MCH POLICY RESEARCH BRIEF

Improving Access to Primary Care for Adolescents: School Health Centers as a Service Delivery Strategy

ISSUE SUMMARY

In 1991, the Office of Technology Assessment concluded that school-based health centers are "the most promising recent innovation to address the health and related needs of adolescents." Numerous researchers and government studies report that these centers increase adolescents' access to health services. Although the past two decades have seen a rapid growth in school health centers, with a reported total number of 623 sites nationally in Fall 1994, these centers still are not implemented extensively in the United States. Data from the Centers for Disease Control reveals that 418 school-based health centers operated during the 1991-1992 school year; of these, 330 were in schools providing services to 270,000 students, approximately 2% of the estimated 13.2 million U.S. students enrolled in grades 9-12 during the same year. However, recent national health care reform proposals, including legislation proposed by President Clinton and Senator Kennedy, support an expanded role for school health centers as an integral part of an improved health care system for children and adolescents. Additional funding for such centers is becoming available, for example, from the Bureau of Primary Health Care and the Maternal Child Health Bureau of the Health Resources and Services Administration, even prior to enactment of health care reform legislation.

School-based health centers (SBHCs), by definition, are located in schools or on school grounds. School-linked health centers (SLHCs) are located near the school and have a formal relationship with the school. Effective SLHCs often co-locate health center staff at the school at specified times each week. School health centers (SHCs) include both SBHCs and SLHCs. Most often, SHCs serve only the children and adolescents enrolled in school, but some also aim to serve family members, students from other schools, or the community in general.

The early designs for SHCs were essentially pediatric (medical) models of care which utilized nurse practitioners as clinic leaders and in expanded clinical roles. Traditionally, school health services have focused on health screening, referral, and health education/counseling. SHCs provide these, as well as medical diagnosis and treatment services. Most SHCs strive to provide comprehensive primary care health services. In recent years, the SHC model has evolved to encompass an even broader range of medical services, particularly mental health care, and to create linkages with community-based organizations also serving adolescents who are in schools.

Despite this expanded mission, primary care medical services are likely to remain an essential component of SHCs.

Considerable diversity exists around the country in the range of services provided in SHCs, and in the staffing and organization of these centers. To promote the continued development of SHCs, it is useful to provide criteria to guide the processes of planning, implementing, expanding, and measuring the impact of services provided. Prior attempts to evaluate SHCs often have focused on health outcomes, such as teen pregnancy, and health behaviors of adolescents enrolled in the centers. More recent evaluation efforts have assessed the degree to which school health centers provide comprehensive or "essential" services.

The purpose of this Policy Research Brief is to assist MCH policy makers, state and local health department personnel, administrators, and program managers in assessing the ability of SHCs to meet the primary care needs of adolescents. If SHCs are to become an important part of the primary care system, they should be judged by the same standards as other primary care systems. Evaluating the ability of SHCs to provide quality primary health care services to their target population is essential. The Maternal and Child Health Bureau defines primary care as follows:

Primary care for children and adolescents can be defined as personal health care delivered in the context of family, culture and community whose range of services meets all but the most uncommon health needs of the individuals and families being served. In addition, primary care is the integration of services that promote and preserve health; prevent disease, injury and dysfunction; and provide a regular source of care for acute and chronic illnesses and disabilities. Primary care serves as the usual entry point into the larger health services system and takes responsibility for assuring the coordination of health services with other human services. The primary care provider incorporates community needs, risks, strengths, resources, and cultures into clinical practice. The primary care provider shares with the family an ongoing responsibility for health care.

This Policy Research Brief uses Starfield's model of primary care as a conceptual framework to begin to assess the strengths and weaknesses of SHCs as primary care sites for adolescents. Research findings on SHCs are summarized with respect to the seven defining attributes of primary care:

- first contact, continuous, comprehensive, coordinated, community-oriented, family-centered, and culturally-competent care.

This MCH policy research brief is the first in a series being developed by the JHU Child and Adolescent Health Policy Center in collaboration with other research centers and projects both within and outside of the Johns Hopkins University School of Hygiene and Public Health. The intent of these briefs is to provide state and local MCH program personnel with access to science-based information for planning and advocacy regarding issues related to primary care, systems development, or accountability.
Defining Elements of Primary Care

