# **Health Care Needs of the Adolescent**

American College of Physicians\*

As adolescence begins, so too starts a new level of tremendous growth and rapid change—physical, psychological, and social development that marks the transition from childhood to adulthood. Providing health care to adolescents presents a dual challenge: the treatment of immediate health problems, and the opportunity, through health promotion and disease prevention, to influence health habits, lifestyle choices, and health status in adulthood, because health behaviors originating in adolescence may well have long-term health consequences.

Perhaps the first requirement for any physician who undertakes to treat adolescents is a sensitivity to the enormous physical and psychological changes that occur during the teenage years. In addition, specific problems facing significant numbers of this country's youths include alcohol and drug abuse, tobacco use, depression and suicide, homicide and other violent behavior, accidents as a result of risk-taking behaviors, eating disorders, physical and sexual abuse, pregnancy, and sexually transmitted diseases, including the acquired immunodeficiency syndrome (AIDS). Physicians have not traditionally been attentive to these problems or to the more general developmental challenges faced during adolescence. In recent years there has been growing recognition of the deficits in the training and skill of primary care physicians concerning the special health care needs of adolescents. Not enough has been done, however, to correct these deficits.

Some physicians have identified insufficient training, the time commitment needed to manage adolescent problems, and limited financial reimbursement for adolescent care, in that order, as the main barriers to managing adolescent health needs (1). Those reasons, or the discomfort some physicians have in dealing with problems of special relevance to adolescents, should not reduce access to medical care for members of this group. All adolescents, including those who may not visit a physician's office because of poverty, lack of health insurance or other reasons, need comprehensive, integrated, quality medical care.

## Position 1

Adolescents, as a group, appear to be medically underserved. All adolescents, including those who may not visit a physician's office because of poverty, lack of health insurance, or other reasons, need comprehensive, quality health care. Internists need better training and more involvement in the care of adolescents. Adolescent medicine should be a greater component of medical school education, residency training, and continuing medical education.

#### Rationale

Patients under 15 years of age account for about 2.9% of the practice of internists, whereas those 15 to 24 years of age make up about 11.5% of the practice (2). It has been suggested that only a fraction of youths who have specific health care needs, especially concerning emotional problems, sexuality and pregnancy, and substance abuse-the "new" morbidities-are being seen by physicians (3). As for adolescents with chronic illness or disease, the problems are twofold: those resulting from the disease itself and those specific to the patient's current stage of development. Although available statistics do not specifically separate out adolescents, one estimate is that approximately 10% of Americans under 18 years of age have a physical handicap or chronic disease (4). Other research on individuals under 20 years of age with chronic conditions suggests a prevalence rate of between 10% and 20% in the United States and Great Britain (5). Primary care physicians should meet the unaddressed general health care needs of these patients, be able to monitor growth and development during adolescence, and coordinate specialist care when necessary (4, 5).

The health needs of adolescents often are overlooked because childhood diseases are no longer a significant threat and the major health problems of adulthood generally have not yet developed (6). In 1978, the American Academy of Pediatrics recommended a more active role for pediatricians in providing adolescent health care, having found that the health care needs of adolescents were being insufficiently met (7). Similar statements have been made about other primary care specialties, including internal medicine (6).

In a recent survey in which 351 internists, family practitioners, and pediatricians assessed their skill in 19 areas of adolescent health care including growth and development problems, eating disorders, sports-related injuries, sexually transmitted diseases, menstrual disorders, birth control and family planning,

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and suicide risk assessment, approximately 25% of the physicians reported insufficient training in all 19 categories. Seventy-five percent of the internists reported insufficient training in all 19 areas. The physicians did not indicate that they had negative feelings about working with adolescents. However, despite the acknowledged deficiencies, few of the physicians surveyed indicated a desire to improve their skills (1).

Among pediatric and medical residents surveyed to determine the importance they assign to achieving skill in 30 tasks associated with adolescent health care, pediatric residents consistently gave greater weight to tasks in the history, physical examination, and diagnostic categories than did medical residents. Both groups considered tasks in treatment and counseling important. In assessing their levels of skill, medical residents reported they felt less skilled than pediatric residents in all tasks in the history, physical examination, and diagnostic categories. Residents considered themselves equally skilled in the tasks included in the treatment and counseling categories. However, while recognizing inadequacies in their training, both the pediatric and medical residents surveyed planned to care for adolescent patients (8).

