

(e.g., the House Select Committee on Children, Youth, and Families) or groups (the Senate Children's Caucus) have responsibility for oversight (House Select Committee on Children, Youth, and Families) or information dissemination (Senate Children's Caucus), but have no authorization or appropriation jurisdiction. Thus, there is fragmentation in the U.S. Congress that it might be helpful to reduce.

Major Policy Options

OTA's analysis of U.S. adolescents' health needs suggest numerous opportunities for action at many levels: Federal, State, and local governments and agencies; the private for-profit and not-for-profit sectors; parents; and adolescents themselves. OTA's analysis also suggests that a more sympathetic, supportive approach to adolescents by policymakers seems warranted. The orientation to adolescents taken during any action is as important as whether an action is taken or its intensity. The new, more supportive approach that OTA's analysis suggests is warranted is discussed below.

Also discussed are three major policy options for Congress that OTA's analysis suggests would both demonstrate the Nation's commitment to a new approach to adolescent health issues and provide tangible, appreciable assistance to adolescents with health needs:

1. taking steps to improve adolescents' access to appropriate health and related services;
2. taking steps to restructure and invigorate the Federal Government's efforts to improve adolescents' health; and
3. supporting efforts to improve adolescents' environments (see table 4).⁵⁶

Each of these major options involves numerous potential strategies, which are presented in detail below. The three major options and strategies cut across the areas analyzed in this Report. Some of them would benefit certain groups of adolescents, or address specific problems, more than others.

The complexity of adolescent health issues, the diversity of the U.S. adolescent population, the structure of the existing health and related services

Table 4—Summary of Three Major Policy Options Related to U.S. Adolescents' Health^a

| | |
|------------------------|---|
| Major Option 1: | Congress could take steps to improve adolescents' access to appropriate health and related services. |
| Major Option 2: | Congress could take steps to restructure and invigorate the Federal Government's efforts to improve adolescents' health. |
| Major Option 3: | Congress could support efforts to improve adolescents' environments. |

^aPossible strategies for implementing these options are presented in table 5 (Major Option 1), table 6 (Major Option 2), and table 8 (Major Option 3).

SOURCE: Office of Technology Assessment, 1991.

system generally,⁵⁷ and political and value considerations⁵⁸ all guarantee that there is no one simple approach to achieving any of the goals reflected in the major policy options. With each major option, therefore, OTA presents a range of potential strategies for accomplishing the goal. (See tables 5, 6, and 8 for summaries of the strategies associated with each major option.)

A New Approach

Currently, adolescent health is often viewed in a problem-specific manner, with the emphasis on a relatively few highly visible issues. Further, as is consistent with the current national approach to health problems, much of the burden for improvements in health is placed on the individual adolescent (201,260). If only adolescents would stop taking drugs, stop having sex, and stay in school, the argument goes, all would be right in adolescent health. Parents, schools, health care systems, individual health care providers, youth services workers, and adolescents themselves are generally given little guidance, and few resources, to enable them to be supportive of adolescents.

How do adolescents feel about adolescent health? Part of the problem in answering this question is that—despite the fact that they are held largely responsible for their health problems—there is little systematic evidence on the adolescent perspective on health issues. The evidence that is available suggests that adolescents believe that there is considerable social ambivalence when it comes to adolescent behavior such as sexuality, alcohol, tobacco, and drug use, and other risk-taking behav-

⁵⁶In addition to these major policy options, problem- or system-specific policy options are presented below in conjunction with findings from specific chapters in this Report (see "Specific Findings and Policy Options").

⁵⁷See section below entitled "Barriers and Opportunities to Change."

⁵⁸See below, "Barriers and Opportunities to Change."

iors (e.g., dangerous driving practices) (235),⁵⁹ that many adults do not really care about them (209),⁶⁰ that health care providers do not discuss the issues of concern to them,⁶¹ and that many adults seem only to see the negative when it comes to adolescents (88).

These findings on adolescents' views, scarce as they are, suggest the existence of a wide gulf between adolescents and adults. Adult observers have also noted that public attitudes toward adolescents are, if not negative, then largely unsympathetic (15,190). As noted by a work group of the 1986 DHHS-sponsored conference "Health Futures of Youth," "most prominent among obstacles to the creation and continuation of integrated community health programs for youth is that the consumers of these services are youth" (15). An assessment of the reasons for such unsympathetic attitudes is beyond the scope of this Report,⁶² but the attitudes can be characterized as consisting of notions that adolescence is merely a transitional stage, rather than a period of life to be valued in its own terms (93), and that adolescence is inherently a problem period about which little can be done (70).

Adolescence is undoubtedly a difficult period for many adults, especially parents (130). Both adolescents and adults may be unsure about how to deal with shifts in the balance of power that begin to occur during adolescence (130). The type of communication that adults have with adolescents, and either the restrictions they place on them or the detachment they assume, may be generated by caring, but may not be perceived as benevolent by adolescents.

OTA concludes, therefore, that, in addition to supporting concrete improvements in a broad range of health and related services and policies, Federal and other policy makers should follow a basic guiding principle of providing a prolonged protective and appropriately supportive environment for adolescents. Implementation of this basic guiding principle may be difficult, however, and attempts will undoubtedly generate disagreement among policymakers. One model that could be followed is that of authoritative parenting. Authoritative parenting consists of a combination of open communication and give-and-take between parent and adolescent, in an environment of consistent support and firm enforcement of unambiguous rules.⁶³

⁵⁹ For example, OTA's Youth Advisory Panel pointed out that while they are formally instructed to abstain from sex, drinking, and drugs, they are bombarded daily with contradictory messages from the adult-controlled media.

⁶⁰ The University of Minnesota's survey of 37,000 7th- through 12th-grade public school students in 86 Minnesota school districts found that only about 45 percent of adolescents felt that *church leaders* cared about them, and that only about 41 percent of adolescents felt that "schoolpeople" cared about them (209). Perceptions that church leaders cared about them declined throughout adolescence, from approximately 50 percent of 7th graders believing that church leaders cared, to between 27 percent (metropolitan area females) and 45 percent (nonmetropolitan-area males) of 12th graders holding this belief (209). (Responses by grade were not reported for other categories of adults.) Overall, however, about 70 percent of adolescents felt that "adults" cared about them, and almost 90 percent felt that *parents* cared about them (209). However, only 65 percent of responding adolescents reported that they felt that their family cares about their feelings, 50 percent that their families paid a lot of attention to them, 45 percent that the people in their families understood them, and 45 percent that they had fun with their families (209). Between 13 percent (males) and 18 percent (females) felt that they wanted to leave home quite a bit or very much (209).

⁶¹ See ch. 6, "Chronic Physical Illnesses: Prevention and Services, in Vol. II.

⁶² Some negative attitudes toward adolescents are at least partially based in reality because some adolescents begin to engage in socially disapproved behaviors often more characteristic of adults (e.g., drug use, drunk driving, crime, out-of-wedlock pregnancy). However, because these behaviors are not normative, they may get more attention (e.g., in the media) than similar behaviors by adults. Acting on the availability heuristic (207), observers may tend to believe that all adolescents, not just those reported on, are engaging in problem behaviors. In addition, as a function of their developing cognitive abilities (see ch. 2, "What is Adolescent Health?" in Vol. II), adolescents typically begin to question and criticize tradition in ways that may be uncomfortable for many adults (7 1).

⁶³ As described by Baumrind, "Authoritative parents, by definition are not punitive or authoritarian. They may, however, embrace traditional values. Authoritative parents, in comparison to lenient parents, are more demanding and, in comparison to authoritarian-restrictive parents, are more responsive. Authoritative parents are demanding in that they guide their children's activities firmly and consistently and require them to contribute to family functioning by helping with household tasks. They willingly confront their children in order to obtain conformity, state their values clearly, and expect their children to respect their norms. Authoritative parents are responsive affectively in the sense of being loving, supportive, and committed: they are responsive cognitively in the sense of providing a stimulating and challenging environment. Authoritative parents characteristically maintain an appropriate ratio of children's autonomy to parental control at all ages. However, an appropriate ratio is weighted in the direction of control with young children and in the direction of autonomy in adolescence. Authoritative parents of adolescents focus on issues rather than personalities and roles, and they encourage their adolescents to voice their dissent and actively seek to share power as their children mature" (13).

In general, authoritative homes can be described as exhibiting a constellation of *warmth*, *democracy*, and *demandingness*. According to several comprehensive reviews of the literature on parenting practices and their outcomes, adolescents who grow up in authoritative homes score higher on indices of psychological development and mental health (including self-image, social integration, and ability to make independent decisions) than do adolescents from homes that are predominantly permissive, rejecting-neglecting, indifferent, or authoritarian (13,14,198). (*Authoritarian* (as opposed to *authoritative*) homes are those in which parents are harsh, rigid, and domineering, and exert rigid social controls.) For further discussion, see ch. 3, "Parents' and Families' Influences on Adolescent Health," in Vol. II.

However, even the execution of this model can obviously be open to some interpretation.

OTA believes, however, that this principle can be followed, though not without initial difficulty, from the highest levels of Federal coordination, through State, local, and school policy, to policies that provide parents of adolescents with guidance and time to spend with their adolescent children, to efforts that attempt to teach social competence to adolescents themselves. Adopting some or all of the strategies suggested in the remainder of this Report could also provide an indication that the Nation was becoming more supportive towards its adolescents.

Major Option 1; Congress Could Take Steps To Improve Adolescents' Access to Appropriate Health and Related Services

For a variety of reasons—adolescents' lack of financial or physical access, their need for confidential care and for providers who know how to work with adolescents, the types of health concerns experienced by adolescents (e.g., problems that may not be deemed clinically serious, problems that require intensive cognitive interventions, needs for preventive services), and adolescents' apparent lack of knowledge about gaining access to services—many American adolescents do not have effective access to care in the primary or specialty health services system or to related services.

Five general strategies Congress could pursue to improve adolescents' access to appropriate health and related services are listed in table 5 and discussed below. Each strategy would affect a somewhat different aspect of access, affect somewhat different numbers and groups of adolescents, and have different potential cost implications.*

Supporting the development of school-linked or community-based centers that offer adolescents comprehensive health and related services (e.g., care for acute physical illnesses, general medical exami-

nations in preparation for involvement in athletics, mental health counseling, laboratory tests, reproductive health care, family counseling, prescriptions, advocacy, and coordination of care; and, perhaps, educational services, vocational services, legal assistance, recreational opportunities, and child care⁶⁵) (Strategy 1-1) could potentially affect almost all adolescents.

Improving adolescents' financial access to health services (Strategy 1-2)---even if effected in the absence of comprehensive services---could touch the many adolescents without financial access to currently available health services (e.g., those adolescents with no health insurance; or with insurance that does not cover essential benefits (e.g., early intervention for family-related and other mental health problems)).

Improving adolescents' legal access to health services (Strategy 1-3) would affect access to health services for those adolescents who are on their own or who may be (or perceive themselves to be) in conflict with their parents on a particular health-related issue (e.g., sexuality counseling, need for contraception, mental health, substance abuse).

The fourth strategy-improving the quality of health care providers who work with adolescents (Strategy 1-4)---would affect both the accessibility and the appropriateness of care for almost all adolescents who come in contact with a health care provider, because many providers are not effective at identifying needs or coordinating needed care.⁶⁶

The fifth strategy to improve access-empowering adolescents to gain appropriate access to health services by providing adolescents with important information about available health services and by encouraging their participation in the design and management of health services for adolescents (Strategy 1-5)---would affect a broad range of adolescents, particularly those who do not yet know how to be, and whose parents are not able to guide

⁶⁴Note that the estimates of cost are limited to short-term (up-front) costs to the Federal Government and are estimated extremely roughly and on a relative basis (e.g., the cost of funding a group to devise a model statute that could provide more uniformity in consent and confidentiality requirements affecting adolescents would be of much lower cost than Federal continuation funding for comprehensive school-linked health centers). More refined cost estimates would depend on a wide range of factors to be decided upon should Congress decide to act upon any of the strategies specified below (e.g., for comprehensive service programs: the number of such programs funded, the number of adolescents expected to use the programs, the types of services provided, the types of health care professionals used to provide the services; the types of financing mechanisms employed; the relative contribution of Federal and local authorities). It was beyond the scope of the present Report to estimate such a wide range of potential costs.

⁶⁵Not all services are available at all centers. Referral and integration is an extremely important aspect of providing appropriate care for adolescents (15).

⁶⁶See ch. 15, "Major Issues Pertaining to the Delivery of Primary and Comprehensive Health Services to Adolescents," in Vol. III.

Table 5-Strategies for Major Option 1: Congress Could Take Steps To Improve Adolescents' Access to Appropriate Health and Related Services

| Strategy | Access issue addressed | | | | | Time for expected impact | Rough estimate of (direct) cost to Federal Government |
|--|------------------------|-------|-----------|---------------|-----------------|--------------------------|---|
| | Physical | Legal | Knowledge | Affordability | Approachability | | |
| Strategy 1-1: Congress could support the development of centers that provide comprehensive and accessible health and related services specifically for adolescents in schools and/or communities. | | | | | | | |
| 1-1a: Provide Federal seed money for the development of school-linked and other community-based centers that provide comprehensive health and related services for adolescents. | X | | X | | X | immediate and long term | Could be high |
| 1-1 b: Provide Federal continuation funding for already established school-linked and community-based centers that provide comprehensive services for adolescents. | | X | X | | X | Immediate and long term | Could be high |
| 1-1 c: Reduce existing barriers to the delivery of comprehensive services in adolescent-specific centers. | | | | | X | Near term; study needed | Medium |
| Strategy 1-2: Congress could take steps to improve adolescents' financial access to health services. | | | | | | | |
| 1-2a: Mandate an immediate expansion of Medicaid eligibility for adolescents. | | | | | | immediate | Depends on utilization |
| 1-2b: Mandate that employers provide health insurance for their currently uninsured workers and those workers' dependents. | | | | | | Immediate | None |
| 1-2c: Directly fund or provide incentives to States for outreach to increase adolescents' use of Medicaid benefits. | | | X | | | immediate | Medium |
| 1-2d: Discourage or prevent private insurers from implementing current plans to limit coverage of adolescent dependents. | | | | X | | immediate and long term | None |
| Strategy 1-3: Congress could take steps to improve adolescents' legal access to health services. | | | | | | | |
| 1-3a: Encourage the U.S. executive branch or a nongovernmental entity to develop a model State statute to enhance adolescents' legal access to health services. | | X | | | | Medium term | Low |
| 1-3b: Enact legislation that requires specific Federal or Federal/State programs to adopt particular substantive policies with respect to parental consent and notification. | | X | | | | Immediate | Low |
| 1-3c: Enact legislation conditioning States' receipt of Federal funds for specific purposes on the States' having particular substantive policies on parental consent and notification. | | X | | | | Medium term | Low |

Continued on next page

Table 5-Strategies for Major Option 1: Congress Could Take Steps To Improve Adolescents' Access to Appropriate Health and Related Services-Continued

| Strategy | Access issue addressed | | | | | Time for expected impact | Rough estimate of (direct) cost to Federal Government |
|--|------------------------|-------|-----------|---------------|-----------------|--------------------------------|---|
| | Physical | Legal | Knowledge | Affordability | Approachability | | |
| Strategy 1-4: Congress could increase support for training of health care providers who work with adolescents. | x | | | x | x | Immediate and long term | High |
| Strategy 1-5: Congress could take steps to empower adolescents to gain access to health services. | | | | | | | |
| 1-5a: Encourage efforts to educate adolescents, parents, health care providers, and others who may identify adolescent health problems and make referrals, about legal and other aspects of using health services. | | | <i>X</i> | | <i>X</i> | Immediate | Low |
| 1-5b: Provide incentives for or mandate adolescent participation in the design of programs and research that affect adolescents at the Federal, State, local, and private level. | | | | | <i>X</i> | Medium | Low |

SOURCE: Office of Technology Assessment, 1991.

them in how to be, informed consumers in the fragmented U.S. health care system. Strategies to empower adolescents would work only if services were available, of course.

