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## Healthy and Ready to Learn: School Nurses Improve Equity and Access

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### Abstract

Healthy children learn better; educated children grow to raise healthier families advancing a stronger, more productive nation for generations to come. School nurses work to assure that children have access to educational opportunities regardless of their state of health. Challenges exist in coordinating children's healthcare, but also present opportunities to build a robust system of care for children. This article briefly reviews the [historical roots](#) and [legal issues in school nursing](#), and [discusses student needs for school nursing support](#) and [disabilities in the school setting](#). The [work of school nursing](#) is described, as well as [registered nurse staffing in schools](#). The [conclusion](#) considers current and future issues in school nursing, including funding and delivery issues, the use of information technology, and partnership opportunities.

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Healthy children learn better; educated children grow to raise healthier families, thus creating a stronger, more productive nation for generations to come ([Centers for Disease Control and Prevention \[CDC\], 2015](#); [Marmot & Bell, 2006](#); [Robert Wood Johnson Foundation \[RWJF\], 2016](#)). School nurses assure that all children have access to appropriate educational opportunities regardless of their state of health. They have a foundational role, providing not only direct services for students with health problems, but also promoting the health of the communities in which they live and serve.

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The combination of children's health and education intertwine to determine their futures; the health and educational paths of a *community* of children combine to lay the foundation for powerful forces that benefit or hinder a *nation* of communities. Health is inextricably tied to student readiness to learn, and education is a social determinant of health that predicts a person's future success, and the health of his or her own children ([CDC, 2015](#); [RWJF, 2016](#)). The CDC defines social determinants as the "...conditions in the environments in which people live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks" ([CDC, 2015](#), para. 1). Educational success is measured by on-time graduation and ultimately attainment of a job for pay ([U.S. Department of Education, Office of Special Education and Rehabilitative Services \[U.S. DoE\], 2010](#)).

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School nurses stand at the intersection of

School nurses stand at the intersection of health and education, weaving supports needed to reduce barriers to learning and promoting healthy children, families, and communities. The following is a discussion of issues related to provision of school health services in the United States (U.S.). This article briefly reviews the historical roots and legal issues in school nursing, and discusses student needs for school nursing support and disabilities in the school setting. The work of school

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nursing is described, as well as registered nurse (RN) staffing in schools. The conclusion considers current and future issues in school nursing, including funding and delivery issues; the use of information technology; and partnership opportunities.

The National Association of School Nurses (NASN) defines school nursing as a specialized practice that “protects and promotes student health, facilitates optimal [student] development, and advances academic success. School nurses, grounded in ethical and evidence-based practice, are the leaders who bridge healthcare and education, provide care coordination, advocate for quality student-centered care, and collaborate to design systems that allow individuals and communities to develop their full potential” (NASN, 2017a, para. 1). School nurses serve the nation’s 56 million school-aged children in public, private, and some charter schools (National Center for Education Statistics [NCES], 2016).

School nurses have earned a minimum of a baccalaureate degree in nursing from an accredited nursing program and are licensed as a RN (NASN, 2016). Licensed practical or vocational nurses, and graduates of diploma and associate degree nursing programs also work in schools, as do graduates of masters of nursing and public health programs and those credentialed as advanced practice registered nurses (APRN). The National Board for Certification of School Nurses (NBCSN, n.d.) offers the opportunity for school nurses to be national board certified in school nursing. In addition, many states have school nurse certification programs administered through their department of education or health. The NASN (2017) serves as the professional organization of school nurses and has affiliate organizations throughout the country.

### Historical Roots of School Nursing

School nursing started in the United States in October 1902 when public health nurse Lina Rogers treated communicable diseases to reduce student absenteeism in New York City. Prior to Rogers’ work, medical officers excluded children with communicable diseases from school (Zaiger, 2013). The exclusions served only to reduce time students spent learning as they went home to play after school with their classmates, resulting in continued community exposure to illness. Rogers worked with families to treat infections, reducing the number of children excluded for health reasons from 10,567 to 1,101 in just one year (Zaiger, 2013). Recognition of the need for school nurses quickly spread across the nation to Los Angeles in 1904, Boston in 1905, Seattle in 1907, and Philadelphia in 1908 (Zaiger, 2013).

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Rural school nursing began soon after as public health nurses traveled on horseback to visit children at schools to perform screenings and infection control. Nurses meeting children at school learned about other health issues of students’ families, and then worked to build relationships with those families. This allowed them to build the trust needed to encourage immunization against communicable diseases and provide support to manage illness in the family, thereby improving the health status of the entire community.

There were wide variations in what school health services looked like until the 1950s when a more implicit focus developed on direct care; leadership and management of school health programs; case finding and coordination; and health education for students and the community (Zaiger, 2013). Today, communicable disease has taken a back seat to care coordination of chronic health conditions as the major focus of school nursing activity. However, the emphasis of the school nurse contribution to improve school attendance for well children and promote access to education for those with chronic health conditions continues (NASN, 2016).

