



Role of the School Nurse in Providing School Health Services

COUNCIL ON SCHOOL HEALTH

The American Academy of Pediatrics recognizes the important role school nurses play in promoting the optimal biopsychosocial health and well-being of school-aged children in the school setting. Although the concept of a school nurse has existed for more than a century, uniformity among states and school districts regarding the role of a registered professional nurse in schools and the laws governing it are lacking. By understanding the benefits, roles, and responsibilities of school nurses working as a team with the school physician, as well as their contributions to school-aged children, pediatricians can collaborate with, support, and promote school nurses in their own communities, thus improving the health, wellness, and safety of children and adolescents.

INTRODUCTION

Traditionally, the school nursing role was designed to support educational achievement by promoting student attendance. The first school nurse, Lina Rogers, was appointed in 1902 to tend to the health of 8671 students in 4 separate schools in New York City. Her early success in reducing absenteeism led to the hiring of 12 more nurses. Within 1 year, medical exclusions decreased by 99%.¹

Over the past century, the role of the school nurse has expanded to include critical components, such as surveillance, chronic disease management, emergency preparedness, behavioral health assessment, ongoing health education, extensive case management, and much more. Although the position has taken on a more comprehensive approach, the core focus of keeping students healthy and in school remains unchanged. School attendance is essential for academic success.

School nurses provide both individual and population health through their daily access to large numbers of students, making them well positioned to address and coordinate the health care needs of children and adolescents. The impact of social determinants of health are felt in the school setting and well known to school nurses.^{2,3} School

abstract

This document is copyrighted and is property of the American Academy of Pediatrics and its Board of Directors. All authors have filed conflict of interest statements with the American Academy of Pediatrics. Any conflicts have been resolved through a process approved by the Board of Directors. The American Academy of Pediatrics has neither solicited nor accepted any commercial involvement in the development of the content of this publication.

Policy statements from the American Academy of Pediatrics benefit from expertise and resources of liaisons and internal (American Academy of Pediatrics) and external reviewers. However, policy statements from the American Academy of Pediatrics may reflect the views of the liaisons or the organizations or government agencies that they represent.

The guidance in this statement does not indicate an exclusive course of treatment or serve as a standard of care. Variations, taking into account individual circumstances, may be appropriate.

All policy statements from the American Academy of Pediatrics automatically expire 5 years after publication unless reaffirmed, revised, or retired at or before that time.

DOI: 10.1542/peds.2016-0852

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

Copyright © 2016 by the American Academy of Pediatrics

To cite: AAP COUNCIL ON SCHOOL HEALTH. Role of the School Nurse in Providing School Health Services. *Pediatrics*. 2016;137(6):e20160852

nursing is a specialized practice of professional nursing that advances the well-being, academic success, and lifelong achievement and health of students. To that end, school nurses understand and educate about normal development; promote health and safety, including a healthy environment; intervene with actual and potential health problems; provide case-management services; and actively collaborate with physicians who work in schools, such as medical advisors and team physicians, families, community service providers, and health care providers, to build student and family capacity for adaptation, self-management, self-advocacy, and learning.^{4,5}

School nurses and pediatricians, both community- and school-based, working together can be a great example of team-based care, defined as the provision of comprehensive health services to individuals, families, and/or their communities by at least 2 health professionals who work collaboratively along with patients, family caregivers, and community service providers on shared goals within and across settings to achieve care that is safe, effective, patient-centered, timely, efficient, and equitable. The principles of team-based health care are as follows: shared goals, clear roles, mutual trust, effective communication, and measurable processes and outcomes.^{6,7} As a health care team member, school nurses connect students and their families to the medical home and can support coordination of care.⁸⁻¹⁰