Strategy I-I: Congress Could Support the Development of Centers That Provide Comprehensive and Accessible Health and Related Services Specifically for Adolescents in Schools and/or Communities

Recognition that many U.S. adolescents' needs for access to health and related services are not being met in the mainstream primary health care system has impelled a variety of groups and individuals to support the development of school-linked or community-based centers that offer comprehensive and accessible services designed specifically to meet adolescents' needs for physical accessibility, approachability, confidentiality, and low or no cost.⁶⁷ Most of these efforts are associated with schools (school-linked health centers), a few have been initiated by health care organizations (hospitals and health maintenance organizations), and apparently even fewer seem to be freestanding centers based in communities.⁶⁸

Existing ' 'comprehensive centers vary considerably in the extent to which they provide a full range of health and related services for adolescents. One group has recommended that school-linked health centers provide, at a minimum, general medical, family planning, mental health, and social services (15). In addition, that group recommended exploring methods to expand traditional health services to include legal assistance, vocational guidance, learning disabilities assessment and planning, nutrition counseling, prenatal care, drug abuse assessment and counseling, and recreational opportunities, either directly or through community linkages. Some school-linked health centers provide these and other ' 'expanded services (e.g., child



Photo credit: © Peter Byron, Mom's Plains, NJ

The defining feature of a comprehensive service center for adolescents is the extent to which the center attempts to be responsive to the specific needs of adolescents, for example, by having staff members who are knowledgeable about and caring toward adolescents.

care services and parenting education for adolescent parents),⁶⁹

In general, the types of services provided, and the structure of the service delivery system, seem to be determined by a combination of the needs of adolescents in a particular community,⁷⁰ funding

⁶⁷For further discussion, see ch. 15, 'Major Issues Pertaining to the Delivery of Primary and Comprehensive Health Services to Adolescents,' in Vol. III.

⁶⁸The precise number of comprehensive service centers designed specifically to serve the needs of adolescents is not known (see ch. 15, 'Major Issues Pertaining to the Delivery of Primary and Comprehensive Health Services to Adolescents,' in Vol. III). Strategy 2-4 (below) addresses data collection issues pertaining to health services for adolescents.

@or a discussion of services provided by existing school-linked health centers, see ch. 15, 'Major Issues Pertaining to the Delivery of primary and Comprehensive Health Services to Adolescents,' in Vol. III.

⁷⁰Both the Robert Wood Johnson Foundation-funded school-based clinics and the State of New Jersey-funded school-linked health centers required documentation of extensive community involvement in planning for centers before such centers could be funded (136).

and staffing limitations, and political considerations.⁷¹ Beyond the actual services provided, the defining feature of a comprehensive service center for adolescents is the extent to which the center attempts to enhance adolescents' access to health care through mechanisms that are not typically found in the mainstream health services system:⁷²

- free care or use of sliding fee scales⁷³;
- evening and weekend hours of operation⁷⁴;
- guaranteed confidentiality of services;
- employment of staff members who are committed to and enjoy helping adolescents; are knowledgeable about adolescent development, behavior, and health and social problems; and, optimally, come to see themselves as advocates for adolescents and actually serve as formal case managers to work together with individual adolescents to coordinate programs of care (321),

All of these mechanisms address access problems that affect adolescents particularly—for example, lack of money to pay for services or transportation, lack of convenient hours, concerns about confidentiality, and perceived lack of approachability of mainstream services.

Systematic evidence for the effectiveness of comprehensive service centers in terms of health *outcomes* for adolescents is sparse because few studies of such centers' effects on health outcomes have been conducted, and those that have been conducted have not been methodologically rigorous. Furthermore, a number of existing comprehensive centers have limitations related to insufficient funding, insufficient availability of providers, and a tendency to follow a "waiting model" of health care provision similar to that of the mainstream primary



Photo credit: © Randall Hagadom, Titusville, NJ

There is as yet little systematic evidence that school-linked or community-based comprehensive service centers for adolescents improve health outcomes, but there is clear evidence that such centers can improve adolescents' access to the health and related services that are likely to be needed by adolescents.

health care system.⁷⁵ Nonetheless, there is convincing evidence that school-linked and community-based comprehensive service centers for adolescents can improve access to health and related services needed by many adolescents.

Many schools, health care organizations, communities, and States that would like to offer adolescents' accessible "one-stop shopping," or better integrated services, for their health and related needs may not be able to establish school-linked or community-based comprehensive service centers. One reason is lack of funds. Several existing centers are in a precarious financial situation and may either

⁷¹For example, certain communities will object to having a school-linked health center that distributes contraceptives; o&m will object to such a center prescribing contraceptives (to be obtained elsewhere in the community); others may object to such a center including any facet of family planning or reproductive services. Anecdotal evidence suggests that some school-linked health centers have been blocked entirely because of fears that they will emphasize sexuality concerns; other school-linked health centers vary in the extent to which they provide services related to adolescent sexuality (see ch. 15, "Major Issues Pertaining to the Delivery of Primary and Comprehensive Health Services to Adolescents," in Vol. III).

⁷²See ch. 6, "Chronic Physical Illnesses: Prevention and Services," in Vol. II, and in Vol. III, ch. 15, "Major Issues Pertaining to the Delivery of Primary and Comprehensive Health Services to Adolescents," ch. 16, "Financial Access to Health Services," ch. 17, "Consent and Confidentiality in Adolescent Health Care Decisionmaking," and ch. 18, "Issues in the Delivery of Services to Selected Groups of Adolescents."

⁷³As noted in ch. 15, "Major Issues Pertaining to the Delivery of Primary and Comprehensive Health Services to Adolescents," in Vol. III, some observers have expressed grave concerns that the use of sliding fee scales, or any financial requirements, will reduce adolescents' perceived access to services.

⁷⁴Evening and weekend hours are sometimes, but not always, an element of comprehensive service Centers for adolescents.

⁷⁵See ch. 15, "Major Issues Pertaining to the Delivery of Primary and Comprehensive Health Services to Adolescents," in Vol. III, for further discussion. Some of these problems could be addressed through the provision of additional funding to existing centers.

have to close completely⁷⁶ or fail to completely implement their program designs (11 5).

Funding is not the only barrier to the establishment of comprehensive centers. The association in the public mind of school-linked health centers and services related to adolescent sexuality and pregnancy seems also to have limited the extent to which such centers have been implemented (98, 154,168). The threat such centers pose to organized medicine is another potential barrier (140).⁷⁷ To date, however, the livelihoods of mainstream health care providers have not been threatened by the implementation of comprehensive service centers for adolescents, because most centers have been provided in schools and communities where the most likely service users do not have health insurance and thus have little access to the mainstream health care delivery system.

Congressional recognition of U.S. adolescents' **unmet** needs for financially accessible and approachable health and related services and the **ability** of adolescent-specific school-linked and community-based comprehensive service centers to provide such services could help enormously to make such centers more acceptable to the public. Several States are beginning to implement school-linked health centers, and this development may be an indication that public opinion is shifting toward support for the idea of offering adolescents comprehensive and highly accessible health and related services.⁷⁸

To support the development of centers that provide adolescents with comprehensive health and related services, Congress could follow one or more of three strategies: provide seed money for the development of school-linked or other community-based centers for adolescents (Strategy 1-1a), provide continuation funding for such centers (Strategy 1- 1b), or reduce barriers to the delivery of comprehensive services in such centers (Strategy 1- 1c) (see table 5).

Strategy 1-1a: Provide Federal seed money for the development of school-linked and other com-



Photo credit: Katherine Criss, New York, NY

To help improve U.S. adolescents' access to appropriate health and related services, Congress could provide seed money or continuation funding for school-linked health centers or other comprehensive service centers designed specifically for adolescents.

munity-based centers that provide comprehensive health and related services for adolescents.

The Federal Government could provide seed money for centers that provide comprehensive health and related services for adolescents by making grants to States, local governments, health care organizations, schools, or community-based private, not-for-profit organizations. Providing seed money would assist those schools, health care organizations, communities, and States currently without adequate financial resources to begin implementing school- or community-based comprehensive, accessible health and related services centers for adolescents.

It is important to note, however, that the State of New Jersey's School-Based Youth Services Center program found that merely proposing the provision of time-limited seed money to communities for support of comprehensive services was not sufficient to garner community interest (205). As a general matter, schools and communities are not likely to be interested in making the considerable investment required to start up a comprehensive

⁷⁶For example, funding from the Robert Wood Johnson Foundation for school-linked health centers is scheduled to end in 1993. See ch.15, 'Major Issues Pertaining to the Delivery of Primary and Comprehensive Health Services to Adolescents,' in Vol. III, for discussion.

--{see ch15, 'Major Issues Pertaining to the Delivery of Primary and Comprehensive Health Services to Adolescents,' in Vol. III.

⁷⁸As described in ch15, 'Major Issues Pertaining to the Delivery of Primary and Comprehensive Health Services to Adolescents,' in Vol. III, the States of Kentucky, Iowa, Florida, New York, and New Jersey are experimenting with providing comprehensive school-linked services to adolescents to one degree or another. Other local jurisdictions (Minneapolis; Pittsburgh; Cleveland; Washington, DC; Alexandria, VA) also provide support for such Services (140).

program for service delivery only to have to dismantle the program for lack of continuation funding (see also 186). As described above,⁷⁹ Federal (as well as State, local, and private) support for adolescent health services is condition-specific and thus fragmented. The Door in New York City, which is widely regarded as the prototype of an integrated comprehensive service model for adolescents, is supported by more than 80 funding sources, including Federal, State, and local public agencies, private foundations, corporations, and individuals (77).⁸⁰

Strategy 1-lb: Provide Federal continuation funding specifically for already established school-linked and other community-based centers that provide comprehensive services for adolescents.

Continuation funding for existing and future comprehensive health services centers for adolescents could help to maintain the existence of, and potentially strengthen, existing centers and (if seed money is provided) assure new centers that their initial intensive efforts will not be wasted. Continuation funding could be provided by Congress through matching grants to States, local governments, health care organizations, or schools.⁸¹ Requiring local evaluation and local matching grants for continuation funding (as well as for seed money) would help to ensure local involvement, integration of existing services, and lack of duplication.

Strategy 1-lc: Reduce, through legislation or regulation, existing barriers to the delivery of comprehensive services in adolescent-specific centers.

Existing barriers to the delivery of low-cost services to adolescents in school-linked or other comprehensive adolescent service centers include State Medicaid administrative barriers limiting or prohibiting reimbursement for services delivered in school-linked health centers. They also include

State, Medicaid, and private insurance restrictions on reimbursement of nonphysician providers.⁸²

Removing such barriers to the delivery of low-cost services to adolescents in school-linked or other comprehensive adolescent service centers may be the weakest approach to supporting accessible, comprehensive services for adolescents, but still may be a somewhat effective strategy for increasing some adolescents' access to health services.

Issues--School- or community-based comprehensive and accessible care especially designed to meet the unique needs of adolescents is not a new idea (144, 187). As noted above, several contentious and longstanding issues have slowed the development of such services, although a growing sense of the health care crisis among U.S. adolescents (8,29, 153) is beginning to erode some impediments, at least at the local level.

Two of the most important issues with respect to the provision of care that can meet the needs of adolescents for confidential, approachable, comprehensive, no- or low-fee services are the issues of community and health care provider resistance. Federal backing would go a long way toward engendering public support for school-linked or other comprehensive services for adolescents, but Congress and the U.S. executive branch themselves have public concern about services related to adolescent sexuality to contend with (168). One way for Federal policymakers to help overcome local resistance to school-linked health centers would be to require centers receiving Federal funds to follow the current approach of gaining initial parental consent to provide services to adolescent children, either blanket consent or consent that excludes specified services. Alternatively, the Federal Government could either permit State or local grantees to exclude the provision of all or some family planning services (e.g., dissemination of contraceptives) from any

⁷⁹See section above entitled "What Is the Federal Government's Role in Improving Adolescent Health?"

Importantly, the administration of The Door reports that it must make a special effort to obtain such funding and protect the professional staff from the perennial threat of the demise of specific programs (77). As described in ch. 15, "Major Issues Pertaining to the Delivery of Primary and Comprehensive Health Services to Adolescents," in Vol. III, staff also work to coordinate individually funded programs so that they work to benefit individual adolescent Door "members."

⁸¹As discussed below, such continuation funding could eventually be applied for by programs receiving seed moneys.

⁸²OTA was unable to find data describing private insurance limitations on nonphysician health care providers, but private insurers may have such limitations.

federally funded program or could itself exclude such services.⁸³

Federal policy makers could encourage organized medicine's further acceptance of school-linked or other comprehensive services centers for adolescents by providing sufficient funding for mainstream providers to deliver services in such centers. Were physicians to dominate the provision of care in school-linked or community-based centers, however, this approach could unnecessarily increase the cost of providing services because not all—perhaps significantly less than all—adolescent health problems appear to require the direct services of a physician.⁸⁴ Instead, cutting-edge adolescent medicine training programs (including those few funded by the Federal Government) emphasize the necessity of an interdisciplinary approach to providing services to adolescents, involving nurses, nurse-midwives, nurse practitioners, psychologists, physician assistants, social workers, nutritionists, and health educators.⁸⁵ Ensuring adequate referral mechanisms to care providers in the community should be a *sine qua non* of a comprehensive approach to adolescent health care, and should help to alleviate mainstream health care providers' fear about being displaced. But confronting the range of financial, legal, quality, and informational barriers that prevent many adolescents from obtaining access to health services (Strategies 1-2, 1-3, 1-4, and 1-5, below) is necessary to help provide a truly integrated **system** of health care for adolescents.

Even some supporters of school-linked and other centers that provide comprehensive health and related services for adolescents fear the implications of providing Federal support. One concern that arises with Strategies 1-1a and 1-1b above (and, to a lesser extent, to 1-1c) is that providing Federal



Photo credit: Zacchaeus Medical Clinic, Washington, DC

Federal policymakers could encourage organized medicine's further acceptance of school-linked or other comprehensive service centers for adolescents by providing sufficient funding to allow mainstream providers to deliver services in such centers.

funding for school-linked and community-based centers might lead to the entrenchment of the existing comprehensive service model, with its known limitations. To minimize this problem, it would be essential for the Federal Government to be

⁸³The statement of the National Conference of Catholic Bishops on school-based clinics suggests that either approach **would have the** Possibility of gaining the support of this organization. In its 1987 position paper, the National Conference of Catholic Bishops acknowledged that the basic health care needs of many young people are not being adequately addressed, and suggested that school-based clinics "that clearly separate themselves from the agenda of contraceptive advocates may provide part of an effective response to the health needs of young people" (154). Although more than half of the school-based health centers surveyed by the Center for Population Options in 1988-89 provided *counseling on* birth control methods (94 percent of centers in high schools, and 73 percent of centers in junior high and middle schools), only 20 percent of all such centers actually dispensed birth control methods (92). In general, school-linked health centers have moved away from an exclusive emphasis on pregnancy prevention.

⁸⁴This is not to say that a broad range of health care providers currently providing care in traditional settings (e.g., private offices, general community clinics) or potentially interested in adolescent clinics as alternative settings should not be adequately paid for their services. During their evaluation of six school-based clinics, Kirby and Waszak observed that cost-cutting measures led to heavy staff turnover, which reduced the continuity of the relationships that can be developed between clinic and students and, potentially, the clinics' effectiveness (105). Although the topic has been studied minimally, the few studies that have been conducted, the remarks of trusted observers and of adolescents themselves, suggest that the quality of the interpersonal relationship between health care provider and adolescent is essential to maintaining adolescent involvement in health care (115, 122, 225; see ch.15, "Major Issues Pertaining to the Delivery of Primary and Comprehensive Health Services to Adolescents," in Vol. HI).

⁸⁵See ch.15, "Major Issues Pertaining to the Delivery of Primary and Comprehensive Health Services to Adolescents," in Vol. HI. As discussed in ch.15, issues of leadership and role ambiguity can be pervasive in programs that do attempt to deliver care using an interdisciplinary approach.

flexible in providing Federal support for funding, to provide technical assistance to communities that wish to develop comprehensive services, and at the same time both require and provide support for rigorous evaluation of both the process and the outcomes of funded comprehensive services centers. In essence, a feedback mechanism for the continuing enhancement of health and related services for adolescents could be supported.

Other issues related to the development of new school- or community-based centers designed specifically to be responsive to the needs of adolescents include how to structure their services to be responsive to the needs of local adolescents and how to avoid potential duplication of services. Both issues can be addressed by ensuring that relevant community members (including adolescents) participate in the design of the services so that they meet local needs and do not duplicate, but are integrated with, existing services. Models for obtaining local involvement exist (36,205), and any Federal grant program could build in requirements for community participation. Structuring support in the form of a matching grant⁸⁶ could help to achieve continued local community involvement.

