The Key Measures Ad Hoc Committee of the Eat Smart, Move More North Carolina Leadership Team was assembled in 2009 to measure progress on the first of four goals of the *Eat Smart Move More: North Carolina’s Plan to Prevent Overweight, Obesity, and Related Chronic Diseases* (North Carolina’s Obesity Prevention Plan). This goal is to “increase healthy eating and physical activity opportunities for all North Carolinians by fostering supportive policies and environments” – in other words, to make the places where we live, learn, work, play and pray more supportive of healthy lifestyle choices.

Data sources for measuring progress on this goal were not specified when North Carolina’s Obesity Prevention Plan was written. Thus, the Key Measures Committee was charged with identifying (1) indicators of change to policies and environments and (2) key examples on the state’s progress related to these indicators.

The Eat Smart, Move More NC Leadership Team Executive Committee appointed Lori Carter-Edwards (Duke University Division of Community Health) as Key Measures Committee Chair and Jenni Albright (N.C. Division of Public Health) as Coordinator. The Chair and Coordinator identified a ten-member team: Kevin Cain (John Rex Endowment), Nakisha Floyd (N.C. Department of Public Instruction), Karen Luken (N.C. Office on Disability and Health), Chris Mackey (N.C. Office on Disability and Health), Justin Moore (East Carolina University School of Medicine), Sharon Nelson (N.C. Division of Public Health), Richard Rairigh (Be Active North Carolina, Inc.), Rebecca Reeve (N.C. Division of Public Health), Maggie Sauer (N.C. Medical Society Foundation), and Rose Ann Simmons (University Health Systems of Eastern Carolina).

The Eat Smart, Move More NC Key Measures Committee decided to select two of CDC’s recommended strategies – one for nutrition and one for physical activity – as key measures for policy and environmental change in North Carolina. The primary criterion for selecting key measures was data availability. The Committee’s charge specified the importance of capturing progress during 2009 and 2010, so the committee narrowed its selection to those strategies for which data seemed most readily available.

To address multiple settings, the committee selected one key measure with a child-care-related indicator and another with a school-related indicator. The committee also felt it was important to select timely key measures in terms of legislative activity. Legislation has been passed recently for each of the two selected key measures, which align with the Eat Smart, Move More NC Policy Strategy Platform.

The two selected key measures – explored further in the next two pages – are as follows:

1. Discourage consumption of sugar-sweetened beverages.
2. Increase opportunities for extracurricular physical activity.

The School Health Profiles Survey provides statewide quantitative data related to key measure #2 above. While the committee was unable to identify statewide quantitative data related to key measure #1, it did find relevant examples of progress related to legislation and program implementation.
Key Measure #1: Discourage consumption of sugar-sweetened beverages

Background

Children’s consumption of sugar-sweetened beverages has increased over the past four decades, which has contributed to the growing childhood obesity epidemic. Schools and child care settings can positively influence children’s health by removing or decreasing access to sugar-sweetened beverages and other unhealthy options.

The CDC's recommended indicator of success for this measure is the percentage of licensed child care facilities that are required to ban sugar-sweetened beverages, including flavored/sweetened milk, and limit the portion size of 100% juice. Data on this specific indicator are not available statewide in North Carolina; however, the state is making substantial progress, as detailed below. New state legislation encourages healthy beverages in child care centers. In addition, a recent Smart Start supported initiative helped child care centers to make healthy improvements, such as offering more healthful beverages.

Progress through State Legislation

House Bill 1726 (Improve Child Care Nutrition/Activity Standards) passed in the 2010 Legislative Session and has direct relevance to the issue of discouraging consumption of sugar-sweetened beverages in North Carolina. Many children under age six are in some form of child care. The bill requires the North Carolina Child Care Commission to adopt rules for child care facilities to ensure that all children receive nutritious food and beverages according to their developmental needs. Examples of recommended rules for child care centers and homes are: (1) prohibiting centers from serving sugar-sweetened beverages other than 100% juice, (2) requiring centers and homes to serve low-fat milk (instead of whole milk) to children over age two, (3) limiting the provision of juice in child care centers and homes, and (4) prohibiting the serving of juice from a bottle. Specific bill language is available at http://www.ncleg.net/Sessions/2009/Bills/House/PDF/H1726v6.pdf.

Progress through Organizational Policy Change

Between 2007 and 2009, Smart Start funded 128 child care centers in North Carolina to implement the Nutrition and Physical Activity Self-Assessment for Child Care (NAP SACC) program. NAP SACC was developed by the Center for Health Promotion and Disease Prevention at the University of North Carolina at Chapel Hill and key advisory partners. It is an innovative program designed to improve the nutrition and physical activity environment within child care settings through provision of an assessment tool, continuing education workshops, and technical assistance. This evidence-based program has been pilot tested and deemed a promising practice. Beverages are a key focus area in the nutrition section of the assessment tool. The final evaluation report from the Smart Start funded NAP SACC implementation indicated that significant changes were made in five areas, one of which was beverages (e.g., water and milk instead of sugary drinks). More evaluation results are available at http://hugh.ncsmartstart.org/wp-content/uploads/2010/08/NAP-SACC-Final-Oct2009.pdf.

One example of a specific child care center that changed routine practices through this initiative is the COGIC Cathedral Day Care Center in Guilford County. Traci Martin at COGIC stated “We at COGIC have completed the NAP SACC program and now have a deeper understanding about health and nutrition. We learned that little changes could make a great impact on the lives of our children and our staff. We learned how to incorporate good health and nutrition into our daily lives. Children are making their parents take notice of changes we have made at our center, and this has impacted their eating habits at home. Little changes like putting water pitchers in the classroom during the day and replacing juice with water at snack time help to slowly change habits.”

