

# AMERICAN ACADEMY OF PEDIATRICS

Committee on School Health

## School Health Centers and Other Integrated School Health Services

**ABSTRACT.** This statement offers guidelines on the integration of expanded school health services, including school-based and school-linked health centers, into community-based health care systems. Expanded school health services should be integrated so that they enhance accessibility, provide high-quality health care, link children to a medical home, are financially sustainable, and address both long- and short-term needs of children and adolescents.

### BACKGROUND INFORMATION

There are a number of core screening, diagnostic, treatment, and health counseling services that every school should provide<sup>1</sup> and that most schools already do provide.<sup>2</sup> These include management of medical emergencies, medication delivery, services for children with special health care needs, referral of common health problems (such as injury, asthma, behavioral and emotional difficulties), and health screens (such as vision and hearing screens).

Increasingly, schools are used as health access sites for students to receive increased and improved access to care that they are not receiving elsewhere.<sup>3-5</sup> A program with expanded health services may provide, for example, on-site immunizations, full health histories and physical examinations, or on-site therapy for children with special mental health needs. These services provide numerous benefits and potential benefits, including:

1. Students of all ages in some rural areas do not have reasonable access to any other medical services.
2. Less classroom time is lost to travel time.
3. Follow-up compliance may be better.
4. Adolescents, for a variety of reasons (eg, emancipation, independence, desire for confidentiality), often will not seek out or take advantage of services in traditional settings.<sup>6</sup>
5. Families that are not accustomed to using primary or preventive services available to them in traditional settings can be taught to use them through schools.
6. Behavioral risk assessments and ongoing preventive strategies that address major causes of youth mortality (suicide, homicide, accidental injury) often require a degree of access to health and mental health services that schools can provide. Mental health services on a school site can reduce time

away from school to travel to regular mental health appointments. When a mental health clinic's presence on a school site is accompanied by close collaboration with school staff, then enhanced behavioral observation and clinical management also occur.

Schools that offer these expanded health services may do so through either school-linked or school-based health centers. "School-based" and "school-linked" are terms used to distinguish between services delivered on school campuses from those coordinated at the school but delivered off campus. In school-linked models, school health professionals collaborate with local community clinics, hospitals, and/or other health professionals and agencies. Some schools have characteristics of both school-linked and school-based models, such as mobile medical service vans that park intermittently outside various school sites.

Health centers' services range from full comprehensive services (preventive and acute care as well as mental health services) to only one component of this care. Many operate from a regular school health office; others are modern, sophisticated, and well-equipped clinics. Some offer services around the clock and every day, while in others a health team from a local practice or clinic visits the school site one half-day per week. Often school staffs do not provide health services; rather community health professionals provide services on a school site through an interagency agreement. The rich diversity of existing models<sup>7</sup> does not allow for simplistic categorization. This diversity exists at every level of education, from preschool to high school.

It is essential that health services provided by the educational sector are integrated with health education, social services, and health services provided elsewhere in the community. It is important that school-based services should not supplant services that could be delivered elsewhere, unless that is part of the agreed-on design. The American Academy of Pediatrics believes that all children and adolescents require a "medical home."<sup>8</sup> All models of health care delivery should aspire to provide health supervision and medical care that is continuous, comprehensive, family centered, culturally sensitive, compassionate, coordinated, and provided by a pediatrician or another physician or health care provider who is well-trained in child and adolescent health.

### CHALLENGES

Some challenges for school health centers or for any model of expanded school health services are:

The recommendations in this statement do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

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1. There is great variability in the degree to which school-based and school-linked services integrate with the medical home and to other community services and the degree to which they complement community services to meet student needs.
2. There is great variability in the degree to which school-based and school-linked services integrate with other components of the school system. School health centers cannot optimally assist students unless they are closely integrated with the school nurse (where one exists), the school's health educational program, and with other traditional or core school programs.<sup>9</sup>
3. Expanded school health services carry inherent and unique issues of patient confidentiality, consent, compliance, and continuity that need different solutions than they would in traditional health care settings and in schools without expanded health services.
4. Fair reimbursement for school-delivered health services is frequently difficult to achieve.<sup>10</sup>

If not addressed, all these issues can remain emotionally, morally, and politically charged, often paralyzing efforts to establish the best and most sustainable intervention and prevention programs. By adhering to a few basic guidelines, schools and their communities may avoid costly redundancies in health care delivery and unnecessary gaps in services.