Two issues are particularly relevant to Strategy 1-1c (and perhaps to a lesser extent, to Strategies 1-1a and 1-1b⁸⁷). One is that neither the full range of Medicaid and private insurance restrictions nor the number of comprehensive health services programs affected by them is currently known.⁸⁸ A study, perhaps by the General Accounting Office, specifying such limitations might be useful before Congress took action. The second is that the expansion of third-party payment as a source of funding for adolescent-specific comprehensive services programs may conflict with programs' objective of being

responsive to adolescents' desire for confidentiality. Currently, parents, as the financially responsible parties, are almost always required to consent to the receipt of services provided to adolescents by health care providers. Even when parents of adolescents are not required to consent to health services, they almost always receive notification from Medicaid and private insurers that services have been rendered to their dependent children.⁸⁹ Further, some health care providers have expressed concern that billing for services adds an additional layer of complexity that may reduce adolescent accessibility to services (77). Any efforts to increase resources for adolescent-specific comprehensive health services through additional third-party payment would have to be carefully constructed.

Strategy 1-2: Congress Could Take Steps To Improve Adolescents' Financial Access to Health Services

For most individuals in the United States, coverage by health insurance is essential for gaining access to almost all health services. For almost all U.S. adolescents, health insurance is a necessary (though not always sufficient) element of access. One out of seven U.S. adolescents lacks any form of health insurance coverage (109).⁹⁰ Many uninsured adolescents are the dependents of parents who work,⁹¹ but whose employment benefits do not include health insurance. One out of three poor adolescents does not have access to Medicaid.

There is accumulating evidence that private insurers, concerned about the rising cost of health care and health insurance, may cut back coverage for adolescents and other dependents, for insurance coverage as a whole, or for specific benefits.

⁸⁶For example, the State of New Jersey required a 25-percent matching grant from the local community; the matching grant could take the form of physical space or the provision of services as well as cash (205).

⁸⁷The extent to which these issues are relevant to Strategies 1-1a and 1-1b depend on the overall structure of financing for comprehensive adolescent services.

⁸⁸As of 1989, five States prohibited Medicaid payment for health services delivered in schools, even by physicians. States varied in the extent to which they permitted Medicaid coverage for nurses and other health care providers acting under the supervision of a physician (except that visits under the Early and Periodic Screening, Diagnosis, and Treatment program were not subject to limits). The Omnibus Budget Reconciliation Act of 1989 (Public Law 101-239) mandated State Medicaid coverage of certified pediatric and family nurse practitioners as of July 1, 1990 (see ch. 16, "Financial Access to Health Services," in Vol. III).

⁸⁹Exceptions to these commonplace occurrences, and ways that some comprehensive services centers have sought and obtained third-party payment without impairing adolescent confidentiality, are discussed in chs. 15 and 16, in Vol. III.

⁹⁰See also ch. 16, "Financial Access to Health Services," in Vol. III.

⁹¹For the most part, adolescents' insurance status reflects that of their parents, but 19 percent of uninsured adolescents (862,000 adolescents) live without their parents. The number who live without their parents and work at least 18 hours a week (and thus would be more directly affected by an employer mandate) is smaller (169,000). See ch. 16, "Financial Access to Health Services," in Vol. III.

Congress could adopt several strategies to address these financial access problems: mandate an immediate expansion of Medicaid (Strategy 1-2a), mandate that employers provide health insurance for their uninsured workers and dependents (Strategy 1-2 b), fund Medicaid outreach efforts (Strategy 1-2c), and prevent private insurers from reducing coverage benefits (Strategy 1-2d) (see table 5).

Strategy 1-2a: Mandate an immediate expansion of Medicaid eligibility for adolescents.

One out of three (approximately 2.76 million) poor adolescents is not covered by Medicaid. The Omnibus Budget Reconciliation Act of 1990 (OBRA-90, Public Law 101-508) included provisions for a Medicaid expansion, but this expansion will not affect the current generation of adolescents. The number of adolescents potentially affected by a Medicaid expansion would depend on the specific terms of the expansion.⁹² OTA estimated the effects of a range of specific terms for a Medicaid expansion. If all adolescents living in families with incomes up to 149 percent of the Federal poverty level were included and the categorical requirements of Aid to Families With Dependent Children (AFDC) were dropped (as required by OBRA-90), an estimated 2.7 million adolescents who are currently not eligible for Medicaid could be covered.

Concerns about costs may lead States and Federal policy makers to resist further Medicaid expansions. The actual cost of a Medicaid expansion would depend in part on whether such programs as Medicaid's Early and Periodic Screening, Diagnosis, and Treatment program (EPSDT) and other early interventions that are designed to detect and treat health problems before they become serious, result



Photo credit: Office of Technology Assessment

Many uninsured adolescents are the dependents of parents who work but whose employment benefits do not include health insurance. A congressional mandate that employers provide health insurance benefits to all permanent employees who work 30 hours or more per week would expand health insurance benefits to 2.55 million uninsured adolescents.

in long-term cost-savings to society, as they were designed to do.⁹³

Strategy 1-2b: Mandate that employers provide health insurance for their currently uninsured workers and those workers' dependents.

The number of adolescents affected by an employer mandate would depend on the specific terms of the mandate. A mandate that employers provide health insurance benefits to all permanent employees who work 30 hours or more per week would expand health insurance benefits to 2.55 million uninsured adolescents.^{94 95}

⁹²As noted in ch.16, 'Financial Access to Health Services,' in Vol. III, OTA estimated that an immediate expansion of Medicaid eligibility for adolescents up to 100 percent of poverty that *retains current Aid to Families With Dependent Children (AFDC) categorical requirements* would cover 621,000 (13.5 percent) of those adolescents currently uninsured; this kind of expansion would be a step backward from the expansion voted under OBRA-90, which eliminates categorical requirements. Congress could support an immediate expansion of Medicaid eligibility for all adolescents up to 100 percent of poverty, *dropping all AFDC categorical requirements*; OTA estimates that this expansion would cover 40 percent (1.84 million) of uninsured adolescents. An additional 874,000 adolescents (19 percent of those who are uninsured) would be included if the income standard was raised to 149 percent of poverty, and all AFDC categorical requirements were dropped, bringing the potential total to 2.71 million adolescents. Other options (e.g., making adolescents up to 133 percent of the poverty level eligible for Medicaid), not examined quantitatively by OTA, are, of course, also possible.

⁹³It should be noted, on the other hand, that many preventive and early intervention programs may in fact increase overall health care costs—their value lies in reduced suffering and, possibly, in increased productivity.

⁹⁴OTA estimated that a congressional mandate that employers provide health insurance benefits to all permanent employees who work 30 hours or more per week would expand health insurance benefits to another 2.55 million uninsured adolescents (equal to 55 percent of those without health insurance coverage in 1987). An additional 255,000 adolescents (another 5.6 percent of those without health insurance coverage in 1987) would be covered by changing the mandate to 18 hours per week. See ch. 16, 'Financial Access to Health Services,' in Vol. III.

⁹⁵Some adolescents covered by either of these two strategies would be covered under the other one as well. A combination of a Medicaid expansion to 149 percent of poverty (with AFDC categorical requirements dropped) and an employer mandate for those employees working 18 hours or more per week would cover 78 percent of uninsured adolescents. Those left uninsured would largely be dependents of the self-employed.

Just as there is State resistance to Medicaid expansions, there is considerable employer resistance to a Federal mandate for employer coverage. Much of the resistance stems from concerns about costs. Many employers have claimed that they would no longer be able to employ many of those employees who currently work fewer than 40 hours a week should there be such a mandate. OTA did not evaluate the validity of these claims. An employer mandate raises issues much more general than those related to adolescents' access to health services.

Strategy 1-2c: Directly fund or provide incentives to States for outreach to increase adolescents' use of Medicaid benefits.

In terms of the range of services covered, Medicaid appears in many ways to be the ideal health care coverage plan for adolescents. One example is the far-reaching EPSDT benefit, which now requires States to periodically screen Medicaid-eligible children and adolescents for any illnesses, abnormalities, or treatable conditions and refer them for definitive treatment. Medicaid is then required to cover the costs of any needed treatment.⁹⁶ However, as also discussed in chapter 16, "Financial Access to Health Services," in Volume III, Medicaid has many other limitations that may block the delivery of services to those in need. Unfortunately, much of the data on lack of adolescents' effective access to Medicaid is anecdotal.

Thus, the extent to which the adolescents who are eligible for Medicaid are not served is not known. Existing data are not very informative about the extent to which Medicaid-eligible adolescents get access to services:⁹⁷

- the Health Care Financing Administration in DHHS estimates that adolescents ages 10 to 18 accounted for 17.1 percent of Medicaid enrollees in 1988 (4.6 million adolescents), and accounted for an estimated 6.9 percent of Medicaid program costs; and
- in 1988, Medicaid's per capita expenditures for EPSDT screening for adolescents (\$4 per capita



Photo credit: Dion Johnson, Washington, DC

In 1988, Medicaid's per capita expenditures for screening of adolescents under the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) benefit were only about one-third the per capita expenditures for children under age 5.

for 10- to 14-year-olds and \$3 per capita for 15- to 18-year-olds) were one-third the per capita expenditures for younger children (\$15 per capita for children under age 5).

Comparisons such as these may not be appropriate because the types of services needed by older individuals covered by Medicaid (e.g., nursing home services) are quite costly (175,253). However, these and other data suggest that the Medicaid program needs to do more to reach eligible adolescents if it is to be more than just a passive insurance plan and actually help those adolescents who are most in need.⁹⁸

Strategy 1-2d: Discourage or prevent private insurers from implementing current plans to limit coverage of adolescent dependents.

Some or all of the approximately 21.7 million adolescents (70 percent overall) who are covered by private health insurance are potentially affected by

⁹⁶These and other EPSDT reforms were enacted as part of OBRA-89. Current EPSDT requirements are described in ch. 16, "Financial Access to Health Services," in Vol. III. To OTA's knowledge, a study of the extent to which States are implementing the OBRA-89 mandate to screen and treat Medicaid-eligible children has not been scheduled.

⁹⁷The only data available are for 1988 and thus precede the enactment of OBRA-89. In addition, available data have certain shortcomings resulting from limitations in the Health Care Financing Administration's (HCFA) data system (see app. C, "HCFA's Method for Estimating National Medicaid Enrollment and Expenditures for Adolescents," in Vol. III). Nevertheless, they are the only quantitative data available.

⁹⁸It is important to note that general and mental health hospital costs accounted for about two-fifths of Medicaid expenditures for 10- to 18-year-olds in 1988 (253).

any such moves by private insurers. Congress could perhaps require that adolescent dependents receive the same benefits as the primary beneficiary.

An issue not addressed by requiring employers to maintain existing levels of coverage is that some adolescents with private insurance do not have the benefits they need to gain access to health services (e.g., preventive services, contraception, prenatal care, mental health services, substance abuse treatment, basic health services for adolescents in juvenile justice facilities). An option addressing the issue of benefits for adolescents under private health insurance policies is included under ‘ ‘Specific Findings and Policy Options’ for chapter 16, below.

Previous attempts by States to mandate that private insurers provide benefits or coverage have resulted in employers turning to ‘ ‘self-insurance’⁹⁹; additional mandates or requirements may accelerate this trend. Under the terms of the Employee Retirement and Income Security Act (Public Law 92- 104), it is unlikely that the Federal Government can pass requirements that would affect self-insured plans. Further, employers and private insurers may have a point when it comes to restricting certain benefits: for example, there is little evidence for effectiveness of substance abuse treatment for adolescents or for the more expensive settings for mental health treatment. However, it seems unfair to restrict only some groups from gaining access to such treatments and settings.

Strategy 1-3: Congress Could Take Steps To Improve Adolescents’ Legal Access to Health Services

The body of law that determines the extent of adolescents’ involvement in decisions about their own health care is large and complicated because it is an amalgam of common law, State and other

statutes, Supreme Court decisions, the decisions of other Federal and State courts, and regulations issued by government agencies.¹⁰⁰ From the standpoint of adolescents, their parents, and health care providers, among others, the law in this area is often unclear and inconsistent.

The common law rule, based in part on the assumption that children and adolescents are incapable of making mature decisions about their health care, is that adolescents’ parents must give their consent for medical or surgical services provided to a minor child.¹⁰¹ There are a multitude of exceptions to this rule, however, most of which are contained in State laws. States can modify the age of majority to confer on minors rights normally reserved for adults, and five States have enacted statutes that specifically authorize minors who have reached a designated age—ranging from 14 to 16—to consent to health care.¹⁰² Furthermore, virtually all States allow all or some minors (e.g., those age 12 or 14) to obtain care for STDs without gaining their parents’ consent.¹⁰³ Most States do not require that adolescents’ parents be notified when adolescents obtain STD services, but about one-third of the States allow parental notification at the discretion of the health care provider. State laws governing minors’ access to mental health services, services for drug and/or alcohol abuse, and other services vary widely across problem areas, and this may be appropriate. Among States, and even within a given State, however, the laws frequently seem to lack any coherent rationale. Restrictions on access to family planning and abortion services by adolescents are ultimately governed by Federal constitutional law as interpreted by the U.S. Supreme Court, and this law is in flux. Health care provider organizations’ guidelines regarding consent and confidentiality in the provision of services to adolescents are often ambiguous,

⁹⁹A ‘ ‘self-insured’ plan is a health benefit plan in which the financial risk for provided medical services is assumed by the employer or sponsor. From the time of the enactment of the Federal legislation that exempted self-insured plans from State mandates in 1974 to 1987, the percentage of employees covered by a self-insured, employer-sponsored conventional health plan rose from about 5 percent to nearly 60 percent. See ch. 16, ‘ ‘Financial Access to Health Services,’ in Vol. III.

¹⁰⁰This body of law is summarized in ch. 17, ‘ ‘Consent and Confidentiality in Adolescent Health Care Decisionmaking,’ in Vol. III. For extensive legal citations on laws pertaining to adolescent health care decisionmaking, see J.D. Gittler et al., ‘ ‘Adolescent Health Care Decisionmaking: The Law and Public Policy’ (76).

¹⁰¹The age of majority is 18 in all States but Alaska, Nebraska, and Wyoming, where it is 19.

¹⁰²The five are Alabama, Kansas, Rhode Island, South Carolina, and Oregon.

¹⁰³As noted in ch. 17, ‘ ‘Consent and Confidentiality in Adolescent Health Care Decisionmaking,’ in Vol. XII, the terms used in these statutes vary. Some statutes allow minors to consent to services for ‘ ‘sexually transmitted disease’ other statutes use the term ‘ ‘venereal disease,’ or ‘ ‘infectious, contagious, communicable, and reportable diseases.’

and individual providers have been found to vary considerably in their approach to these issues.¹⁰⁴

Some empirical evidence indicates that parental consent and notification requirements may impose barriers to some adolescents' access to health Services.¹⁰⁵ Specifically, adolescents in actual or potential conflict with their parents may not seek family planning services or even some other types of health services (e.g., those related to sexuality, substance use, and emotional upset) because they fear parental involvement (76,127,333). Concerns have also been raised that, as a concomitant of the parental consent requirement, parents may be able to "voluntarily commit their adolescents to a mental health or substance abuse treatment facility without adequate safeguards to protect the rights of the adolescent."¹⁰⁶

If it chose to, Congress could play a greater role than it typically has in the past in the formulation of public policies pertaining to the allocation of authority for adolescent health care decisionmaking. Two issues that would arise if Congress were to consider acting in this area are: 1) whether greater uniformity and coherence in laws governing consent and confidentiality in adolescent health care decisions is desirable, and 2) if so, what substantive policies should be adopted.

In the interests of increasing adolescents' legal access to services, substantive policies could be changed to allow adolescents' greater autonomy in making decisions concerning their own health care. A small body of relatively methodologically sound research on the relationship between age and competence in health care decisionmaking suggests that adolescents age 14 or older may be as capable as young adults of making health care decisions (5,18,103,104,19,120,327), challenging one of the key assumptions that underlies requirements for parental consent and notification. The evidence is not as conclusive as one might like for policy decisions, however, and adolescents' capacity for



Photo credit: Sarah Hocut, Atlanta, GA

A few empirical studies suggest, though not conclusively, that at about age 14 adolescents may be as capable as young adults of making health care decisions. This evidence challenges one of the key assumptions that underlies legal requirements for parental consent.

making health care decisions is only one of many important considerations in determining whether adolescents should be able to consent to health services or to receive services without parental notification.¹⁰⁷ Other important considerations include the following:

- the interest of the State in promoting public health and ensuring that individuals have access to needed health services, in ensuring that parents assume responsibility for their children, in protecting family autonomy and privacy, and in maintaining family cohesiveness and stability;
- the interests of adolescents' parents in ensuring their children's welfare, in maintaining authority over their adolescent child, in protecting their family's autonomy and privacy, in directing the upbringing of their children, and in

¹⁰⁴ s. ch. 15, "Major Issues Pertaining to the Delivery of Comprehensive Health Services to Adolescents," and ch. 17, "Consent and Confidentiality in Adolescent Health Care Decisionmaking," in vol. III.

