Today’s school nurses provide episodic care, manage chronic conditions, track communicable diseases, promote healthy behaviors, connect children with insurance and health care providers, and handle medical emergencies. They care for students with disabilities and for those who depend on medical devices such as gastrostomy tubes, insulin pumps, and urinary catheters. And they act as a health care safety net for all children.

Despite this track record, policies related to school health services vary dramatically, and half the nation’s schools lack a full-time registered nurse. This brief reveals huge disparities in service provision, highlights promising policies and funding strategies, examines the challenges school nurses face, and uncovers the potential of these professionals to improve children’s health, remove barriers to learning, and save precious lives.

The Value of Nursing

School nurse Mary Pappas assesses the health of a teenage student at Saint Francis Preparatory School in Queens, New York.

With 27 years of nursing experience behind her, Pappas knew that something was seriously wrong when a line of feverish students formed in her office on the morning of April 23, 2009. She alerted the local health department and the Centers for Disease Control and Prevention, whose epidemiologists soon detected the presence of the H1N1 virus among the school’s population. Pappas’ decisive action alerted the nation that the influenza epidemic had reached U.S. soil and triggered a national response.

Approximately 56 million students and another 3.8 million teachers, administrators, and support personnel gather regularly in the nation’s schools, placing school nurses on the frontlines of disease surveillance. They play a critical role in containing epidemics in addition to promoting healthy behaviors and meeting children’s chronic and episodic health care needs.
School health services have been described as a “hidden system” of health care by Julia Graham Lear, PhD, founder of the Center for Health and Healthcare in Schools at the George Washington University School of Public Health and Health Services. Lear notes that school health services are largely unfamiliar to health policy decision makers—even though tens of thousands of counselors, nurses, psychologists, and social workers and smaller numbers of other health professionals are caring for children’s physical and emotional needs in schools.

School nurses reside at the core of this enterprise. They play diverse roles (see “What School Nurses Do,” below) and collaborate with other health professionals to serve the needs of all students. Some schools also offer expanded health services through school-based health centers staffed by nurse practitioners (see page 6).

Escalating health care costs and the failure of recent educational reform initiatives to significantly improve student performance are prompting many reformers in both these arenas to examine the connection between health and learning and to reconsider the potential of school nurses to keep children healthy, in school, and ready to learn.

To achieve their goals, reformers will have to confront a range of challenges, including a lack of federal policy and a patchwork of state and local policies regarding school nurse staffing and practice (see pages 4–5) and the financing of school health services (see page 7). Despite these challenges, some state and local policy initiatives offer promising models (see pages 4, 5, and 7), and opportunities for greater federal support of school nursing may be gaining traction (see page 8).

What School Nurses Do

- Manage chronic conditions
- Handle life-threatening allergy and asthma events
- Act as sentinels when epidemics strike
- Respond to students’ physical and emotional concerns
- Connect students with substance-abuse treatment and mental, behavioral, and reproductive health services
- Refer students’ families to care providers and insurance programs
- Screen for conditions that impair learning, such as poor vision
- Educate children about healthy lifestyles
- Ensure immunization compliance
- Develop health plans for students with disabilities
- Prepare for schoolwide and community emergencies
- Administer medication and provide first aid

Complex Student Needs

Today’s school population is more medically diverse than ever before, posing daunting challenges for today’s school nurses. In the past 35 years, schools have been required by federal law to provide a safe learning environment for students with a broad spectrum of disabilities (see pages 4 and 7). Students who once would have remained homebound or in institutions are now educated beside their peers.

The prevalence of chronic conditions such as asthma and diabetes among children has also increased during this time (see figure 2), forcing school nursing to become much more complex. In 2008, the Centers for Disease Control and Prevention (CDC) estimated that 13 percent of children were taking prescription medicines for 90 days or longer, up from 9 percent a decade earlier.

