



**Adolescent Health Task Force  
September 5, 2008  
10:00-3:00  
NC Institute of Medicine**

**Meeting Summary**

**Attendees:**

*Task Force/Steering Committee:* Barb Bowsher, Donna Breitenstein, Jane Brown, Steve Cline, Tania Connaughton-Espino, Tamera Coyne-Beasley, Susan Fisher, Carol Ford, Lloyd Hackley, Dan Krowchuk, Peter Leone, Bronwyn Lucas, Sharon Mangan, Jim Martin, Steve North, Marcus Plescia, William Purcell, Kristin Rager, Joel Rosch, Adam Searing, Tom Vitaglione, Irene Zipper

*Interested Persons and Staff:* Laura Aitkens, Kimberly Alexander-Bratcher, Alice Ammerman, Ashley Bell, Angella Bellota, Amy Davenport, Mark Holmes, David Jones, Jim Martin, Brandy Peaker, Ruth Petersen, Sharon Rhyne, Ellen Riegg, Meka Sales, Carol Sexton, Pam Silberman, Carol Tyson, Andrea Weathers, Yvonne Wasilewski, Berkeley Yorkery, Elizabeth Zurick

**REVIEW OF UNINTENTIONAL INJURY RECOMMENDATIONS**

*Mark Holmes, PhD, Vice President, North Carolina Institute of Medicine*

At the 11 July Meeting, we discussed unintentional injuries, focusing on motor vehicle and athletic injuries. What follows are most of the ideas that were suggested, irrespective of relative strength. Some are not evidence-based. Some may be outside the scope of this Task Force's charge. This includes all ideas mentioned. The list of potential recommendations will be narrowed at the November 14<sup>th</sup> Task Force meeting. Comments and questions about the recommendations should be sent to Berkeley Yorkery (byorkery@nciom.org).

**Potential Recommendation Motor Vehicle Accidents (MVA).1**

The North Carolina Department of Transportation's (DOT) Governor's Highway Safety Program (GHSP) should develop a comprehensive young driver's education curriculum and campaign. This campaign should include

- Research to determine effective strategies enhancing the quality of driver's education curricula
- Development and evaluation of a research-based young driver's education curriculum. The GHSP should work with the Department of Public Instruction to implement a large-scale trial of the program through the current driver's education system in public schools. Rigorous evaluation of the program should be conducted before implementing the program in all public schools. Evaluation should include collecting data on the driving records of those exposed to the program and those exposed to traditional driver's education.

- Developing materials to help better educate parents on the critical components of teaching their adolescents to drive and involving parents more in the ongoing education of young drivers.

#### Potential Recommendation MVA.2

The North Carolina General Assembly should appropriate \$X to the North Carolina Department of Transportation's Governor's Highway Safety Program to revise the implementation of the "Booze It & Lose It" DWI checkpoint program to fit evidence-based program guidelines, including, but not limited to, the following components:

- A comprehensive, statewide media campaign.
- Ongoing checkpoints throughout the year.

#### Potential Recommendation MVA.3

The North Carolina General Assembly should enact a cell phone ban for drivers of all ages while operating a moving motor vehicle.

#### Potential Recommendation MVA.4

North Carolina should support expansions to the public transportation system.

#### Potential Recommendation Sports and Recreation (SR).1

The North Carolina General Assembly should appropriate \$X to the (UNC Injury Research Center/Division of Public Health, Injury and Violence Prevention Branch) to hire 6 full time employees (*this was Steve Marshall's recommended #*) to conduct outreach with schools and youth sports clubs across the state. These employees would:

- Train coaches and other youth athletic staff/volunteers in how to implement evidence-based programs proven to reduce youth sports and recreation injuries, such as those developed by staff at the UNC Injury Research Center.
- Develop and distribute materials targeting parents to increase awareness of the frequency of sports and recreation injuries and to provide information on how to prevent the most common sports and recreation injuries.

#### Potential Recommendation SR.2

The Injury and Violence Prevention Branch of the North Carolina Department of Health and Human Services should develop a "Safe Sports Schools" campaign modeled on the NC Tobacco Free Schools Campaign. The goal of the campaign should be to provide information, resources and assistance to school districts (and communities) interested in adopting "Safe Sports" policies (e.g. mandatory mouthguards for all team sports, changes to the policies and procedures around use of sports physicals for participation in team sports, adoption of evidence-based training and warm-up programs).