As more children with special health care needs attend school, the school nurse plays a vital role in disease management, often working closely with children and their parents to reinforce the medical home's recommendations and provide treatment(s) during the school day. Feedback mechanisms regarding student response to the treatment

plan in school are critical to timely medical management in areas such as attention-deficit/hyperactivity disorder, diabetes, life-threatening allergies, asthma, and seizures as well as for the growing population of children with behavioral health concerns. School nurses play an important role in interpreting medical recommendations within the educational environment and, for example, may participate in the development of action plans for epilepsy management and safe transportation of a child with special health care needs.^{11,12} School nurses may also provide insight to a student's pediatrician when attendance concerns, parental noncompliance with medical home goals, or even neglect or abuse is suspected. In addition, with increased awareness recently about such issues as head injuries, the school nurse is poised to offer on-site assessment of the student's postconcussion progress and adaptations required in the educational plan.¹³

School nurses are also participants in public health arenas, such as immunization, obesity prevention, substance abuse assessment, tobacco control, and asthma education. Their daily presence in the school setting further augments and potentiates the pediatrician's professional interventions with individual children and adolescents.¹⁴

Collaboration among pediatricians, families, school staff, school physicians, and school nurses is increasingly critical to optimal health care in both office and community settings. This policy statement describes the crucial aspects of the school nurse's role, its relationship to pediatric practice, and recommendations to facilitate productive working relationships benefiting all school-aged children and adolescents. An important and more detailed reference for school health, *School Health: Policy and Practice*, provides a more in-depth

description about health and schools, including a comprehensive chapter on school health services, including school nurses.¹⁵

BACKGROUND

During the past few decades, major legal, medical, and societal changes have critically influenced the need for registered professional nurses (hereafter referred to as school nurse) in the school setting.

Legal Changes

Social attitudes that promote inclusion, as well as state and federal laws such as the Individuals With Disabilities Act (Pub L No. 101-476 [1990]) and section 504 of the Rehabilitation Act of 1973 (Pub L No. 93-112), specify disability rights and access to education, resulting in more children requiring and receiving nursing care and other health-related services in school.^{16,17}

The Privacy, Security, and Breach Notification Rules of the Health Insurance Portability and Accountability Act of 1996 (Pub L No. 104-191) and Family Educational Rights and Privacy Act (Pub L No. 93-380 [1974]) laws impose important privacy protections for a student's health information. However, myths and misunderstanding among parents, pediatricians, and school nurses about these laws can inadvertently hinder efficient, efficacious, and cost-effective case management of student health care needs. School nurses work with parents to educate, facilitate, and expedite necessary communication between schools and the medical home. School nurses facilitate parental permissions for information exchange and serve as a link between parent and pediatrician to establish essential and effective individualized health care plans for students at school.

Medical Changes

Survival rates of preterm infants have increased to more than 80% of infants born at 26 weeks' gestation and to more than 90% of infants born after 27 weeks' gestation, resulting in an increase in the number of children with moderate to severe disabilities and learning or behavioral problems.^{18,19}

Chronic illnesses also are on the rise. In 2010, 215 000 people younger than 20 years in the United States had a diagnosis of either type 1 or type 2 diabetes.²⁰ The prevalence of food allergies among children younger than 18 years increased from 3.4% in 1997–1999 to 5.1% in 2009–2011.²¹ An average of 1 in 10 school-aged children has asthma,²² contributing to more than 13 million missed school days per year.²³ As the number of students with chronic conditions grows, the need for health care at school has increased.²⁴ The rise in enrollment of students with special health care needs increases the need for school nurses and school health services.²⁵

Caring for children with chronic conditions in schools requires registered professional school nurses. However, the reality is that school nurse staffing patterns vary widely across the United States.¹⁴ When a school nurse is not available at all times, the American Academy of Pediatrics, the National Association of School Nurses, and the American Nurses Association recommend that delegated, unlicensed assistive personnel be trained and supervised in the knowledge, skills, and composure to deliver specific school health services under the guidance of a registered nurse. The delegation of nursing duties must be consistent with the requirements of state nurse practice acts, state regulations, and guidelines provided by professional nursing organizations.²⁶ Delegation does not obviate the need for continued advocacy for full-time professional school nurses in each

building. American Academy of Pediatrics' policy has previously supported ratios of 1 school nurse to 750 students in the healthy student population and 1:225 for student populations requiring daily professional nursing services. However, the use of a ratio for workload determination in school nursing is inadequate to fill the increasingly complex health needs of students.^{27,28}

Societal Changes

Families face multiple barriers to adequate health care, including accessibility, availability, and affordability. Many working parents also fear job loss if they are absent from work to attend a child's medical appointment, forcing them to leave illnesses and chronic conditions unattended.²⁹ The availability of school nurses to children and families helps to increase access to the medical home for comprehensive care as well as to essential public health functions, such as immunization or obesity prevention.