Nurses must also respond to the toll poverty takes on children. According to Child Trends, a nonprofit, nonpartisan research center, low-income children are more likely to face health risks such as poor nutrition, exposure to environmental toxins, and domestic abuse.
The Past as Prologue: From Exclusion to Care

In 1897, the New York City Department of Health appointed the first doctors to examine students for contagious diseases and exclude them from school. Five years later, an outbreak of an infectious eye disease led to the suspension of thousands of children. “Few received treatment,” wrote Lillian D. Wald, the founder of community nursing in the United States, “and, where medical inspection was most thorough, the classrooms were depleted.”

Concerned over the dismal prospects for uneducated youth, Wald and her colleagues offered to treat infected children to keep them healthy and in school. The Department of Health agreed to a limited trial program, and Lina Rogers Struthers became the nation’s first school nurse.

The impact of nursing services proved dramatic, and after only one month the city voted to set aside money to employ trained nurses in its schools with a goal of “keeping the children in the classroom and under treatment.” In September 1902, prior to the introduction of nurses in the schools, 10,567 children were excluded. One year later the number was 1,101.

The Value of Nursing

While school nursing practice remains focused on keeping children healthy, today it encompasses managing conditions that once kept children out of schools. Mississippi estimates that assisting children with diabetes accounts for half of the time that school nurses spend managing chronic conditions. The state has the nation’s highest rates of obesity, which is associated with type 2 diabetes. Significant new hiring of school nurses and a multifaceted effort to stem childhood obesity reflect the state legislature’s commitment to funding initiatives that improve children’s health. Additional funding from the Bower Foundation and the Robert Wood Johnson Foundation supports these efforts.

Insufficient Funding

Although school nursing proved its value more than 100 years ago (see “The Past as Prologue: From Exclusion to Care” below), advocates are once again faced with the challenge of making this specialty an established, well-resourced part of the educational, health care, and public health systems (see page 7).

Underfunding in many localities may have long-term health and economic consequences. According to the CDC, chronic conditions consumed 75 cents of every health care dollar spent in the United States in 2005. When school nurses identify and manage these conditions, they stave off future health problems and help reduce overall health care spending.

The CDC has also found correlations between lower grades and youth health risk behaviors such as smoking, acts of violence, and unsafe sex. This data strongly suggests that school health services that promote healthy behaviors also contribute to educational success.

Serving Two Masters

School nurses find themselves in a unique and often isolated position, straddling the divide between education and health care. Both systems strive to foster child and adolescent well-being, but their priorities differ. Educators must answer to local taxpayers and meet state and federal academic standards. Health care providers must answer to insurers, licensing boards, and professional associations for the quality of care they provide. Nurses must also comply with each state’s Nurse Practice Act, which delineates the scope of nursing practice, and with privacy laws that safeguard patient and student records. These laws sometimes appear to conflict with one another, inhibiting nurses’ ability to communicate effectively with both teachers and other health care providers.

School nurses are well positioned to play a pivotal role in improving students’ health by ensuring continuity of care, but greater coordination between the education and health care sectors will be needed to fully realize this potential.

“We know that students need to be healthy to learn. School nurses play a vital role in making sure children are healthy and ready to learn.”

Arne Duncan, secretary, U.S. Department of Education
**Data Collection: Fragmented and Inconsistent**

Substantial variation in school health data collection within and between states makes it difficult to compare the effectiveness of school nurse staffing and practice models and establish evidence-based policies. Only half a dozen states use consistent measures and collect relevant data from a sizeable portion of their schools.

“On the positive side, the states that are already doing this work could potentially serve as models,” says Connie White Delaney, PhD, RN, FAAN, FACMI, professor and dean at the University of Minnesota School of Nursing and a member of the Health Information Technology Policy Committee, a federal advisory body. “If states and municipalities were to adopt a single set of standard measures, this would allow researchers to determine the efficacy of school nursing practices and their value relative to care delivered in other settings.”

Delaware is the only state with electronic health records for all of its public school students. It employs a standard, statewide data set to track nursing activity and student health. Its database is linked to the state’s pupil accountability system, which tracks academic measures and demographic data. As a result, individual schools can identify students with failing test scores; look for commonalities in health conditions, economic status, or patterns of behavior; and design interventions to benefit multiple children.
ate public education” to children with disabilities, such as intellectual disability, serious emotional disturbance, autism, and traumatic brain injury.