#### Potential Recommendation SR.3

Increase bicycle helmet use through one or more of the following:

- Enact new and enforce existing bicycle helmet requirements for all bicycle riders.
- Some sort of incentive for helmet purchase
- Engaging civic groups to do helmet giveaways and safety campaigns locally.
- A well-designed awareness campaign would likely be needed to publicize/influence new social norms around helmet use.

#### Potential Recommendation SR.4

The North Carolina General Assembly should appropriate \$X to the Department of Public Instruction to fund the hiring of Y Certified Athletic Trainers. (58% of schools already have access to one.)

#### Potential Recommendation SR.5

Defibrillators should be available in all schools.

### **REVIEW OF UNINTENTIONAL INJURY RECOMMENDATIONS**

#### **OVERVIEW OF CHRONIC ILLNESS**

*Mark Holmes, PhD, Vice President, North Carolina Institute of Medicine*

“Chronic diseases” is one of the six areas of the Healthy People 2010 Critical Health Objectives for Adolescents and Young Adults. The indicators in this area concern reducing tobacco use and the proportion of children and adolescents who are overweight, and increasing physical activity. In addition to looking at tobacco use and overweight/physical activity/nutrition, today’s meeting will include secondary prevention targeting those at risk for adult cardiovascular disease.

Both tobacco use and obesity are linked to adult cardiovascular health, as well as other health concerns in adulthood. While they have negative implications for health during adolescence, their impact is mainly seen in the adult population. Tobacco use and obesity during adolescence are predictors of the same problem during adulthood. Tobacco use typically begins during adolescence; youth who are overweight as adolescents are 4-20 more likely to be overweight as adults.

Secondary prevention activities are focused on early disease detection so that early intervention may help delay or prevent the onset of disease. Today’s discussion will focus on early detection of the precursors to cardiovascular disease and what can be done to help reduce the risk that today’s adolescents will have these problems as adults.

#### **OBESITY, NUTRITION, & PHYSICAL ACTIVITY**

*Alice Ammerman, PhD, Director, UNC Center for Health Promotion and Disease Prevention*

Today, 1-in-5 children and youth in North Carolina is overweight. Among youth ages 12-18, almost 1-in-3 is overweight. Each year in North Carolina, the cost of unhealthy lifestyles (excess weight, lack of physical activity, type 2 diabetes, and inadequate fruit and vegetable consumption) is estimated to cost \$24.1 billion.

Many factors contribute to obesity including personal behaviors, community/environment, clinical care and public health policies. In each of these areas there are currently programs and practices being implemented to improve the health of North Carolinians. Additionally, there are programs and practices that research indicates may be even more effective at making positive gains in nutrition and physical activity to help reduce the obesity rates among children and youth.

how people eat. Research shows that intensive, long-term interventions with social support and problem solving/skill development work to help people eat better and exercise more. Many innovative public health programs developed using this model are currently being implemented in North Carolina, such as the Health and Wellness Trust Fund’s FitKids Initiative. North Carolina could encourage more programs by helping to disseminate evidence-based interventions and leveraging research funding.

Personal behaviors are heavily impacted by the community and built environment. Factors such as access to healthy food, cultural norms around food and eating, and accessibility of safe places to exercise all positively or negatively affect personal behaviors around nutrition and physical activity. A number of strategies, such as community-wide campaigns, increased access to healthy foods, and changes in the built environment, have been shown to be effective at changing community/environment factors. While some work in this area has already begun, there are many opportunities to improve community/environment factors including: longer term financial support of community-based projects, changes to WIC to support increased fruit and vegetable access for recipients, using schools after-hours as a safe place for physical activity, and partnerships with the Department of Transportation and other non-traditional partners to change the built environment.

Access to and quality of clinical care are also important. The availability of care, how care can be billed and the knowledge and comfort level of physicians in dealing with weight management all contribute to the quality of care patients receive around obesity, nutrition and physical activity. Research shows that clinical care interventions in this area must be intensive and long-term. Currently North Carolina is seeing budding collaborations among very strong primary care networks, a strong public health system, and innovative 3<sup>rd</sup> party payers to help improve clinical care. These resources must be utilized and strengthened by facilitating more collaboration, improving reimbursement for obesity-related clinical care, and by engaging the clinical community in public health efforts to reduce obesity rates.

All of these components are heavily influenced by public and health policies such as those around school nutrition and physical activity. There is some evidence that school-based and worksite/organizational interventions, as well as those that are state or community-wide, have a positive impact on obesity/nutrition/physical activity. While there are a number of programs in NC working to improve obesity/nutrition/physical activity, such as improving child nutrition standards, local school wellness policies, and a requirement that all children get 30 minutes of physical activity in grades K-8, implementing and enforcing such policies can be quite difficult because of the scale of the intervention. North Carolina must support current efforts by supporting child nutrition standards implementation and supporting school wellness plan implementation. Additionally, NC should work to improve the built environment, improve school physical activity and physical education requirements, and encourage collaboration among stakeholders.