Although the American Academy of Pediatrics has redefined the age range of pediatric practice to include patients up to 21 years of age, 60% of pediatricians in one survey used younger age cutoffs (ranging from 12 to 21 years of age but often set at 16 or 18 years of age) to limit the number of adolescents in their practices (9). The pediatricians cited insufficient training in adolescent health care, the large amounts of time often required to manage adolescent problems, and financial considerations (adolescent care is cognitive and non-procedural) as their reasons for using an age cutoff policy. Other reasons mentioned by the pediatricians were pre-established policies toward adolescents (in group-practice settings) and a sense of discomfort in working with adolescents. Many pediatricians thought teenagers were uncomfortable in the pediatric setting and that some adolescents were experiencing problems that warranted transition to adult care by another physician (7).

Whatever the reasons, it seems clear that many primary care physicians will be unprepared to effectively provide for the health care needs of adolescent patients until their training and skill levels in adolescent medicine are improved. Adolescent medicine should be a greater component of medical education and primary care residency training programs. Training programs that include ambulatory care settings can assist in giving residents more exposure to adolescent medicine. Continuing medical education programs should be available and include such topics as general comprehensive medical care, counseling, health promotion, substance abuse, eating disorders, sexuality, contraception, sexually transmitted diseases, pregnancy, sports medicine, learning disorders, and medical-legal issues relating to the health care of minors. Practicing physicians are encouraged to attend such programs and to work with their colleagues to promote awareness of adolescent issues in practice.

#### Position 2

Health promotion and disease prevention should be a major focus of adolescent health care, because lifestyle choices and health habits present in adolescence can shape behaviors and health status in adulthood. The internist can play a particularly important role in the health care-related decisions made by adolescents by providing counseling and other interventions regarding the wide range of health issues faced by adolescents. School-based adolescent health education and health care programs and school-related clinics, with the participation of physicians and other health care professionals, can also help meet some of the health care needs of adolescents by providing health services and education.

#### Rationale

The integration of preventive health measures and counseling into medical care is especially important in the care of adolescents. Health screening and counseling can uncover immediate health risks, as well as help the adolescent begin to develop positive health habits that can continue into adulthood. Appendices 1 and 2 provide information on health assessment and maintenance for the adolescent patient as well as important elements to be included in obtaining the adolescent patient's history.

Lifetime preparation in health promotion and disease prevention should begin early. Adolescence is a critical time, as individuals start to take responsibility for their health and their health care decisions. For example, autopsy studies have shown that atherosclerosis begins in childhood and may accelerate during the teen years (10). Although the risk factors for cardiovascular disease are complex, most of the established risk factors such as positive family history, hypertension, elevated serum cholesterol, obesity, diabetes mellitus, and smoking can be identified during adolescence. Emotional stress and lack of exercise may also increase risk (10). Screening for these risk factors is not difficult and the benefits from early detection and preventive measures may be significant in later life (10).

Preventive health care requires education and counseling focused on several major areas of substantial risk. The recent Johnston survey (11) of substance use in high schools found that 51% of seniors have used marijuana. The numbers for cigarette smoking and alcohol use were 68% and 91% respectively, and 30% and 65% reported use within the past month. Although most drug use starts during the last 3 years of high school, marijuana and alcohol use often begin before the tenth grade (10). Motor vehicle accidents are a particular concern; internists should encourage the regular use of seatbelts and warn against the use of alcohol or drugs especially while driving.

Every year, approximately one million teenage girls become pregnant. A recent survey showed that adolescents waited, on average, 1 year after becoming sexually active before they sought a prescription method of contraception. Many girls made their first visit for birth control because they believed they were already pregnant (10). Adolescents need earlier and better counseling regarding sexuality, the use of nonprescription and prescription birth control methods, and the option of postponing sexual activities.