¹⁰⁵ It is not clear that parental notification requirements are any less of a barrier to adolescents' access than parental consent requirements.

¹⁰⁶ Inpatient mental health services pose special problems in the area of consent. About two-thirds of States have statutes that allow parents, as a concomitant of the parental consent requirement, to make a "voluntary commitment" to a mental health facility of a minor child. These statutes vary substantially in the safeguards they provide against inappropriate hospitalization or institutionalization to manage "troublesome" minor children who may not have severe mental health problems (326).

¹⁰⁷ Because the existing literature on adolescents' capacity to consent is not conclusive and is focused mostly on white, middle-class adolescents, the option of funding additional studies on this topic is presented in table 24 in the section entitled "Specific Findings and Policy Options," below.

being protected from financial liability arising from the provision of health services to their children; and

- the interests of health care providers in providing services to adolescents that are consistent with their professional ethics and professional practices, in being able to receive compensation for their services, and in clear laws that enable them to avoid unintentional violations of those laws.¹⁰⁸

There are sound reasons for promoting parental involvement in adolescent health care decisionmaking. As described in this Report, evidence suggests that appropriate parental and family involvement with adolescents is essential to adolescents' optimal development and functioning.¹⁰⁹ In some situations, however, parents do not act in the best interests of their adolescent children,¹¹⁰ and adolescents may delay receiving appropriate health care services for fear of parental involvement.¹¹¹ Three strategies for improving adolescents' legal access to health and related services that Congress might want to consider are encouraging the development of a model State statute (Strategy 1-3a), requiring specific Federal or Federal/State programs to adopt particular substantive policies with respect to parental consent and notification (Strategy 1-3 b), and conditioning States' receipt of Federal funds for specific purposes on the States' having particular substantive policies with respect to parental consent and notification (Strategy 1-3c).

Strategy 1-3a: Encourage the U.S. executive branch or a nongovernmental entity to develop a model State statute to enhance adolescents' legal access to health services.

Congress could encourage the U.S. executive branch or a nongovernmental entity to lead in the development of a model State statute that would potentially enhance adolescents' legal access to health services by increasing their autonomy in decisions about their health services. The model State statute might be used to inform State policies



Photo credit Center for Youth Services, Washington, DC

There are sound reasons for promoting parental involvement in adolescents' health care decisionmaking. Available evidence suggests that appropriate parental and family involvement with adolescents is essential to adolescents' optimal development and functioning.

regarding consent and confidentiality in adolescent health care decisionmaking. This would be true even if the statute were not adopted in its entirety by all States.

Optimally, the development of a model State statute would involve a variety of all relevant parties, including parents, advocates for adolescents, third-party payers, community leaders, ethicists, experts in informed consent, developmental and social psychologists, historians of childhood and adolescence, health care providers, lawyers, and adolescents themselves. Relevant studies and testimonial evidence, considered dispassionately and systematically, could be brought to bear.

The financial costs to the Federal Government of funding a study group to develop a model State statute would be relatively low, although any

¹⁰⁸See box 17-B, "A Conceptual Framework To Aid Public Policymakers in Formulating Policy Related to the Allocation Of Authority for Adolescent Health Care Decisionmaking," in ch. 17 in Vol. ITI.

¹⁰⁹Several approaches for increasing support for adolescents' families are discussed in **Strategy 3-1** in Major Option 3, below.

¹¹⁰See **Primarily** ch. 3, "Parents' and Families' Influence on Adolescent Health" in Vol. II, but also ch. 11, "Mental Health Problems: prevention and Services" ch. 12, "Alcohol, Tobacco, and Drug Abuse: prevention and Services" ch. 13, "Delinquency: Prevention and Services" and ch. 14, "Homelessness: Prevention and Services," in Vol. III.

¹¹¹See especially ch. 9, "AIDS and Other Sexually Transmitted Diseases: Prevention and Services," in Vol. II, and ch. 17, "Consent and Confidentiality in Adolescent Health Care Decisionmaking," in Vol. III.

improved access to health services by adolescents might prove costly in the near term.¹¹² The potential exists, however, that the model statute that is developed could be: 1) more restrictive than what currently exists in some States and case law, and so further limit adolescents' access to care; 2) so unrestrictive as to *inappropriately* reduce parental involvement in the parent-child relationship; or 3) so nebulous as to be unhelpful.¹¹³ Nonetheless, the legal barriers to access that adolescents in conflict or potential conflict with their parents face as a result of the present legal situation make taking the risk of attempting to develop a model statute seem worthwhile.

To make their task more manageable, the individuals developing the model statute might want to focus on developing model statutes in certain critical areas, such as policies to permit confidential access to mental health, drug/alcohol treatment services, pregnancy-related services, contraceptive services, and HIV testing and STD treatment services for a broader range of adolescents; policies to eliminate inappropriate "voluntary" commitments of adolescents to inpatient mental health facilities by their parents; and, possibly, policies to provide more workable alternatives to parental notification for abortion.

Strategy 1-3b: Enact legislation that requires specific Federal or Federal/State programs to adopt particular substantive policies with respect to parental consent and notification.

Congress authorizes and appropriates funds for a variety of Federal and Federal/State programs that provide adolescent health services or reimbursement for such services, for example,

- Medicaid,
 - . the maternal and child health services block grant program authorized under Title V of the Social Security Act,

- . the family planning program authorized under Title X of the Public Health Service Act, and
- . the alcohol, drug abuse, and mental health services block grant program authorized under Title XIX of the Public Health Service Act.

The Federal laws authorizing and appropriating funds for these programs and the regulations and rules issued by agencies administering these programs at the Federal level generally do not deal directly with questions of whether adolescents must have parental consent to participate in the programs, whether parents must be notified of adolescents' participation in the programs, or whether health care records and communications between program service providers and adolescents are confidential vis-à-vis their parents.¹¹⁴ In the absence of explicit directives from Congress or Federal agencies, the administrators of federally funded programs are free so long as they remain within the parameters imposed by State law and Federal constitutional law—to establish their own policies regarding parental consent and notification requirements and the confidentiality of records and communications involving minors.¹¹⁵

Congress could enact legislation that requires Federal and Federal/State programs that provide health services for adolescents or reimbursement for such services to adopt particular substantive policies with respect to the allocation of authority for adolescent health care decisionmaking. Enacting legislation that requires Medicaid to increase adolescents' autonomy in decisions about their health services could help to improve access for poor Medicaid-eligible adolescents. It could also signal a new direction to other third-party payers in the development of policies to permit confidential access to mental health, drug, contraceptive, and STD treatment services for a broader range of adolescents; and policies to prevent inappropriate,

¹¹²See above for the argument, as yet unproven, but likely, that access to some early intervention services would be cost-saving in the long-term.

¹¹³Such is largely the case with the ethical statements on this issue of several health care provider organizations. See ch. 17, "Consent and Confidentiality in Adolescent Health Care Decisionmaking," in vol. III.

¹¹⁴There have been exceptions, for example a rule issued by DHHS in 1987, which prohibits federally funded alcohol or drug abuse programs from notifying a minor's parent of the minor's application for treatment without the minor's consent, but only in States where State law permits minors to obtain alcohol or drug treatment without parental consent (42 CFR, Part 22.214 (1989)).

¹¹⁵In 1983, DHHS unsuccessfully attempted to promulgate regulations requiring that family planning clinics receiving Federal funds under Title X of the Public Health Service Act notify parents of unemancipated minor children where contraceptives were prescribed. These regulations—issued pursuant to a congressional amendment to the authorizing statute for the Title X program that provided that "[t]o the extent practicable, entities which receive grants or contracts under this subsection shall encourage family participation in projects assisted under this section (42 U.S.C. sec. 300(a)(1982))"—aroused a great deal of controversy and were the subject of litigation in the Federal courts. Ultimately, two Federal courts enjoined DHHS from implementing the regulations.

involuntary hospitalizations of adolescents for mental health and substance abuse treatment.

Strategy 1-3c: Enact legislation conditioning States' receipt of Federal funds for specific purposes on the States' having particular substantive policies on parental consent and notification.

Exceptions to the common law requirement for parental consent and legal provisions pertaining to parental notification have generally been carved out by State courts and legislatures. The extent to which States currently allow minors to obtain services on their own (i.e., without parental consent or without either parental consent or notification) varies widely.

- Most States already allow all minors (or minors of a certain age, e.g., 12 or 14) to obtain diagnosis and treatment *services for STDs* (sometimes termed "venereal diseases" or "infectious, contagious, communicable, and reportable diseases," as noted above) without parental consent. Nearly two-thirds of States provide that STD services may be furnished without parental notification; most of the others give health professionals discretion to notify parents.
- Only a few States currently have statutes that expressly authorize minors to consent to or receive HIV *testing* without parental consent. These laws vary with respect to parental notification requirements (e.g., some give providers discretion; one State requires notification if the test is positive).
- A little under half of States have statutes providing that minors (or minors who meet specified criteria) may obtain without parental consent *family planning services* (variously

described as "contraceptives," "birth control services," or "services for the prevention of pregnancy"). Only a few of the State statutes that permit minors to consent to family planning services without parental consent have provisions pertaining to parental notification of the minor's application for receipt of such services, and nearly all of them allow, but do not compel, parental notification.¹¹⁶

- About one-quarter of States have enacted statutes requiring parental consent to *abortion* for minors. Some of these State statutes have been invalidated or are currently being challenged on constitutional grounds, however, so not all of the statutes are currently being enforced.¹¹⁷ A little under one-quarter of the States have statutes requiring parental notification of a minor's abortion decisional
- Over half of States have statutes allowing minors to consent to *pregnancy-related services* (e.g., testing to determine pregnancy, prenatal care, and delivery services). Most of these statutes do not require parental notification. About one-fourth of the States have statutes that provide for parental notification at the discretion of health professionals.
- All but five States (Alaska, Arkansas, Oregon, Utah, and Wyoming) have statutes specifically authorizing minors to consent to services related either to *treatment for drug abuse*, to treatment for *alcohol abuse*, or to treatment for both drug and alcohol abuse. Some of these statutes apply only to minors who have reached a designated age, ranging from 12 to 16 years of age. The various statutes exhibit considerable variation when it comes to parental notification provisions.

¹¹⁶The U.S. Supreme Court ruled in *Carey v. Population Services international* (431 U.S. 678 (1977)) that minors as well as adults have a constitutionally protected right of privacy with respect to the use of contraceptives and that State restrictions on a minor's privacy rights are valid only if they serve any significant State interest. . . that is not present in the case of an adult. " As of 1990, the U.S. Supreme Court had not directly addressed the constitutionality of parental notification requirements that involve parents in decisions involving minors' use of family planning services.

¹¹⁷Federal constitutional law regarding the permissible scope of State regulation of abortion is in flux. In the wake of its landmark 1972 *Roe v. Wade* decision (410 U.S. 113 (1973)), the U.S. Supreme Court issued several decisions that have extended (o minors at least some constitutional protections with respect to abortion (e.g., any parental consent requirement for a minor's abortion must be coupled with a "judicial bypass" procedure that allow a minor to secure court approval for an abortion if she can meet certain requirements). Notable Supreme Court decisions dealing with parental consent to a minor's abortion include *Planned Parenthood of Missouri v. Danforth* (428 U.S. 52 (1976)), *In Bellotti v. Baird (Bellotti II)* (443 U.S. 622 (1979)), *City of Akron v. Akron Center for Reproductive Health, Inc.* (462 U.S. 416 (1973)), and *Planned Parenthood Association v. Ashcroft* (462 U.S. 476 (1983)). A 1989 case that did not directly address the question of parental consent, *Webster v. Reproductive Health Services* (109 S. Ct. 3040 (1989)), appears to give States greater leeway in restricting abortions generally and has raised questions about whether past Supreme Court decisions dealing with abortion will stand.

¹¹⁸The U.S. Supreme Court has not dealt extensively with parental notification in cases involving abortion services for minors. In June 1990, however, the Court handed down two decisions that may furnish the impetus for further State legislative activity aimed at requiring parental notification in the case of a minor's decision to have an abortion, *Hodgson v. Minnesota* (110 S. Ct. 2926 (1990)) and *Akron Center for Reproductive Health* (110 S. Ct. 2972 (1990)).

- A little under half of States have statutes that allow minors of a certain age to obtain *outpatient mental health services* without parental consent. The majority of statutes are silent as to parental notification, but the others have varying provisions.
- Concern about the overuse of *inpatient mental health treatment* for children¹¹⁹ is increasingly encouraging States to move in the direction of making it more difficult for parents to commit their dependent children to inpatient psychiatric facilities (73a).¹²⁰

If Congress decides that greater coherence and uniformity in State laws is desirable, it could enact legislation conditioning States' receipt of Federal funds for specific purposes on the States' having statutes or administrative rules and regulations that incorporate particular substantive policies with respect to health care decisionmaking by and for adolescents. To OTA's knowledge, this approach has not been used by Congress in this realm to date.

What substantive requirements should be adopted would depend on policymakers' judgments regarding the appropriate balancing of the interests of the state, adolescents, parents, and health care providers (see discussion above). Different sets of rules may appropriately govern the allocation of decisionmaking for adolescents of different ages and for different types of services. In other words, the rules governing the allocation of decisionmaking authority for young adolescents may be different from those governing the allocation of authority for older ones. Also, the rules that govern the allocation of decisionmaking authority for STD treatment, for family planning services, for mental health services, for substance abuse treatment and counseling, for abortion, and for other services may all be different.

A Federal requirement conditioning States' receipt of specified Federal funds on their allowing adolescents who meet certain requirements to consent to treatment for STDs might not be particularly onerous or controversial, because (as noted above) most States already allow minors to consent to such

treatment as a public health measure. Fewer States have statutes allowing minors to consent to other types of services (contraceptives, outpatient mental health services, drug/alcohol treatment services), so the imposition of a Federal requirement giving adolescents' greater autonomy in these areas might be more difficult. Any requirement having to do with abortion is likely to engender considerable political opposition.

Strategy 1-4: Congress Could Increase Support for Training of Health Care Providers Who Work With Adolescents

Many health care providers report, and objective evidence also suggests, that health care providers across disciplines (e.g., physicians, nurses, psychologists, social workers, nutritionists) are often unequipped to deal with issues that may be presented by adolescents during a health care visit.¹²¹ Adolescents report that they are sometimes reluctant or unwilling to consult with private physicians on sensitive issues (e.g., those related to sexuality or mental health problems), and the health issues of concern to adolescents often differ from those discussed by health care providers.¹²²

To improve the quality of care and the approachability of care as perceived by adolescents, Congress could increase support for a range of training through a multiplicity of approaches, including:

- continuing education for health care providers already in practice and interested in treating adolescents;
- training in adolescent health issues for trainees who are likely to see adolescents in their practices; and
- specialized interdisciplinary training for those who plan to work exclusively with adolescents.

Such a multiplicity of approaches would affect all adolescents who come in contact with a health care provider, although not immediately.

Issues—Several considerations may limit the feasibility of increasing support for training of

¹¹⁹See ch. 11, "Mental Health Problems: Prevention and Services," in Vol. II.

¹²⁰In 1990, Oklahoma, Virginia, and Wyoming enacted such laws (73a).

¹²¹This problem is discussed at length in ch. 15, "Major Issues Pertaining to the Delivery of Primary and Comprehensive Health Services to Adolescents," in Vol. III.

¹²²For further discussion, see ch. 6, "Chronic Physical illnesses: Prevention and Services," and ch. 11, "Mental Health Problems: Prevention and Services," in Vol. II and ch. 15, "Major Issues Pertaining to the Delivery of Primary and Comprehensive Health Services to Adolescents," and ch. 17, "Consent and Confidentiality in Adolescent Health Care Decisionmaking," in Vol. III.



Photo credit: © Randall Hagadorn, Titusville, NJ

Specialized interdisciplinary training for health care providers who work with adolescents is deemed essential to providing comprehensive, coordinated health services, but Federal support for interdisciplinary training programs has declined since 1980.

health care providers who work with adolescents. One is that support for such training would be costly. Second, it is not clear that sufficient numbers of health care professionals are available to be appropriate trainers. Third, specific criteria for training programs have not been adequately evaluated in terms of effectiveness in ameliorating adolescent health problems or patient satisfaction. The second problem will clearly take years to address fully, but neglecting to move now will make the situation in the future even worse. To deal with the third problem, a rigorous evaluation component could be a required condition of support for training, and the Federal Government could help by providing technical assistance (e.g., on adolescent development and health, on interpersonal styles relevant to adolescents) to training programs.

