



The vital role of school nurses in ensuring the health of our nation's youth



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Child, Adolescent, Family Expert Panel

Executive Summary

The American Academy of Nursing believes all students must have daily access to a full-time, school nurse, who is part of a comprehensive health-care and education system, and is supported financially by health and education dollars. The health of our nation's youth affects the health of the nation now and in the future, and is a critical investment. Rates of chronic health conditions continue to increase and become more complex. The number of outbreaks of communicable diseases such as measles and pertussis has been increasing as a result of the increase in immunization exemptions that have caused decreased herd immunity for these and other conditions. Children with mental and behavioral health issues such as depression, school/personal violence, and bullying are also on the rise and being manifested at younger ages, with 13% to 20% of children in the United States experiencing a mental health issue each year. Many risk behaviors often develop during pre-adolescent and adolescent years. Researchers have found that having a school nurse present decreases absenteeism, increases immunization compliance, improves chronic condition management, promotes health, and assists with identification and management of mental health issues, allowing students to stay in school and improve academic achievement.

Background

Professional, baccalaureate prepared, registered nurses (herein referred to as school nurses) are needed daily in every school to promote health and wellness, and to

address the increasingly complex health-care needs of youth. Ninety-eight percent of children in the United States attend school. Rates of chronic health conditions continue to increase and become more complex, with an estimated 27% of students having a chronic health condition (Van Cleave, Gortmaker, & Perrin 2010). In addition, the number of outbreaks of communicable diseases such as measles and pertussis have been increasing as a result of the increase in immunization exemptions that have caused decreases in herd immunity for these and other conditions (Centers for Disease Control and Prevention [CDC], 2017). Children with mental and behavioral health issues such as depression, school/personal violence, and bullying are also on the rise and being manifested at younger ages, with 13% to 20% of children in the United States experiencing a mental health issue each year (Perou et al., 2013). Many risk behaviors often develop during preadolescent and adolescent years (Healthy People 2020, 2017b).

The World Health Organization (WHO) has recently indicated that school health services (SHSs) are a viable strategy to address the health needs of youth and promote healthy behaviors (Baltag, Pachyna, & Hall, 2015). Researchers have found having a school nurse present decreases absenteeism, increases immunization compliance, improves chronic condition management, promotes health, and assists with identification and management of mental health issues, allowing students to stay in school and improve academic achievement (Bohnenkemp, Stephan, & Bobo, 2015; Morrica et al., 2013; Salmon et al., 2005). Scholars at the Centers for Disease Control and Prevention identified additional medical costs of \$1,377 to \$9,059 for care of each child with asthma, diabetes, or epilepsy (Miller, Coffield, Leroy, & Wallin, 2016). Care coordination by school nurses significantly reduces the costs associated with these

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conditions. School nurses deliver skilled health care to students, provide referrals to other providers, and assist families gain access to specialized medical care. They also ease the transition back to school for children who have been hospitalized or require ongoing care by providing education to teachers and other children. School nurses also address social determinants that impact students' health, as well as provide population-based care of students at risk. Cost-benefit analysis indicates for every dollar spent on school nurses, more than two dollars are saved (Wang et al., 2014). Yet, many schools do not have daily access to a full-time school nurse, due to inadequate funding and lack of integration of SHSs in the broader health-care system.

Responses and Policy Options

The American Academy of Pediatrics (AAP), the National Association of School Nurses (NASN), and Healthy People 2020 assert the value of the school nurse related to chronic disease management and health promotion (American Academy of Pediatrics & Council on School Health, 2016; Healthy People 2020, 2017a; National Association of School Nurses, 2016). AAP and NASN recommend every school have a minimum of a full-time registered nurse who serves as a bridge between health and education and helps keep students, families, and staff safe and healthy (American Academy of Pediatrics & Council on School Health, 2016; National Association of School Nurses, 2016). NASN supports school nurses being certified.

Efforts to allocate funding for school nurses have been ongoing. Traditionally, school nurses have been funded by education funds, which continue to be stretched to meet increasingly complex needs. For several years, federal and state Medicaid laws have allowed for certain school nurse services to be reimbursed for eligible children. The Every Student Succeeds Act (ESSA) (Public Law 114-95) includes school nursing and allows local districts to use ESSA funds to support school nursing services for Title 1 (40% of children from lower socio-economic) schools (ESSA, 2015). In some areas of the country, hospital/health-care systems, public health departments, and community agencies have partnered with school districts to provide professional school nursing services.

Academy's Position

The American Academy of Nursing believes all students must have daily access to a full-time school nurse, who is part of a comprehensive health-care and education system, and is supported financially by health and education dollars. Daily access of a school nurse will improve the health of the country's children and decrease future health-care dollars needed to address unmanaged adult health concerns such as diabetes and

cardiovascular disease (Cook, Cole, Asaria, Jabbour, & Francis, 2014; Dall et al., 2015). The health of our nation's youth affects the health of the nation now and in the future, and is a critical investment.