The acquired immunodeficiency syndrome is an adolescent health issue that cannot be ignored. The best weapon against the spread of AIDS is public education. Education on AIDS for the adolescent, especially regarding how the virus is transmitted (and how it is not transmitted) is particularly important because certain behaviors may place adolescents at increased risk for human immunodeficiency virus (HIV) infection. Teaching about protection against exposure to the virus should be done early in life, as adolescents begin to make choices about sexual activity and drug use.

Today, cigarette smoking is more prevalent among female adolescents than male adolescents. In addition to the acute problems smoking can cause, such as recurrent upper respiratory infections, decreased exercise tolerance, shortness of breath, and chronic cough, adolescents need to be made fully aware of the lifelong implications of smoking (10). The use of smokeless tobacco in the form of chewing tobacco and snuff is also becoming commoner among teenagers. It is estimated that between 10% and 20% of high school students use smokeless tobacco, which has been associated with oral cancer, leukoplakia, and tooth loss (12).

Although it has been said that many primary care physicians do not think highly of sports preparticipation examinations, and the medical value of such examinations has been questioned, preparticipation examinations can assist in detecting problems that could predispose the adolescent athlete to injury or death (13). Such an examination may also bring an adolescent to the physician's office who might not otherwise have contact with a physician. In addition to sports-related counseling about anabolic steroid abuse, extreme dietary practices, or other behaviors some adolescents might feel make them better athletes, this contact can also be an opportunity for general preventive health care and counseling, or may intiate a follow-up visit.

School-based programs and school-related clinics, with the participation of physicians and other health care professionals, can help meet some of the health care needs of adolescents by providing health services and education. School-related clinics, initially established in or near schools to deal with teen pregnancy and related problems, have gradually evolved and now provide a wide range of other health services. Schools themselves often give screening tests for vision, hearing and dental problems, and scoliosis. They also often provide vaccinations, sports participation evaluations, and health education. Schools and college health services have a role to play in ensuring, with primary care physicians, that adolescents receive comprehensive health care. However, school programs cannot help teenagers who drop out of school. Attempts to reach those outside of the school setting through television, other media and community group programs, as well as through innovations in other methods of health promotion, are needed.

#### Position 3

Caring for the adolescent patient typically occurs in the context of his or her family. It requires an understanding of the family dynamics of which the patient is a part. Family involvement, however, must be balanced with confidentiality needs and the right of the adolescent to exercise autonomy and self-determination in health care decisions and in his or her relationships with health care providers. Legislatures and courts vary in the amount of decision making freedom (without parental consent or knowledge) they permit minors. Internists should be aware of the relevant laws in their state.

#### Rationale

The physician must serve as the adolescent patient's advocate. The physician who cares for the adolescent must also be cognizant of family dynamics, including the relationship the family might have to a current or potential health problem (14). For example, the single best predictor of adolescent drinking may be parental attitudes and behavior regarding alcohol. Problem drinking by adolescents appears to occur most often when both parents are heavy drinkers or strict abstainers (15). Alternatively, a family member may be the cause of a problem, as in the case of a physically or sexually abused adolescent. Families can contribute to problems; families can also help in the detection, management, or prevention of some problems and should be included in counseling efforts with the adolescent or counseled separately by the physician, as appropri-

Adolescents should be encouraged to assume an active role in decision making about their health, marking an end to the passive role they have played as children. Physicians should be knowledgeable about the laws of their state regarding the rights of adolescent patients to confidentiality and the adolescent's legal ability to consent to treatment. Courts and legislatures are allowing minors (individuals under 18 years of age), in many circumstances, the ability to make health care decisions where they have not been able to do so in the past (16).

Often, states have minor treatment statutes which specify an age, usually from 12 to 16 years of age, at which a minor can be considered completely independent for health care decision making purposes. Evaluation and treatment may be provided to these minors as though they were adults. States that do not have minor treatment statutes regarding general medical treatment do have statutes that permit treatment of any minor for sexually transmitted diseases or substance abuse without parental knowledge or consent (16).

In the absence of statutes, courts have constructed mature minor rules that allow teenagers 14 or 15 years of age or older to validly consent to treatment if the teenager understands the nature of the proposed treatment and its risks and if the physician believes that the teenager can give the same degree of informed consent as an adult patient. The treatment in these cases cannot involve very serious risks. Whether or not it is reasonable to permit an individual minor to make a particular decision is a determination that must take into account the age and maturity of the patient, the nature of the illness, and the potential risks of the treatment (16).