First Contact Care is the usual entry point into the expanded health care system. The primary care provider is responsible for guiding the client to the most appropriate source of care. Within the system, the provider is contacted for all non-referred health care needs so that an informed judgement is made and guidance is given regarding the appropriate next step in the management and treatment of the patient. Continuous Care refers to the longitudinal use of a regular source of care over time, regardless of the presence or absence of disease or injury. It involves a patient-provider relationship based on established trust and soundness of the medical interaction between the provider and his or her family. Within the system, a “health care home” is established for each child and adolescent. This home is the repository of a unified record of all health care that is provided. Comprehensive Care provides a continuum of essential personal health services that promote and preserve health, prevent disease, injury and dysfunction, as well as provide care for acute and chronic illnesses and disabilities. Primary care is inclusive of the many dimensions of health beyond physical components, including the social, environmental, spiritual, developmental and intellectual aspects of health. It directly provides services needed by a substantial proportion of the population and arranges referral for services to meet needs that are relatively uncommon or rare in that population. Coordinated Care is the linking of health care events and services. It requires the establishment of mechanisms to transfer information and the incorporation of that information into the plan of care. Primary care has the responsibility and obligation to transfer information to and receive it from other resources that may be involved in the care of children and adolescents; and, to lead in the development and implementation of an appropriate plan of management and source of care. Coordination ensures that the more narrowly focused perspectives of specialists are combined into a holistic view. Community-Oriented Care takes into account the needs of a defined population. Delivery of care is based on an understanding of community needs and the integration of a population perspective into clinical practice. Primary care providers are responsible for supporting public health roles and activities through epidemiologic awareness and reporting of specific health problems identified in the course of delivering personal health care services. Primary care providers contribute to and participate in community diagnosis, health surveillance, monitoring and evaluation conducted as a routine function of public health agencies. Community-oriented care assures that the views of community members are incorporated into decisions involving policies, priorities and plans related to the delivery of primary care. Family-Centered Care recognizes that the family is the major participant in the assessment and treatment of a child or adolescent. As such, families have the right and responsibility to participate individually and collectively in determining and satisfying the health care needs of their children and, in most instances, adolescents. Being family-centered means that policies regarding access, availability, and flexibility take into consideration the various structures and functions of families in the community being served. Finally, it means that primary care needs to understand the nature, role, and impact of a child’s health, illness, disability, or injury in terms of the family’s structure, function and dynamics. Culturally Competent Care incorporates cultural differences into the provision of health care. Services should be acceptable to all of the groups of people in the community who may be distinguished by common values, language, world view, heritage, institutions or beliefs about health and disease. A mechanism should be in place to represent the views of these groups and incorporate them into decisions involving policies, priorities and plans related to the delivery of services.

6 Although there is growing interest in implementing school health centers for elementary school age children, the vast majority of operating Centers serve adolescents. Most research on school health centers to date, and hence this brief, therefore focuses on the adolescent population.

7 Most national research studies, with the notable exception of those by Advocates for Youth, focus on school-based health centers alone, as opposed to school-linked health centers. The term “school health centers” was chosen for this policy research brief because, where possible, data on both school-based and school-linked health centers are included.

8 These defining features of primary care were first described by Barbara Starfield and later endorsed by the Maternal and Child Health Bureau, Department of Health and Human Services, Health and Human Resources Administration, Public Health Service in its definition of “primary care for children and adolescents.”
SUMMARY AND IMPLICATIONS FOR RESEARCH AND POLICY AND PROGRAM DEVELOPMENT

This assessment of the potential strengths and weaknesses of school health centers indicates that these facilities can play an increasingly vital role in the delivery of primary care to adolescents. SHCs have been shown to reduce many of the access barriers to health care faced by adolescents in general, and especially by medically underserved and low-income adolescents. SHCs provide a variety of services to adolescents, aiming to meet multiple physical, mental, and social needs. In addition, as administrators and staff of SHCs work to develop new programmatic responses to the changing health care environment, some are developing mechanisms, such as data management systems, to improve coordination with other community primary care providers. SHCs, through various planning, governance, and programmatic initiatives, also have evolved into unique community-based service providers. However, as evidenced in this Brief, SHCs are limited in their ability to function as health care homes to adolescents, due to limited operating hours, staff turnover, and problems coordinating care with other community providers.

A primary care perspective provides only one framework to examine SHCs. Because SHCs have diverse functions – as focal points for expanded health activities in schools, as multi-service centers incorporating social services, education, delinquency prevention, etc., and as parts of targeted health promotion interventions – it is possible to utilize other frameworks to analyze their effects on health, social, educational, and economic outcomes. Moreover, an urgent need remains to review both the models for providing school-based health services and the research designs that can be used to evaluate them. Evaluation data, which might present a case for the effectiveness of these centers, are limited.12,13 Also, as evidenced by the sources used in the analysis table of attributes, there are few examples of published national or large-sample surveys. Consequently, researchers have had difficulties trying to uncover the effects of SHCs. Moreover, it is not clear what outcomes should be expected from these centers. Although reductions in school absenteeism, alcohol consumption, smoking, sexual activity, and pregnancy have been found in some schools with SHCs, these findings have not been consistent or well researched.14

Prior evaluation research also has suffered from a variety of methodological limitations.15-20 These include lack of baseline data, lack of comparison groups, failure to consider self-selection in enrollment and use of health centers, substitution of the SHC for community-based providers (so that there may be a net decrease or no change in available resources in the community), inadequate sample size, failure to consider the prevalence of existing conditions or problem behaviors, inadequate conceptual frameworks, and poor fit between intervention intent and outcome measures. Quasi-experimental, time-series designs may have serious limitations given small effect sizes, low to moderate prevalence, and rapid turnover in the student body. Future evaluation efforts should consider longitudinal cohort designs (although these may suffer from rapid turnover as well) and randomized designs where possible and appropriate.