### Legal Issues in School Nursing

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School nurses are bound by the same nurse practice acts and standards of practice and ethics as nurses in other healthcare settings (American Nurses Association [ANA], 2010; ANA, 2015; National Council of State Boards of Nursing [NCSBN], n.d.). *The Scope and Standards of School Nursing* publication provides further practice guidance for school nurses (ANA & NASN, 2011). In addition to state nurse practice acts, school nurses are bound by education specific statutes at the federal and state level. For instance, Washington State has a whole section in their education statutes devoted to school health requirements on screening, medication delegation, and care of students with chronic conditions such as type I diabetes, asthma, anaphylaxis, and urinary catheterization (Revised Code of Washington: Common School Provisions, 1890).

Straddling health and education sectors and interfacing with the boards of both professional nursing and education at the state and district level adds a layer of regulatory complexity to the role. In general, school board policies and procedures authorize school health services in an individual school district in the same way as policy manuals in a specific hospital or ambulatory care setting.

Given the large caseloads that many school nurses manage, delegation to unlicensed assistive personnel is a key element of school nursing in those states where it is allowed by nurse practice acts. Parents and school staff whose typical experience with healthcare is related to their own family sometimes struggle to understand the safety and legal requirements of providing care as part of their employment ([NASN, 2014d](#)). Because of this, the importance of nursing delegation, medical orders, and training by a nurse for the administration of medications and treatments may be overlooked by school staff if an RN is not available. Safe and legal delegation of care in the school setting must be supervised by an RN, just as in other healthcare settings.

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Where allowed by nurse practice acts, delegation of nursing tasks occurs in the school setting to unlicensed assistive personnel who typically include the classroom teacher, instructional assistant, or office staff ([NASN, 2014d](#)). School nurses follow delegation principles outlined by the ANA and NCSBN ([n.d.](#)). Some states also allow volunteers identified by parents to independently administer certain medications in the absence of an RN. For example, California allows insulin to be administered by unlicensed volunteers, and Washington State allows parents to identify an unlicensed volunteer to administer insulin and nasal medications (e.g., Midazolam®) ([American Nurses Association v. Torlakson, 2013](#); [Revised Code of Washington: Common School Provisions, 1890](#)). Recognizing the value of an RN to assess and promote the health of students, some states require a registered nurse at each school. In sum, there is wide variation across states in access to an RN at school, which is addressed in greater detail in a subsequent section.

### Student Needs for School Nursing Support

Improvements in medical care in recent years have changed the landscape of childhood health, allowing more children to survive prematurity, cancers, and other conditions previously unsurvivable ([Perrin, Anderson, & VanCleave, 2014](#)). Increased knowledge about child health has led to improved screening, preventive care, and management of chronic conditions. This has increased the number of children with health problems who survive to school-age and then require nursing services at school.

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Immunizations and advances in infectious illness have led to reductions in communicable diseases. However, they have been replaced with increases in chronic diseases such as asthma, obesity, mental health concerns, and neurodevelopmental disorders. In fact, rates of children with chronic conditions that interfere with their daily life have increased 400% between 1960 (when many current policy makers attended school) and 2010 ([Perrin et al., 2014](#)). Today's children come to school with more complex daily health needs, requiring technology-enhanced interventions and a need for increased surveillance to assure their safety at school. Social and demographic factors (e.g., poverty; racial and ethnic health disparities; language issues) add to the complexity of the care of today's children ([Perrin et al., 2014](#)). For example, asthma strikes American Indian and Native Alaskan children 25% more frequently than White children, while Puerto Rican children have an asthma rate 140% more than their non-Hispanic White classmates; Black and Hispanic children live with higher rates of obesity ([Perrin et al., 2014](#)).

The good news is that death rates from all causes for pre-teen children declined 60% from 1980 to 2013 ([Federal Interagency Forum, 2015](#)). This means that more children come home after treatment in the intensive care unit (ICU) with conditions that span the range of specialized clinics in the most comprehensive children's medical centers. Children who survive acute conditions arrive at school with a variety of complex health needs that require nursing care. The Maternal Child Health Bureau reported that in 2010, children with special healthcare needs (CSHCN) comprised 18% of school aged children in the United States ([U.S. Department of Health & Human Services \[U.S. DHHS\], 2013](#)). Eighty-six percent of CSHCN require prescription medications, and nearly 30% require specialized therapies; nearly a quarter of their parents report at least one unmet need for services while less than half of CSHCN receive coordinated care in a medical home ([U.S. DHHS, 2013](#)).