Schools and school nurses can partner with medical homes and public health agencies to increase access to or to deliver vaccines. The presence of registered nurses in schools is correlated with fewer immunization exemptions in schools.³⁰ School nurses can improve vaccine uptake among students and staff by providing accurate information about vaccines. They can also remind students, families, and staff of immunization schedules and retrieve and update immunization records for state-specific reporting requirements.

Increasing rates of obesity over the past several decades represent alarming risks for the current and future health of children and adolescents. The percentage of children 6 to 11 years of age with obesity increased from 7% in 1980 to nearly 18% in 2012, with more than

one-third of children now overweight or obese.³¹

The immediate and long-term effects on health range from cardiovascular disease and diabetes mellitus to social problems because of stigmatization.³¹ The school nurse, with his or her daily presence in school and access to large populations of students, is well positioned to prevent and/or intervene on this health issue through (1) implementing BMI screenings and referrals to the medical home as needed, (2) collaborating with food service personnel and administrators to advocate for and to provide nutritional meals and snacks, (3) working with school staff to promote opportunities for physical activity, (4) educating parents about healthy lifestyles, and (5) involving the community providers and organizations in these efforts.

School-based health centers complement school nursing services by delivering a continuum of diagnostic and treatment services on-site and collaborating for prevention, early intervention, and harm-reduction services. To be most effective, school nurses and school-based health center staff need to develop close communication and referral systems, similar to school nurses and any medical home.³²

Another societal change is the increase in students identified with mental or behavioral health issues. One in five young people between the ages of 4 and 17 years experiences symptoms of minor to severe mental/behavioral health problems. One in ten children and adolescents has a mental illness severe enough to cause some level of impairment; yet, in any given year, only about 12% of children in need of mental health services actually receive them.³³ Pediatricians, both community- and school-based, and school nurses need to collaborate to advocate for professional resources addressing

this burgeoning problem that affects both their practices.⁹

Health care reform, including how health care is financed and delivered, is a significant societal change. In addition to improving quality of health care, cost containment is a major aim of health care reform. Working closely with parents, school staff, and community pediatricians, school nurses are well positioned to help contain costs. Initiatives such as chronic disease management, early detection of behavioral health issues, and obesity prevention are just a few examples of how school nurses contribute to significant cost savings for the health care system. There is growing evidence that full-time school nurse staffing results in cost savings for society. In 1 study, for each dollar spent on school nurses, \$2.20 was saved in parent loss of work time, teacher time, and procedures performed in school rather than in a more costly health care setting.³⁴

Healthy Students Are Better Learners

Understanding the complex factors that lead to academic underachievement, poor school attendance, student drop out, and poor health outcomes is critical for the practicing community and school pediatrician, the educational community, and lawmakers alike. Physical and emotional health problems rank high among the factors contributing to chronic absenteeism (missing 10% or more of school days for any reason), a key risk factor for failing to complete school.³⁵ Health-related problems contributing to academic underachievement are a primary responsibility of the medical home, the family, and the school health services team led by the school nurse in the health office on a daily basis. A growing body of research indicates that school nurses can improve attendance by reducing illness rates

through education about preventive health care, early recognition of disease processes, improving chronic disease management, and increasing return-to-class rates.³⁶ Of the students seen by the school nurse for illness or injury, 95% were able to return to the classroom. Without a school nurse, unlicensed personnel who are uncertain what to do medically are at risk of sending children home from school or to the emergency department needlessly.³⁷

