

Annual High-Quality Wellness Visits for Adolescents:

A Standard Whose Time Has Come

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Adolescence is often described as the period when people are in their best physical health. It is also a time of rapid change in physical, cognitive, emotional, and social development. As teens strive to define themselves in relation to the world, they are also faced with increasing responsibilities and independent decision making. Along the way, there are challenges as adolescents experiment and take risks as a part of their increasing independence.

Through recent brain-imaging studies, we know that brain development continues during adolescence and, specifically, that an area called the prefrontal cortex may not finish developing until an individual reaches their mid-twenties.¹ The prefrontal cortex is responsible for making decisions, paying attention, and controlling impulses; therefore, it is not surprising that the immaturity of this area of the brain in teens can result in poor decisions and risky behavior. The top three causes of death among North Carolina adolescents and young adults aged 10 to 24 years—accidental trauma, suicide, and homicide—are largely related to risk-taking behavior and mainly preventable.² In addition, many decisions that adolescents must make, including those about sexual behavior, driving, substance use, nutrition, and exercise, may not have deadly consequences but can have long-lasting effects on one's future. Routine preventive health screening helps ensure that adolescents choose patterns of behavior and make decisions that enhance long-term health and permits early diagnosis and intervention when problems emerge.

Immunizations are another important determinant of future health during the teen years. Currently, immunizations recommended for adolescents include tetanus diphtheria toxoids and acellular pertussis vaccine (ie, Tdap), meningococcal conjugate vaccine (ie, MCV4), human papillomavirus vaccines, seasonal influenza vaccine, H1N1 influenza vaccine, and any others missed during childhood.³

Although any interaction with a health care practitioner is an opportunity for administering a vaccine, most of the vaccines listed above are provided during an adolescent's routine preventive screening visit.

Despite the clear need for routine preventive health screening among adolescents, only 64.1% of North Carolina high school students reported that they saw a physician or

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nurse during the past 12 months for a wellness check-up or physical examination when they were not sick or injured.^{4p89} Perhaps this statistic will improve after a policy change by the North Carolina Division of Medical Assistance (DMA) that took effect July 1, 2009, and recommends an annual wellness visit for all persons aged 2 to 20 years.^{5p13} In keeping with current national standards and guidelines, the North Carolina Institute of Medicine Task Force on Adolescent Health recommends that Medicaid and other insurers provide and/or improve coverage for annual high-quality wellness visits among persons 20 years of age or younger.^{6p75}

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Although an annual visit is now recommended, a consensus policy defining the quality components of the Adolescent Health Check Screening Assessment remains pending at the time of writing but has strong support from the DMA and from health care professionals who treat adolescents. The policy was developed by the North Carolina Division of Public Health and the DMA in collaboration with content experts and clinical reviewers broadly representative of the private and public sectors. The policy was approved by the DMA's Physician Advisory Group and made available for public comment, and a final draft has been prepared. The North Carolina Department of Health and Human Services is considering the fiscal impact of and publication timing for this policy.

The consensus policy is based on evidence-informed and, when possible, evidence-based guidelines. These include the 2008 Bright Futures guidelines from the American Academy of Pediatrics⁷ and recommendations from the Centers for Disease Control and Prevention (CDC), the US Preventive Services Task Force (USPSTF), and the Advisory Committee for Immunization Practices (ACIP). The policy also provides links to tools and resources that support the implementation of these guidelines.

The proposed package of services recommends an annual preventive health screening for all adolescents. The specific elements vary on the basis of risk-assessment findings, but an Adolescent Health Check Screening Assessment would include, at minimum, the following components: a comprehensive health history, measurement of blood pressure and anthropometric characteristics, visual and hearing risk assessment and screening (as clinically indicated), dental screening, laboratory testing (as clinically indicated), a nutrition assessment, developmentally appropriate psychosocial/behavioral and alcohol/drug use assessments, a comprehensive physical assessment, immunizations (as clinically indicated by ACIP guidelines), anticipatory guid-

ance, and follow-up visits and/or referrals (as indicated, including transition to adult care). Each component is defined specifically for adolescents, based on evidence-informed or evidence-based practice.