Strategy 1-5: Congress Could Take Steps To Empower Adolescents To Gain Access to Health Services

Information is generally scarce, but adolescents seem largely disengaged from the health services system. Adolescents, like most health care consumers, are rarely involved in the design of services (225). In addition to taking steps to increase the physical availability, financial accessibility, legal accessibility, and approachability of the services themselves, Congress could take steps to empower adolescents in relation to the delivery of services. Empowerment approaches take as a given that individuals, not just professionals, have a set of competencies, that these competencies are useful in the design and manage-

ment of services, and, further, that those competencies can be even more fully developed by giving individuals additional opportunities to control their own lives (e.g., 173). Thus, in addition to empowerment's benefits for individual adolescents' sense of competency, more proactive involvement of adolescents in the design of services would have the benefit of making those services more responsive to the more concrete health-related needs of adolescents. Strategies for adolescent empowerment could involve two approaches: one is to support efforts to educate adolescents about various aspects of using health and related care services (Strategy 1-5a); the second is to support the provision of opportunities for adolescents to participate in decisionmaking about the design and management of health services (Strategy 1-5b).

Strategy 1-5a: Encourage efforts to educate adolescents, parents, health care providers, and others who may identify adolescent health problems and make referrals, about the legal and other aspects of using health services.

The provision of health care services in the United States is complicated, and consumers must be educated to use health services appropriately and when they are needed. Systematic evidence is scant, but available data suggest that, in many respects, adolescents have insufficient information to be active, engaged health care consumers. Striking examples can be found in the report of the National Adolescent Student Health Survey (10). With respect to knowledge about *when* to seek health care services for STDs, for example, 33 percent of students surveyed (8th and 10th graders) did not know that a sore on the sex organ is a common early sign of an STD; 44 percent did not know that a discharge of pus from the sex organ is a common early sign of an STD; 41 percent did not know that experiencing pain when going to the bathroom is a common early sign of an STD; and 43 percent did not know that it is harmful to wait to see if the signs of STDs go away on their own (10). With respect to *how* to gain access to treatment for STDs, 76 percent of the adolescents surveyed were either unsure or mistakenly believed that the Public Health Department must inform parents about STDs in patients under age 18; 79 percent were either unsure or mistakenly believed that most clinics must have parental permission to treat patients under age 18 for STDs; and 39 percent reported that they would not know where to go for medical care if they thought

they had an STD (10). With respect to suicide prevention, approximately one-third of students surveyed did not recognize common signs of possible suicide, and 65 percent of adolescents surveyed could not or did not know whether they could locate a community agency for suicide prevention (10). As noted above (Strategy 1-3 on improving adolescents' legal access to services), laws pertaining to adolescent consent and confidentiality are inconsistent not only across States, but across problem and service areas within States; thus, it is not surprising that adolescents may be ill-informed about access to health services.

Issues—Knowledge about the availability and need for health services imparted independently to adolescents could be perceived (as health education often is) as interfering with parental prerogatives. But in fact, if done well, it could open up avenues for parent-child discussion, and opportunities for parents to help educate their children about using health care services. Adolescents who objected to certain restrictions, rights, or lack of services, might be stimulated to become involved in the political system. Consideration would have to be given to delivering the information in a developmentally appropriate manner, based on the adolescent's actual needs. Currently, the appropriateness of information to developmental and experiential status is recognized as an important aspect of health education, but approaches to developing and imparting information appropriately have not been wholly crystallized (29,153,279). More participatory approaches to health education for adolescents should help (see Major Option 2, Strategy 2-2b on supporting innovative health education research and demonstration projects, below), as should greater training in adolescent development and health issues for health educators and other health care providers (see Major Option 1, Strategy 1-4 on increasing support for such training, above).



Photo credit: Kaiser Teen and Young Adult Health Center, Granada Hills, CA

Adolescent participation in health services planning can take the form of special adolescent advisory panels or adolescent representatives on general advisory boards. The Kaiser Permanente health maintenance organization in Granada Hills, California, asks adolescents to provide advice on a regular basis.

Strategy 1-5b: Provide incentives for or mandate adolescent participation in the design of programs and research that affect adolescents at the Federal, State, local, and private level.

Adolescent participation can take the form of special adolescent advisory panels such as the Youth Advisory Panel that assisted in the preparation of this OTA Report (see app. A, "Method of the Study" or of adolescent representatives on general advisory boards.¹²³ Several organizations have been experimenting with adolescent participation (e.g., the Center for Population Options, the Child Welfare League, the Kaiser Permanente health maintenance organization in the Los Angeles area) and should be able to provide advice to organizations interested in involving adolescents in governance.¹²⁴

Issues—Taking adolescents' views into account is a difficult process that may be unfamiliar to many professional organizations. Not only will the usual conflicts between citizens and professionals be at

¹²³Some elements of the executive branch are showing interest in the concept of empowerment as a strategy for helping to improve individuals' life situations (55). Explicit government support for citizen participation in human services programs was more prevalent in the 1970s. For example, the Community Mental Health Centers Amendments of 1975 (Public Law 94-63) included requirements for citizen participation in governance and in program evaluation but the requirement for citizen evaluation was overturned with the enactment of alcohol, drug abuse, and mental health block grant legislation (Public Law 97-35) (268,269). The National Institute of Mental Health reported in 1984, however, that citizen evaluation in mental health services seemed to be "well-established" (269). Existing requirements for citizen participation in research, services, and program evaluation include the national advisory boards of various Public Health Service and National Institutes of Health agencies (research), and the Working Group for Community Development Reform (monitoring and evaluation of community development block grants), financed through a Title IX grant from the Community Services Administration in DHHS.

¹²⁴The Young Americans Act (Public Law 101-501) (discussed below) requires the participation of young people in the Federal Council on Children, Youth, and Families and the 1993 White House Conference on Children, Youth, and Families established by the act.

issue (269), but professionals and adolescents are particularly likely to have different styles of communication and understandings of system limitations. Adolescent involvement can be expected to be time-consuming and may require additional sensitivity training for professionals and adolescents. Thus, if such participation is mandated or encouraged, it should be accompanied by appropriate supports.

Major Option 2: Congress Could Take Steps To Restructure and Invigorate the Federal Government's Efforts To Improve Adolescents' Health

As noted earlier, OTA found that Federal efforts in the area of adolescent health are undertaken by a broad range of U.S. executive branch agencies and congressional committees (see tables 2 and 3 in "Major Findings"). Generally speaking, Federal efforts tend to be condition-specific rather than population-specific. A major consequence is that adolescent health initiatives by the Federal Government are often seriously fragmented and inappropriately focused. Many important adolescent health issues lack visibility and attention.

Five general strategies Congress could follow to restructure and invigorate the Federal Government efforts to improve U.S. adolescents' health are shown in table 6. To address the issues of fragmentation, inappropriate focus, and lack of visibility for adolescent health issues, Congress could create the locus for a strong Federal role in addressing adolescent health issues (Strategy 2-1). Other strategies would be to encourage the U.S. executive branch to invigorate traditional Federal activities in program development (Strategy 2-2), basic research (Strategy 2-3), and data collection (Strategy 2-4). The most ambitious approach would be to combine all four of these approaches (Strategy 2-5).

Strategy 2-1: Congress Could Create a Locus for a Strong Federal Role in Addressing Adolescent Health Issues

Even if Congress acted on many of the suggestions in this Report, specific incremental improvements in and of themselves are unlikely to have very much impact without some central locus from which adolescent health efforts can be monitored and either directed or coordinated. Currently, at least seven Cabinet-level departments in the U.S. executive branch (Health and Human Services, Education, Defense, Labor, Transportation, Justice, and Agriculture) and two independent agencies (ACTION and the Consumer Product Safety Commission) have a major role in addressing adolescent health and related issues (see table 2 and figure 13 in "Major Findings"). Numerous agencies within DHHS (and to a lesser extent, the other departments) are involved in adolescent health issues. But no single Federal agency has the mandate or resources to oversee the many diverse issues and programs related to adolescent health. In 1990, the 101st Congress enacted the Young Americans Act as part of the reauthorization of the Head Start program (Public Law 101-501). Modeled after the "Older Americans Act," the legislation aims to create a coordinated Federal response to the multiple needs of children.¹²⁵ Although many of the program areas mentioned in the legislation are specific to adolescents (e.g., teen parenting support, teen pregnancy prevention), and others are relevant to adolescents (e.g., housing and shelter assistance, education and training services, protective services, recreational and volunteer opportunities, community referral services, outreach services), it is still too early to tell how much adolescent issues will be emphasized in the implementation of the legislation.

OTA finds that a number of functions that are related to improving adolescent health are not being adequately performed. These functions (listed below)

¹²⁵The new law establishes several Federal initiatives to promote "the best possible physical and mental health" for all children and youth, including:

- an office of 'Commissioner' within the Administration on Children, Youth, and Families of DHHS, to serve as an advocate for children across Federal agencies;
- a State grant program to assist States with the planning and coordination of services and developing family resource and support programs;
- a National Center on Family Resource and Support programs to gather and disseminate information and provide training on family resources and support programs;
- a Federal Council on Children, Youth, and Families to evaluate Federal policies and programs affecting young people and advise the President on such issues; and
- a 1993 White House Conference on Children, Youth, and Families to examine issues affecting children and youth and make recommendations for further action.

Table 6-Strategies for Major Option 2: Congress Could Take Steps To Restructure and Invigorate the Federal Government's Efforts To Improve Adolescents' Health

| Strategy | Policy issue addressed | Time for expected impact | Rough estimate of (direct) cost to Federal Government |
|--|---|---|---|
| Strategy 2-1: Congress could create a locus for a strong Federal role in addressing adolescent health issues. | | | |
| 2-1 a: Create a new Federal agency at the Cabinet level, with line responsibilities, to undertake broad efforts related to improving adolescents' health. | Highest coordination, highest visibility for adolescent issues | Immediate | High |
| 2-1 b: Create a new Federal agency at the Cabinet level, but without line responsibilities, to coordinate efforts related to adolescent health. | Some coordination, high visibility for adolescent issues | Long term | Medium |
| 2-1 c: Create a new agency within an existing Cabinet department (e.g., U.S. Department of Health and Human Services) to address adolescent health issues. | Coordination, visibility for adolescent issues | Medium term | Medium |
| 2-1 d: Mandate the creation of a strong interdepartmental, inter-agency adolescent health coordinating body. | Coordination | Long term | Low |
| Strategy 2-2: Congress could encourage the U.S. executive branch to invigorate traditional Federal activities in program development. | | | |
| 2-2a: Encourage the U.S. executive branch to support program development or demonstration projects in specific neglected or promising areas related to the prevention and treatment of adolescent health problems. ^a | Provide needed services, enhance future policy decisions | Immediate and long term | Depends on number and type of activities supported |
| 2-2b: Provide support for multisite rigorous research and demonstration projects that test and compare suggested new comprehensive and innovative models of education for health. | Provide needed information to adolescents, enhance future policy decisions | Immediate and long term | Medium |
| Strategy 2-3: Congress could encourage the U.S. executive branch to invigorate traditional Federal activities in research on adolescent development. | | | |
| 2-3a: Require the U.S. executive branch to establish a permanent council or councils to provide ongoing advice to Federal agencies on research directions in adolescent health. | Coordination, raise level of research, attention to important issues, innovation | Short to medium term and long term | Low ^b |
| 2-3b: Support, or encourage the U.S. executive branch to support, a symposium or symposia on adolescent research issues. | Coordination, raise level of research, attention to important issues, innovation | Longer term | Low ^b |
| Strategy 2-4: Congress could encourage the U.S. executive branch to invigorate traditional Federal activities in data collection. | | | |
| 2-4a: Require the appropriate U.S. executive branch agency to provide Congress with periodic (e.g., every 2 years) reports on the health status of U.S. adolescents and require that these reports be made available to the public. ^c | Coordination, visibility, U.S. executive branch accountability, resource planning | Immediate and long term | High |
| 2-4b: Support and encourage local efforts to collect adolescent health information that will be, at least in part, able to be compared to national level data. | Resource allocation | Longer term | Could be high |
| Strategy 2-5: Congress could create a locus for a strong Federal role in addressing adolescent health issues and invigorate traditional Federal activities in program development, research, and data collection. | Depends on specific strategies selected | Depends on specific strategies selected | Depends on specific strategies selected |

^aSpecific areas found by OTA to be in particular need of development are listed in table 7.

^bDoes not include the cost of funding actual research.

^cCongress could frame the request in such a way that specific health-related findings for specific age, gender, racial, ethnic, income, regional, and residential groups are highlighted. This would encourage the collection of appropriate data.

SOURCE: Office of Technology Assessment, 1991.

could be undertaken by a new adolescent health agency or coordinating body:

- monitoring of trends in adolescent health;
- coordination of research;
- overseeing the design of, support for, and evaluations of, adolescent health services;
- overseeing and coordinating training for service providers who work with adolescents;
- providing a focal point for adolescent participation in policymaking;
- providing a focal point for a national advisory body on adolescent issues;
- coordinating the diverse activities of Federal agencies as they relate to adolescents;
- interpreting and overseeing congressional mandates; and
- advising Congress on adolescent health issues.¹²⁶

Congress could take any of several approaches to the creation of a locus for a strong Federal role in addressing adolescent health issues: create a new Federal agency at the Cabinet level with line responsibilities (Strategy 2-1a) or without line responsibilities (Strategy 2-1b) or create a new Federal agency within an existing Cabinet department (Strategy 2-1c) or create a new interdepartmental, interagency adolescent health coordinating body (Strategy 2-1d) (see table 6).

With the adoption of any of these strategies, two issues will remain. One is how to design Federal policy so that it would be refocused to reflect a new approach that reflects the guiding principles of attention to adolescent environments (in addition to their behaviors and disorders) within a prolonged sympathetic and supportive context. The mere existence of a new agency or coordinating body, even though such a body would raise the visibility of adolescent health issues, would not be enough to accomplish this goal; congressional oversight could ensure that this approach is followed. The recently enacted Young Americans Act takes an exemplary approach because it is aimed at improving social environments for young people and their families by emphasizing the creation of programs that: support

families, create community referral services, and provide high-quality educational opportunities (Public Law 101-501, Title IX, Chapter 2, Sec. 932).

The second issue is to which congressional committee(s) a new adolescent health agency or coordinating body would report in the Congress. currently, multiple congressional committees have interests in and jurisdiction over specific adolescent issues (see table 3 in "Major Findings"). The variety of congressional mandates is one reason cited by executive branch agency representatives for the current lack of coordination on adolescent health issues in the executive branch.

Strategy 2-1a: Create a new Federal agency at the Cabinet level, with line responsibilities, to undertake broad efforts related to improving adolescent health.

The advantages of having a new Cabinet-level agency with line responsibilities is that such an agency would be highly visible, would have the authority to perform many of the functions that are widely regarded as needed (see above), and, importantly, would cross current departmental lines. On the other hand, creating a separate department solely for adolescent health and related issues might create an unwanted precedent. Further, it could not fully resolve redundancies and gaps across topics (e.g., highway safety, disabilities, vocational training) or age groups.

Strategy 2-1b: Create a new Federal agency at the Cabinet level, but without line responsibilities, to coordinate efforts related to adolescent health.

A separate office on a level with other Cabinet departments but without line responsibilities (analogous to the Office of National Drug Control Policy) would provide more visibility and coordination across department lines than would a new agency within a single department. However, policies drawn up in such an office might not be accepted by other departments.

Strategy 2-1c: Create a new agency within an existing Cabinet department (e.g., the U.S. De-

¹²⁶Recently, the Federal Government has been recognizing the cross-condition needs of other population groups. Primary examples include the National Institute on Aging (within the National Institutes of Health of DHHS), the Office of Minority Health (in the Public Health Service of DHHS), and the Office of Women's Health Research (within the National Institutes of Health). These efforts are small, generally research- rather than service-focused, and at least one (by the DHHS Office of Minority Health) was criticized for its lack of initiative (211). Subsequently, Congress authorized separate funding for the Office of Minority Health (Public Law 101-527). Nevertheless, these efforts do represent a recognition that disease-focused activities may not be sufficient to seize the needs of certain groups,

partment of Health and Human Services) to address adolescent health issues.

