Building Strong Children

Why We Need Nurses in Schools



BY ERIN D. MAUGHAN

he number of students with chronic and complex health conditions significantly affects a teacher's ability to teach and meet the needs of the whole child—especially combined with the impact of societal issues such as poverty, violence, and the growing population of families who speak a language other than English at home. Education in America is free, but healthcare is not. This fact presents a unique divide among schools and even within classrooms, where some students have parents who have good healthcare coverage and seek medical attention regularly, while others come from families who are limited to emergency room visits for chronic illnesses or only see a healthcare professional in life-threatening situations. School nurses can help bridge this divide. Often, they are the only healthcare professional that students see regularly. So when a class includes Paul (who has missed multiple days of school, seems distracted when he does attend, and often has a deep, penetrating cough), Keisha (who stays in her seat during class but always seems drowsy), Aidan (whose disruptive behavior makes instruction difficult), and Anni (who is struggling to learn English), the school nurse should be one of the first resources their teacher turns to.

Unfortunately, not every school has a nurse. Only about 50 percent of schools have a full-time registered nurse for at least 30 hours per week, and 18 percent do not have a nurse at all.¹

While the National Association of School Nurses (NASN) recommends that every student have access to a school nurse every day, the presence of a nurse in school depends on state nurse practice acts and regulations. NASN recommends that the severity of a student population's health needs should factor into how many school nurses should staff a school. Home and family factors, such as poverty and home languages other than English,

Erin D. Maughan is the director of research for the National Association of School Nurses. Previously, she was an associate professor in the College of Nursing at Brigham Young University. A former school nurse, she has also worked as a school nurse consultant for the Utah Department of Health.

should also factor into determining adequate nurse staffing.²

Currently, more than 61,000 school nurses work in K–12 schools.³ According to the National Center for Education Statistics, there are 52 million students in our nation's public schools. Studies indicate that as many as 27 percent of American children have chronic health conditions (such as asthma, diabetes, severe food allergies, and seizure disorders), which school nurses are trained to help manage.⁴

With so many students in need of medical care in school whether that care is related to a chronic illness or an emergency situation—and so few nurses in schools to help them, policy-

makers, educators, and the general public must understand all that school nurses do so they can advocate for having one in every public school.

Meeting Students' Needs

It would seem that teacher preparation programs would be the perfect place for educators to learn how school nurses enable teachers to focus on instruction. Yet few education courses cover what, exactly, school nurses do.

A skilled school nurse can be a lifesaver (both literally and figuratively) for teachers. School nurses have medical training to deal with the physical and mental illnesses of students as well as the entire school population. To help ensure school nurses have the skills needed to address current health concerns, NASN recommends that a school nurse have a minimum of a bachelor's degree in nursing as well as a registered nurse (RN) license. A bachelor's program in nursing covers the leadership skills of community and public health nursing, whereas shorter programs, such as associate degree RN programs or licensed

practical/vocational nurse (LPN/LVN) programs, may mention these areas but do not emphasize them. Such skills are critical for school nurses to obtain so they can meet their students' complex health needs. It may be appropriate for aides and LPNs/LVNs to perform certain healthcare-related tasks, but only when an RN is providing proper oversight.

Of course, school nurses' primary purpose is to keep students healthy and safe so they are ready to learn. School nurses do this in several different ways. These include working with students to manage chronic health conditions (e.g., observing them use an inhaler during an asthma attack or helping them check their blood sugar), identifying students who might have an undiagnosed health condition that is impeding their well-being and ability to learn, and reinforcing current medical and legislative policies that affect student health (e.g., allowing students to carry their inhalers and including a school nurse on appropriate individualized student educational team meetings).

School nurses make sure students know how to manage their conditions by taking their medication or adhering to other treatments. Technological innovations and medical advancements happen quickly, and school nurses work hard to stay up to date. In so doing, they act as the bridge between the school and a student's healthcare provider to ensure a student's needs are met.

Some children who have complex medical issues require

Only about 50 percent of public schools have a fulltime registered nurse for at least 30 hours per week, and 18 percent do not have a nurse at all.



treatments ranging from catheters to gastrointestinal tubes. School nurses work with teachers and other school staff so that everyone on the educational team understands how best to support students' needs. They also work hard to connect families struggling with poverty or serious health issues to community resources such as health insurance, food pantries, language assistance programs, and transportation services, as well as offsite healthcare providers.

As a school nurse for several years, I found home and family factors underlying many children's health concerns. For example, learning that a student did not have electricity and heat at home helped me understand his poor health and helped his teachers understand his academic struggles. By connecting his family to social service agencies in the community, progress was made in helping the student feel well enough to focus on learning. As is so often the case, school nurses do more than hand out Band-Aids and ice packs and check for lice!

School nurses spend much of

their time ensuring that all students in the school are ready to learn, and they help to identify those who may be at risk of not progressing academically. To that end, school nurses conduct vision and hearing screenings and follow up with families to ensure students receive eyeglasses or other treatments. If a family member or a teacher is concerned about a student, a school nurse can provide individual screenings and follow-up as well.