Social issues add to the complexity of children's health needs. Twenty percent of U.S. children live in poverty and 21% live in homes that are food insecure; 11% of teens had a major depressive episode ([Federal Interagency Forum, 2015](#)). Four percent of children do not have a regular source of healthcare and school nurses may be the only health provider they see. One in five teens experience a serious mental health problem and 50% of mental health disorders start in childhood ([National Alliance for the Mentally Ill \[NAMI\], n.d.](#)). Untreated mental illness is

associated with suicide, homelessness, and incarceration ([NAMI, n.d.](#)). Urban minority children have been particularly impacted by health issues that interfere with learning and add to the disparities they face ([Basch, 2011](#)).

Health and social issues combine to adversely affect school attendance. The impact of chronic absenteeism, defined as missing 10 percent or more school days per year, on educational outcomes, future health, and the student's financial future is an additional barrier for students with health or social needs. "Ten percent of kindergarteners and first graders are chronically absent" ([RWJF, 2016](#), p. 1). Chronic absenteeism in early grades diminishes students' ability to read in third grade, which in turn puts them at four times the risk of dropping out of high school ([Balfanz & Byrnes, 2012](#); [RWJF, 2016](#)). Children who are chronically absent for even one year in high school are *seven* times less likely to graduate, which increases the risk that they will die earlier than classmates who earn a high school diploma ([Attendance Works, 2015](#); [RWJF, 2016](#)). Despite increasing prevalence and complexity of student health needs and the subsequent impact on educational success, structures to uniformly provide resources to meet those needs are developed ad hoc at the local level.

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### Disabilities in the School Setting

Children who are disabled require directed support at school to be successful. The Civil Rights movement of the 1960s also energized advocacy for persons with disabilities, leading to laws to protect their rights. In 1973, the Rehabilitation Act was passed, forbidding discrimination against disabled persons in federally funded programs such as public schools ([National Low-Income Housing Coalition \[NLIHC\], 2014](#)). In 1975, the first special education statutes were enacted to protect the rights of students with disabilities to receive a free, appropriate public education (FAPE) ([U.S. Department of Education \[U.S. DoE\], 2010](#)). Before these federal statutes were enacted, millions of children with disabilities were either excluded from school or had limited access and were denied an education, ultimately limiting their ability to earn a living and function independently as adults ([U.S. DOE, 2010](#)).

Students with disabilities fit into two categories: a) students whose disability affects their educational *progress* and b) students whose disability restricts *access* to their education. Students whose disability affects educational progress are eligible for special education services under the Individuals with Disabilities in Education Act (IDEA) ([U.S. Department of Education \[US DOE\], n.d.](#)). Students whose disability restricts *access* to their education require accommodations under Section 504 of the Americans with Disabilities Act (ADA) ([U.S. Department of Education, Office for Civil Rights \[U.S. DOE, OCR\], n.d.](#)).

Students eligible for special education services (category a) need specialized instruction to advance academically. Many also have a health component to their disability and require health services at school (e.g., tracheostomy care, gastrostomy tube feedings, medications, and training for staff providing healthcare as delegated by an RN). Students (category b) with conditions such as Type I diabetes or severe allergies require accommodations to be at school safely. For a student with diabetes, these accommodations may include snacks and the ability to use insulin at school; students with severe allergies require medication at school and staff training to avoid known anaphylaxis triggers or recognize and treat emergencies.

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The school nurse, armed with knowledge of the school environment, specialized knowledge of the health condition, and the specific health needs for that student, develops individualized healthcare plans (IHPs) to outline appropriate accommodations and health support ([NASN, 2015a](#)). Providing supports for students through special education services has resulted in greater numbers of students with disabilities achieving educational success, graduating from high school, enrolling in post-secondary education, and attaining independence as adults working for pay ([U.S. DOE, 2010](#)). Disability statutes protect the rights of Americans "...to participate and contribute meaningfully to society" ([U.S. DOE, 2010](#), p. 12).

### The Work of School Nursing

Health conditions underpin most disabilities that children face in school. It is the responsibility of the school nurse to develop IHPs, emergency care plans (ECPs) and the health portion of individualized education plans (IEPs) that form the foundation of special education and Section 504 accommodations ([NASN, 2015a](#)). Part of these accommodations may include identifying and minimizing barriers to attendance; delegating and supervising of prescribed medications and treatments; and training school staff to recognize and respond to health emergencies ([NASN, 2015a](#)). School nurses are uniquely positioned to assure that appropriate

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accommodations are in place for the student, improving educational access while avoiding unnecessary expense ([Zirkel, Grandhom, & Lovato, 2012](#)).