DHHS currently has the broadest mandate and level of expenditures related to adolescent health issues (see table 2 and figure 13 in "Major Findings"). Thus, DHHS seems a likely place within which to create a new agency with broader responsibility for adolescent health issues. Such an agency could perform many of the functions suggested above. A new agency within DHHS could be situated high enough within the Department to ensure comparability of standing with other DHHS agencies with current major, but disparate, roles in adolescent health issues. Budgets and responsibilities from existing DHHS agencies with major roles in adolescent health issues could be transferred to the new agency. Even so, cooperative efforts within DHHS would still be required because many health and health care issues affecting adolescents require strategies that are disease-specific or that cross population groups (e.g., families, children of all ages, older adolescents and young adults, racial and ethnic minorities, rural people). In addition, strong mandates for collaboration among such a DHHS agency and both independent agencies and agencies in other departments, or possibly the moving of certain of the other agencies' functions (e.g., those of the Office of Juvenile Justice and Delinquency Prevention in the U.S. Department of Justice) to DHHS, could help to ensure a more consistently coordinated adolescent effort.

Strategy 2-id: Mandate the creation of a strong interdepartmental, interagency adolescent health coordinating body.

Mandating the creation of an interdepartmental, interagency adolescent health coordinating body seems the weakest strategy of the four for strengthening the Federal role in adolescent health. A coordinating body similar to some of those that



Photo credit: Office of Technology Assessment

Programs to distribute bicycle helmets or other protective equipment to adolescents in economic need are an example of a potentially effective accidental injury prevention strategy.

already exist would have little visibility and no accountability.¹²⁷ If the creation of a new adolescent health agency, even within an existing department, is thought to be unworkable, however, Congress and the executive branch might be able to structure the creation and implementation of a coordinating body so that the coordinating body is visible, accountable, and potentially effective in strengthening the Federal role in adolescent health and related issues.

Even without mandating or encouraging the executive branch to restructure Federal efforts in improving adolescent health, Congress could act to invigorate traditional Federal efforts in program development (see table 6).

¹²⁷For example, an agency on adolescent research issues was created in 1972 as an offshoot of the Interagency Panel on Early Childhood Research and Development itself established in 1970 in response to evidence that agencies sometimes "duplicated research and ignored important gaps in research" (258). According to a recent document by the Panel, now known as the Interagency Panel on Research and Development, "For many years the two panels were supported by a central contractor who developed and ran an information system that tracked salient information on each research project funded by member agencies. In addition, special studies were performed on cross-cutting issues that were common to the work performed by the agencies on selected topics of special interest to member agencies as well as reviews of currently funded research." However, the information system and research activities were eventually discontinued. In 1985, the two panels were combined into a single interagency panel on research and development on children and adolescents. Now, the panel's work consists largely of monthly meetings in which information on member activities is presented and suggestions for joint research may be made, and an annual conference in which special topics are addressed in depth. Panel members include representatives of ACTION, and the U.S. Departments of Agriculture, Defense, Education, Health and Human Services, Justice, Labor, State, and Transportation. The panel is chaired by a representative from the Administration on Children, Youth, and Families in the Family Support Administration of DHHS. Other examples of existing and past coordinating bodies with a role in adolescent health can be found in ch. 19, "The Role of Federal Agencies in Adolescent Health" in Vol. III.



Photo credit: Benjamin Smith, Washington, DC

There is little systematic information about effective means of preventing adolescent involvement in violence. Congress could support demonstration projects based on promising models.

Strategy 2-2: Congress Could Encourage the Executive Branch To Invigorate Traditional Federal Activities in Program Development

One of the traditional missions of the Federal Government is to provide leadership in the development of new and innovative programs to improve the health of the population. To invigorate Federal activities in program development related to adolescent health, Congress could encourage the executive branch to support program development or demonstration projects in specific neglected areas of prevention and treatment (Strategy 2-2a). A second approach would be to support demonstration projects that use a comprehensive integrated approach to



Photo credit: Benjamin Smith, Washington, DC

Very often, adolescents have little control over the food available to them. Congress could support efforts to provide better nutritional choices to adolescents.

health education within the framework of health promotion (Strategy 2-2b). This approach would cut across many specific areas in adolescent health promotion and problem prevention (and, to some extent, treatment).

Strategy 2-2a: Encourage the executive branch to support program development or demonstration projects in specific neglected areas related to the prevention and treatment of adolescent health problems.

In addition to facing special barriers in access to health services, many adolescents have or are at risk for one or more specific critical health problems. The level of conclusive evidence for "what works" in terms of health promotion, disease prevention, and treatment varies by problem. In some areas (e.g., provision of contraceptive services, mental health services, life-skills training), existing evidence often provides strong indicators of the kinds of promising interventions that deserve additional testing and evaluation. In other areas (e.g., child welfare, hopelessness prevention), a considerable amount of additional analysis may be required to determine the kinds of specific approaches that may be effective for prevention and treatment.

Table 7 displays examples of selected programs or approaches that OTAs analysis suggested were either: 1) innovative and promising (e.g., life-skills training for adolescents at risk of alcohol, tobacco, and drug abuse) or 2) in areas that were in serious need of innovative program development and evalu-

Table 7—Promising or Neglected Areas of Adolescent Health Promotion, Problem Prevention, and Treatment: Examples of Program Development Needs^{a,b}

Promising or neglected areas of adolescent health promotion and problem prevention: examples of areas in particular need of program development and accompanying evaluation

- To improve family environments:
 - innovative methods for dissemination to parents of accurate and useful information about adolescent development and appropriate parenting
 - interventions to help prevent problems in adolescents from single-parent or stepparent families
- To improve school environments:
 - Peer tutoring
 - Decentralized decision making
 - innovative approaches to parental involvement
- To improve adolescents' use of discretionary time:
 - Recreational facilities and programs (e.g., pools, gymnasiums, parks)
 - Community service programs
- To reduce accidental injuries:
 - innovative methods for school-based driver education
 - Programs to distribute free protective equipment (e.g., football and bicycle helmets) to adolescents in economic need
- To improve nutrition and fitness:
 - innovative attempts to provide food widely regarded as healthful
 - Education of physical education teachers, coaches, trainers, etc., about adolescent-specific factors that could influence adolescents' physical abilities
 - Nutrition education
- To improve dental and oral health:
 - Preventive education on dental and oral hygiene and health, including information about obtaining access to needed services, when needed (e.g., for low-income adolescents)
- To prevent AIDS and other sexually transmitted diseases:
 - Condom distribution accompanied by education about the prevention and treatment of human immunodeficiency virus (HIV) and sexually transmitted diseases
 - Education on access to clinical preventive and treatment services
- To prevent adolescent pregnancy:
 - Contraceptive distribution accompanied by family life education for adolescents particularly likely to be sexually active (e.g., older adolescents)
 - Sexuality/pregnancy prevention education for young adolescents, before they are likely to be sexually active
 - Parent-child communication groups with a focus on sexuality
 - Broad-based, intensive programs emphasizing life-options discussions and experience plus discussions of sexuality
- To promote mental health and prevent mental health problems:
 - Social competency-based mental health promotion efforts
- To prevent alcohol, tobacco, and drug abuse:
 - Additional support for life-skills training
- To prevent delinquency:
 - Comprehensive, intensive efforts early in life (e.g., Perry Preschool Program, parent-skill training) and after problems have appeared (e.g., intensive psychotherapeutic and vocational-education intervention)
 - Supervised integration of identified antisocial adolescents into activities with nondisturbed peers
 - Violence prevention curricula
 - Victimization prevention curricula
- To prevent homelessness:
 - Prevention of abuse in families; treatment services for abusive families
 - Education for families of homosexual adolescents

Adolescent treatment service delivery: examples of areas in particular need of program development and accompanying evaluation

- To improve family environments:
 - innovative approaches to child welfare services for adolescents
 - Family counseling/therapy, especially for abusive or dysfunctional families
- To improve services for chronic physical illnesses:
 - Efforts to reduce fragmentation in delivery of health services to adolescents with serious chronic physical illnesses
 - Efforts to inform adolescents about the availability of treatments for problems of importance to them (e.g., acne, dysmenorrhea)
- To improve nutrition and fitness:
 - See "to improve use of adolescents' discretionary time" above regarding providing fitness opportunities
- To treat AIDS and other sexually transmitted diseases:
 - innovative, sensitive, and flexible approaches to treatment for STDs
 - Outreach efforts to bring adolescents into AIDS clinical trials
- To prevent adverse effects of pregnancy and parenting for adolescents^d:
 - Outreach and intensive comprehensive services (e.g., housing, child care, transportation) to keep pregnant and parenting adolescents in school

Table 7—Promising or Neglected Areas of Adolescent Health Promotion, Problem Prevention, and Treatment: Examples of Program Development Needs^{a,b}-Continued

- To treat mental health problems:
 - Information to adolescents about when and how to seek mental health services
 - Systematic comparisons of processes and outcomes for inpatient v. outpatient treatment
 - Innovative approaches to case management and financing (e.g., “wraparound” funding)
 - Innovative mental health treatment approaches, such as home-based and therapeutic foster care, compared to traditional approaches (outpatient therapy, inpatient treatment)
- To treat alcohol, tobacco, and drug abuse:
 - Innovations in access to early intervention (e.g., student assistance programs, school-linked health centers)
 - Information to adolescents about when and how to seek treatment services
- To treat delinquent adolescents:
 - Innovations in the delivery of health services to adolescents in juvenile justice facilities
 - Systematic comparisons of outcomes for a broad range of more and less punitive approaches (e.g., private v. public facilities; community-based v. facilities away from the adolescents’ home community; open v. dosed facilities; “boot camps” v. traditional approaches)
- To provide services to homeless adolescents:
 - comprehensive (e.g., for physical health, mental health, substance use), intensive services for homeless adolescents
 - Transitional living

^aFor adolescents, as discussed under “Major Findings,” the areas of health promotion, problem prevention, and treatment often overlap.

^bNote that this is not a comprehensive list of adolescent health problems and solutions, but a list that includes: service systems in dire need of innovative and rigorously evaluated approaches (e.g., the child welfare system); specific interventions that are being widely used but have not been adequately evaluated (e.g., inpatient v. outpatient treatment for mental health problems); interventions that appear promising but have not been widely tested (e.g., violence prevention curricula; distribution of free or low-cost bicycle helmets, paired with an educational campaign); and types of interventions that appear promising but have not been tested with adolescents to OTA’s knowledge (e.g., victimization prevention). This list arguably does not include the most important approaches, which are: 1) to develop methods of comprehensively addressing adolescent health issues, within a context of health promotion, rather than splintered efforts to prevent discrete problems, 2) to increase adolescents’ access to health services through changes in health financing, and 3) to improve adolescent environments through interventions that are already known to be effective (e.g., fluoridated water).

^cClinical preventive services are services that prevent the occurrence (e.g., through contraception) or potential worsening (e.g., through screening for conditions) of clinical conditions.

^dThis Report focused on the prevention of adverse effects of pregnancy for adolescents, although, as discussed in the chapter on families, healthy mothers and fathers are essential to healthy infants and children. An earlier OTA report, *Healthy Children: Investing in the Future*, focused on preventive health services in the prenatal and early infant period to protect the health of young infants and children (224).

SOURCE: Office of Technology Assessment, 1991.

ation (e.g., child welfare, health care in the juvenile justice system). The examples are listed by goal (e.g., “to improve family environments”).

Issues—In designing and funding programs and demonstration projects on *specific* issues and service delivery systems, it would be important for executive branch agencies to be mindful of several factors: critical definitional issues regarding adolescent health concerns (box A in “Introduction”); the apparent, but inconstant, interrelatedness of some adolescent health problems (165); the fact that interventions can have multiple intended outcomes; the low base rate of some high-visibility problems; and the “partially inconsistent assumptions about evaluation” made by the variety of disciplines involved in adolescent health intervention (41). One approach to these issues is adequately to conceptualize and measure the problem, the intervention, and the possible outcomes.

Strategy 2-2b: Provide support for multisite rigorous research and demonstration projects that test and compare suggested new comprehen-

sive and innovative models of education for health such as those suggested recently by the Carnegie Council on Adolescent Development, the National Commission on the Role of the School and the Community in Improving Adolescent Health, and the Centers for Disease Control.

Another approach to program development in health promotion and problem prevention is to take a more broad-based approach to school-based educational approaches to adolescent health. In the United States, there is little in-depth understanding about the way health education is delivered to adolescents. In but concerns have eventuated in a consensus that changes in the delivery of health education are needed. In recognition that most contemporary health education efforts are neither appropriate for adolescents nor effective, a task force of the Carnegie Council on Adolescent Development, the National Commission, and the Centers for Disease Control have recently generated suggestions for change (29,153,279). Their recommenda-

¹²⁸See, for example, ch. 10, “Pregnancy and Parenting: Prevention and Services,” in Vol. II.

tions regarding school-based health education are presented in box C in "Major Findings."

Common themes in these groups' recent recommendations include the need for health-related education to begin early, be developmentally appropriate, involve life-skills training, involve the active participation of adolescents, and be part of a general approach to health that includes improved access to health services (29,153,279). Some have felt the need to recommend explicitly that information be honest and relevant (153). Others suggest that health education be part of an integrated life-sciences curriculum and, more importantly, that health education be integrated into overall school environments that are health-promoting (29). OTA's analysis suggests another consideration: that education for health include information about gaining access to health services, even if such services are not school-linked. And OTA's Adolescent Health Youth Advisory Panel expressed an interest in health education that was immediately relevant to what they view as one important aspect of their lives: interpersonal relations (235). The Youth Advisory Panel's concern is consistent with societal interest in reducing adolescent pregnancy, interpersonal violence, and, potentially, the high divorce rate among adults (292,293).¹²⁹ While these recommendations seem eminently logical, there is still some inconsistency among them, and none of them have been tested systematically.

Issues—It is important to note that existing recommendations on health education are limited to school-based health education. There are no attempts known to OTA to conceptualize a method of providing comprehensive health education for adolescents who are not in school.¹³⁰

A second issue is that school-based prevention efforts could continue to tend to be didactic and relatively passive rather than proactive. Proactive efforts are those that attempt to promote health and prevent the occurrence of problems by changing environments rather than merely attempting to change individual behavior.¹³¹ By integrating health

education efforts into the school and community environments (including, if available, comprehensive health and related services), the danger of limiting health education to "lectures" on the "four food groups" (151) can be avoided. Were health education to be well-integrated into a total school and community environment, however, evaluation of the effectiveness of any particular component is made more difficult.

A fourth issue in attempting to provide quality health education in the schools is the frequent political divisiveness encountered when the discussion of morally difficult issues with minors is proposed.

Further conceptualization and testing of multiple components of an integrated approach is clearly needed, but an often effective approach to implementing improvements is to make theoretically reasonable changes and carefully observe the effects of those changes (1 17).

Strategy 2-3: Congress Could Encourage the Executive Branch To Invigorate Traditional Federal Activities in Research on Adolescent Development

This Report and other recent documents specifically focused on either adolescent development and health (62,95,340) or on the Federal role in financing research on the topic of adolescent development and health (144) are unanimous in concluding that Federal efforts in research related to adolescent development and health have been and continue to be dismally inadequate and shortsighted.

As mentioned previously, overall Federal research expenditures on adolescent development and health are small, focused on a relatively narrow spectrum of problems, and freed on an even narrower set of solutions. Although the problems typically emphasized may be costly and important, with potentially disastrous implications for adolescents' futures (e.g., serious delinquency, unprotected pregnancy and parenthood), there is little indication in current Federal policy and programs of concern for the context and entirety of adolescents'

¹²⁹The 1988 DHHS National Survey of Family Growth found that more than one-third of first marriages among women ages 15 to 44 had already ended in separation divorce, or widowhood, and among women who had been married for the first time in 1974 or earlier, the proportion of disrupted first marriages approached half (293). Also see ch. 3, "Parents' and Families' Influence on Adolescent Health," in Vol. II.

¹³⁰The Centers for Disease Control in DHHS is charged with developing human immunodeficiency virus (HIV)-related education prevention for out-of-school youth. For discussion see ch. 9, "AIDS and Other Sexually Transmitted Diseases: Prevention and Services," in Vol. II.

¹³¹Selected major strategies for improving adolescents' environments are discussed below under Major Option 3 ("congress could take steps to improve environments for adolescents").

lives, a situation that has left informed observers perennially disappointed with the Federal role in improving adolescents' lives and health.

Congress could help to substantially revitalize the research agenda related to adolescent development and health. Research on adolescent health and development issues should be approached in a consistent, comprehensive, coordinated, sensitive, and supportive manner. To oversee the development of a research agenda, Congress could require that the executive branch establish a permanent council or councils to provide ongoing advice to Federal agencies on research directions in adolescent health (Strategy 2-3a). Alternatively, or in addition, Congress could support a symposium or symposia on adolescent research issues (Strategy 2-3b).