The presence of a coordinated school health program, often led by school nurses, contributes to both educational achievement and the educational system.³⁸ School nurses can provide key leadership in all the components of the Whole School, Whole Community, Whole Child model.³⁹ Direct health services provided by a school nurse are linked to positive academic achievement. With a nurse in the school, other school staff, including teachers, divert less time from their primary job responsibilities to deal with student health issues.⁴⁰

CONCLUSIONS

School nurses, working with pediatric patient-centered medical homes, school physicians, and families, are in a critical position to identify unmet health needs of large populations of children and adolescents in the school setting. Promoting the presence of a qualified school nurse in every school and a school physician in every district fosters the close interdependent relationship between health and education. Academic achievement, improved attendance, and better graduation rates can be a direct result of a coordinated team effort among the medical, family, and educational homes all recognizing that good health and strong education cannot be separated.

RECOMMENDATIONS

1. Pediatricians can advocate for a minimum of 1 full-time professional school nurse in every school with medical oversight from a school physician in every school district as the optimal staffing to ensure the health and safety of students during the school day.
2. Pediatricians can ask school-related questions, including about health problems contributing to chronic absenteeism, at each visit and provide relevant information directly to the school. Electronic health records should include the name of the patient's school and primary contact at the school. Health Information Exchange requirements, as defined in stage 3 of Meaningful Use, should permit the direct exchange of school-related information collected in the pediatrician's office at each visit, including attendance and health problems contributing to absenteeism.
3. Pediatricians can establish a working relationship with school nurses to improve chronic condition management. Establishing an agreed-upon method of communication with the use of standardized forms and securing permission to exchange information are ways to facilitate this relationship. Communication and collaboration will also aid in the development of Individualized Health Care Plans, care coordination, and planning for transition from pediatric to adult health care.
4. Pediatricians can include school nurses as important team members in the delivery of health care for children and adolescents and in the design of integrated health systems, including school-based health centers.

LEAD AUTHORS

Breena Welch Holmes, MD
Anne Sheetz, MPH, RN

COUNCIL ON SCHOOL HEALTH EXECUTIVE COMMITTEE, 2015–2016

Breena Welch Holmes, MD, FAAP, Chairperson
Mandy Allison, MD, MEd, MSPH, FAAP
Richard Ancona, MD, FAAP
Elliott Attisha, DO, FAAP
Nathaniel Beers, MD, MPA, FAAP
Cheryl De Pinto, MD, MPH, FAAP
Peter Gorski, MD, MPA, FAAP
Chris Kjolhede, MD, MPH, FAAP
Marc Lerner, MD, FAAP
Adrienne Weiss-Harrison, MD, FAAP
Thomas Young, MD, FAAP

CONSULTANT

Anne Sheetz, MPH, RN

LIAISONS

Nina Fekaris, MS, BSN, RN, NCSN – *National Association of School Nurses*
Veda Johnson, MD, FAAP – *School-Based Health Alliance*
Sheryl Kataoka, MD, MSHS – *American Academy of Child and Adolescent Psychiatry*
Sandra Leonard, DNP, RN, FNP – *Centers for Disease Control and Prevention*

FORMER EXECUTIVE COMMITTEE MEMBERS

Cynthia DiLaura Devore, MD, FAAP, Past Chairperson
Jeffrey Okamoto, MD, FAAP, Immediate Past Chairperson
Mark Minier, MD, FAAP

FORMER LIAISONS

Carolyn Duff, RN, MS, NCSN – *National Association of School of Nurses*
Linda Grant, MD, MPH, FAAP – *American School Health Association*
Elizabeth Matthey, MSN, RN, NCSN – *National Association of School Nurses*
Mary Vernon-Smiley, MD, MPH, MDiv – *Centers for Disease Control and Prevention*

STAFF

Madra Guinn-Jones, MPH

REFERENCES

1. Zaiger D. Historical perspectives of school nursing. In: Selekman J, ed. *School Nursing: A Comprehensive Text*. 2nd ed. Philadelphia, PA: F.A. Davis; 2013:2–24
2. National Association of School Nurses. Resolution: public health as the foundation of school nursing practice.