**How Many Nurses Do Schools Need?**

Districts must consider several factors.

- **Student Demographics:** How many students are in good health? How many have daily health care needs such as chronic conditions? How many are medically fragile with multiple disabilities?
- **Staffing Patterns:** Will the nurse be on-site full-time or part-time? In one or many buildings? Alone or as part of a team?
- **Available Support Services:** Can the nurse draw on the expertise of a district, regional, or state school nurse consultant?
- **Access to Care:** Are affordable health services readily available in the community?

**The Value of Nursing**

School nurse Jeff Kincaid screens a child for vision impairment. Most elementary schools conduct vision screenings, but these do not necessarily result in improved vision. Children may not receive care if parents lack a regular health care provider, insurance coverage, or an understanding that good vision is required for school success.

A 2004 study showed that children in eastern North Carolina were more likely to receive appropriate follow-up care when school nurses had smaller caseloads. They persisted in contacting parents and, when needed, scheduled follow-up appointments, arranged transportation, and procured charitable care.

Research looking at health services delivery in the school setting could help establish a needs-based staffing formula that takes all these factors into consideration.

Meanwhile, in New Hampshire, nurses in the Manchester Health Department (MHD) have developed a productivity model to determine appropriate staffing for their city’s schools. The model assigns each nursing intervention a value that reflects both time and intensity. Values range from 5 for determining a student’s body mass index to 60 for developing an Individual Health Plan. Each school collects this data on a daily basis. As workloads increase in individual schools, the MHD can provide additional support from two floating RNs or from five health aides who primarily assist with clerical tasks.

**What Qualifies a School Nurse for Practice?**

Unlike nurses in clinical settings, school nurses typically practice independently. They are called upon to assess student health, develop and execute plans for care management, act as first responders, and engage in public health functions such as disease surveillance, immunization compliance, and health promotion.

The title school nurse is reserved for RNs meeting specific criteria in most states, but in some locales, LPNs and LVNs also work as school nurses, even though their training does not encompass the full scope of school nursing practice. In still other districts, the title is inappropriately used to denote unlicensed personnel such as health aides. National certification in school nursing is available, but few jurisdictions require or reward this credential. Variation in standards, even within states, leads to significant disparities in preparation for the school nurse role.

The National Association of School Nurses recommends that school nurses be licensed RNs with a baccalaureate or advanced degree.
Policymakers and school administrators sometimes fail to perceive the distinctions between school nursing and school-based health centers (SBHCs). SBHCs were conceived in the 1970s to reduce health-related absences and improve access to care for underserved youth by making primary care and related health services readily accessible on school grounds without regard to a student’s ability to pay. SBHCs are typically affiliated with public health departments or area hospitals, and nurse practitioners (NPs) are the chief providers of care.

The National Assembly on School-Based Health Care and the National Association of School Nurses agree that SBHCs do not duplicate or replace school nursing services.

School nurses must care for the immediate health needs of every child in the school and protect the public’s health by ensuring immunization compliance and monitoring for outbreaks of contagious disease (see “What School Nurses Do,” page 2).

NPs, who direct most SBHCs, hold advanced nursing degrees and are licensed to provide primary care. They focus on providing nonemergency services such as physical exams and mental health counseling. They diagnose and prescribe treatments for chronic conditions and refer students to medical specialists. They develop wellness initiatives such as those aimed at raising the graduation rates of pregnant and parenting teens. In many states, they also prescribe medicines.

In schools with well-staffed health programs, both school nurses and NPs devote time to case finding, especially among children at risk of failing or dropping out. They walk the halls, visit classrooms, and offer screenings to find out, for example, if children who doze in class are chronically tardy or have an underlying health concern that needs to be addressed.

In schools with both a school nurse and an SBHC, collaboration can prove extremely beneficial. For example, students who present to the school nurse with headaches several times a week can be sent to the SBHC for a physical exam. Depending on what is learned, the NP might prescribe allergy medicine; connect students with nutrition, substance abuse, or behavioral health counseling; or refer them to medical specialists.

