. The goal of the review process was to have each person working in the area of obesity prevention believe that their voice was heard and that the plan was not just a plan for ESMM NC, but a plan for their organization. All member organizations needed to see how they could contribute to implementation of the plan. Growth of the movement to over 90 member organizations required much broader buy-in than the earlier plan. Many members were not involved in ESMM when the earlier plan’s was written. It was an opportunity to galvanize all members to continue to work together, or at least to use similar strategies, in the area of obesity prevention. The goal of the broad review of the plan’s was to fully engage the ESMM NC Leadership Team as well as those working in the area of obesity prevention who may not yet be a part of the ESMM Movement. To that end, all of the >100 comments that were provided as part of the review were answered and taken into account as the final plan was prepared. Table 2 outlines the robust review process employed for the development of the 2013-2020 plan.

COMMITMENT TO IMPLEMENT THE PLAN

Creating a usable plan that has wide acceptance was only the first step to success. The plan must be used and implemented to continue to create environments conducive to healthy eating and physical activity. To begin the work of implementing the plan, participants to the online survey employed as part of the plan review were asked about the likelihood of their using the plan. Most (82.8%) reported they were either somewhat or very likely to use the plan, whereas only 2.9% said they were unlikely to do so. Interestingly, fewer than half (49.1%) reported that their organization, agency, or coalition served on the ESMM Leadership Team. Of those responding, almost half (24.6% each) were from the field of health care or public health. Others responding were from schools, grades kindergarten through 12 (17.5%), cooperative extensions (14%), community-based organizations and colleges or universities and state government (12.3% each), or other groups such as child care and faith-based organizations. Unfortunately, no member of the media or food and beverage industry responded. Respondents said they would use the plan for grant writing, program planning and program justification, education of the community and its leaders, research, and teaching. The Leadership Team will be surveyed in subsequent years to ascertain the use and impact of the plan.

A PowerPoint presentation and a press release about the plan is available on the web site’s for partners to use in creating awareness about the updated plan. The release garnered...
Leadership Team meeting updates: During the year of plan development, updates were provided at each Eat Smart, Move More North Carolina Leadership Team meeting. Leadership Team members were given the opportunity to provide input about the name of the plan, the review process, and overall development.

Technical review of first draft: Subject-matter experts were recruited as part of the online survey conducted in 2011. Survey respondents were asked to nominate experts in obesity to provide technical review for the plan. A total of 14 professionals were chosen who provided detailed review for the first draft of the plan in March, 2012.

Statewide review of second draft: Each member of the Eat Smart, Move More North Carolina Leadership team received an electronic version of the plan. They were asked to share with others with whom they worked, so that feedback was not limited to those who were already engaged in Eat Smart, Move More North Carolina. Feedback was accepted in multiple forms, including mark up on the draft, e-mail, or responses to an electronic questionnaire. Over 60 people provided feedback in June, 2012.

Virtual town hall meetings: Two webinars were held. The writing team guided participants through the second draft of the plan, which had been distributed for statewide review. The chair of the Eat Smart, Move More North Carolina Leadership Team solicited feedback through the chat box or verbal questions and comments. Over 70 people participated in the virtual town hall meetings in June, 2012.

attention from the local media as well as several newspapers across the state. The first-quarter meeting of the Leadership Team was devoted to stories from several members about how they were already using the new plan. Presentations are available on the ESMN NC Web site.

Leadership Team members representing the western region of NC reported that for the first time, they had participated actively in writing the state plan. They were looking at existing programs and coalitions working in the area of obesity prevention and examining how they could use strategies outlined in the plan in their work. They were working to align their efforts with those in the plan. A local coalition working on policy and environmental change (Advocates for Health in Action) already had prescribed goals on which they were working. They shared how they took existing goals and aligned strategies to reach those goals with strategies presented in the new plan. Colleagues from the Brody School of Medicine at East Carolina shared that Kolasa and colleagues approached the university chancellor with the plan in hand, and that the chancellor appointed a task force to assess how it could respond to the recommendations outlined for colleges and universities. Dr Kolasa provided medical grand rounds on the topics to family physicians and to obstetricians and gynecologists, and hopes to continue to talk with both the university and medical communities about implementing recommendations. A Leadership Team member from Vidant Health in eastern NC described their efforts as a worksite to respond to the plan's recommendations on physical activity, healthy eating environments, and outreach to the communities where its hospitals and physician clinics exist.

IMPLICATIONS FOR PRACTICE

The ESMN NC movement and implementation of the plan was not driven by the search for a magic bullet, but rather a commitment to continue to implement evidence-based solutions to reduce overweight and obesity. Overweight and obesity rates continue to increase across the nation. The obesity crisis is simply too big and entrenched in society to be easily reversed. More individuals and families are needed to make healthier choices. Also needed are more funding, more partners, and more commitment from those who have the power to make healthy eating and active living a reality in the community.

With precious few resources, strategies proven to work must be implemented to address this public health crisis. To achieve this, states need a plan to guide everyone working in the area of overweight and obesity. Development of a plan that includes evidence-based strategies can bring together those working toward the common goal of improved eating and physical activity environments. Strategies employed to begin and maintain the ESMN NC movement may be used by other states as they work to address overweight and obesity. Furthermore, the process used to create a state plan that is implemented by multiple organizations working in the area of overweight and obesity may be interesting to other states or municipalities.

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