In conclusion, it should be noted that primary health care facilities rarely are independently able to serve the diverse health care needs of adolescents. Therefore, the success of school health centers will rely ultimately on their ability to establish a unique and sustainable niche within the larger health care delivery system. Communities that have successfully implemented school health centers are often those which have demonstrated the ability to maximize a stable mix of support from both public and private sources, ranging from state and federal grants, foundation support, and reimbursement from private insurance and Medicaid. With the emergence of managed care networks, especially among those serving Medicaid populations, it is particularly important that policy makers facilitate productive relationships between school health centers and the financiers of health care.

Debates about state and national health reform have generated increased public scrutiny about the accessibility and quality of health care services, and like the other players in the delivery system, school health centers should be evaluated according to objective criteria. These efforts will require a sizable commitment of resources to support the development of data collection, or management information systems, to guide policy makers and program planners. These data should specify the needs and characteristics of the adolescents and their families, including measures of health status and health outcomes; service utilization, reimbursement methods; and indicators to describe the extent to which school health centers fulfill the attributes of primary care. The following policy and research questions represent only a small sample of those that may be useful in further evaluating the potentials of school health centers as key components of a primary health care system.

First Contact Care
• Does the availability of a SHC enhance adolescents' entry into the health care system?
• Does the utilization of SHCs reduce hospitalization and the use of emergency rooms by adolescents?
• Do SHCs improve access to health care for adolescents with specific health problems?

Continuous Care
• What policies can be enacted to enhance the ability of SHCs to function appropriately as "health care homes"?
• How does the continuity of care provided in SHCs compare with that provided in other settings? What effect does this have on health outcomes?

Comprehensive Care
• What SHC services are considered "essential" by adolescents, their families, and health care providers?
• To what extent do SHCs provide those essential services?
• Do comprehensive or targeted SHC programs have a greater impact on specific health outcomes?

Coordinated Care
• What federal, state or local incentives will promote coordination between SHC and community-based and managed care organizations?
• Which financial and/or organization models of SHC will best facilitate coordinated care?
• What services are better provided on-site in SHC and which are better provided by referral?

Community-Oriented Care
• How and to what extent do SHCs involve the community in its planning efforts?

Family-Centered Care
• How can SHCs best foster appropriate family involvement in the health care of their adolescents?

Culturally Competent Care
• How do SHCs compare with other parts of the health care delivery system in their ability to provide culturally-competent care?

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REFERENCES


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Potential Weaknesses of SHCs

- \textit{Continuous Care}:

1. Limited access to health care providers for youth in high-risk neighborhoods.
2. High budget, resulting in shorter operating hours and days due to budget constraints.
3. Limited access to health care providers for youth in high-risk neighborhoods.

Potential Strengths of SHCs

- SHCs are an accessible source of care.

- SHCs meet the needs of youth in high-risk neighborhoods.

- SHCs are an accessible source of care.

Analysis of Research Findings

First Contact Care

- SHCs often meet the needs of youth in high-risk neighborhoods.
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Potential weaknesses of SHCs

Coordinated Care

- Many SHCs are not able to work with other community services.
- Space in SHCs is limited.
- Coordination and collaboration between SHCs and other community services is non-existent or weak.
- The scope of services provided by SHCs is limited.

Advantages of using SHCs

- Access to a wide range of health professionals.
- Coordinated and comprehensive care.
- Enhanced patient outcomes.

Conclusion

SHCs provide a variety of services to meet the physical, mental, and emotional needs of residents. However, it is crucial to consider the limitations and potential weaknesses of SHCs to ensure effective and comprehensive care. Coordinates and partnerships with other community services are essential to address these limitations and improve the overall quality of care.
Potential Weaknesses of SHCS

- Few SHCS are able to explain their services to the student.

Potential Strengths of SHCS

- Increased awareness and knowledge of child health and wellness
- Improved communication and collaboration between school and health services
- Enhanced support for students with special needs

Community-Oriented Care

Potential Weaknesses of SHCS

- Limited funding and resources
- Lack of coordination between different agencies
- Inadequate tracking and evaluation of services

Potential Strengths of SHCS

- Enhanced collaboration with community partners
- Improved access to healthcare services
- Greater focus on preventative care
Potential weaknesses of SHCS

Culturally Competent Care

Potential strengths of SHCS

ShCS provide care for culturally diverse populations

Assessing health needs or developing strategies for management...