Health and Academic Benefits

Two peer-reviewed studies have compared the use of services by students with and without SBHC access who were also enrolled in health maintenance organizations or community-based clinics. Both studies concluded that students with access to SBHCs were more likely to access services to maintain their physical health, less likely to receive care in an emergency room, and 10 to 21 times as likely to seek mental health services as their peers without access to an SBHC.

A third study, which examined the impact of SBHC use on academic outcomes for a cohort of high school students in Seattle, Washington, found that use of mental health services through an SBHC was predictive of a rise in grade point average over 5 semesters far higher than that experienced by other students in the cohort.

SBHC Funding

Stable funding has been the biggest challenge facing SBHCs, which rely on a mix of government, private, in-kind, foundation, and Medicaid dollars to stay afloat. The 2010 health reform law includes language authorizing a grant program that advocates hope will provide $200 million to SBHCs over each of five years and an emergency appropriation of $200 million to construct new and improve existing SBHC facilities. “These provisions mark the start of a new day for SBHCs,” says Linda Juszczak, executive director of the National Assembly on School-Based Health Care. “They are an acknowledgment that SBHCs act as safety net providers for children and youth.”
Schools, families, local health care providers, the public health system, and the community at large all reap the benefits when school districts hire nurses, but only one of these stakeholders bears any direct responsibility for providing school health services: the schools themselves. The Individuals with Disabilities Education Act (IDEA) legally obligates schools to provide special education and related services, including direct-care nursing services, to students who need them to participate in school. Section 504 of the Rehabilitation Act of 1973 also requires health services for students with any disability that “substantially interferes with a major life function.”

Federal dollars allocated to the states under IDEA typically cover less than half the additional cost of educating a child with disabilities. Compliance with Section 504 is mandatory, but no federal funding supports its implementation. Medicaid payments contribute some dollars to school health, but their impact is limited. In 1988, the U.S. Supreme Court upheld a lower court finding that covered services provided to Medicaid-eligible children should be paid for by Medicaid without regard to the setting in which the services are provided. In practice, however, Medicaid rarely reimburses schools for services to students who are not covered under IDEA. Private insurers contribute even less. They rarely, if ever, reimburse schools for covered services, in effect transferring the cost of much daily, pediatric care to the educational community.

The public health aspects of school nursing and direct-care services for students without federally recognized disabilities are provided at the discretion of states and school districts, some of which rely on public health departments to provide school nursing services. Ultimately, school boards and administrators must procure funding elsewhere or decide what portion of their finite education budgets to spend on health services.

### Delaware: A Notable Exception

Delaware first mandated school nursing in 1947. Since then, state legislators have provided unparalleled support for school health services at the urging of leaders in the health policy, education, nursing, and parent communities. The state pays for roughly two-thirds of the cost of public education, which includes a full-time registered nurse in every school building.

School nurses are paid on the same salary scale as teachers, so financial rewards accrue with increased education. The state’s school nurses are among the most highly credentialed in the nation.


### Funding Strategies: A Mixed Bag of Approaches

#### Outsourcing Care

When Austin Independent School District (AISD) proposed replacing its 30 full-time RNs with 47 health aides in 1996, a community partner proposed an alternative plan. The Seton Family of Hospitals, which acts as a safety-net provider to the community, would provide school health services and additional funding. AISD contracted with Seton, and today 73 RNs and 55 school health assistants work in teams to provide coverage to 112 schools.

#### A Dedicated Tax

In 2002, Miami-Dade County (MDC) voters authorized the creation of a dedicated tax linked to property values to fund children’s services, and they established The Children’s Trust to administer those funds. One of its programs, Health Connect in Our Schools, has placed nurses, nurse practitioners, social workers, and health aides in 131 of the county’s 427 schools in partnership with MDC Public Schools and the MDC Health Department.

#### Health Plan Initiative

A partnership between Saint Paul Public Schools (SPPS) and UCare, an independent, nonprofit health plan, suggests a promising revenue model for school nursing. UCare is contracting with SPPS to provide asthma education to UCare-member students who attend public school. Parents must consent to the program and may also participate. UCare considers this outreach effort a cost effective investment in improved asthma control for this target population.

