



## TSNO ESSA RESPONSE - LITERATURE REVIEW

A growing body of research emphasizes the effect of good health on academic potential and the positive link between school nurse availability and student attendance and academic performance. Texas must take the step to validate the important role school nurses play in securing the future health of children, families and communities. School nurses improve school environment, help bridge social determinant gaps, connect children with health care resources, improve attendance, and manage chronic health conditions. The reference content below is organized by published resource and centers around four main topics:

1. Absenteeism
2. Chronic Health Condition Management
3. Impacting Social Determinants of Health
4. Improved Culture, Climate and Safety

### Literature Review in Support of School Nurse Services

American Nurses Association & National Association of School Nurses. (2011). *School nursing: Scope and standards of practice (2<sup>nd</sup> ed.)* Silver Spring, MD: Nursebooks.org

- School nurses coordinate care to effect positive health outcomes

American Academy of Pediatrics Council on School Health.(2016). Role of the school nurse in providing school health services. *Pediatrics*. 137(6):e20160852. Accessed October 23, 2016.

- The American Academy of Pediatrics highlights the important role school nurses play across a child's continuum of care and recommends that every school should have at least one nurse
- Federal laws that specify disability and educational access rights of children has resulted in more children requiring and receiving nursing care and health related services in schools.
- Nursing delegation does not negate the need for full time school nurses in every school, every day

Association for Supervision & Curriculum Development & The Centers for Disease Control and Prevention. (2014). *Whole school, whole community, whole child: A collaborative approach to learning and health*. Alexandria, VA.

<http://www.ascd.org/ASCD/pdf/siteASCD/publications/wholechild/wsc-a-collaborative-approach.pdf> Accessed October 23, 2016.

- The Whole School, Whole Community, Whole Child Model recognizes the connection between health and education and calls for students to be healthy, safe, engaged, supported and challenged.
- "There needs to be greater alignment between education and health to improve each child's cognitive, physical, social and emotional development." (Pg. 6).

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(2). p. 74-80.

- School nurses save principals nearly one hour per day, clerical staff 46 minutes, and teachers were able to devote more time on instruction. Schools in the study had a \$1.84 return on investment for every dollar invested in health services.

Balfanze, R. & Byrnes, V. (2012). Chronic absenteeism: Summarizing what we know from nationally available data. *Johns Hopkins University Center for Social Organization*.

[http://new.every1graduates.org/wp-content/uploads/2012/05/FINALChronicAbsenteeismReport\\_May16.pdf](http://new.every1graduates.org/wp-content/uploads/2012/05/FINALChronicAbsenteeismReport_May16.pdf).

Accessed October 23, 2016.

- Almost 40% of students in 10<sup>th</sup> grade who miss 10 or more days of school will dropout.

Bethell, C., Forrest, C., Stumbo, S., Gombojav, N., Carle, A., & Irwin, C. (2012). Factors promoting or potentially impeding school success: Disparities and state variations for children with special health care needs. *Maternal & Child Health Journal*, 16(Supp 1), S35-S43. doi:10.1007/s10995-012-0993-z

- School nurse care coordination skills are effective in improving readiness to learn, classroom participation, and academic performance

Douglass, Frederick. (n.d.). BrainyQuote.com. Accessed October 23, 2016.

- “It is easier to build strong children than to repair broken men.”

Every Student Succeeds Act (ESSA). (2015). Public Law No: 114-95 (12/10/2015)

<https://www.congress.gov/bill/114th-congress/senate-bill/1177/text>. Accessed October 23, 2016.

- School nurses are leaders in student chronic disease management.

Forrest, C. B., Bevans, K. B., Riley, A. W., Crespo, R., & Louis, T. A. (2011). School outcomes for children with special health care needs. *Pediatrics*, 127(2), 303 -312. doi: 10.1542/peds.2010-3347

- Children with chronic conditions are at risk for low student engagement, more exposure to bullying, disruptive behaviors, poor grades, and below-average performance on standardized achievement tests

Hainault, B. (2013). Educating children with chronic illnesses (Published master’s thesis). Northern Michigan University, MI.