#### INTEGRATED SCHOOL HEALTH SERVICES

"Integrated school health services" refers to a community-based approach to identifying the needs of children and youth, then matching them to available resources in the educational, health care, and social services sectors. All stakeholders, usually the school system, community health care providers, families, social service agencies, health plans, managed care organizations, and public health departments, must first decide on common goals and objectives for improving educational performance and child and adolescent health.

This should be based on a comprehensive community needs assessment—the first step in any decision to expand school health services.<sup>1</sup> The district or school and local child health and social services professionals must work closely with parents and community groups to evaluate the current status of child health and determine unmet needs. Services already available to children should not be duplicated unless the school is considered by stakeholders to be the only way to make these services accessible. A needs assessment should be developed that is supported by credible data and conducted by those knowledgeable of existing health care resources and health data in their community. It should be an ongoing process built permanently into the program.

Integrated school health services should have a governing structure that establishes communication among various professional disciplines and agencies, and designs and guides the service delivery program. Membership is at an authority level that ensures appropriate agency participation. Representa-

tives in the administrative structure include students (especially adolescents), parents, pediatricians and other health care providers, school nursing personnel, local health department representatives, school administrators, and educators. It may also include faculty of local institutions of higher education, social service providers, representatives of managed care organizations, public and private mental health care agencies, and representatives of local government and local business, cultural, ethnic, and religious communities. In an integrated school health services plan, school-nursing personnel and, if one exists, the school's own physician or medical consultant, should be involved in the planning and direction of the program.

Once a needs assessment is complete and stakeholders are established, the extent and type of services provided through an integrated school health service program needs to be determined. Services might include any of the following: screening for acute and chronic health problems; preventive health care (disease prevention and health promotion); acute illness care; family planning and reproductive health care; mental health services; social services; substance abuse counseling; dental services; nutritional services; health counseling and education; and transportation to a traditional provider. The decision to choose an enhanced school health office, to link with a nearby community health agency, or to set up a school-based health center is based on what can best complement existing resources.

Last in the process of setting up an integrated school health services plan are formally written agreements and goals. To protect the collaboration from the threats of turf and control conflicts between agencies or to provide a more efficient management structure, some communities may choose to establish a nonprofit corporation to administer the program. More typically the school, school district, or one of the community health or social entities becomes the fiscal and lead agency. In these formal agreements, a formalized communication plan and a plan for collaboration with the medical home (provider or clinic) and health and social service agencies in the community should be included.

School-based health services are often provided by certified nurse practitioners, physician assistants, or licensed or credentialed mental health professionals (social workers, psychologists, etc). Pediatricians or other physicians from a community practice or clinic or from the public health sector frequently serve as medical directors. The medical director, along with the school principal and school-based health professionals, decide on day-to-day activities, protocols, and quality assurance. The activities of the clinical personnel should reflect the decisions of the broader-based governing structure as described above. If primary medical services are delivered on a school site by a nonphysician provider, telephone back-up from a pediatrician or other physician should be available at all times. It is important to establish where students will receive after-hours and weekend telephone and triage services. Onsite consultation, supervision, and quality assurance with periodic chart

review are part of an integrated school health services plan.