The older concept of the emancipated minor, one who is living on his or her own and is not subject to parental control, has evolved today to include college students (even when parents remain financially responsible), married minors or those who have been married, minors who are parents, or a minor who is pregnant. No parental permission is required for the evaluation and treatment of an emancipated minor (16).

Recent court decisions suggest that an adolescent who requests contraception has a right to have it if it is being sought at a federally funded facility. A private physician has the right to refuse to provide it, but may have an obligation to refer a regular patient to another physician or clinic. Regarding abortion, state statutes have been found constitutionally valid if they provide the adolescent access to a judge if she chooses not to involve her family in the decision. The judge's role is to determine whether the adolescent is mature enough to decide for herself whether or not to have an abortion (16). Physicians should consult applicable law in their state.

#### Position 4

The American College of Physicians will work with other interested organizations to identify issues and to provide leadership in practice, education, and research in adolescent health care.

#### Rationale

Adolescent medicine is a relatively new discipline. Much is starting to happen in this area; many medical professional organizations and educators are beginning to set priorities for adolescent health care. The American College of Physicians is participating in the National Coalition on Adolescent Health established by the American Medical Association to bring together medical professional organizations and other health care professionals and groups with an interest in adolescent health to identify and address adolescent health care issues. One significant aspect of this new initiative has been the formation of a task force on the adolescent and AIDS.

Recently, the Accreditation Council on Graduate Medical Education in its essentials for an approved residency in internal medicine recommended that adolescent medicine be included in the education of residents (17). Other organizations have similar goals. The College has provided continuing medical education programs on adolescent health at its Annual Ses-

sions and urges other organizations to provide continuing medical education in this area as well. These initial efforts are encouraging and should be expanded, as internists and other primary care physicians set out to make adolescent health care a new priority.

# Appendix 1: The Adolescent Patient: Health Assessment and Maintenance

Health assessment and screening procedures should include a complete medical history, physical examination, and laboratory testing as necessary. A carefully taken family history is needed to identify patients at high risk for cardiovascular disease, diabetes, and other problems. Appendix 2 provides useful elements that might be included in the adolescent patient's family and medical history.

It is helpful to obtain a separate history from the patient and from the parents, so that the information gathered is complete and uninhibited. However, it may also be valuable for a parent to be present for part of the time while the physician is obtaining the history from the adolescent so that the physician can assess the interaction between parent and teenager. Questionnaires can be used to gather information from the adolescent and his or her parents. Questionnaires may save time and serve as an ice breaker, facilitating the adolescent's willingness to discuss delicate issues more openly (10). The physical examination with the adolescent alone, in particular, can serve as a good opportunity for the exchange of information about sexual activity, drug abuse, tobacco use, and parental relationships (14). A later private conference with a parent might raise suspicions; the adolescent's fears regarding confidentiality can be allayed by establishing with the young person what information will not be discussed with the parent without the patient's consent.

The adolescent's medical history should include a careful assessment of psychosocial and sexual development, and a physical examination of the patient's stage of physical growth and development (18-20). The psychosocial assessment should at least include information regarding the adolescent's function in the home, school, workplace, and peer group, as well as an estimate of his or her progress in accomplishing the psychosocial and sexual developmental tasks of adolescence (18, 19) and his or her risk-taking behavior (21).

Marks and Fisher (10) suggest that information be elicited from the adolescent patient through questions that are nonjudgmental and empathetic. Questions about the adolescent's use of drugs or alcohol or about sexual activity may be broached more easily by first discussing peer group activities; the patient's own experiences will often flow from that discussion. Even if all questions are not answered honestly on an initial visit, the physician will have shown an interest that may later lead to greater openness.

Adolescent patients should be specifically asked about sexual activity as well as the use of alcohol, cigarettes, and prescription and nonprescription drugs, both frequency of use and amounts. Internists should be capable of assessing whether a particular patient is at risk for substance abuse and be able to provide counseling to the adolescent and his or her family. A history that includes inquiries about drug use and sexual practices may reveal the need to further investigate the potential of AIDS or HIV infection.