Strategy 2-3a: Require the executive branch to establish a permanent council or councils to provide ongoing advice to Federal agencies on research directions in adolescent health.¹³²

A permanent council or councils would provide executive branch agencies the benefit of advice on adolescent health and development issues from leading practitioners in the field. This strategy is a relatively low-cost way to potentially raise the level of federally funded adolescent development and health research and would probably have beneficial repercussions for non-federally funded research.

One hazard to avoid in establishing a Federal advisory board or boards is domination by a single professional discipline. In addition, strong adolescent participation in the symposia or advisory councils and explicit attention to reconceptualizations of adolescent health issues (e.g., in a symposium designed for that purpose) would help to ameliorate any tendencies to remain in the traditional frameworks.

Alternatively, or in addition to the permanent advisory council or councils:

Strategy 2-3b: Support, or encourage the executive branch to support, a symposium or symposia on adolescent research issues.

Such symposia could address the development of research agendas in normal adolescent development, risk and protective factors in adolescent health and



Photo credit: Benjamin Smith, Washington, DC

Congress could encourage the U.S. executive branch to strengthen traditional Federal activities in research on adolescent development and health. One strategy would be to require the establishment of a permanent advisory council or councils to advise Federal agencies on research directions; another would be to support a symposium or symposia on adolescent research issues. Advice from a range of disciplines and from adolescents would be helpful.

well-being, health promotion and disease prevention, treatment services, and nontraditional strategies for improving adolescent health and well-being. They could help to energize the research community and stimulate cross-fertilization of ideas.

Analyses in OTA's Report, and in other recent volumes on adolescent development, health, and health services (8,5 1,62,93,102,153,340), can help to provide the groundwork for an improved approach to adolescent health research.

¹³²This council or councils could be similar to those currently advising the National Cancer Institute (within the National Institutes of Health of DHHS) and the National Institute of Mental Health (within the Alcohol, Drug Abuse, and Mental Health Administration of DHHS).

If implemented in addition to a permanent advisory council or councils, these symposia could be guided by, and work in tandem with, the advisory council(s). Adolescent participation could be encouraged in the symposia as well as in the advisory boards.

Strategy 2-4: Congress Could Encourage the U.S. Executive Branch To Invigorate Traditional Federal Activities in Data Collection

National and local information on adolescent health, health problems, and health services is typically unavailable or deficient.¹³³ Data for monitoring adolescent health status, health and related services utilization, and barriers to access are currently insufficient in terms of topics covered, ages reported on, and ability to disaggregate data for specific racial, ethnic, income, gender, age, regional, and residential groups.

To encourage the collection and dissemination of data on adolescent health, Congress could require periodic reports to Congress on the health status of U.S. adolescents (Strategy 24a) and support local efforts to collect adolescent health information comparable to national level data (Strategy 2-4b).

Strategy 2-4a: Require the appropriate U.S. executive branch agency¹³⁴ to provide Congress with periodic (e.g., every 2 years) reports on the health status of U.S. adolescents and require that these reports be made available to the public.

The reports should include information on the following:

- a comprehensive range of health status measures (e. g., self-reported risk and protective behaviors, self-perceived emotional status, self-perceived physical health problems);
- utilization of the range of health services providers and settings likely to be seen by adolescents (e.g., guidance counselors, school nurses, teachers (for counseling and guidance), coaches, mentors, adolescent and adult friends, psychologists, nurses outside the school, social workers, nutritionists, and physicians, in schools, urgent/emergency care centers, hospitals, youth serving agencies, sports facilities, workplaces, and private offices);



Photo credit: Mark Charette, Washington, DC

Congress could require the appropriate U.S. executive branch agency to provide Congress with periodic reports on a comprehensive range of adolescent health status and health and related services indicators. Such a requirement would promote the collection of appropriate information.

- . availability and utilization of recreational facilities and outlets;
- volunteer and paid work activities; and
- other environmental risk and protective factors (e.g., family structure, abuse, neglect).

Congress could frame the request in such a way that health-related findings for specific age, gender, racial, ethnic, income, regional, and residential groups are highlighted. This would force the eventual collection of appropriate data.

Issues—Clearly, the U.S. executive branch is not *currently* equipped to regularly provide Congress with adolescent related-reports of this broad nature (260; see app. C). Requiring such reports, however, would compel the executive branch to begin compiling such data as are available and to determine the kinds of data not currently available.

A second issue is that national data, while useful in suggesting broad trends in adolescent health and access to health and health services, are certainly not sufficient guides for use in local practice. The provision of services to adolescents, although it can be assisted by support from the Federal Government, is ultimately a local issue. In addition, some Federal

¹³³See app. C, “Issues Related to the Lack of Information About Adolescent Health and Health and Related Services.”

¹³⁴A central Federal locus for adolescent health issues would provide an appropriate organizational setting through which to collect and disseminate such data (see Major Option 2, Strategy 2-1 on creating a locus for a strong Federal role in addressing adolescent health issues).

grant programs relevant to adolescent health issues are based at least in part on the demonstration of need in the local community. Answers to questions such as which adolescents are using alcohol, tobacco, and illicit drugs; how many (and which) adolescents have mental disorders; how many (and which) adolescents use or need contraception, become pregnant, or are parents can serve as a guide to the placement of resources. To assist local communities with their planning, and potentially make the Federal grantmaking process more equitable, Congress could consider the following strategy.

Strategy 2-4b: Support and encourage local efforts to collect adolescent health information that will be, at least in part, able to be compared to national level data.¹³⁵

There are several potential barriers to expansions in the collection and analysis of information pertinent to adolescent health, both at the national and local levels. First, data collection is expensive and would almost certainly require additional budgetary support.¹³⁶

Second, questionnaires relying on self-reports are the most common means of collecting information on adolescent health status and health utilization, perhaps because they are among the least expensive alternatives. However, there is considerable concern about the reliability and validity of self-report data. This may be particularly true for: 1) adolescents, who as a group may be more likely than other age groups to respond in a socially desirable, rather than an objectively true, manner (42,85); and 2) for tracking trend data in those behaviors that vary over time in social acceptability (e.g., sex, contraceptive use, drug use). Alternative means of collecting data from adolescents, or making concerted efforts to verify information amassed through self-reports, will be necessary.

Third, certain topics (e.g., suicide, drug use, sexual activity) are considered quite delicate. For economic reasons (e.g., real estate values, school

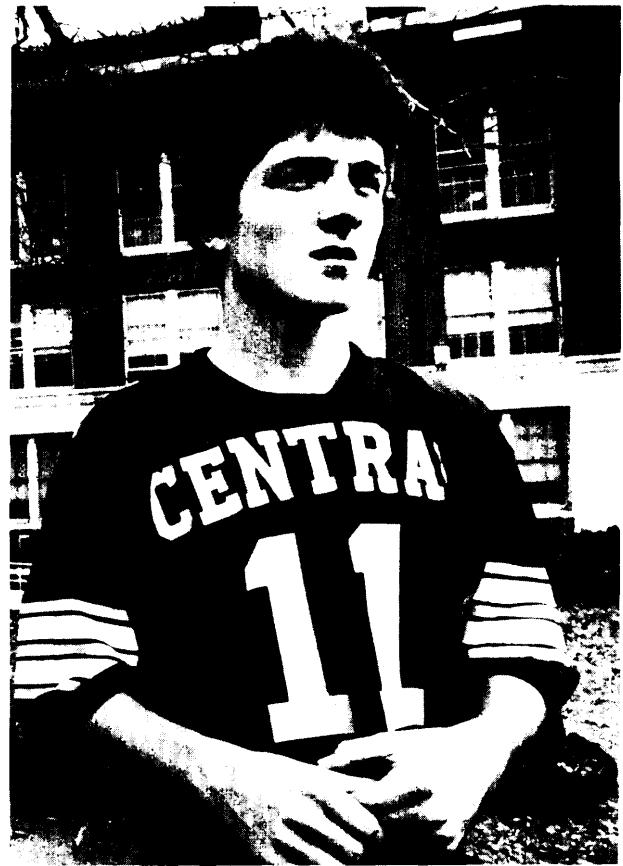


Photo credit: Education Week

Congress could support and encourage efforts to collect local data that will be able, at least in part, to be compared to national data

enrollments), local jurisdictions and specific schools may be reluctant to collect data suggesting that adolescents in their communities are troubled or engaged in behaviors that may meet with social disapproval. Also, there is typically some concern that adolescents may be troubled by the asking of some questions or actually driven to engage in certain behaviors through the power of suggestion. There is no hard evidence to support that the raising of an issue in a questionnaire leads to engagement in

¹³⁵For example, the Youth Risk Behavioral Survey, which was being designed by a steering committee supported by Centers for Disease Control in DHHS, will be administered at the National, State, and local levels. Certain core items will be constant across localities, and localities will have the option to add specific items of particular importance. In this way, a core of information will be available nationally, and localities will have information of importance to them as well as national comparative data (277). Similarly, the Young Americans Act called for States wishing to apply for formula grants for the purpose of improving the coordination of services provided to children, youth, and families, to prepare reports with detailed information gathered by the State on young individuals and the families of such individuals concerning: 1) age, sex, race, and ethnicity; 2) residences; 3) incidence of hopelessness; 4) composition of families; 5) economic situations; 6) incidence of poverty; 7) experiences in care away from home; 8) health; 9) violence in homes or communities; 10) nature of their attachment to school and work; 11) dropout rates; 12) character of the communities in which they reside (Public Law 101-501, Title IX, Subtitle A, Chapter 2, Sec. 931).

¹³⁶In addition, it may require training for additional researchers trained to work with adolescent respondents.

a proscribed or dangerous behavior,¹³⁷ but these concerns may be a function in part of communities not knowing how to proceed when they do find they have a problem. Therefore, it is important that local data be allowed to be collected anonymously if need be (so that individuals, individual schools, and perhaps individual communities are not able to be identified) and that they not be collected in isolation from other efforts designed to deal with adolescent health concerns.¹³⁸

Strategy 2-5: Congress Could Create a Locus for a Strong Federal Role in Addressing Adolescent Health Issues and Invigorate Traditional Federal Activities in Program Development, Research, and Data Collection

Restructuring Federal adolescent health efforts so that there is a more central locus for coordination would not by itself address current deficiencies in the traditional Federal activities related to program development, research, and data collection. Thus, a more ambitious, and potentially effective, approach would be to *combine* Strategies 2-1 through 2-4.

Major Option 3; Congress Could Support Efforts To Improve Adolescents' Environments

The Nation's approach to addressing the health problems of adolescents is often skewed toward efforts designed to convince adolescents to change their own behavior. Teaching adolescents to behave

in ways that are socially acceptable, life-prolonging, and otherwise health promoting is, of course, important. But in the Nation's realization that behavior affects health (e.g., 260), the importance of the social environment¹³⁹ in influencing behavior and otherwise contributing to health and health problems has been neglected (230).

To illustrate this point consider the DHHS report, *Healthy People 2000*. *Healthy People 2000* is the Nation's most prominent statement on health objectives for the U.S. population and has numerous health status and risk reduction goals related to children, adolescents, and young adults (260).¹⁴⁰ By comparison, the report sets forth relatively few goals for "services and protection" that are specific to adolescents. Box D presents year 2000 'service and protection' objectives related to adolescents.¹⁴¹

Major Option 1 (encouraging efforts to improve adolescents' access to health services) and Major Option 2 (taking steps to restructure and invigorate the Federal Government's efforts to improve adolescents' health) are consonant with a 'new approach' to adolescent health concerns, in which adolescents are provided with a prolonged protective and supportive environment and, it is hoped, adolescents come to perceive that they are appropriately cared for. Major Option 3 (supporting efforts to improve environments for adolescents) requires strategies outside of areas traditionally regarded as health services (see table 8); they are designed to improve

¹³⁷A possible exception are the findings from some suicide prevention research studies that mass-oriented suicide prevention "interventions" (e.g., the showing of films about adolescent suicide on television) have resulted in a, but statistically significant, increase in adolescent suicide (see ch. 11, "Mental Health Problems: Prevention and Services," in Vol. II). However, these were films and not questionnaires.

¹³⁸For example, the National Commission on the Role of the School and the Community in Improving Adolescent Health recommended that communities establish coordinating councils for children, youth, and families that develop local solutions to local problems (153).

¹³⁹The physical environment is also important, but this Report focused on the social environment. Other reports by OTA have focal on potential health effects of the physical environment, although they have not focused specifically on adolescents. See for example: *Catching Our Breath: Next Steps for Reducing Urban Ozone* (227); *Technologies for Reducing Dioxin in the Manufacture of Bleached Wood Pulp* (226); *Acid Rain and Transported Air Pollutants: Implications for Public Policy* (222); *Neurotoxicity: Identifying and Controlling Poisons of the Nervous System* (231) and *Complex Cleanup: The Environmental Legacy of Nuclear Weapons Production* (234).

¹⁴⁰The *Healthy People 2000* report identified 32 "health status" and "risk reduction" goals for adolescents and young adults, and 34 such goals for children (260). A *health status goal* is defined in terms of a reduction in death, disease, or disability (e.g., "Reduce deaths among youth aged 15 through 24 caused by motor vehicle crashes to no more than 33 per 1(X),000 people" (Healthy People Objective Number 9.3b)). A *risk reduction goal* is defined in terms of prevalence of risks to health or behaviors known to reduce such risks (e.g., "Increase use of helmets to at least 80 percent of motorcyclists and at least 50 percent of bicyclists" (Healthy People Objective Number 9.13)). It is important to note that DHHS notes that the report *Healthy People 2000*, although published by DHHS, "does not reflect the policies or opinions of any one organization including the Federal Government, or any one individual" (260). It is viewed by DHHS as "the product of a national process" (260). However, in transmitting the report to the Secretary of DHHS, the Assistant Secretary for Health committed the Public Health Service "to work toward achievement of these objectives [contained in *Healthy People 2000*] for the coming decade" (260).

¹⁴¹The American Medical Association's "Healthier Youth by the Year 2000 Project" publication, *Healthy Youth 2000*, provides a fuller accounting of the *Healthy People 2000*'s national health promotion and disease prevention objectives applicable to adolescents (defined by the American Medical Association project as ages 10 through 24) (6). The American Medical Association publication excerpted objectives from the DHHS publication *Healthy People 2000* (260) pertaining to all or part of the age group 10 to 24. In addition, the American Medical Association publication includes "Additional Objectives" culled from *Healthy People 2000*, organized according to roles for "professionals in health care, education, community, and government contexts" (6).

Box D—Healthy People 2000 Service and Protection Objectives That Pertain to Adolescents

Healthy People 2000 is the Nation's most prominent statement on health objectives for the U.S. population. This report, published by the U.S. Department of Health and Human Services (DHHS) in 1990, contained a number of health status and risk reduction goals for adolescents but relatively few service and protection objectives related to adolescents. Preventive services include counseling, screening, immunization, or chemoprophylactic interventions for individuals in clinical settings, and health *protection objectives are those* environmental or regulatory measures that confer protection on large population groups. In its lists of objectives by age group, DHHS combined services and protection objectives.

Some year 2000 service and protection objectives identified by DHHS as related to adolescents would not require changes in adolescents' behavior, among them the following:

- increasing the proportion of school lunch and breakfast services and child care food services with more nutritious menus;
- increasing the number of State and local tobacco-free indoor air laws;
- eliminating or severely restricting tobacco product advertising and promotion to which youth are likely to be exposed;
- increasing the number of State laws to restrict minors' access to alcohol;
- increasing restrictions on promotion of alcohol to young audiences;
- extending emergency room protocols for identification of suicide attempters, victims of sexual assault, and child abuse victims;
- removing financial barriers to immunizations; and
- increasing the proportion of primary care providers who provide age-appropriate preconception care and counseling.

Other service and protection goals targeted to adolescents would require changes in adolescent behavior, among them:

- increasing the proportion of children and adolescents who participate in daily school physical education;
- increasing the proportion of school physical education class time that students spend being physically active; and
- increasing the proportion of 10- to 18-year-olds **who have** discussed sexuality with their parents and/or received sexuality information through a parentally endorsed source.