Integrated school health service programs require a sound financial base. Sources of funds may include private health insurance plans; traditional school health funds; an Early and Periodic Screening, Diagnostic, and Treatment program; Medicaid; Chapter I; Title X; Title XX; and other government programs.<sup>11</sup>

Among populations with high managed care penetration, there are additional considerations and possibilities.<sup>12</sup> Students enrolled in managed care plans have primary care providers assigned to them. Typically these providers are outside of the school system, they receive monthly capitation funds, and they are expected to provide all primary health care. A number of financial arrangements are possible for this population.<sup>13-17</sup> Health plans may agree to compensate school-based clinical activities on a fee-for-service basis, while still compensating their community-based providers at the same or a reduced amount. School clinics may also be compensated on a capitated basis. In some communities, health plans expect the school's reimbursement to come not from them, but directly from the students' capitated health care providers. In this latter model, there is usually a large portion of the student population that shares one common medical group or community clinic as its primary care provider. These clinicians or their designees come onto the school site to provide services for their patients. The school operates as a satellite location for a traditional primary care agency. In this model, the need to reimburse school providers through a separate agreement with managed care organizations is not necessary. Often, mental health services are contracted out or carved out from managed care health plans, so that mental health providers who work on school sites are compensated no differently than those working in traditional off-school site settings.

Advocacy for new mechanisms of health care financing at both state and national levels may be needed to ensure that dollars flow to all health and human service providers so that there is a seamless web of services for the child and family.

### RECOMMENDATIONS

The Academy recommends that the medical service component of an integrated and comprehensive school health program meet the provisions of the current policy statements and manuals of the Academy, ie, "The Medical Home,"<sup>8</sup> *School Health: Policy and Practice*,<sup>18</sup> "Recommendations for Preventive Pediatric Health Care,"<sup>19</sup> "School Health Assessments,"<sup>20</sup> and "Qualifications and Utilization of Nursing Personnel Delivering Health Services in Schools."<sup>21</sup>

1. School-based health care providers must communicate with each student's existing sources of health care, eg, the primary care provider, when there is one. When necessary, and based on the specific design for that school, arrangements may also be made with neighborhood health programs, mental health programs, and health main-

tenance organizations. This communication needs to be established at the onset, and may be via telephone, fax, e-mail, or post. Care should be taken not to disrupt existing services.

2. Part of every integrated health services program charter must be to introduce each student and family to a traditional medical home whenever this is possible in a community. An integrated school health program must include activities that prepare the large portion of students who will inevitably graduate or transfer from school each year. Examples of such activities are those that assist families with health insurance eligibility determinations, applications for insurance, selection of a non-school-based primary care provider, and registration at a community-based clinical practice that will serve as the students' medical home. Even if students receive most services at a school health center, families should be taught when and how to make preventive health appointments, to travel to their medical-home site independently, and to become familiar with a permanent primary care provider of their choice.
3. Parents should be encouraged to be primarily and intimately involved in the health education and health supervision of their children.
4. Issues of medical liability and confidentiality should be identified and addressed during a registration process. Typically a standard parent permission form is prepared as a component of registration for the school-based clinic so that students may receive services. At the very least, this should include permission for the school health center to exchange information with the primary care provider and with the school's traditional health staff (eg, school nurse, school counselor) for matters that pertain to a child's well-being at school. If the school's plan includes provisions for adolescents to receive services without parent notification or health plan billing, this too must be addressed at the time of registration.
5. A comprehensive review of existing resources and funding mechanisms must be done, preferably as part of the initial community assessment. Financial support for providers who supply in-school and after-hours health care should be included. Schools should not rely solely on temporary foundation grants. These funds are appropriate to use for start-up costs and to fund health care costs for students ineligible for any health insurance program. A variety of possible models of funding should be explored. Design and choose a system that is acceptable to all parties at financial risk and that does not fragment continuity of care in an attempt to capture dollars. A long-term funding plan is optimally developed before the integrated school health services program is initiated.
6. An ongoing process of evaluation should be incorporated into all integrated school health programs. Programs should adopt clearly stated goals and then design an ongoing data-based needs assessment. Programs must have the means to collect data and establish mechanisms for anal-

ysis and reporting. Quality assurance and improvement are important parts of the evaluation. Systematic evaluation should provide information about whether the integrated school health services approach is effective and worth the investment.