### *Discussion*

- What is the relationship between fitness and academic performance? There is some association between physical fitness and academic performance but not a whole lot of research on the link between nutrition and academic performance.
- Health education is often being reduced as an unintentional consequence of requirements around physical education. Need to include education around nutrition and health rather than just increasing physical activity. Need a comprehensive approach to nutrition and physical activity, not just one or the other.
- Where are the parents in this? Are their interventions to help parents once their children get older (seem to be ones for parents of young children)?
  - Isolated programs, but nothing comprehensive.
  - Need parenting skills to help parents deal with making changes to family diets.

- Often schools will use less healthy food options to reward behaviors/have family nights and such that promotes unhealthy options- contradicts messages that are supposed to be being taught in schools.

## **TOBACCO USE**

*Marcus Plescia, MD, MPH, Chief, Chronic Disease and Injury Section, Division of Public Health, NC Department of Health and Human Services*

Tobacco is the leading cause of preventable deaths each year in North Carolina. Reducing tobacco use is one area where significant gains have been made, particularly among adolescents. Since 1999, middle school tobacco use has decreased from 15% to 5% while high school use has decreased from 32% to 19%. Among teens, black youth are significantly less likely to smoke than their white peers while American Indian youth are significantly more likely to smoke (35% vs. 19%). Reducing adolescent smoking is particularly important because 70% of adult smokers started smoking before they were 17.

Reducing tobacco use is one area where there is a significant evidence-base for what works in reducing both overall and teen use. This is one reason that North Carolina has been so successful in reducing youth smoking rates. North Carolina has already implemented a number of evidence-based programs and practices, including the Tobacco-Free Schools campaign, the NC Quitline, and the Health and Wellness Trust Fund's (HWTF) Tobacco Use and Prevention Cessation Initiative and the TRU (Tobacco-Reality-Unfiltered) media campaign aimed at youth.

While North Carolina has implemented many evidence-based practices shown to reduce youth smoking, there are others that could be implemented. Tobacco taxes have been shown to be particularly effective at curbing youth smoking. Currently North Carolina has one of the lowest tobacco taxes in the country. Therefore, one potential strategy for this Task Force would be to recommend raising (and indexing) the tobacco tax to the national average. Doing so would save 32,600 children that are alive today from later premature smoking-caused death.

Banning smoking in public places such as restaurants, workplaces and public sites has also been shown to both reduce exposure to harmful secondhand smoke and to reduce youth smoking. This Task Force should consider recommending comprehensive statewide smoke-free laws to eliminate exposure to secondhand smoke in all indoor workplaces and public places.

Within clinical practice, counseling has been shown to be effective in treating adolescent smokers, however tobacco cessation services are not always available through insurance. This Task Force should consider recommending that all payers cover and all providers deliver comprehensive, evidence-based tobacco cessation services and benefits including counseling and appropriate medications.

Although North Carolina is doing a good job reducing smoking rates, currently the state spends \$19 million each year to fund tobacco prevention and control while the CDC recommends that North Carolina spend \$107 million on prevention and control. Much of North Carolina's current funding comes from the HWTF. The HWTF funding for tobacco prevention and control is set to be cut in half for SFY 09-10. Because maintaining funding is crucial to maintaining progress made in reducing tobacco use, this Task Force may want to consider recommending that NC Division of Public Health and the HWTF annual appropriations be increased to reach the CDC recommended level by 2020.

*Discussion:*

- Where is NC on the tobacco tax? The tobacco tax comes up every year. It is hard to pass a tax increase during an election year. Long session coming up could be a different story. There is great optimism around the tobacco bans and taxes in the upcoming year.
- There is increasing evidence linking smoking and obesity to prematurity and infant mortality, have there been any campaigns around this? HWTF is about to launch a campaign around pregnant women. Have not gotten to point of stressing this with young women.
- Are there particular strategies for American Indians? Studies of price elasticity have been done and the results hold true for all race/ethnicity groups. HWTF has funded tobacco campaigns specifically targeting race/ethnic groups. Among American Indians there may be cultural practices that do promote tobacco use. Need to be aware of these issues when trying to reduce American Indian tobacco use. The local governments in areas that American Indians live in also did not embrace the policy solutions to reduce youth smoking early on like some other areas did.
- School-based evidence-based programs cannot be well implemented without a supportive environment. Now that we have the tobacco-free schools policies in place, school-based programs should be renewed interest.