In addition, as part of their work in health promotion and illness prevention, school nurses support school management of emergencies and disasters. Emergency responses range from the acute injury or illness of an individual student or staff member, to community wide catastrophes, including accidents, natural disasters, and lockdowns due to criminal activity ([NASN, 2014b](#)). School nurses are often the first person called to an emergent situation and are critical to implementing the school's Incident Command System ([NASN, 2014b](#)). They prepare for and respond to emergent situations by assessing and identifying prevention and mitigation measures, facilitating a "rapid, coordinated, effective emergency response," responding to actual emergencies and preparing for and assisting in recovery efforts after the emergency ([NASN, 2014b](#), p. 2). This planning and preparation supports not only well students, but those with special healthcare needs such as Type I diabetes, seizure disorders, those who require mechanical ventilation or are dependent on others for emergency evacuation. School nurses meet these needs through a combination of triage, staff training, and safety surveillance ([NASN, 2014b](#)).

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Additional work in health promotion and illness prevention for school nurses includes health education in areas that address obesity, bullying, environmental health and drug abuse ([NASN, 2013c; 2014a; 2014c; NASN 2016c](#)). From providing fundamental health education by teaching kindergarteners to cover their coughs, to growth and development education for middle and high schoolers, school nurses incorporate health education into every interaction they have with students, staff, and families. School nurses coordinate their work with other education professionals to promote the health of students, staff, and the community ([NASN, 2015b](#)). The CDC has long recognized the role of school nurses in promoting health by including school health services in their Coordinated School Health program ([NASN, 2017c](#)). The program has since evolved into a partnership with education professionals called the *Whole School, Whole Child, Whole*

*Community* program (WSCC Model) ([CDC, n.d.](#)).

### Registered Nurse Staffing in Schools

The presence of an RN at school is very dependent on local funding, and state specific regulations ([Baker, Hebbeler, Davis-Aldritt, Anderson, & Knauer, 2015; Maughan, 2009](#)). Scarce school financing is a common dilemma for school districts and when budgets are tight, cuts in health services programs often result. However, the U.S Department of Education clarifies that public schools "... operating federally funded programs must provide education and related services free of charge to students with disabilities"– a provision of special education law known as "free appropriate public education" or FAPE that includes the provision of health services ([U.S. Department of Education \[U.S. DOE\], 2010, p. 1](#)). Unfortunately, federal funding for special education covers only about 10% of costs incurred for these programs, and mandated services under Section 504 are unfunded ([U.S. DOE, 2005](#)).

Unstable funding mechanisms and the indirect link between student health and the educational mission of schools often puts funding for school health services at risk. This risk for services is despite documented value that the nursing care provides for education and health outcomes, particularly to address issues of equity ([Baker et al., 2015; Baisch, Lundeen, & Murphy, 2011; Basch, 2011; Wang et al., 2014](#)). For example, the cost of managing asthma was approximately \$56 billion in 2007 and resulted in 3.68 million lost school days ([Rodriguez, Riviera, Perlroth, Becker, & Wang, 2013](#)). Rodriguez et al. found that a full-time school nurse decreased absenteeism, particularly for younger students.

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As indicated earlier, students with high rates of absenteeism before 3<sup>rd</sup> grade are less likely to read at the 3<sup>rd</sup> grade level ([Balfanz & Byrnes, 2012](#)). Failure to read in grade 3 in turn impacts high school graduation rates, which affects student employability and future financial independence ([Bureau of Labor Statistics, 2017](#)). Rodriguez et al. ([2013](#)) also described decreased overall costs of providing care for children with asthma when a full-time nurse was present at school, which resulted from increased state payments to the school related to improvements in average daily attendance; a reduction in emergency room visits and hospitalizations; and wages earned by parents who did not miss work due to their child's illness. Similar outcomes have been found in other studies ([Baisch et al., 2011; Wang et al., 2014](#)). Despite this evidence-base, funding for school nursing services, highly dependent on per pupil funding, varies widely across the United States ([Maughan, 2009](#)).

### Conclusion

### **Current Issues in School Nursing**

Some issues present challenges for appropriate provision of school health services, yet also point to opportunities to improve healthcare and education outcomes for children. This section discusses several such current concerns, such as regional issues that impact funding; variability in services related to funding differences; information technology; the aging school workforce; community partnerships; and emergence of telehealth.

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Caseload numbers are closely tied to per pupil funding.

**Regional issues that impact funding and oversight.** School districts (Local Education Agencies [LEAs]) operate under local control, in which community school boards make decisions on issues such as curriculum and school policies. That same reliance on local control is applied to staffing and funding for school health programs. As a result, school nurse caseload numbers vary widely across states ranging from 300 to almost 6000 students per nurse (Maughan, 2009). Caseload numbers are closely tied to per pupil funding (Maughan, 2009). In 2015, there was a difference of more than \$10,700 between the state with the highest per pupil spending and the state with the lowest (i.e., \$21,206 per pupil in one state versus \$6,575 in the state with the lowest education funding) (U.S. Census Bureau, 2015).