[https://www.nmu.edu/education/sites/DrupalEducation/files/UserFiles/Hainault\\_Brandi\\_MP.pdf](https://www.nmu.edu/education/sites/DrupalEducation/files/UserFiles/Hainault_Brandi_MP.pdf). Accessed October 23, 2016.

- Each year 6.5% of students experience a chronic illness to the point that it affects school performance.

Jacobsen, K, Meeder, L, & Voskuil, V. (2016). *Chronic student absenteeism; the critical role of school nurses*. NASN School Nurse 31 (3). DOI: 10.1177/1942602X16638855

- School nurses decrease chronic absenteeism by assisting families to access health care; by providing disease related education to parents, students and staff; and by coordinating care between school and medical homes.

Martin, J.A. & Osterman, M.J.K. (2013). Preterm birth- United States, 2006 and 2010. *Morbidity and Mortality Weekly Report*, 62(03), 136-138. Retrieved from <http://www.cdc.gov/mmwr/preview/mmwrhtml/su6203a22.htm>

- As life expectancy for students with chronic conditions increases, the healthcare and educational service needs of students also increases.

Maughan, E. (2016). Building strong children: Why we need nurses in schools. *American Educator*. Spring 2016. Retrieved from <http://www.aft.org/ae/spring2016/maughan>

- Missing 3 or more school days per month can set a student back up to 2 years of learning. Missing 2 days of school per month can lead to academic trouble
- Less absenteeism found in schools with full-time school nurse employment
- There are fewer student absences and fewer student check-outs for medical reasons when a full-time school nurse is available at school.
- School nurses bridge the divide between societal issues such as poverty and lack of accessible health care. Education is free but healthcare is not.
- Skilled school nurse can be a life-saver for students and staff. School nurses have the medical training to deal with the physical and mental illnesses of students as the entire school population.

McCabe, P.C., & Shaw, S.R. (2008). Hospital-to-school transition for children with chronic illness: Meeting the new challenges of an evolving health care system. *Psychology in the Schools*, 45(1). p. 74-87.

- “Children with chronic illness are absent from schools for an average of 16 days a year compared to a 3-day average for healthy children. “
- Reduced hospital stays and greater use of outpatient medical care place children with chronic illness directly into the school environment. This places growing burden on school districts and families. School nurses can ease that burden.

McClanahan, R., & Weismuller, P. (2015). School nurses and care coordination for children with complex needs: An integrative review. *The Journal of School Nursing*, 31(1), 34-43

- School nurses mitigate long-term impacts of chronic health conditions on children by coordinating the interests of families, education, health care, public health, insurance and community agencies

McClaskey, B. (2010). The impact of chronic illness on school-aged children. *Journal of Pediatric Health Care*. 24(5). [www.jpeds.org](http://www.jpeds.org). Accessed October 23, 2016.

- “Up to 20% of children in the United States have a chronic or disabling condition, and because of ongoing improvements in health care, these children are living longer.

Michael, S., Merlo, C., Basch, C., Wentzel, K., & Wechsler, H. (2015). Critical connections: Health and academics. *Journal of School Health*. 85(11). p. 740-758.

- The Whole School, Whole Community Whole Child model highlights the critical connection between health and academic achievement; addresses health related learning barriers; and, recognizes the positive impact school nurses make on attendance, academic performance, and safe school environments
- 25% of children and adolescents are estimated to suffer from chronic conditions such as asthma, diabetes, food allergies, epilepsy and obesity [Journal of School Health November 2015]
- School nurses can have influence on student absenteeism by targeting students with history of high rates for absenteeism

- Health related problems greatly limit student's motivation and ability to learn
- Research shows negative association between being overweight or obese and school attendance and decreased test scores
- There is an association between asthma and academic achievement: Students with asthma have to been shown to have lower cognitive performance and increased school absenteeism rates
- Vision problems are associated with decreased standardized measures of literacy, standardized reading test scores, basic skills test scores, reading ability and spelling

National Association of School Nurses. (2015). Framework for 21<sup>st</sup> century school nursing practice. *NASN School Nurse*, 30(4), 218-231.