**Bronwyn Lucas, Project YES! was introduced.** Information about Project YES! is available online at <http://www.youthempowerededsolutions.org/>.

**SECONDARY PREVENTION OF CHRONIC ILLNESS**

*Carol Ford, MD, Adolescent Medicine, Program Director, NC MARCH, University of North Carolina at Chapel Hill*

Secondary prevention activities involve the early detection of people at risk and work to reduce their risk. Secondary prevention activities are much more targeted than primary prevention activities.

Family history, obesity, tobacco use, high blood pressure, diabetes, and high cholesterol are all risk factors for adult cardiovascular disease. Many of these risk factors start to appear during adolescence and early adulthood. Among North Carolinians ages 18-24, 1-in-3 is a smoker, 1-in-5 is obese, 1-in-9 has a history of high cholesterol and 1-in-20 has a history of high blood pressure. Although many young North Carolinians clearly have precursors for adult cardiovascular disease,

it is unclear how many are receiving the kind of preventive services that can help identify these risk factors and develop a plan to delay or prevent heart disease.

The American Medical Association recommends that adolescents receive well visits annually from 10-21. Such visits should include a physical exam, lab tests if indicated, a HEADSS interview (Home/health, Education/employment, Activities, Drugs, Depression, Safety, Sexuality), counseling and management, and a follow-up plan. Data are not available to show the percentage of youth receiving thorough well visits annually, but the data that are available indicate that it is likely that *at least* 1-in-3 youth are not seeing a health professional for a yearly well visit.

Given the importance of early detection for preventing chronic illness, this task force may want to consider the following:

- Building Culture of “Well Adolescent Visits”: Develop and evaluate promising approaches to educate healthcare professionals, parents, adolescents, and other key stakeholders about professional recommendations for annual high-quality wellness visits for children 10-21.
- Updating NC EPSDT: Update NC EPSDT guidelines to reflect evidence-based recommendations for well child care for this age group and the intent of Bright Futures.
- Building a Culture Around Transition: Develop and evaluate promising approaches to educate healthcare professionals, parents, adolescents, and other key stakeholders about the importance of older adolescents acquiring:
  - Knowledge/skills to manage ongoing health conditions
  - Knowledge/skills to manage ongoing healthcare
- Designing and conducting pilot studies to increase the proportion of adolescents that:
  - Receive high quality annual wellness visits
  - Acquire knowledge/skills to manage chronic illness or conditions into adulthood
- Insurance Coverage: All public and private insurers should pay for annual wellness visits for North Carolinians 10-21 years of age.

## **Potential Recommendations**

### Obesity, Nutrition and Physical Activity

- Recommendations from Alice Ammerman’s presentation (see pages 3 & 4)
- School nutrition funding ideas:
  - Help schools identify other funding streams so that they do not need to generate revenue from the sale of unhealthy foods vending machines/lunch options/etc.
  - Need to enforce current vending machine laws.
  - Need to encompass school nutrition into the funded package of school rather than making it a separately funded item that has to make money to fund itself.
- State sponsored summer and afterschool programs should be required to provide nutritious snacks/meals if they are funded by the state.
  - Expand current law affecting DPI to include all publicly-funded afterschool and summer school.
- Funding for community demonstration projects around obesity.

- Enhanced reimbursement for adequate number of visits for intensive behavioral counseling (ex. Nutrition counseling).
- If require increase in physical education or health education, need to develop a pipeline of qualified teachers.
- Targeting safe routes to schools funds to low-wealth areas.
- The health component of health education needs to be taught by trained health educators. Within schools, equal attention should be given to the Health Education component of Healthful Living Standard Course of Study (focus seems to be limited to physical activity and the school nutrition program (school lunches, access to vending machines, food as rewards).

The Health Education component of HLE should

1. Meet the objectives in the NC Standard Course of Study
2. Teach a skills approach to prevention of risks and
3. Be delivered by qualified teachers.

#### Tobacco

- Recommendations from Marcus Plescia's presentation (see pages 5 & 6)
- Include primary prevention. Schools should be implementing evidence-based programs in tobacco prevention (CDCs programs that work/research to classroom has a list of programs).

#### Secondary Prevention

- Recommendations from Carol Ford's presentation (see page 7)
- Do we need to have more PAs and nurse practitioners to expand the services available by physicians? (avg. physician visit allocates 7 minutes).
- Screening before going into middle school or high school. Tdap requirement provides an opportunity to do well child visits in middle school.
- Require insurance to pay for annual wellness visits for North Carolinians.