HEALTH SERVICES:
Evidence-Informed Practice Brief

WHAT DO WE MEAN?

As defined by the Whole School, Whole Community, Whole Child (WSCC) model, Health Services consist of supports provided to promote the physical health of students in the school setting. These services are delivered by school nurses and/or other credentialed medical staff such as nurse practitioners, dentists, health educators, or physicians. Promoting student well-being and a healthy, safe school environment requires active collaboration between school health service providers, staff, students, families, and community-based health care providers. School health services include preventative wellness promotion and health education for staff, students, and parents, as well as first aid and emergency care. Health services personnel also offer assessment and planning for the management of students’ chronic health conditions. School health services extend beyond the school building to help families manage, adapt to, and plan for social and economic barriers to health care by promoting access to community-based health care. In addition, health services work to inform students and families of how they can effectively advocate for their own health and learning needs.

The School Health Services Model developed by the CDC describes four key components of school-based health services. The first component is acute and emergency care. Emergencies related to unexpected injury or illness can occur at any time throughout the school day; therefore, schools must have staff available who are trained and prepared to handle acute and emergency care. Most often, the school nurse, in collaboration with community medical personnel, is responsible for addressing any medical crises that take place at school. The second component of school health services is care coordination, which involves the organization of student care by sharing information and maintaining communication between all individuals concerned with student needs. Students can benefit from improved medical management, access to more detailed health information, and consideration of health needs for Individualized Education Plans or Individualized Health Plans when families, health care providers, and school staff are in communication. The third component is management of chronic health conditions. Federal and state regulations mandate that schools provide services and accommodations for students with chronic health conditions, which commonly include asthma, diabetes, food allergies, poor oral health, and epilepsy or other seizure disorders. The fourth component is family engagement in school health services, which promotes guardian awareness of available health services that can benefit their child. Family engagement is also critical for developing relationships that foster continuing communication and coordination between the school, family, and health care providers.
WHY IS IT RELEVANT TO CHILD OUTCOMES?

Physical Health Outcomes
Effective school health services offer a variety of benefits for students' physical health. At the universal level, screening students for conditions such as asthma, hearing, and vision problems can result in early identification and referral to appropriate services for diagnosis and/or changes to medication.29 School-based health clinics that offer vaccinations for common illnesses, such as the flu, can help to reduce the spread of germs, infections, or diseases.7, 22 For students who become sick or get injured during the school day, health service staff can provide first aid within the school building, or referral to proper outside health care. For individual case management, such as medication administration at school, health services can help to reduce students’ physical symptoms.14 Specifically, for students with asthma, use of school health services is associated with fewer urgent visits to primary care physicians, visits to the emergency room, and hospitalizations.1, 14 Overall, health services can support both prevention of and response to negative physical outcomes associated with student health needs and chronic health conditions.

Social, Emotional, and Behavioral Outcomes
Students who are affected by chronic illness or physical health complications are at increased risk for a wide range of psychosocial difficulties compared to their healthy peers.4, 6, 23 These students have shown to be at an increased risk of bullying victimization and to struggle with anxiety out of fear of a sudden health emergency or peer rejection.1, 4, 21, 23 School-based health service providers can work to decrease anxiety and worry among teachers and healthy peers who are in close contact with a student with special health needs.6 Research has also found that the general student population often experiences distress and/or symptoms of anxiety surrounding provided health services, such as scoliosis screenings or vaccination that occurs in school-based health centers.20, 22 Supporting student psychological well-being as part of school health services emphasizes the need for integration and collaboration of supports across domains to properly care for the whole child.

Academic Outcomes
Student access to school health services is related to both physical health outcomes and academic achievement. If schools can meet diverse health needs, students may feel more comfortable and safe attending school, which can result in a healthy body and mind available for learning. Researchers have found an association between improved attendance and access to school health services, including screenings, direct clinical interventions (e.g., providing medications at school), and care coordination.15, 16 However, even while in attendance, students with chronic health conditions tend to have lower academic achievement if their health needs are not appropriately managed.13, 15 For those students who receive proactive management of their condition, research indicates positive student academic outcomes, including improved grades and increased standardized test scores.15, 19, 26 By providing students with access to preventive and responsive care, school health services can play a vital role in ensuring students achieve their full academic potential.
# HEALTH SERVICES: EVIDENCE IN ACTION

The strategies provided here summarize a review of available evidence and best practice recommendations in this domain.* Strategies are grouped by anticipated resource demand for implementation (e.g., funding, time, physical space, training, materials).

## Level 1 Strategies: Low resource demand

### Utilize the Health Services Assessment Tool for Schools (HATS)
- This free evaluation tool was developed by leading school health organizations and experts in the field, and has been tested by over 50 school districts.\(^2\)
- Schools can use this tool to help reach the "gold standard" for comprehensive school health by assessing the quality of school-based health services, resources available to support those services, and strength of school health policies and practices.\(^2\)

### Disseminate health information resources to students and families
- Preliminary research demonstrates the importance of distributing information regarding available school health services to parents and students, particularly tailored messages that address individual student health needs.\(^20\)
- Schools can distribute health information with pamphlets, newspapers, flyers, posters in the school building, or email\(^22\); potential topics include vaccination programs, school-based screening, and allergy management.

