



Healthy Living Through Environment
Policy and Improved Clinical Care (EPICC)

NURSING SERVICES IN UTAH PUBLIC SCHOOLS

2016-2017

Annual Report

Utah Department of Health

Healthy Living Through Environment, Policy, and Improved Clinical Care (EPICC)

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Contents

| | |
|-----------------------------------------------|----|
| School Nursing Highlights _____ | 1 |
| Utah School Health Workload Census _____ | 3 |
| Students with Chronic Health Conditions _____ | 8 |
| School Nurse Funding _____ | 10 |
| References _____ | 11 |

School Nursing Highlights

Students are best able to achieve their educational potential when they are healthy. Many students in Utah schools have been diagnosed with chronic health conditions that may need interventions while at school. Nursing services to students are individualized to meet the variety of needs of each student. During the 2002 General Legislative Session, the Utah State Legislature encouraged each school district to provide nursing services equivalent to one registered nurse for every 5,000 students, or in school districts with fewer than 5,000 students, the level of services recommended by the Utah Department of Health.

The National Association of School Nurses (NASN) defines school nursing as follows:

“School nursing: a specialized practice of public health nursing, protects and promotes student health, facilitates normal development, and advances academic success. School nurses, grounded in ethical and evidence-based practice, are the leaders that bridge health care 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 potentials.” (NASN, 2016)

SCHOOL NURSING SERVICES IN UTAH

The NASN Board of Directors recently passed a motion stating that:

“To optimize student health, safety and learning, it is the position of the National Association of School Nursing that a professional registered school nurse is present in every school all day, every day (NASN, 2017).”

NASN further states that school nurse workloads should be determined annually, using student and community specific health data (NASN, 2015).

Although data on nursing services in the public schools has been collected for the past several years, data was collected in different ways. It is unclear in the past if ratios in Utah included special education students and special education only-school nurses. It is believed that the most accurate way to determine ratios for Utah would be to eliminate the special education students and special education only-nurses from the calculations.

What Can School Nurses Do for You?

Based on the Framework for the 21st Century School Nursing Practice, the following are things a school nurse can do for children in Utah:

- Care Coordination – This involves case management, chronic disease management, direct care, nursing delegation, and student-centered care. The school nurse develops individualized healthcare plans (IHP) and emergency action plans (EAP) for those students with chronic health conditions and ensures the staff in the schools are trained on how to care for those students.
- Leadership – School nurses are advocates for the students and the health of the communities they serve. They should be involved in policy development and implementation at the district and school level. They should participate on interdisciplinary teams, sharing their knowledge on how to address the individual needs of the students.
- Quality Improvement – School nurses submit data each year with the annual School Health Workload Census. Through this data the school nurse can see the services that are provided to students in Utah. This process also allows them to see where improvements could be made. Evaluation is an important part of the nursing process and a standard of school nursing practice.
- Community and Public Health – School nurses are often the only healthcare professional in the school, so they must be knowledgeable on how to expand their focus to the entire school community, not just the students. They should be culturally competent and help their community understand the levels of disease prevention in order to reduce risks. These include vision, dental, and hearing screenings (in some districts) as well as follow-up activities in the event a problem is detected. School nurses also support healthy food services programs and promote healthy physical activity, safe sports policies, and other best practices.
- Standards of Practice – The school nurse provides the specialized knowledge, skills, decision making, and standards for school nursing practice. These include clinical competence, critical thinking, evidence-based practice, and practice in an ethical way. All of these are guided by the Utah Nurse Practice Act and accompanying rules (UCA 58-31b and R156-31b).

The center of this framework is the student, their families, and the community. By working within the Framework of the 21st Century School Nursing Practice, school nurses can ensure that students are healthy, safe, and ready to learn.

Utah School Health Workload Census

Each year, student health information is collected by school nurses and compiled as aggregate data. Some data points collected include the number of registered school nurses, licensed practical nurses, and health aids in schools; total number of students; number of students with chronic health conditions; types and amount of medication administered in schools; and screenings and trainings done by school nurses. The following is a summary of some of the data collected in the 2016-2017 school year.