In addition, discussions about a student with the school nurse might result in some suggestions that a non-medically trained professional might not provide. For instance, if a student is frequently asking to use the toilet and has shown recent weight loss, a school nurse might suggest that the student see a healthcare provider, as these can be signs of diabetes. School nurses also serve as health leaders in a school by ensuring that current, evidence-based practices are in place so that the school environment supports students—for example, eliminating environmental asthma triggers such as idling cars or buses near school buildings and playing fields to ensure students with asthma can participate in physical activity.*

School nurses can provide general evidence-based health education, specific trainings, or health promotion activities for students and school staff on a variety of topics. For example, school nurses may train school staff on what to do in a medical emergency or provide outreach to parents when there is an

increase in a specific illness among students, to help minimize its further spread.

Monitoring the health of a school community by collecting data is another key practice of school nursing. It was actually a school nurse who identified the first case of H1N1 (swine flu), whose spread reached pandemic proportions in 2009,5 and school nurses have identified measles, pertussis, tuberculosis, and other communicable disease outbreaks in their school communities by virtue of tracking symptoms and immunity. Electronic school health records facilitate their ability to analyze data quickly,6 and to work with local health departments to stop outbreaks and prevent them in the future through improved prevention methods.

School nurses also provide valuable information to school leaders regarding major concerns that can affect a student's ability to attend school and learn. Unlike the administrators or staff who take the calls reporting a student's absence, school nurses have an overarching view of the school community's physical health and

can address the underlying physical, social, and mental health causes of absenteeism.

A Return on Investment

I loved being a school nurse, but, covering multiple schools, I often felt stretched thin. After seeing the overwhelming health needs students had, I decided to earn a doctoral degree in nursing, hoping to make a greater impact. I soon realized there was a dearth of research on the positive impact of school nurses, so

I focused on marshalling the evidence to support the benefits of school nursing. However, measuring the effects of school nursing is complex because school nurses are part of a larger team. Also, the standard "random control trial" does not work well in many situations; we do not want to withhold health interventions from students in the name of seeing what works.

This is not to say no evidence exists. Many researchers have shown that when school nurses intervene, they can help decrease rates of student absenteeism and early dismissals of students due to health concerns.⁷ Often, student absences are related to unknown or poorly controlled chronic conditions that

> school nurses can assess; then they can help students and their families better manage these conditions, leading to improved attendance.⁸

> Research shows that school immunization rates are higher when a school nurse is present to follow up with parent concerns and help connect families to healthcare providers.9 In addition, school nurses have been found to help students stop smoking, lose weight, avoid pregnancy, and improve their mental health, all factors that influence student learning.¹⁰ Besides helping to keep students in school, school nurses may decrease a school's liability, as researchers have found that when school nurses provide medication to students, fewer medication errors occur.11

> My current role as the director of research at NASN is to gather research on school nursing and ensure that school nurses follow evidence-based practices. One of my greatest pleasures is helping school nurses collect and use their school's data to illustrate the importance of what they do and how it affects student health.

Generally, people agree that having a school nurse is good for a school. Yet, in a time of tightening budgets and increased class sizes, districts often choose to disinvest in school nursing. But researchers have found that having a school nurse actually results in returns on the investment—not only in dollars saved but in time spent on instruction.

One study that investigated the amount of time principals and other staff focused on health concerns instead of instruction found that when there was a school nurse in the building, the principal saved nearly one hour and clerical staff about 46 minutes that they otherwise would have spent on student health. Teachers were also able to devote more time to instruction when a school nurse was present. Using these data, the study's authors



As a school nurse for

several years, I found

home and family factors

underlying many children's

health concerns.

^{*}For more on common environmental problems in the school setting, see "First, Do No Harm" in the Winter 2011–2012 issue of *American Educator*, available at www. aft.org/ae/winter2011-2012/landrigan.

calculated the savings per school to be \$133,174.89, which translates to a 1.84 return on investment for every dollar invested.¹²

Another analysis, this one from school nurses in the Massachusetts Essential School Health Services program, found that for every dollar spent on school nurses, society gains \$2.20.¹³ It is important to note that this analysis only measured program benefits as savings in the costs of medical procedures, parents' lost productivity (when they take their students out of school for treatment or come to school to give them medication), and teachers' lost productivity (when they have to deal with students' health issues instead of teaching). This study did not look at

emergency room visits, hospitalizations, or 911 calls, nor did it factor in school nurses' prevention and promotion efforts to help individual students better manage their conditions and improve their health.

Return-on-investment studies that have focused on prevention often show higher returns on investment. For example, Trust for America's Health found that for every dollar spent to support community prevention programs that address smoking and promote exercise, \$5.60 would be saved after five years.¹⁴ In Canada, every dollar spent on measles, mumps, and rubella immunizations saves \$16,15 and every dollar spent on mental health and addictions saves \$7 in healthcare costs and \$30 in lost productivity and social costs.¹⁶ Prevention and promotion efforts that focus on children save all of society millions of dollars but require an initial investment.