### SUMMARY

Schools can successfully expand access to health care services for all students, particularly underserved populations, when the program includes careful community assessment and endorsement, is integrated with the school's existing health program, has a sound plan for financial sustainability, and pays adequate attention to quality assurance, evaluation, promotion, and integration with a medical home. School health services can be an effective vehicle for integrating psychosocial care and education with medical care.

Pediatricians practicing in public and private sectors should become actively involved in any community effort to develop an integrated school health services initiative. A well-designed integrated health services program, when coupled with comprehensive school health education, could significantly advance the state of health of the nation's children, youth, and families.

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Su Li, MPA

### REFERENCES

1. Duncan P, Igoe JB. School health services. In: Marx E, Wooley SF, eds. *Health Is Academic*. New York, NY: Teachers College Press; 1998:169–194
2. Davis M, Fryer GE, White S, Igoe JB. *A Closer Look: A Report of Select Findings From the National School Health Survey (1993–1994)*. Denver, CO: Office of School Health, University of Colorado Health Sciences Center; 1995
3. McHarney-Brown C, Kaufman A. Comparison of adolescent health care provided at a school-based clinic and at a hospital-based pediatric clinic. *South Med J*. 1991;84:1340–1342
4. Anglin TM, Naylor KE, Kaplan DW. Comprehensive school-based health care: high school students' use of medical, mental health, and substance abuse services. *Pediatrics*. 1996;97:318–330
5. Kaplan DW, Brindis CD, Phibbs SL, Melinkovich P, Naylor K, Ahlstrand K. A comparison study of an elementary school-based health center: effects on health care access and use. *Arch Pediatr Adolesc Med*. 1999;153:235–243
6. Klein JD, Slap GB, Elster AB, Schonberg SK. Access to health care for adolescents. A position paper of the Society of Adolescent Medicine. *J Adolesc Health*. 1992;13:162–170
7. School Health Resources Services (SHRS). *School-Based Health Centers: The Facts*. Resource Packet Series. Denver, CO: University of Colorado Health Sciences Center; 1995
8. American Academy of Pediatrics, Ad Hoc Task Force on Definition of the Medical Home. The medical home. *Pediatrics*. 1992;90:774
9. Hacker K, Wesel GL. School-based health centers and school nurses: cementing the collaboration. *J Sch Health*. 1998;68:409–414
10. Farrow F, Joe T. Financing school-linked, integrated services. *Future Child*. 1992;2:56–67
11. Making the Grade National Program Office. *Issues in Financing School-Based Health Centers: A Guide for State Officials*. Washington, DC: George Washington University; 1995
12. American Academy of Pediatrics, Committee on Child Health Financing. Guiding principles for managed care arrangements for the health care of infants, children, adolescents, and young adults. *Pediatrics*. 1995; 95:613–615
13. Hacker K. Integrating school-based health centers into managed care in Massachusetts. *J Sch Health*. 1996;66:317–321
14. Taras H, Nader P, Swiger H, Fontanesi J. The School Health Innovative Programs: integrating school health and managed care in San Diego. *J Sch Health*. 1998;68:22–25
15. Taras HL. Managed health care and school health. *Pediatr Ann*. 1997;26: 733–736
16. Department of Health and Human Services. *School-Based Health Centers and Managed Care: Examples of Coordination*. Washington, DC: Office of Inspector General; 1993
17. Brindis C. Promising approaches for adolescent reproductive health service delivery: the role of school-based health centers in a managed care environment. *West J Med*. 1995;163(suppl 3):50–56
18. American Academy of Pediatrics, Committee on School Health. *School Health: Policy and Practice*. Nader PR, ed. Elk Grove Village, IL: American Academy of Pediatrics; 1993
19. American Academy of Pediatrics, Committee on Practice and Ambulatory Medicine. Recommendations for preventive pediatric health care. *Pediatrics*. 1995;96:373–374
20. American Academy of Pediatrics, Committee on School Health. School health assessments. *Pediatrics*. 1991;88:649–651
21. American Academy of Pediatrics, Committee on School Health. Qualifications and utilization of nursing personnel delivering health services in schools. *Pediatrics*. 1987;79:647–648

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