Available at: www.nasn.org/Portals/0/statements/resolutionph.pdf. Accessed April 15, 2015

3. American Academy of Pediatrics, Council on Community Pediatrics. Policy statement: community pediatrics: navigating the intersection of medicine, public health and social determinants. *Pediatrics*. 2013;131(3):623–628
4. National Association of School Nurses. Position statement: definition of school nursing. Available at: <http://nasnupgrade.winxweb.com/PolicyAdvocacy/PositionPapersandReports/NASNPositionStatementsFullView/tabid/462/ArticleId/87/Role-of-the-School-Nurse-Revised-2011>. Accessed May 12, 2014
5. Devore CD, Wheeler LS; American Academy of Pediatrics, Council on School Health. Policy statement: role of the school physician. *Pediatrics*. 2013;131(1):178–182
6. Mitchell P, Wynia M, Golden R, et al *Core Principles and Values of Effective Team-Based Health Care*. Washington, DC: National Academies Press; 2012
7. Committee on Pediatric Workforce. Policy statement: scope of practice issues in the delivery of pediatric health care. *Pediatrics*. 2013;131(6):1211–1216
8. American Academy of Pediatrics, Medical Home Initiatives for Children With Special Needs Project Advisory Committee. Policy statement: the medical home. *Pediatrics*. 2002;110(1):184–186. Reaffirmed May 2008
9. Council on Children With Disabilities and Medical Home Implementation Project Advisory Committee. Policy statement: patient- and family-centered care coordination: a framework for integrating care for children and youth across multiple systems. *Pediatrics*. 2014;133(5). Available at: www.pediatrics.org/cgi/content/full/133/5/e1451
10. McAllister JW, Presler E, Cooley WC. Practice-based care coordination: a medical home essential. *Pediatrics*. 2007;120(3). Available at: www.pediatrics.org/cgi/content/full/120/3/e723
11. Hartman AL, Devore CD; American Academy of Pediatrics, Section on Neurology, Council on School Health. Rescue medicine for epilepsy in education settings. *Pediatrics*. 2016;137(1):e2015–3876
12. American Academy of Pediatrics, Committee on Injury, Violence, and Poison Prevention. School bus transportation of children with special health care needs. *Pediatrics*. 2001;108(2):516–518. Reaffirmed May 2013
13. Halstead ME, McAvoy K, Devore CD, Carl R, Lee M, Logan K; Council on Sports Medicine and Fitness; Council on School Health. Clinical report: returning to learning following a concussion. *Pediatrics*. 2013;132(5):948–957
14. Robert Wood Johnson Foundation. Unlocking the potential of school nursing: keeping children healthy, in school, and ready to learn. *Charting Nursing's Future*. Princeton, NJ: Robert Wood Johnson Foundation; 2010;14:1–8. Available at: www.rwjf.org/content/dam/farm/reports/issue_briefs/2010/rwjf64263. Accessed May 12, 2014
15. American Academy of Pediatrics, Council on School Health. *School Health: Policy and Practice*. 6th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2004
16. Gibbons L, Lehr K, Selekman J. Federal laws protecting children and youth with disabilities in the schools. In: Selekman J, ed. *School Nursing: A Comprehensive Text*. 2nd ed. Philadelphia, PA: F.A. Davis; 2013:257–283
17. Raymond JA. The integration of children dependent on medical technology into public schools. *J Sch Nurs*. 2009;25(3):186–194
18. Allen MC, Cristofalo EA, Kim C. Outcomes of preterm infants: morbidity replaces mortality. *Clin Perinatol*. 2011;38(3):441–454
19. Roberts G, Lim J, Doyle LW, Anderson PJ. High rates of school readiness difficulties at 5 years of age in very preterm infants compared with term controls. *J Dev Behav Pediatr*. 2011;32(2):117–124