School nurses practice independently in a non-health setting, often in professional isolation, sometimes referred to as a silo. Some districts operate without the benefit of a nurse administrator. This leaves non-health school administrators with uncertainty about the needs and management of school health programs, and school nurses juggling the demands of their caseloads, advocating for professional nursing standards, and looking for reliable technical support for their work. While most healthcare organizations have independent oversight (Joint Commission, n.d.) and structures focused on healthcare quality, local school boards retain oversight of school health programs without the benefit of baseline program standards to guide them. Combined with economic pressures faced by school districts, support for students with health problems can be more dependent on zip code than on health condition. Research on school health models would provide information about the recommended administrative structure of school health delivery systems. Partnership with hospital systems would lay ground work for more standardization in delivery models and stable funding.

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**Variability in services related to funding differences.** Disparities in funding and caseloads across the country, and even within states, highlight the lack of clarity on the scope and role of healthcare in schools for nurses, medical providers and educators alike (Endsley, 2017; Maughan, 2009). Work associated with a caseload of 300 students compared with the workload of nearly 6000 students impacts the level of care that can be provided (Maughan, 2009). Workload issues are further muddled by increasing numbers of students with complex healthcare needs who require intensive services, such as tracheostomy care, gastrostomy feedings, or managing Type I diabetes or severe seizure disorders. While society and health systems benefit from school-based care, the burden of paying for that care has been borne by education systems as opposed to health systems.

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Systems level solutions are needed to improve uniformity in school health services delivery.

Systems level solutions are needed to improve uniformity in school health services delivery. An ever-increasing number of hospital systems collaborate with school districts to staff school nursing services. Healthcare is moving to new delivery systems, and improved ways of coordinating care are emerging, including accountable health communities (Centers for Medicare and Medicaid [CMS], 2017). Including school health services in these systems offers the opportunity to improve coordination of children's healthcare and stabilize school health funding. These partnerships create healthier communities, and school nurses benefit from the professional support systems imbedded in hospitals.

**Information technology (IT).** Health IT has advanced rapidly with the oversight of the Office of the National Coordinator for Health Information Technology (ONC). The ONC has partnered with CMS to drive adoption of electronic health records, use of standardized languages, and certification of electronic documentation systems (ONC, 2016). The field of education has seen similar advances in data management with collection of data through the National Center for Education Statistics (NCES). Despite having a presence in both worlds, data collection and IT implementation for school health has lagged. While many school nurses report access to electronic documentation systems, no standards or systems for certifying school EHRs have been identified. This leaves the selection of appropriate school health documentation systems to be sorted by school nurses with limited IT experience, and school IT and education administrators with little knowledge of health IT requirements.

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Barriers to smooth information exchange between school nurses and health systems impact efficient care coordination between health providers and the place where students spend the majority of their waking hours. To address this and improve information sharing, some hospitals allow parents to give permission for school nurses to access student primary and specialty care provider electronic medical records. Improved information exchange makes both systems more efficient and enhances care coordination for the student.

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Demographics of the school nursing workforce mimic those of RNs in general, predicting a looming shortage.

**Aging school nurse workforce.** Demographics of the school nursing workforce mimic those of RNs in general, predicting a looming shortage ([U.S. DHHS, 2014](#); [Willgerodt & Brock, 2016](#)). Inequities related to compensation for school nurses when compared to community nursing pay standards, further complicate RN staffing concerns for schools. The shortage of RNs, and particularly baccalaureate prepared RNs needed in schools, requires that districts identify more robust recruitment and retention strategies to improve their ability to attract new nurses to the school setting. These include improved compensation, new school nurse orientation programs, and ongoing professional development.

**Partnership with school-based health centers.** School-based health centers (SBHC) provide primary healthcare and often behavioral health services in schools to students enrolled in their practice ([School Based Health Alliance \[SBHA\], n.d.a](#)). These centers function as an independent medical office, usually within school walls, at approximately 2,300 U.S. schools, ([SBHA, n.d.a](#)), or 2.3% of the nation's 98,271 schools ([NCES, n.d.b](#)). The SBHA noted,

The **school nurse** is the building's health ambassador, on the frontline for day-to-day oversight and management of the school population's health. **School-based healthcare** complements the work of school nurses by providing a readily accessible referral site for students who are without a medical home or in need of more comprehensive services such as primary, mental, oral, or vision health care" ([SBHA, n.d.b](#), para. 12).

Partnerships between SBHCs, school nurses, and school districts minimize barriers of access to medical services, particularly for students who live with disparities.

**Telehealth.** School nurses are professionals trained in assessment of body systems and documentation of findings. They are connected to the communities they serve and are often the first health professional a student or family member may consult when confronted with a health problem. Advances in telehealth hold great promise for rural and frontier communities to have increased access to medical care right in their local school by combining the benefits of telehealth with the professional skills of the school nurse ([Nelson, 2017](#)).