- School nurse care coordination skills are effective in improving attendance, readiness to learn, classroom participation, and academic performance
- Provide direct care to students
- Provide screenings and referral for health conditions thereby decreasing negative effects of health problems on education, and by early identification of students with underlying medical problems
- Promote healthy school environments and provide for physical and emotional safety of the school environment
- Provide health assessments for complaints, administer medication and care for students with special needs
- Provide system management for emergencies and urgent situations
- Is an extension of community health services ensuring continuity, compliance and professional supervision of care within the school setting yielding improved health and academic outcomes
- Allow teachers and staff to focus on their jobs.

National Collaborative on Education + Health. (2015). *Leading health conditions impacting student attendance*. <http://www.attendanceworks.org/research/health-issues-and-absenteeism/> Accessed October 23, 2016.

- 6.8 % of children 3-17 have ADHD
- 8.3% of children under the age of 18 are diagnosed with asthma (a leading cause of school absenteeism)
- Tooth decay among children in five times more prevalent than asthma and 20% of all children have at least one untreated decayed tooth
- 6% of children have suffered from effects of food allergies in past 12 months
- 8% of children 3-17 have a learning disability
- 13-20% of children experience a mental disorder in any given year and 75% of those children do not get the help they need
- 25% of school-aged children have some form of vision impairment (low income and minority youth are at greater risk of under diagnosis and under treatment of vision problems and unmet need of vision care services).
- 31.8% of children are overweight or obese (21% are obese)
- 30% teen American girls will get pregnant at least once before age 20
- 21% of children live in food-insecure households at some point during the school year.

Pennington, D. & Delaney, E., (2008). Number of students sent home by school nurses compared to unlicensed personnel. *Journal of School Nursing*, 24(5). P. 290-297

- Research shows that schools with high nurse to student ratios:
  - Have better attendance rates
  - Have more school nurse involvement with health-related issues (diabetes, asthma, unintended pregnancies, etc.)

- Send home fewer students during the school day (increase student learning time) with 57% fewer students leave school early after school nurse contact compared to those who leave with school nurse contact.
- Have more involvement with high-absence students.
- Studies show school nurses are involved with 75% of high absence students as compared to their involvement with 66% of low absence students. In addition, school nurses are involved at increased rates with student with previously identified health problems.

Resave, M. E., & Pollock, M. (2015). Multiple chronic conditions among outpatient pediatric patients, southeastern Michigan, 2008–2013. *Preventing Chronic Disease: Public Health Research, Practice and Policy*, 12, 140397. doi: <http://dx.doi.org/10.5888/pcd12.140397>

- 7% of children with chronic disease experience multiple chronic illnesses

Wang, L. Y., Vernon-Smiley, M., Gapinski, M. A., Desisto, M., Maughan, E., & Sheetz, A. (2014). Cost-benefit study of school nursing services. *JAMA Pediatrics*, 168(7), p. 642-648.

- School nurses save dollars for educational, healthcare and family systems.
- Save schools money by improving attendance.
- Every dollar spent on nursing services saves \$2.20 in medical cost and lost productivity for teachers and parents.

Wolfe, L. (2013). The profession of school nursing. In J. Selekman (Ed.), *School nursing: A comprehensive text* (2<sup>nd</sup> ed.) (pp.25-47). Philadelphia, PA: F.A. Davis Company.

- School nurse mitigates the effects of chronic conditions in children

Zirkel, P. A., Granthom, 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: 10.1177/10598405012449358

- Identify health condition requiring Section 504 accommodations



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