## Level 2 Strategies: Moderate resource demand

### Assess and plan for chronic health condition management
- Approximately 25% of children in the United States have a chronic health condition such as asthma, diabetes, or epilepsy.\(^28\) Students with chronic health conditions are at greater risk for prolonged absences;\(^11\) implementing school reentry programs can help to educate peers and teachers about unfamiliar illnesses or injuries, prepare the family, school, and health care system for a partnership, and promote successful return to school.\(^6\)
- Schools can educate students about their medications, develop and train appropriate staff members on emergency care procedures (e.g., inhalers for asthma attack, glucagon emergency kit for low blood pressure, rescue medications), and specify Individualized Health Care Plans.\(^11\)

### Develop allergy management plans
- Approximately 4-6% of children in the United States are affected by food allergies,\(^6\) which have become the most common cause of serious and life-threatening allergic reactions in community health settings.\(^5,12\)
- Schools can develop allergy management plans to reduce the risk of allergic reaction (e.g., specified allergy tables in the cafeteria, meal accommodations) and an emergency response plan for reactions that may occur (e.g., epinephrine injector training).\(^8\)

## Level 3 Strategies: High resource demand

### Provide behavioral health training for school health service providers (SHSP)
- Because of their frequent access to students, SHSP are ideal candidates to identify student social, emotional, or behavioral risks or concerns (e.g., unsafe sexual activity, substance use, suicidality); it is estimated that SHSP spend about a third of their time responding to mental health needs, as they are trained to identify physical complaints that co-occur with behavioral health concerns.\(^18\)
- SHSP can identify students who may be at risk by using data-based decision making, such as tracking the number of students visiting the nurse’s office for non-medical needs.

### Implement multicomponent school-based prevention programs
- Multicomponent school-based interventions are effective for promoting student health and reducing risk behavior (e.g., preventing bullying, smoking, and teenage pregnancy).\(^25\) Multicomponent interventions should include multiple strategies to promote health, including school policy changes (e.g., whole-school anti-smoking policy), family involvement (e.g., trainings/education), and relationships with the local community (e.g., student community service).\(^25\)
- Schools can ensure SHSPs are knowledgeable about the intended prevention program, as research has found SHSPs’ expertise, knowledge of particular students and families, and ability to educate families about the rationale behind prevention programs has a significant impact on program development and success.\(^20\)

*For more information about the systematic review process we used to identify evidence-based practices, please refer to our overview brief which can be found here.*
ADDITIONAL RESOURCES

Addressing the Needs of Students with Chronic Health Conditions: Strategies for Schools
National Center for Chronic Disease Prevention and Health Promotion

This 2017 research brief summarizes recent findings and statistics regarding the prevalence of chronic health conditions of students in the United States and offers suggestions for strategies to address such conditions.

Resources:
- Health
  Healthy Schools Campaign
  https://healthyschoolscampaign.org/resource-center/?fwp_category=health
  This website, updated in 2018, provides access to tip sheets, model policies, and reports helpful for improving school health services, including school health care provider leadership documents and current school health care policies.

School Health Services Best Practices
University of Northern Colorado Active Schools Lab
https://healthyschoolshub.org/resources/health-services-menu-of-wscc-evidence-based-practices/

This resource includes information about health services and includes examples of school health services.

Supporting Student Success Through Health and Education
New York State Center for School Health
https://www.schoolhealthny.com/ny

This webpage offers a health information portal, medical resources, and national data reporting and surveys surrounding health services topics from the years 2002-2018.

TEAMS: Enhancing School Health Services
American Academy of Pediatrics
https://schoolhealthteams.aap.org/public/content.cfm?m=11&id=11&startRow=1&mm=0&parentMenuID=0

This webpage offers many resources, including an online course, policy guides, videos, case examples, and the Health services Assessment Tool to help schools incorporate the TEAMS framework for the purposes of improving health services.

National Center for Medical Home Implementation: Care Coordination Resources
American Academy of Pediatrics
https://medicalhomeinfo.aap.org/tools-resources/Pages/Care-Coordination.aspx

Updated in 2018, this webpage offers a collection of tools and resources pertaining to health services care coordination, including a framework for implementing care coordination and instructional curricula for school health care providers.

Tools and Ideas
National Education Association
http://www.nea.org/home/ToolsAndIdeas.html

This resource includes tools and ideas for classroom teachers.

Health Services
School Health Corporation
https://www.schoolhealth.com/health-services

This website can be used to order health services products/ equipment, as well as to access educational aids and resources related to health services.

Managing Chronic Health Conditions in Schools: The Role of the School Nurse
National Center for Chronic Disease Prevention and Health Promotion
https://www.cdc.gov/healthyschools/chronic_conditions/pdfs/2017_02_15-FactSheet-RoleOfSchoolNurses_FINAL_508.pdf

This 2017 fact sheet briefly outlines the importance of and roles of, a school health service provider for managing students' chronic health conditions.

NASN: Home
National Association of School Nurses
https://www.nasn.org/home

This website provides news in school health services and up-to-date toolkits, skills training, and sample and model health services programs.
SOURCES


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