### **The Future of School Nursing**

As healthcare moves into the community, focuses more on client-centered care, and is facilitated by electronic documentation systems, there is huge potential to improve efficiency and cost effectiveness of coordinating healthcare for our nation's children by including school health services. In an ideal child centered system, interoperability between children's electronic medical records and school health records will become standard, thus facilitating efficient, effective coordination between health systems and school; improved surveillance of disease outbreaks; and coordination of health promotion activities.

Health and education data systems will be integrated to provide information to drive policy, care delivery, and research into effective interventions in both health and education. Schools will partner with community healthcare systems as part of accountable care organizations to provide a true system of care for children who are well and those with chronic conditions. In turn, this will standardize models of school healthcare delivery and lead to quality recognition programs where parents, medical providers, and educators will have clear information about their school healthcare program. The school nurse will be an integral member of a child's larger healthcare team, assuring implementation of the plan of care and providing timely information from the school health record about student response to care. School health will be fully integrated into the greater healthcare system to provide a holistic, child-centered, health system.

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Schools will partner with community healthcare systems as part of accountable care organizations to provide a true system of care for children who are well and those with chronic conditions.

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School nurses stand in both the health and education sectors to support the well-

In summary, school nurses are an important link in the continuum of care for children with chronic conditions, a critical component of illness prevention, and a safety net for those children who are outside the traditional medical care system. They bridge the gap between health and education; individual and population healthcare; and address chronic health needs of individual students as well as prevention and health promotion activities of public health. School nurses serve children whose health needs range from well care to the full spectrum of chronic

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pediatric health conditions. While challenges to integrate the healthcare that children receive remain, robust opportunities also exist to further promote child health. Healthy children learn better; educated children grow to raise healthier families and stronger communities. School nurses stand in both the health and education sectors to support the well-being of children and the future health and economic vitality of our nation.

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### References

- American Nurses Association. (2010). *Nursing: Scope and standards of practice* (2nd ed.). Silver Spring, MD: American Nursing Association.
- American Nurses Association v. Torlakson, 57 Cal. 4th 570 (2013).
- American Nurses Association. (2015). *Code of ethics for nurses with interpretive statements* (2nd ed.). Silver Spring, MD: Author.
- American Nurses Association & National Association of School Nurses. (2011). *Scope and standards of practice: School Nursing* (2nd ed.). Silver Spring, MD: Nursesbooks.org.
- American Nurses Association & National Council for State Boards of Nursing. (n.d.). *Joint statement on delegation*. Retrieved from [https://www.ncsbn.org/Delegation\\_joint\\_statement\\_NCSBN-ANA.pdf](https://www.ncsbn.org/Delegation_joint_statement_NCSBN-ANA.pdf)
- Attendance Works & Healthy Schools Campaign. (2015). *Mapping the early attendance gap: Charting a course for school success*. Retrieved from <http://www.attendanceworks.org/wordpress/wp-content/uploads/2015/07/Mapping-the-Early-Attendance-Gap-Final-4.pdf>
- Baisch, M. J., Lundeen, S. P., & Murphy, M. K. (2011). Evidence-based research on the value of school nurses in an urban school system. *Journal of School Health, 81*, 74-80. doi:10.1111/j.1746-1561.2010.00563
- Baker, D. L., Hebbeler, K., Davis-Aldritt, L., Anderson, L. S., & Knauer, H. (2015). School health services for children with special health care needs in California. *The Journal of School Nursing, 31*, 318-325. doi:10.1177:1059840515578753
- Balfanz, R., & Byrnes, V. (2012). The importance of staying in school: A report on absenteeism in America's public schools. *The Johns Hopkins University*. Retrieved from [http://new.every1graduates.org/wp-content/uploads/2012/05/FINALChronicAbsenteeismReport\\_May16.pdf](http://new.every1graduates.org/wp-content/uploads/2012/05/FINALChronicAbsenteeismReport_May16.pdf)
- Basch, C. E. (2011). Healthier students are better learners: High quality, strategically planned, and effectively coordinated school health programs must be a fundamental mission of schools to help close the achievement gap. *Journal of School Health, 81*, 650-662. doi: 10.1111/j.1746-1561.2011.00640.x.
- Bureau of Labor Statistics. (2017). *Employment projections: Unemployment rates and earnings by educational attainment, 2016*. Retrieved from [https://www.bls.gov/emp/ep\\_chart\\_001.htm](https://www.bls.gov/emp/ep_chart_001.htm)
- Centers for Disease Control and Prevention. (2015). *Social determinants of health: Know what affects health*. Retrieved from <https://www.cdc.gov/socialdeterminants/faqs/#faq6>
- Centers for Disease Control and Prevention. (n.d.). *Whole school, whole community, whole child: A collaborative approach to learning and health*. Retrieved from [https://www.cdc.gov/healthyschools/wsc/wscmodel\\_update\\_508tagged.pdf](https://www.cdc.gov/healthyschools/wsc/wscmodel_update_508tagged.pdf)

Centers for Medicare and Medicaid. (2017). *Accountable health communities model*. Retrieved from <https://innovation.cms.gov/initiatives/ahcm>

Endsley, P. (2017). School nurse workload: A scoping review of acute care, community health, and mental health nursing workload literature. *The Journal of School Nursing, 32*(1), 43-52. doi:10.1177/1059840516681423

Federal Interagency Forum on Child and Family Statistics. (2015). *America's children: Key national indicators of well-being, 2015*. Washington, DC: Government Printing Office.