An Extended Adolescent Health Check Screening Assessment is appropriate for and applicable only to female adolescents receiving preventive health screening that has a family-planning component. This assessment includes all of the components of the Adolescent Health Check Screening Assessment, as well as enhanced anticipatory guidance related to contraceptive options and their efficacy and risks; cervical dysplasia screening, as clinically indicated for immunocompromised persons; and a bimanual pelvic examination, as appropriate.

Several components of the Adolescent Health Check Screening Assessment are endorsed by multiple national organizations and agencies and are of critical focus for adolescents.^{6pp70-71} One component is a comprehensive health history and physical assessment, including measurement of blood pressure and anthropometric characteristics (eg, height, weight, and body mass index).

A second component consists of laboratory testing, most importantly for sexually transmitted infections and diseases, including chlamydial infection, gonorrhea, human immunodeficiency virus infection, and syphilis, in accordance with CDC and USPSTF recommendations.

A third component is a health-risk screening tool for adolescents, such as Bright Futures,^a HEADSSS,^b or the American Medical Association's Guidelines for Adolescent Preventive Services,^c that gathers information in several priority areas, focusing on assets (ie, strengths) and areas of concern for youths and their parents (Table 1).⁷ Of note, further screening is recommended for behavioral/mental health and substance use issues, using evidence-based tools such as the Pediatric Symptom Checklist,^d the Strengths and

Table 1.
Priority Areas for an Adolescent Health-Risk Screening Tool

Priority Area	Characteristics
Physical growth and development	Body image, diet, weight, physical activity, sexuality
Academic competence	School attendance, attitude, performance
Social competence	Relationships with family and friends and involvement in school and the community
Emotional well-being	Self-esteem, coping skills, adult and peer support systems, responsibility, independent decision making
Risk reduction	Tobacco, alcohol, and drug use; avoidance of pregnancy and sexually transmitted disease
Violence and injury prevention	Motor vehicle safety, weapon use, physical confrontation

a. Available at: http://brightfutures.aap.org/tool_and_resource_kit.html.

b. Available at: <http://www.health.state.mn.us/youth/providers/headsslong.html>.

c. Available at: <http://www.ama-assn.org/ama/pub/physician-resources/public-health/promoting-healthy-lifestyles/adolescent-health.shtml>.

Difficulties Questionnaire,^e the Patient Health Questionnaire Modified for Teens (PHQ-9, Modified; this is a slightly reformatted tool that adapts the Patient Health Questionnaire-Adolescent [PHQ-A] to facilitate ease of use in a practice setting),^f the BDI-FastScreen for Medical Patients,^g and the CRAFFT questions.^h In March 2009, the USPSTF gave a grade B recommendation for “screening of adolescents (12-18 years of age) for major depressive disorder when systems are in place to ensure accurate diagnosis, psychotherapy (cognitive-behavioral or interpersonal), and follow-up.”⁸

A fourth component involves administration of vaccines recommended by the ACIP.³

A fifth component consists of developmentally appropriate anticipatory guidance tailored to the questions, issues, and/or concerns of each adolescent and their family. Priority areas for the series of annual visits that occur during early, middle, and late adolescence are summarized in Table 1 and focus on the child's medical history and findings from health-risk screening.⁷

Widespread adoption of annual wellness visits for adolescents that meet quality-of-care guidelines will be challenging to achieve. Clinician capacity to meet the increased demand for adolescent health checks is a concern, as is clinician efficacy and efficiency in treating adolescents, particularly with respect to providing comprehensive health-risk screening, behavioral health assessments and interventions, clinically effective family-planning interventions, sexually transmitted infection and disease screening, and gynecologic examinations. There will also need to be additional outreach to adolescents and their families to increase awareness of the need for yearly health checks. Finally, progress toward increasing the percentage of adolescents who receive annual health checks and the amount of feedback received about the quality and content of these checks will need to be monitored.