Recommendations

- The Center for Medicare and Medicaid Services (CMS)'s Innovation Center should fund innovative SHS models, including population-based health for funding school nurses in schools with high numbers (over 80%) of Medicaid eligible students. In addition, CMS should require all states to allow school nurses to be reimbursed for case management and prevention activities.
- Health insurance companies should contribute funding for SHSs through third-party reimbursements and/or contributions to SHSs budgets for population-based prevention.
- Local, state, and national offices of education should collect and report data related to the student health and number of school nurses working in schools, and track compliance of this reporting.
- Health-care systems should partner with education and contribute to the funding of school nurses.
- Professional organizations of nursing should band together to advocate for national, state, and local policy changes that would support funding and regulations need so students have daily access to a school nurse.
- The Office of the National Coordinator (ONC) should seek to support population-based data exchange (e.g., immunizations, chronic diseases, injuries, and communicable diseases between local public health agencies and school nurses); encourage certification of electronic health systems used in schools; and promote interoperability between school health records and other electronic health records.
- Institutions of higher education should continue to emphasize the role of school nursing as part of the public health and/or pediatric nursing content in nursing baccalaureate programs. Graduate programs in nursing should focus on developing advanced practice nurses to address the needs of school-age students. Institutions should also ensure qualified and experienced faculty provides student instruction.
- Private and public research funding agencies should include school health as a priority area and allocate funds to address the needs of school-age children, and partner with school nurse leaders and researchers to conduct studies.

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REFERENCES

- American Academy of Pediatrics, & Council on School Health. (2016). Role of the school nurse in providing school health services. *Pediatrics*, 137(6), e20160852.
- Baltag, V., Pachyna, A., & Hall, J. (2015). Global overview of school health services: Data from 102 countries. *Health Behavior and Policy Review*, 2(4), 268-283.
- Bohnenkemp, J. H., Stephan, S. H., & Bobo, N. (2015). Supporting student mental health: The role of the school nurse in coordinated school mental health care. *Psychology in the Schools*, 52(7), 714-727.
- Centers for Disease Control and Prevention (CDC). (2017). What would happen if we stopped vaccinations? Vaccines and Immunizations [website]. Retrieved from <http://www.cdc.gov/vaccines/vac-gen/whatifstop.htm>.
- Cook, C., Cole, G., Asaria, P., Jabbour, R., & Francis, D. P. (2014). The annual global economic burden of heart failure. *International Journal of Cardiology*, 171(3), 368-376.
- Dall, T. M., Yang, W., Halder, P., Pang, B., Massoudi, M., Wintfeld, N., ... Hogan, P. F. (2015). The economic burden of elevated blood glucose levels in 2012: Diagnosed and undiagnosed diabetes, gestational diabetes mellitus, and prediabetes. *Diabetes Care*, 37(12), 2172-2179.
- Every Student Succeeds Act (ESSA) of 2015, Public Law No: 114-95. Retrieved from <http://www.ed.gov/essa?src=rn>.
- Healthy People 2020. (2017a). *Educational and community-based programs*. Washington, DC: US Department of Health and Human Services, Office of Disease Prevention and Health Promotion. [Internet]. Retrieved from <https://www.healthypeople.gov/2020/topics-objectives/topic/educational-and-community-based-programs/objectives>.
- Healthy People 2020. (2017b). *Adolescent health*. Washington, DC: US Department of Health and Human Services, Office of Disease Prevention and Health Promotion. [Internet]. Retrieved from <https://www.healthypeople.gov/2020/topics-objectives/topic/Adolescent-Health>.
- Miller, G. F., Coffield, E., Leroy, Z., & Wallin, R. (2016). Prevalence and costs of five chronic conditions in children. *The Journal of School Nursing*, 32(5), 357-364.
- Morrica, M. L., Grasska, M. A., BMarthaler, M., Morphew, T., Weismuller, P. C., & Galant, S. P. (2013). School asthma screening and case management: Attendance and learning outcomes. *The Journal of School Nursing*, 29(2), 104-112.
- National Association of School Nurses. (2016). *The role of the 21st century school nurse (position statement)*. Silver Spring, MD: Author.
- Perou, R., Bitsko, R. H., Blumberg, S. J., Pastor, P., Ghandour, R. M., Gfroerer, J. C., ... Huang, L. N. (2013). Mental health surveillance among children—United States, 2005–2011. *MMWR Supplements*, 62(2), 1-35. Retrieved from http://www.cdc.gov/mmwr/preview/mmwrhtml/su6202a1.htm?s_cid=su6202a1_w.
- Van Cleave, J., Gortmaker, S. L., & Perrin, J. M. (2010). Dynamics of obesity and chronic health conditions among children and youth. *Journal of American Medical Association*, 303(7), 623-630. doi:10.1001/jama.2010.104.
- Salmon, D. A., Moulton, L. H., Omer, S. B., Chace, L. M., Klassen, A., Talebian, P., ... Halsey, N. A. (2005). Knowledge attitudes and beliefs of school nurses and personnel and association with nonmedical immunization exemptions. *Pediatrics*, 113, e552-e559.
- Wang, L. Y., Vernon-Smile, M., Gapinski, M. A., Desisto, M., Maughan, E., & Sheetz, A. (2014). Cost-benefit study of school nursing services. *JAMA Pediatrics*, 168(7), 642-648.