Joint Commission. (n.d.). *About the Joint Commission*. Retrieved from [https://www.jointcommission.org/about\\_us/about\\_the\\_joint\\_commission\\_main.aspx](https://www.jointcommission.org/about_us/about_the_joint_commission_main.aspx)

Marmot, M., & Bell, R. (2006). The socioeconomically disadvantaged. In B. S. Levy & V. W. Sidel (Eds.), *Social injustice and public health*. New York: Oxford University.

Maughan, E. (2009). Part I - factors associated with school nurse ratios: An analysis of state data. *The Journal of School Nursing, 25*(3), 214-221. doi:10.1177/1059840509336058

National Alliance for the Mentally Ill. (n.d.). *Mental health facts: Children and teens*. Retrieved from <https://www.nami.org/NAMI/media/NAMI-Media/Infographics/Children-MH-Facts-NAMI.pdf>

National Association of School Nurses. (2017a). *Affiliates*. Retrieved from <https://www.nasn.org/about-nasn/affiliates>

National Association of School Nurses. (2017b). *Definition of school nursing*. Retrieved from <https://www.nasn.org/nasn/about-nasn/about>

National Association of School Nurses. (2017c). Whole school, whole community, whole child: Implications for 21st century school nurses. Retrieved from <https://schoolnursenet.nasn.org/blogs/nasn-profile/2017/07/28/whole-school-whole-community-whole-child>

National Association of School Nurses. (2016). *Education, licensure, and certification of school nurses*. Retrieved from <https://schoolnursenet.nasn.org/blogs/nasn-profile/2017/03/13/education-licensure-and-certification-of-school-nurses>

National Association of School Nurses. (2015a). *Individualized healthcare plans: The role of the school nurse*. Retrieved from <https://schoolnursenet.nasn.org/blogs/nasn-profile/2017/03/13/individualized-healthcare-plans-the-role-of-the-school-nurse>

National Association of School Nurses. (2015b). *The Patient Protection and Affordable Care Act: The role of the school nurse*. Retrieved from <https://schoolnursenet.nasn.org/blogs/nasn-profile/2017/03/13/the-patient-protection-and-affordable-care-act-the-role-of-the-school-nurse>

National Association of School Nurses. (2014a). *Bullying prevention in schools: Position statement*. Retrieved from <https://schoolnursenet.nasn.org/blogs/nasn-profile/2017/03/13/bullying-prevention-in-schools>

National Association of School Nurses. (2014b). *Emergency preparedness and response in the school setting: The role of the school nurse*. Retrieved from <https://schoolnursenet.nasn.org/blogs/nasn-profile/2017/03/13/emergency-preparedness-and-response-in-the-school-setting-the-role-of-the-school-nurse>

National Association of School Nurses. (2014c). *Environmental health in the school setting: The role of the school nurse*. Retrieved from <https://schoolnursenet.nasn.org/blogs/nasn-profile/2017/03/13/environmental-health-in-the-school-setting-the-role-of-the-school-nurse>

National Association of School Nurses. (2014d). *Delegation, Nursing delegation to unlicensed assistive personnel in the school setting*. Retrieved from <https://schoolnursenet.nasn.org/blogs/nasn-profile/2017/03/13/delegation-nursing-delegation-to-unlicensed-assistive-personnel-in-the-school-setting>

National Association of School Nurses. (2013a). *Drug testing in schools: Position statement*. Retrieved from <https://schoolnursenet.nasn.org/blogs/nasn-profile/2017/03/13/drug-testing-in-schools>

National Association of School Nurses. (2013c). *Overweight and obesity of youth in schools: The role of the school nurse*. Retrieved from <https://schoolnursenet.nasn.org/blogs/nasn-profile/2017/03/13/overweight-and-obesity-in-youth-in-schools-the-role-of-the-school-nurse>

National Board for Certification of School Nurses. (n.d.). *School nursing certification: Examination*. Retrieved from <http://www.nbcsn.org/examination>

National Center for Education Statistics. (n.d.). *Fast facts: Educational institutions*. Retrieved from <https://nces.ed.gov/fastfacts/display.asp?id=84>

National Center for Education Statistics. (2016). *Fast facts: Back to school statistics*. Retrieved from <https://nces.ed.gov/fastfacts/display.asp?id=372>

National Council of State Boards of Nursing. (n.d.). Boards and regulation. Retrieved from <https://www.ncsbn.org/boards.htm>

National Low-Income Housing Coalition. (2014). *40 Years Ago: The Rehabilitation Act of 1973 passed*. Retrieved from <http://nlihc.org/article/40-years-ago-rehabilitation-act-1973-passed>

Nelson, R. (2017, June). Telemedicine and telehealth: The potential to improve rural access to care. *American Journal of Nursing*, 117(6), 17 - 18. doi: 10.1097/01.NAJ.0000520244.60138.