Committee Recommendations for Measuring Policy Change

1. Incorporate qualifications based on a child care center’s policy and environmental supports for physical activity and healthy eating into the Star Rated License System to create a method for
tracking the number of centers making these changes as well as the quantity and quality of the changes made.

2. Work with the Child and Adult Care Food Program to develop a system for regularly collecting data about nutrition and physical activity policies and practices from participating centers.

**Key Measure #2: Increase opportunities for extracurricular physical activity**

**Background**

Evidence indicates that opportunities for extracurricular physical activity outside of school hours to complement formal Physical Education help to prevent obesity in children and youth. The focus of such opportunities is non-competitive physical activity (e.g., games and dance classes available through community and after-school programs), not varsity team sports or sport clubs which require try-outs and are not open to all students.

The CDC’s recommended indicator of success for this measure is the percentage of public schools that allow the use of their athletic facilities by the public during non-school hours on a regular basis. The School Health Profiles survey provides data on community use of school facilities among middle and high schools, as detailed below. In addition, recent state legislation encourages local school boards to make such allowances in their communities.

**Progress through State Legislation**

In 2009, the North Carolina General Assembly passed House Bill 1471 (Counties and Schools Share PE Equipment), which helps to increase opportunities for extracurricular activity. This bill directs the State Board of Education to encourage local school boards to enter into agreements with local governments and other entities regarding the joint use of their facilities for physical activity. Creating joint-use agreements will not only provide children and adults with safe, convenient places to exercise and play, but can save scarce resources (e.g., land and funding that would be needed to build new facilities). Studies show that people who have access to nearby recreational facilities are more likely to be physically active and to meet daily guidelines for physical activity. While this bill has been passed at the state level, local school boards and local governments are responsible for implementing these agreements in their communities. Specific bill language is available at [http://www.ncleg.net/Sessions/2009/Bills/House/PDF/H1471v3.pdf](http://www.ncleg.net/Sessions/2009/Bills/House/PDF/H1471v3.pdf).

**Progress through Organizational Policy Change**

Some North Carolina middle and high schools have policies in place that allow community members to use the schools’ facilities (e.g., gym, track, playing fields) for physical activity. These policies are referred to as “joint use” or “dual use” policies. The presence of these policies is one of many issues addressed by the School Health Profiles Survey, which is coordinated by CDC to assess school health policies and practices. This survey is conducted biennially by the North Carolina Department of Public Instruction among middle and high school principals and lead health education teachers. The 2008 survey provides the most recent data regarding community use of schools’ outdoor facilities, and the 2010 survey provides the most recent data regarding community use of schools’ indoor facilities:

- **Outdoor facilities (2008):** Of the middle and high schools participating in the 2008 School Health Profiles Survey, 83% allow people in the community to use at least some of the school’s outdoor physical activity or athletic facilities outside of school hours or when school is not in session, without being in a supervised program. The two previous surveys showed similar results (82% of schools in 2004, 81% of schools in 2006). The 2010 survey did not include this question.

- **Indoor facilities (2010):** Of the middle and high schools participating in the 2010 School Health Profiles Survey, 71% allow use of their indoor physical activity or athletic facilities for community-sponsored classes or lessons outside of school hours or when school is not in session. Due to changes in the survey questionnaire, comparable data from previous years is not available.
An example of successful joint use of school facilities for physical activity can be found in Beaufort County. A joint use policy was developed by the Beaufort County Health Department and school officials from the P.S. Jones Middle and John Small Elementary schools. They partnered to create a walking trail with funds from an Eat Smart, Move More Community Grant. The schools sit side by side, so ringing the campus with a walking trail for students and staff was a natural fit. However, the project team recognized that obesity is a problem for all age groups and that most neighborhoods lack places for getting physical activity. As a result, organizers decided to open the track to community members to make it a dual-use facility. After consulting with members of the school board, who determined that proper signage would resolve legal concerns over liability, the team made reaching out to the greater community a core part of its mission.

Committee Recommendations for Measuring Policy Change

1. Create a process for collecting information on joint use policies between schools and communities. Information needed includes: presence of policy, quality of the policy, whether the policy is being implemented, and results of implementation (including positive or negative unintended consequences).

2. Develop a set of standards for joint use agreements to include: a consistent definition, an overview of associated issues, model language and/or policies, roles and responsibilities, and opportunities for success.

Conclusions from the Key Measures Committee

It was much more challenging than initially perceived to document specific policy and environmental changes across the state, primarily because of the lack of data sources. Furthermore, it was evident that some potential key measures were applicable across ages and settings while others applied only to a specific setting or target population. The Key Measures Committee has developed the following conclusions and points for consideration:

1. There is a need to standardize data collection on nutrition and physical activity policy and environmental changes across facilities in any given setting (e.g., child care facilities, schools).

2. State level policy change, including state legislation, indicates progress. However, the next challenge is to create a system to track policy implementation at the organizational level. It would be useful to engage various organizations who are affected by obesity-related state policy to discuss standardized methods to feasibly assess organizational policy implementation.

3. It would be valuable to incorporate the collection of information about policy and environmental supports for healthy eating and physical activity into existing statewide or organizational data collection systems.

For more information, contact Lori Carter-Edwards, Key Measures Committee Chair (lori.c.edwards@duke.edu), or Jenni Albright, Key Measures Committee Coordinator (jenni.albright@dhhs.nc.gov).

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