Several agencies and organizations may be enlisted to assist with implementation and to provide technical assistance to practices and health care professionals. The North Carolina Institute of Medicine Task Force of Adolescent Health recommends that Community Care of North Carolina, the North Carolina Area Health Education Centers, the North Carolina Division of Public Health, professional societies, and content experts from North Carolina's academic centers pilot tools and strategies to help primary care professionals deliver these high-quality health checks to adolescents. Strategies include providing training and other educational opportunities related to the components of the Adolescent Health Check Screening Assessment, as well as developing and implementing a model for improving the

quality of health care provided to adolescents.^{6p75}

The Task Force also recommends that North Carolina's philanthropic foundations support this effort. Initial training efforts for health care professionals are ongoing and in development. For example, training sessions on high-quality preventive health screening for adolescents have been included in the annual meetings for the North Carolina Pediatric Society, the North Carolina Academy of Family Physicians, and the North Carolina School Community Health Alliance. Training webinars have also been developed and will be offered once the proposed policy on the Adolescent Health Check Screening Assessment is published. Additional elements of support include algorithms (Gerri Mattson, unpublished findings) and tool kitsⁱ that have been developed to assist health care professionals with prompts for risk assessments and next steps.

Strategies for outreach and for increasing clinician capacity will need to be developed. Community Care of North Carolina case managers and Health Check coordinators, who work directly with Medicaid recipients, may assist practices in communicating with patients about the need for annual visits. Outreach efforts will be supported by automated submission of reminder letters to patients. School-based health centers also have a critical role to play in reaching adolescents and increasing clinician capacity.

Use and quality will need to be monitored. There are existing models in the Medicaid program for data measurement. For example, national Healthcare Effectiveness Data and Information Set indicators measure the number and percentage of enrollees, stratified by payer type and enrollee age, who have had annual wellness visits.⁹ The North Carolina Medicaid program reports these values and posts them on their Web site¹⁰; however, practices and health care professionals may not be aware of statewide results. Community Care of North Carolina has recently begun tracking data on preventive measures, such as the number of adolescents who receive health checks yearly. These data will be reported at the practice and patient levels so that interventions can be targeted to patients and practices to improve results.

Annual high-quality wellness visits for adolescents provide a tremendous opportunity to impact the lifelong health trajectories of North Carolina's population. Passage of a policy that defines high-quality Adolescent Health Check Screening Assessments is an important step toward this goal. To maximize this impact, these preventive visits should be accessible to all adolescents regardless of their source of insurance coverage. **NCMJ**

d. Available at: http://www.brightfutures.org/mentalhealth/pdf/professionals/ped_sympton_chklst.pdf.

e. Available at: <http://www.sdqinfo.org>.

f. Available at: <http://www.teenscreen.org/programs/primary-care/sign-up-for-free-materials>.

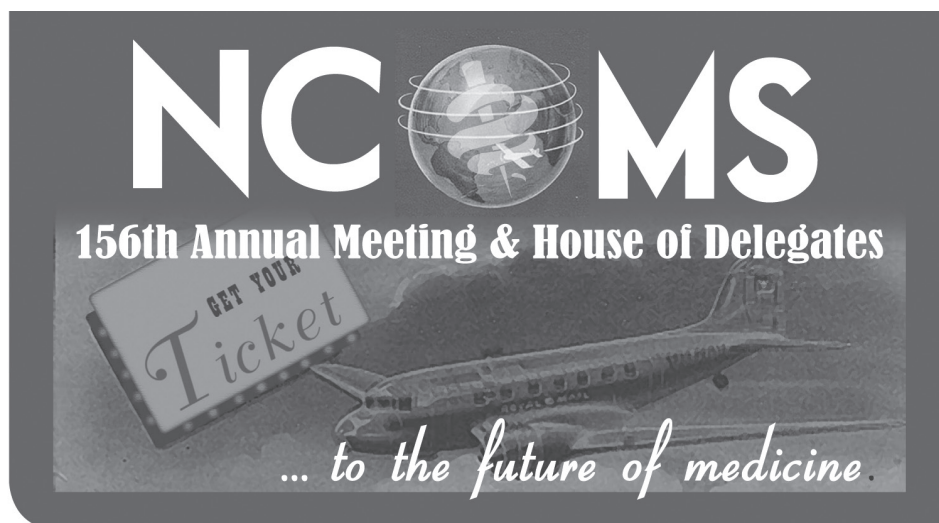
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