Office of the National Coordinator for Health Information Technology. (2016). *About ONC*. Retrieved from <https://www.healthit.gov/newsroom/about-onc>

Perrin, J. E., Anderson, L. E., & VanCleave, J. (2014). The rise in chronic conditions among infants, children and youth can be met with continued health system innovations. *Health Affairs*, 33(12), 2099-2105. doi:10.1377/hlthaff.2014.0832

Revised Code of Washington: Common School Provisions, RCW 28A.210 WA State Code §§ 010 - 385 (1890).

Robert Wood Johnson Foundation. (2016). *The relationship between school attendance and health*. Retrieved from <http://www.rwjf.org/en/library/research/2016/09/the-relationship-between-school-attendance-and-health.html>

Rodriguez, E., Riviera, D. A., Perloth, D., Becker, E., & Wang, N. E. (2013). School nurses' role in asthma management, school absenteeism, and cost savings: A demonstration project. *Journal of School Health*, 83(12), 842-850. doi:10.1111/josh.12102

School Based Health Alliance. (n.d.a). *2013-14 digital census report*. Retrieved from <http://censusreport.sbh4all.org/>

School Based Health Alliance. (n.d.b). *School-based health care: Where health and education intersect*. Retrieved from <https://www.sbh4all.org/school-health-care/aboutsbhcs/>

U.S Census Bureau. (2015). *Per pupil spending varies heavily across the United States* (CB15-98). Washington, DC: Government Printing Office.

U.S. Department of Education. (2005). *10 facts about K-12 education funding*. Retrieved from <https://www2.ed.gov/about/overview/fed/10facts/index.html?exp>

U.S. Department of Education. (n.d.). *Individuals with disabilities in education*. Retrieved from [http://idea.ed.gov/explore/search?search\\_option=all&query=documentation&GO.x=0&GO.y=0](http://idea.ed.gov/explore/search?search_option=all&query=documentation&GO.x=0&GO.y=0)

U.S. Department of Education, Office for Civil Rights. (n.d.). *Protecting students with disabilities*. Retrieved from <https://www2.ed.gov/about/offices/list/ocr/504faq.html>

U.S. Department of Education, Office of Special Education and Rehabilitative Services. (2010). Thirty-five years of progress in educating children with disabilities through IDEA. Retrieved from <https://www2.ed.gov/about/offices/list/osers/idea35/history/idea-35-history.pdf>

U.S. Department of Health and Human Services, Health Resources and Services Administration, National Center for Health Workforce Analysis. (2014). The future of the nursing workforce: National- and state-level projections, 2012-2025. Retrieved from <https://bhw.hrsa.gov/sites/default/files/bhw/nchwa/projections/nursingprojections.pdf>

U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. The national survey of children with special health care needs chartbook 2009-2010. Rockville, Maryland: U.S. Department of Health and Human Services, 2013.

Wang, L., Vernon-Smiley, M., Gapinski, M., Desisto, M., Maughan, E., & Sheetz, A. (2014, May 19). Cost-benefit study of school nursing services. *JAMA Pediatrics*, 168(7), 642-648. doi:10.1001/jamapediatrics.2013.5441

Willgerodt, M., & Brock, D. (2016). School nurses in the U.S. Retrieved from [https://higherlogicdownload.s3.amazonaws.com/NASN/3870c72d-fff9-4ed7-833f-215de278d256/UploadedImages/PDFs/Advocacy/2017\\_School\\_Nurses\\_in\\_the\\_Nation\\_Infographic\\_.pdf](https://higherlogicdownload.s3.amazonaws.com/NASN/3870c72d-fff9-4ed7-833f-215de278d256/UploadedImages/PDFs/Advocacy/2017_School_Nurses_in_the_Nation_Infographic_.pdf)

Zaiger, D. (2013). Historical perspectives in school nursing. In J. Selekmán (Ed.), *School nursing: A comprehensive text* (2nd ed. (pp. 2-24). Philadelphia: F.A. Davis.

Zirkel, P. A., Grandhom, M. F., & Lovato, L. (2012). Section 504 and student health problems: The pivotal position of the school nurse. *The Journal of School Nursing*, 28(6), 423-432. doi:10.1177/1059840512449358

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