#### Nursing School Partnership

Nurse practitioner students and faculty from Regis College of Nursing and Health Professions provide school nursing services to several parochial schools in the cash-strapped Archdiocese of Boston. Regis faculty and students were instrumental in establishing a wellness center at one high school with high rates of overweight students, providing programming and staff and obtaining corporate grant funding for equipment.

#### Diverse Funding Streams

Mississippi’s diverse funding streams reflect the patchwork that typifies financing in most of the country. The state’s School Nurse Intervention Program awards $50,000 grants to place school nurses in some underserved districts. In others, raising attendance has brought in enough additional state dollars to fund a school nurse. Some districts acquire nurses by partnering with hospitals, while others support the presence of a nurse with federal Early Periodic Screening, Diagnosis, and Treatment funds. Reimbursements from this program can sustain a full-time nursing position in schools where several hundred students are Medicaid eligible. Significant support for the state’s school nursing program also comes from the Mississippi-based Bower Foundation.
Ratio Improvement Legislation
In the 110th and 111th Congress, U.S. Representatives Carolyn McCarthy (D-NY) and Lois Capps (D-CA) introduced the Student-to-School Nurse Ratio Improvement Act. A version of the bill was also included in the House-passed health reform bill in 2009. The McCarthy-Capps bill would provide competitive grants to states with ratios higher than one nurse per 1,000 students in an effort to improve ratios and study the impact of any resulting health benefits on learning. Senator Charles Schumer (D-NY) has since introduced a similar bill in the Senate.

Comprehensive National Data Collection
The Departments of Education (ED) and of Health and Human Services (HHS) include school nurses in their workforce counts, but only the CDC collects national data on school nursing practice. “The School Health Policies and Programs Study provides a window on school nursing, but this survey is conducted only every six years,” says Amy Garcia, RN, MSN, executive director of the National Association of School Nurses (NASN). “Comprehensive national data measuring the intensity of school health services and their impact on student health would provide firmer ground on which to establish federal policies.”

Federal Administrative Guidance and Support
NASN and the 19 other member organizations of the National Alliance of Pupil Services Organizations have proposed the creation of an Office of Specialized Instructional Support Services Personnel within ED. The office would provide school nurses, school social workers, school psychologists, and others with a point of contact within ED dedicated to identifying best practices, providing technical assistance, and offering professional development opportunities to its diverse constituencies.

NASN and the National Association of State School Nurse Consultants (NASSNC) would ultimately like to see the creation of a national school nurse consultant position within such an office. “A nurse consultant who understands both health and education laws, policies, and practices would enable coordination and communication between the multiple stakeholders working to address the critical health issues facing our youth,” says Cathy Young-Jones, president of NASSNC.

“When children receive the support they need to remain healthy and focused on learning, the entire classroom benefits. Increasing the presence of nurses in our schools can be a critical element in achieving this goal. I’m proud to support policies that will enable the federal government to help struggling states and localities ensure that all children have access to a qualified school nurse.”

U.S. Representative Lois Capps (D), California, former school nurse

“A school nurse is the only consistent contact that millions of children have with a health care professional, yet half of the nation’s schools lack a full-time registered nurse. We need to make sure that all children have access to a nurse in their schools.”

U.S. Senator Olympia Snowe (R), Maine, cofounder, Senate Nursing Caucus

“School nurses were instrumental in mitigating the impact of the H1N1 influenza outbreak. By ensuring immunization compliance, they contribute to public health year in and year out. Investing in school nursing will enhance prevention. It is cost effective and makes good sense.”

Florida State Senator Frederica S. Wilson (D), District 33

Resources from the Centers for Disease Control and Prevention
The CDC’s Division of Adolescent and School Health (DASH) is committed to assisting schools in promoting student health and to exploring the relationship between health and academic achievement. Its Web site contains a wealth of information on promoting health and well-being of children and adolescents, including a model coordinated school health program.

This year DASH launched a new Web navigation tool to streamline access to this information for school health services professionals. The CDC’s School Health Services Resources Tool makes CDC fact sheets, protocols, guidelines, research and survey information, and health topic overviews available through a centralized, searchable tool.