Care Management Outcomes

School nurse care management of selected students with complex health needs involves use of a plan of care that includes specific interventions with achievable goals, measurable outcomes and regular evaluations. Students may have one or more planned outcomes based on identified needs. School nurses may care manage students with a variety of diagnoses. Not all chronic condition diagnosed students are in need of care management services. Care management outcomes for the following diagnosis are reported each school year:

ASTHMA OUTCOMES

Consistently verbalized accurate knowledge of the pathophysiology of their condition	83%
Consistently demonstrated correct use of asthma inhaler and/or spacer	88%
Accurately listed his/her asthma triggers	84%
Remained within peak flow/pulse oximeter plan goals	80%
Improved amount and/or quality of regular physical activity	85%
Improved grades	81%
Decreased number of absences	84%

DIABETES OUTCOMES

Consistently verbalized an accurate knowledge of the pathophysiology of their condition	87%
Demonstrated improvement in the ability to correctly count carbohydrates	84%
Improved skill in testing own blood sugar.	83%
Showed improvement in HgA1C (if measured and available.)	75%
Consistently (90% of time) calculated accurate insulin dose	77%
Improved ability to deliver insulin dose	86%
Improved grades	73%
Decreased number of absences	78%

SEIZURE DISORDER OUTCOMES

Consistently verbalized accurate knowledge of the pathophysiology of his/her condition	83%
Consistently recognized seizure triggers	74%
Reduced side effects of seizure medications	81%
Avoided complications from seizure activity	87%
Reduced number of seizures	84%
Improved grades	74%
Decreased number of absences	80%

SEVERE ALLERGY OUTCOMES

Consistently verbalized accurate knowledge	
of the pathophysiology of his/her condition	89%
Consistently avoided allergy triggers	92%

Improved skill in recognizing hidden sources of allergen	92%
Improved skill in epinephrine administration	75%
Reduced episodes of severe allergic reactions	93%
Improved grades	85%
Decreased number of absences	86%

WEIGHT MANAGEMENT OUTCOMES

Consistently verbalized accurate knowledge of relationship of food and activity to weight	87%
Kept a daily food diary as planned	76%
Increased physical activity (PE or after school)	86%
Improved frequency of healthy food choices	90%
Consistently able to identify appropriate portion sizes	84%
Improved BMI	60%
Improved grades	69%
Decreased number of absences	72%

Summary

School nursing services are one component of a local School Health Program. By working with multiple partners in health and education, including the North Carolina Division of Public Health, North Carolina Division of Medical Assistance, North Carolina Department of Public Instruction, North Carolina Pediatric Society, North Carolina Academy of Family Physicians, North Carolina Dental Society, Prevent Blindness North Carolina, North Carolina School and Community Health Alliance, local health departments, and more, school nurses are working to help students achieve at levels they might not otherwise reach. In many school health areas North Carolina can serve as a model for school health programs. In others, services are limited as a result of relatively slow growth in the number of school nurse positions in relation to student population growth and complexity of health care needs. Working towards an increase in the number of school nurses in North Carolina could positively impact overall student health and well-being, resulting in improved student attendance and successful academic outcomes.

This data represents key information shared by North Carolina School Nurses via the Annual School Health Report Surveys. The information is based on students known to school nurses who received health related services in North Carolina public schools. It is not intended as surveillance data. Except where indicated the data does not include students in North Carolina Charter public charter schools. Additional data is collected and is available upon request.

CONTACT FOR ADDITIONAL INFORMATION & DATA REQUESTS: Ann.Nichols@dhhs.nc.gov • Carol.Tyson@dhhs.nc.gov

This and reports from previous school years are available for download at: https://www2.ncdhhs.gov/dph/wch/stats/

North Carolina Annual School Health Services Report

2013-2014



North Carolina School Health Nurses

Keeping Students in Class and Ready to Learn



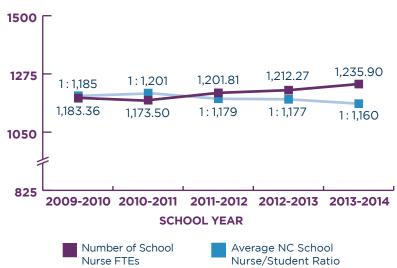






School Nurse Profile

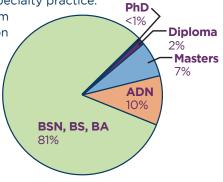
School Nurse Staffing and Nurse-to-Students Ratios



School Nurse Educational Preparation

School nurses are Registered Nurses (RN) with varied educational preparation. In addition to being a RN, national certification in school nursing is the standard by which North Carolina school nurses are assured to have the advanced knowledge and skills required in this independent specialty practice.

A baccalaureate is the minimum degree required for certification eligibility. At the close of the 2013-2014 school year 50% of the total number of school nurses were nationally certified. NC school nurse degree status is illustrated in the following graph.



NC Public Charter Schools that Employ a School Nurse

While NC LEA public schools are required to provide the services of a Registered Nurse to plan for the health needs of students, public charter schools are not. During the 2013-14 year 13.8% of public charter schools reported employing a school nurse, full or part-time.

Common School Nurse Activities:

North Carolina school nurses are assigned a varying case load dependent upon school district resources and serve between one and six schools per nurse. Common school nurse activities include:

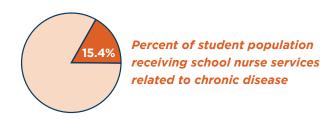
- Preventing and responding to communicable disease outbreaks
- Developing and implementing plans for emergency health related assistance
- Planning and providing specialized clinical services and related health instruction
- Medication and health care procedure oversight
- Assessment, referral, and assuring care for identified health needs
- Assuring that mandated health related activities are completed
- Provision of health education and health counseling
- Helping to assure a safe and healthy school environment

NC Students

Chronic Disease

School nurses assess needs, complete health care plans, and provide instruction to meet the health needs of students with chronic conditions.

2013-2014 Most Common Chronic Conditions	
Asthma	101,101
ADD/ADHD	58,865
Severe Allergies	42,662
Nonspecific Emotional/Behavioral/Psychiatric	5,313



Procedures

School nurses completed or supervised completion of 36,499 individual student health care procedures that were needed many times over the course of the school year. These included things such as catheterizations, tube feedings, dressings, glucose monitoring, etc.

Students and Suicide

	Elementary School	Middle School	High School
Suicide attempt	45	185	337
Death from suicide	1	7	15
Suicide occurred at school	0	0	0

Selected Services Provided

Medication Delivery and Oversight

School nurses provide oversight for medication administration in schools through training, administration, auditing for medication variances and assuring compliance with requirements.

2013-2014 Student Medications	
Number of students on long term medications (more than 3 weeks)	24,205
Number of students on short term medications (less than 3 weeks)	6,335
Number of students on PRN (non-emergency) medications	28,706
Number of students on emergency medications (included 17,786 orders for epinephrine auto-injectors)	67,271

Screening Data

School nurses manage screening programs to identify health conditions that may impact education. The most common screening program is for visual issues.

2013-2014 School Year	
% Target Population Screened	47.7
% Referred for vision care	5.7
% Referred who secured vision care	69.9

Counseling

School nurses provide health counseling which is defined as any encounter with a student where direct service, instruction and advice for health promotion, health improvement and health maintenance were discussed.

2013-2014 Mental Health Issue Counseling		
Total Number of Counseling Sessions	242,374	
Other Mental Health Issues	11,112	
Depression	4,919	
Suicide Ideation	1,295	