Reproductive history including diethylstilbestrol (DES) exposure in utero (although this becomes a less critical issue as more of the adolescents seen today were born after the use of DES was discontinued in 1971 [10]), menarche, last date of menstrual period, and pregnancies, should be sought for adolescent girls. Sexually active adolescents should be seen for history, contraceptive update, and counseling and education on the prevention and treatment of sexually transmitted diseases, including AIDS.

A complete physical examination should be done at least once during adolescence. Self-examination instructions can

be given during the breast and testicular components of the examination; however, some have questioned whether selfexaminations should be a universally applied recommendation (22, 23). Studies on the value of such practices are being conducted (10). Blood pressure should be measured at every examination, as should height and weight, in part because of the possibility of eating disorders. Use of a sexual maturity scale such as that developed by Tanner (10, 14, 18-20) is another way to monitor adolescent development. Diet should be discussed, both to elicit information that signals a possible eating disorder, and to offer suggestions that encourage good dietary habits. Exercise should also be discussed. Current estimates suggest that 5% to 25% of adolescents are overweight (17). Visual acuity should be checked at least once during adolescence, and auditory screening should be done at least once for high-risk groups, which can include teens with school or communications problems or those involved in activities with high noise exposure. Primary care physicians should be aware of the need for, and encourage, adequate dental care (10).

Laboratory screening must be individualized for particular patients. The following might be considered: cholesterol screening, urinalysis, Papanicolaou (Pap) smear for cervical cancer, and screening for sexually transmitted diseases, anemia, or sickle cell anemia. It is also important to ask about immunizations and the patient's history of childhood disease. In its Guide for Adult Immunization (1985), the American College of Physicians offers recommendations concerning the immunization of healthy 18- to 24-year-olds with tetanus and diphtheria toxoids, and measles, mumps, rubella, influenza, and hepatitis B vaccines. Physicians should be alert for behaviors that put persons at risk. For example, patients with a history of repeated episodes of sexually transmitted diseases, intravenous drug users, and homosexually active young men, are potential candidates for the hepatitis B virus vaccine (24).

Physicians should encourage adolescents to keep their own immunization record. Often adults have received immunizations from different providers in several geographic areas-if they have not kept their own record, obtaining an accurate history can be difficult. (A prototype immunization record that can be duplicated and given to patients for their use is available in the College's Guide for Adult Immunization.) As a rule of thumb for physicians, it is safest to assume a patient has not been immunized if there is doubt about previous immunizations; the decision to immunize should then be based on current risk (24). The College will publish a second edition of the Guide in 1989 with expanded guidelines that include adolescents and young adults 12 to 24 years of age.

Health maintenance should also include early detection of such problems as scoliosis, slipped capital femoral epiphysis, hyperlipidemia, hypertension, and Osgood-Schlatter disease, which may have a significant impact on the physical health and psychosocial development of adolescents. For example, scoliosis may progress at a rate of one degree per month during an adolescent's growth spurt year (peak height velocity year). This deformity may diminish both the short- and long-term physical health of the adolescent as well as his or her psychosocial development (17).

# Appendix 2: Potential Elements of the Family and Medical History of an Adolescent Patient

Family history of hypertension, cardiovascular disease, diabetes or other medical problems

Diethylstilbestrol exposure in utero or illnesses or unusual factors during the mother's pregnancy or delivery

History of childhood diseases

History of immunization

Known medical problems and past hospitalizations Significant accidents and unintentional injuries

Family relationships

Peer relationships

Mental well-being School or work performance Environmental health issues

Hobbies

Tobacco use

Drug use

Alcohol use

Driving habits (use of seatbelts, knowledge of risks of drug or alcohol use and driving)

Reproductive history including menarche, date of last menstrual period, and any pregnancies for young women

Sexual activity, contraceptive use, and sexually transmitted discases

Knowledge of AIDS

Dental and eve examinations

Dietary habits and weight patterns, meals and snacks for a typical day

Exercise patterns

For further information see: Marks A, Fisher M. Health assessment and screening during adolescence. Pediatrics. 1987;80(suppl):135-58.

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## Appendix 3: Resources and Supplemental Reading

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