A number of service and protection objectives were not identified by DHHS as targeting adolescents but could potentially affect adolescents, among them:

- increasing the availability and accessibility in the community of physical activity and fitness facilities;
- increasing by 100 percent the availability of processed food products that are reduced in fat and saturated fat;
- increasing the proportion of restaurants and institutional food service operations that offering identifiable low-fat, low-calorie food choices;
- ensure access to alcohol and drug treatment programs for traditionally undersexed people;
- increasing driver's license suspension/revocation laws or programs of equal effectiveness for people determined to have been driving under the influence of intoxicants;
- increasing the proportion of pregnancy counselors who offer positive, accurate information about adoption to their unmarried patients with unintended pregnancies;
- increasing services for human immunodeficiency virus (HIV) infection and sexually transmitted diseases (STDs);
- increasing the proportion of providers of primary care for children who include assessment of cognitive, emotional, and parent-child functioning, with appropriate counseling, referral, and followup, in their clinical practices;

¹The health promotion and disease prevention **objectives** are organized initially by strategy (e.g., **health promotion, health protection, preventive services, and surveillance and data systems**), not by population group (260). Then, a separate section of the *Healthy People 2000* report lists the objectives as they pertain to certain age groups (i.e., **children, adolescents** and young adults, adults, and older adults) and "special" populations (i.e., people with low income, blacks, Hispanics, Asians and **Pacific Islanders**, American Indians and Native **Americans**, and people with disabilities).

Box D-Healthy People 2000 Service and Protection Objectives That Pertain to Adolescents— Continued

- increasing the number of States in which at least 50 percent of children identified as physically or sexually abused receive physical and mental health evaluation with appropriate followup;
- increasing the number of States requiring safety belt and motorcycle helmet **use for all ages**;
- **enacting laws requiring that handguns be made more** difficult to discharge by children;
- extending to 50 States emergency medical services and trauma systems linking prehospital, hospital, and rehabilitation services;
- performing testing for lead-based paint in homes built before 1950;
- extending **to to long-term institutional facilities (including juvenile homes and detention facilities) the requirement that oral examinations and services be provided no later than 90 days after entry into these facilities**; and
- **extending requirement of the use of effective head, face, eye, and mouth protection to all organizations sponsoring sporting and recreation events that pose risk of injury.**

SOURCE: office of Technology Assessment, 1991, based on U.S. Department of Health and Human Services, Public Health Service, *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*, conference edition (Washington, DC: September 1990).

the social environment for adolescents, with the goals of promoting health and protecting adolescents from adverse environments.

One strategy would be for Congress to take steps to increase support to families so that they can play their rightful and important role in adolescents' development and health (Strategy 3-1). Another strategy would be for Congress to take steps to reduce the adolescent death and injury toll from firearms by reducing adolescents' access to firearms (Strategy 3-2). A third strategy would be for Congress to support the expansion of health-promoting recreational opportunities for adolescents (Strategy 3-3). A fourth strategy would be for Congress to monitor the effect on adolescents of the recently passed National and Community Service Act (Public Law 101-610) (Strategy 3-4).

Strategy 3-1: Congress Could Take Steps To Increase Support to Families of Adolescents

Appropriate roles for parents change during adolescence, but changing relationships between adolescents and parents should not obscure the fact that parents remain essential to healthy adolescent development.¹⁴² Unfortunately, many current policies provide little support for parents to take an active and appropriate role in the lives of their



Photo credit: Capitol Hill Arts Workshop, Washington, DC

Many current policies provide little support for parents to take an active and appropriate role in the lives of their adolescent children.

adolescent children.¹⁴³ A recent review found that, of the four parental functions important for the socialization, development, and well-being of adolescents (providing basic needs, protection, guidance, and advocacy), existing parental support programs were most likely to emphasize the guidance function, and none addressed the basic resource provision function of parents (192). Only a handful of parental support programs addressed the personal or developmental needs of adults who are raising adolescent children (192). Further, OTA has observed that much of the theorizing and planning

¹⁴²See ch. 3, "Parents' and Families' Influence on Adolescent Health," in Vol. II.

¹⁴³For example, schools have not adjusted their policies to the fact that both (or the single) parents of 60 percent of adolescents work full time.

Table 8-Strategies for Major Option 3: Congress Could Support Efforts To Improve Adolescents' Environments

| Strategy | Policy issue addressed | Time for expected impact | Rough estimate of cost (direct) to Federal Government |
|---|--|-----------------------------|---|
| Strategy 3-1: Congress could take steps to increase support to families of adolescents. | Parents are legally responsible for their adolescents, are often needed to accompany adolescents for the receipt of health services, and play an essential role in adolescents' optimal development. | Depends on strategy adopted | Low to medium, depending on strategy |
| Strategy 3-2: Congress could take steps to support additional limitations on adolescents' access to firearms. | | | |
| 3-2a: Act to place additional limitations on adolescents' access to firearms. | Suicide, infliction of injury and death by adolescents. | Medium term | Low |
| 3-2b: Fund a study to determine how to further restrict adolescents' access to firearms. | Suicide, infliction of injury and death by adolescents. | Longer term | Medium |
| Strategy 3-3: Congress could support the expansion of appropriate recreational opportunities for adolescents. | Appropriate use of discretionary time; potential for adult guidance; possible reduction of subjective distress; opportunities for learning life-skills and social competence; opportunities for work (community service); possible reduction in substance abuse, especially among disadvantaged adolescents. | Medium to longer term | Depends on Federal contribution |
| Strategy 3-4: Congress could monitor the effects on adolescents of the Implementation of the National and Community Service Act of 1990. | Appropriate use of discretionary time; adult guidance; improved sense of citizenship. Would help to ensure that the "quantifiable measurable goals" to be included in local grant applications are stated and measured for adolescents, including the economically and educationally disadvantaged youths targeted in the legislation; and would thus give a sense of how well adolescents are addressed in the implementation of the legislation. | Immediate | Low |

SOURCE: Office of Technology Assessment, 1991.

about the role of the family and family support has focused on the needs of younger children.¹⁴⁵

Congress could take concrete steps to enhance the abilities of parents to provide for the basic needs of their adolescent children (e.g., through child allowances, tax credits, additional support for postsecondary education, and child care appropriate for adolescents¹⁴⁶). In addition, Congress could take steps to enhance the availability of parents to be involved in the lives of their adolescent children (e.g., by promoting flexible worktime so that parents can be home after school, attend teacher conferences, and participate in school activities).

The changing developmental status of individuals during adolescence means that direct application of the kinds of family support features proposed or enacted for families with younger children would not be appropriate for families with adolescents. In general, the design of appropriate family support policies for families with adolescents might be preceded by an analysis of the practices of other developed countries and should seek the participation and advice of adolescents and their families.

In addition to concrete support, a clear need for many parents is for accurate information about the challenges of parenting adolescents. The need to develop innovative methods to disseminate information about appropriate parenting strategies during adolescence was noted earlier (see Major Option 2, Strategy 2-2a and table 7, above). Because the

knowledge base on appropriate parenting is still slender with respect to nonwhite, non-middle-class, and nonurban families (192), it would be important to accompany such information dissemination with training and evaluation, as well as to expand the research base on how appropriate parenting of adolescents may differ for lower socioeconomic and/or racial and ethnic minority adolescents, and those in rural areas.

Strategy 3-2: Congress Could Take Steps To Support Additional Limitations on Adolescents' Access to Firearms

Access to firearms for persons of all ages is one of the most hotly debated issues in the United States (214). It seems universally agreed, however, that it is unwise for minors to have unlimited access to firearms. Despite this recognition, and associated Federal legal limits on the *sale* (but not possession) of firearms to minors,¹⁴⁷ U.S. adolescents do have access to firearms, which they use for destructive purposes (e.g., suicide, homicide, other violence) or to harmful ends (e.g., accidental injuries).¹⁴⁸ In addition, adolescents are increasingly the victims of firearm-related homicides committed by persons of all ages.¹⁴⁹

Much needs to be determined about how adolescents gain access to firearms, particularly those firearms that are used without parents' knowledge and for illegitimate purposes (e.g., see 336).¹⁵⁰ Nonetheless, international comparisons of youth

¹⁴⁵For example, the **Family and Medical Leave Act**, which was passed by the 101st Congress but vetoed by the President and not overridden by the Congress (H.R. 770), applied primarily to family leave for newborn or adopted children, although it would have covered unpaid family leave for seriously ill children.

¹⁴⁶Strategies for recreational and youth service opportunities that are appropriately overseen by adults (Strategies 3-3 and 3-4 below) are relevant to child care for adolescents.

¹⁴⁷Some State laws also limit the ownership, purchase, and possession of guns by minors. The laws vary widely by State.

¹⁴⁸See ch. 5, "Accidental Injuries: Prevention and Services"; ch. 11, "Mental Health Problems: Prevention and Services"; ch. 13, "Delinquency: Prevention and Services," in Vol. II.

¹⁴⁹See ch. 13, "Delinquency: Prevention and Services," in Vol. II.

¹⁵⁰For example, *Healthy People 2000* gave as goals for reducing violent and abusive behavior 20 percent reductions in: 1) the proportion of weapons (i.e., not limited to guns) that are inappropriately stored and therefore dangerously available, and 2) the incidence of weapon-carrying by adolescents aged 14 through 17 (260). DHHS noted, however, that baseline data for the first objective would not be available until 1991, and for the second objective, 1992 (260). (The only apparent objective specific to firearms was a "services and protection" goal related to unintentional injuries (not violent and abusive behavior) that, by the year 2000, 50 States would have laws "requiring that new handguns be designed to minimize the likelihood of discharge by children" (260).)

The National Adolescent Student Health Survey asked only limited questions about adolescents' access to firearms (10). Even data about the causes of injuries from hospital emergency rooms are limited (see ch. 5, "Accidental Injuries: Prevention and Services," in Vol. II). The U.S. Consumer Product Safety Commission collects information about adolescents' emergency room visits associated with numerous consumer products, but not about emergency room visits related to guns (see ch. 5, "Accidental Injuries: Prevention and Services," in Vol. II). Wright and Rossi noted in their book summarizing their survey of weapons acquisition among convicted felons doing time in State prisons that "some of the most important questions [on weapons, crime, and violence in America] have . . . barely been researched" (336). Among these important questions they included 'the question of how, where, and why criminals acquire, carry, and use firearms.' Their own survey could not answer this question regarding juvenile offenders because relatively few juvenile offenders were serving time in the State prisons for violent offenders that cooperated with the Wright and Rossi research project (336).

homicide rates, and data about the level of access to firearms by U.S. adolescents, suggest that one or both of the following strategies maybe warranted.

Strategy 3-2a: Act to place additional limitations on adolescents' access to firearms.

Strategy 3-2b: Fund a study to determine how to further restrict adolescents' access to firearms.

Analysis of specific actions that Congress (and others) could take to specifically limit adolescents' access to firearms would require analysis beyond that which was possible in this Report (e.g., an in-depth analysis of the ways in which adolescents legally and illegally gain access to firearms; legal issues in limiting access).¹⁵¹

Because the sale of firearms to adolescents is already illegal under Federal law, it can be assumed that many adolescents obtain access to firearms purchased by adults. Placing further limitations on adolescents' access may affect adults' access to firearms, and efforts to limit adult access to firearms raise constitutional issues and are politically contentious (see, e.g., 214). Half of U.S. adults polled report that they own at least one gun, and half keep guns in their homes (217). Further, the issue of whether the availability of guns is a major or substantial factor in the violent crime rate¹⁵² (or in adolescent suicide¹⁵³) has not been settled to everyone's satisfaction (214). Steps that could limit adolescents' access to firearms, while not unduly affecting adult access,¹⁵⁴ include requirements for adults with firearms to keep firearms securely away from adolescents (and younger children) (e.g., locked up in the home, or, for firearms used only for hunting, locked up in a community facility), penalties for adults whose adolescent dependents are harmed by firearms, and training and licensing requirements for adolescent use of firearms (e.g., for hunting). Adults, as well as adolescents, need to be educated that ammunition should be stored in a location separate from guns.

Strategy 3-3: Congress Could Support the Expansion of Appropriate Recreational Opportunities for Adolescents

Adolescents need health-promoting recreational opportunities. Although no national survey has been conducted on the kinds of recreational opportunities adolescents would like to have, reasonable options for recreation include swimming pools, running tracks, basketball courts, ball fields, gymnasiums, billiards, ping pong, other indoor sports, music, dances, and a place to socialize.¹⁵⁵

Federal support could be provided through seed moneys or matching grants to local recreation departments and private organizations that can demonstrate a strategy appropriate for adolescents, including adolescent participation and sufficiently trained adult supervision.

On the face of it, increasing recreational outlets for adolescents may seem costly. On the one hand, supporting additional recreational outlets may rarely involve the construction of new buildings.¹⁵⁶ Rather, available facilities such as school buildings could be adapted to be compatible with the needs of adolescents (e.g., remain open at appropriate hours and



Photo credit: Katherine Criss, New York, NY

Adolescents need health-promoting recreational facilities and activities ranging from swimming pools, gymnasiums, and ball fields to dances and other social activities.

¹⁵¹OTA is currently developing a background paper on automatic firearm purchaser checks.

¹⁵²See ch.13, 'Delinquency: Prevention and Services,' in Vol. II.

¹⁵³See ch.11, "Mental Health Problems: Prevention and Services," in Vol. II.

¹⁵⁴OTA did not assess the wisdom of or potential health effects of universal gun control (i.e., for all ages).

¹⁵⁵The DHHS publication *Healthy People 2000* recommended increases in community availability and accessibility of physical activity and fitness facilities (hiking, biking, and fitness trails; public swimming pools; acres of park and recreation open space) in order to improve the physical fitness of U.S. citizens (Objective 1.1.1) (260). Data on facility availability per 1,000 population cited in *Healthy People 2000* were not adolescent-specific.

¹⁵⁶Some communities, however, may not have adequate facilities.

install appropriate equipment). On the other hand, such adaptations, and requirements for appropriate adult supervision, may involve upfront and continuing costs (e.g., training, continuing education),

Strategy 3-4: Congress Could Monitor the Effects on Adolescents of the Implementation of the National and Community Service Act of 1990

As described in this Report,¹⁵⁷ the 101st Congress passed a 1990 law designed to enhance opportunities for national and community service for all U.S. citizens, particularly the disadvantaged. In presenting the rationale for the legislation, the senatorial authors of the legislation argued in part that (S. 1430, 101st Congress, 2d session):

(1) service to the community and the Nation is a responsibility of all citizens of the United States, regardless of the economic level or age of such citizens;

(2) citizens of the United States who become engaged in service at a young age will better understand the responsibilities of citizenship and continue to serve the community into adulthood;

(3) serving others builds self-esteem and teaches teamwork decision making, and problem-solving;

(4) the 70,000,000 youth of the United States who are between the ages of 5 and 25 offer a powerful and largely untapped resource for community service;

(5) conservation corps and human service corps provide important benefits to participants and to the community;

(6) the Volunteers in Service to America Program is one of the most cost effective means of fighting poverty in the United States. . .

Many of the activities and program requirements authorized by the National and Community Service Act of 1990 are particularly relevant to adolescents,¹⁵⁸ including economically and educationally disadvantaged adolescents.¹⁵⁹ The legislation also requires that quantifiably measurable goals be included in local grant applications (S.1430, Title I,



Photo credit: Youth Services of America, Washington, DC

It is likely that adolescents who serve others can build self-esteem and learn teamwork, decisionmaking, and problem solving.

Subtitle B, Sec. 110). While the total amounts authorized for programs with a considerable emphasis on adolescents are not very large,¹⁶⁰ the legislation does begin to address many of the concerns about adolescent rolelessness and preparation for the future expressed by numerous observers

¹⁵⁷See ch. 4, "Schools and Discretionary Time, in Vol. II.

¹⁵⁸As or other relevant age-related characteristics were included the School and Community Based Service portion (Title I, Subtitle B), for elementary and secondary school students and out-of-school youth; the American Conservation and Youth Corps (Title I, Subtitle C), for 15- to 25-year-olds; and the National and Community Service Program (Title I, Subtitle D), for ages 17 and older. Youth Community Service programs are required to include an age-appropriate learning component.

¹⁵⁹"To be eligible to receive a grant [under Title I, Subtitle B, School and Community Based Service] a State . . . shall prepare and submit, to the Commission [on National and Community Service, established under section 190 of the act], an application . . . including a description of the manner in which . . . economically and educationally disadvantaged youths, including individuals with disabilities, youth with limited basic skills or learning disabilities, and youth who are in foster care, are assured of service opportunities" (S. 1430, Title I, Subtitle B, Sec. 113).

¹⁶⁰For example, the following amounts were authorized to be appropriated for fiscal year 1991: \$10 million for the School and Community Based Service provision; \$14 million for the American Conservation and Youth Corps; and \$14 million for National and Community Service. Fifty percent increases for each program were authorized to be appropriated for fiscal year 1992.