Given that education dollars always seem to be tight, school districts have found innovative funding streams for school nursing. Some school districts part-

ner with local public health departments to share the cost of nurses, while others have partnered with local healthcare systems or community agencies.* With the emphasis on decreasing hospital admissions and increasing hospital and community partnerships, hospitals have also become involved in funding or providing school nurses.

Although each state's Medicaid laws are different, school districts or other health entities employing school nurses can

bill Medicaid for reimbursement of particular procedures performed in schools. As a result, some school districts have been able to hire additional school nurses with these reimbursed funds.

nvesting in school nurses helps students stay healthy and ensures they're ready to learn so they can graduate and become productive citizens. As Frederick Douglass once said, "It is easier to build strong children than to repair broken men." With nurses in schools, educators, families, and school nurses can work together to build strong children.

Endnotes

1. Centers for Disease Control and Prevention, Results from the School Health Policies and Practices Study 2014 (Washington, DC: Department of Health and Human Services, 2015), 75.

2. National Association of School Nurses, School Nurse Workload: Staffing for Safe Care (Silver Spring, MD: National Association of School Nurses, 2015).

3. Health Resources and Services Administration, *The U.S. Nursing Workforce: Trends in Supply and Education* (Washington, DC: Department of Health and Human Services, 2013), 16.

4. Robert Wood Johnson Foundation, Chronic Care: Making the Case for Ongoing Care (Princeton, NJ: Robert Wood Johnson Foundation, 2010), 12.

5. "Swine-Origin Influenza A (H1N1) Virus Infections in a School—New York City, April 2009," *Morbidity and Mortality Weekly Report*, April 30, 2009.

 National Association of School Nurses, School Nurse Role in Electronic School Health Records (Silver Spring, MD: National Association of School Nurses, 2014).

7. Nina Jean Hill and Marianne Hollis, "Teacher Time Spent on Student Health Issues and School Nurse Presence," *Journal of School Nursing* 28 (2012): 181–186; Nicole Pennington and Elizabeth Delaney, "The Number of Students Sent Home by School Nurses Compared to Unlicensed Personnel," *Journal of School Nursing* 24 (2008): 290–297; and Susan K. Telljohann, Joseph A. Dake, and James H. Price, "Effect of Full-Time versus Part-Time School Nurses on Attendance of Elementary Students with Asthma," *Journal of School Nursing* 20 (2004): 331–334.

8. Michelle L. Moricca, Merry A. Grasska, Marcia BMarthaler, et al., "School Asthma Screening and Case Management: Attendance and Learning Outcomes," *Journal of School Nursing* 29 (2013): 104–112.

9. Daniel A. Salmon, Lawrence H. Moulton, Saad B. Omer, et al., "Knowledge, Attitudes, and Beliefs of School Nurses and Personnel and Associations with Nonmedical Immunization Exemptions," *Pediatrics* 113, no. 6 (2004): e552–e559.

10. National Association of School Nurses, *Role of the School Nurse* (Silver Spring, MD: National Association of School Nurses, 2011).

11. "Fewer School Nurses Leads to Greater Medication Errors," ConsumerMedSafety.org, May 7, 2012, www.consumermedsafety.org/medication-safety-articles/item/550-fewer-school-nursesleads-to-greater-medication-errors.

12. Mary J. Baisch, Sally P. Lundeen, and M. Kathleen Murphy, "Evidence-Based Research on the Value of School Nurses in an Urban School System," *Journal of School Health* 81 (2011): 74–80.

13. Li Yan Wang, Mary Vernon-Smiley, Mary Ann Gapinski, et al., "Cost-Benefit Study of School Nursing Services," JAMA Pediatrics 168 (2014): 642–648.

14. Jeffrey Levi, Laura M. Segal, and Chrissie Juliano, *Prevention for a Healthier America: Investments in Disease Prevention Yield Significant Savings, Stronger Communities* (Washington, DC: Trust for America's Health, 2009).

15. Public Health Agency of Canada, *Canadian Immunization Guide, Part 1* (Ottawa: Public Health Agency of Canada, 2014), 7.

16. Ontario Ministry of Health and Long-Term Care, *Every Door Is the Right Door: Towards a 10-Year Mental Health and Addictions Strategy; A Discussion Paper* (Toronto: Ministry of Health and Long-Term Care, 2009), 16.



Having a school nurse

actually results in returns on

the investment—not only in

dollars saved but in time

spent on instruction.

^{*}School districts that have partnered with local health departments include Austin Independent School District, Akron Public Schools, Dayton Public Schools, and Provo City School District. For more on these partnerships, visit www.bit.ly/1SMy53w, www. bit.ly/1JJftyl, www.bit.ly/1Tqh26C, and www.bit.ly/1OSB72d.