20. Centers for Disease Control and Prevention. National diabetes fact sheet, 2011. Available at: www.cdc.gov/diabetes/pubs/pdf/ndfs_2011.pdf. Accessed May 12, 2014
21. Jackson KD, Howie LD, Akinbami LJ. Trends in allergic conditions among children: United States, 1997-2011, no. 121. Atlanta, GA: National Center for Health Statistics; May 2013. Available at: www.cdc.gov/nchs/data/databriefs/db121.htm#summary. Accessed May 12, 2014
22. Forum on Child and Family Statistics. America's children: key national indicators of well-being, 2013. Available at: www.childstats.gov/americaschildren/glance.asp. Accessed May 12, 2014
23. McCarthy AM, Kelly MW, Reed D. Medication administration practices of school nurses. *J Sch Health*. 2000;70(9):371-376
24. Van Cleave J, Gortmaker SL, Perrin JM. Dynamics of obesity and chronic health conditions among children and youth. *JAMA*. 2010;303(7):623-630
25. Clements KM, Barfield WD, Ayadi MF, Wilber N. Preterm birth-associated cost of early intervention services: an analysis by gestational age. *Pediatrics*. 2007;119(4). Available at: www.pediatrics.org/cgi/content/full/119/4/e866
26. American Academy of Pediatrics, Council on School Health. Policy statement: guidance for the administration of medication in school. *Pediatrics*. 2009;124(4):1244-1251. Reaffirmed February 2013
27. Magalnick H, Mazyck D; American Academy of Pediatrics, Council on School Health. Policy statement: role of the school nurse in providing school health services. *Pediatrics*. 2008;121(5):1052-1056
28. National Association of School Nurses. Position statement: school nurse workload: staffing for safe care. Available at: www.nasn.org/PolicyAdvocacy/PositionPapersandReports/NASNPositionStatementsFullView/tabid/462/ArticleId/803/School-Nurse-Workload-Staffing-for-Safe-Care-Adopted-January-2015. Accessed April 15, 2015
29. Smolensky E, Gootman JA, eds. *Working Families and Growing Kids: Caring for Children and Adolescents*. Washington, DC: National Academies Press; 2003
30. Salmon DA, Omer SB, Moulton LH, et al. Exemptions to school immunization requirements: the role of school-level requirements, policies, and procedures. *Am J Public Health*. 2005;95(3):436-440
31. Centers for Disease Control and Prevention. Childhood obesity facts. Available at: www.cdc.gov/healthyschools/obesity/facts.htm. Accessed September 30, 2015
32. Council on School Health. Policy statement: school-based health centers and pediatric practice. *Pediatrics*. 2012;129(2):387-393
33. Substance Abuse and Mental Health Services Administration. *Mental Health, United States, 2010*. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2012. HHS Publication (SMA) 12-4681
34. Wang LY, Vernon-Smiley M, Gapinski MA, Desisto M, Maughan E, Sheetz A. Cost-benefit study of school nursing services. *JAMA Pediatr*. 2014;168(7):642-648
35. Moonie S, Sterling DA, Figgs LW, Castro M. The relationship between school absence, academic performance, and asthma status. *J Sch Health*. 2008;78(3):140-148
36. Basch CE. 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. *J Sch Health*. 2011;81(10):650-662
37. Pennington N, Delaney E. The number of students sent home by school nurses compared to unlicensed personnel. *J Sch Nurs*. 2008;24(5):290-297
38. Vinciullo FM, Bradley BJ. A correlational study of the relationship between a coordinated school health program and school achievement: a case for school health. *J Sch Nurs*. 2009;25(6):453-465
39. Association for Supervision and Curriculum Development. Whole school, whole community, whole child: a collaborative approach to learning and health. 2014. Available at: www.ascd.org/ASCD/pdf/siteASCD/publications/wholechild/wsc-a-collaborative-approach.pdf. Accessed September 30, 2015
40. Baisch MJ, Lundeen SP, Murphy MK. Evidence-based research on the value of school nurses in an urban school system. *J Sch Health*. 2011;81(2):74-80