CHRONIC HEALTH CONDITIONS IN UTAH

In the 2016-2017 school year, Utah school nurses submitted data on the following:

Asthma

- 17,365 students were documented to have asthma by a healthcare provider
- Of these, 10,949 students had an individualized healthcare plan (IHP) or emergency care plan (ECP) at school for asthma

Anaphylaxis (to anything)

- 6,781 students were documented to have anaphylaxis by a healthcare provider
- Of these, 5,722 students had an individualized healthcare plan or emergency action plan at school for anaphylaxis
- 27 doses of epinephrine auto-injector were administered to students while at school

Type I Diabetes

- 2,190 students were documented to have type I diabetes by a healthcare provider
- Of these, 2,157 students with an individualized healthcare plan on file
- 1 dose of glucagon were administered to students while at school

Type II Diabetes

- 75 students had type II diabetes
- Of these, 62 students had an individualized healthcare plan or emergency action plan at school

Seizures (all types)

- 2,968 students were documented to have any type of seizure diagnosis by a healthcare provider
- Of these, 2,475 students had an individualized healthcare plan or emergency action plan at school
- 422 school employee volunteers trained to administer emergency seizure rescue medication
- 202 students had physician orders for emergency seizure rescue medication at school
- 51 doses of emergency rescue medication were administered while at school

MEDICATIONS IN UTAH SCHOOLS

- 27 students received emergency epinephrine injections while at school
- 3 staff/visitors received stock epinephrine injections while at a school
- 8 of the 41 school districts in Utah do not currently have a stock epinephrine policy
- 1 student received glucagon while at school
- Currently 12 schools in Utah have a naloxone (Narcan) policy in place and have a supply of naloxone on hand in case of an opioid overdose

HEALTH SCREENINGS IN UTAH SCHOOLS

School nurses in Utah perform a variety of screenings, including vision screening as required by law (UCA 53A-11-203). They may also provide hearing, oral, and postural (scoliosis) screenings, as determined by district or school policy.

- 283,748 students received distance vision screening
- 17,374 students received referrals for distance vision screening
- 5,330 students were receiving treatment for vision issues
- 4,323 students were offered financial help for vision exam/glasses
- 21,941 students received an oral health screening
- 14,472 students received an oral health varnish application
- 570 students received restorative dental services as part of a school-sponsored program

TRAINING BY SCHOOL NURSES IN UTAH SCHOOLS

Because there is not a nurse in every Utah school, nurses regularly train school staff to care for the students with chronic health conditions. This is done annually to ensure all staff (with a need to know) are ready to meet the needs of students with certain chronic conditions.

- 24,135 staff were trained by school nurse on general anaphylaxis information
- 17,502 staff were trained by school nurse on general diabetes information
- 18,514 staff were trained by school nurse on general seizure information
- 19,348 staff were trained by school nurse on general asthma information

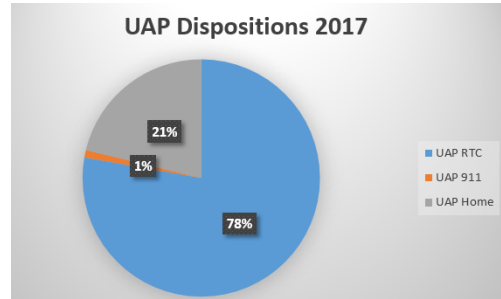
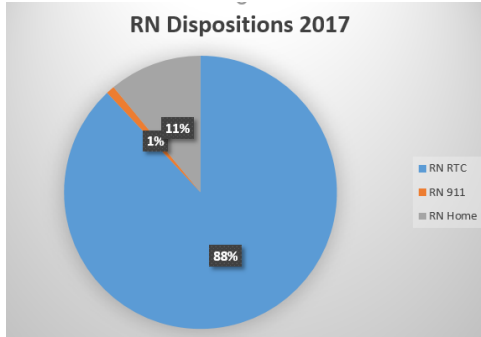
In the 2016-2017 school year, students received the following trainings by a school nurse:

- 32,980 students attended a school nurse led maturation class
- 1,796 students attended a school nurse led asthma class
- 23,451 students attended a school nurse led hygiene class
- 22,849 students attended a school nurse led handwashing class
- 18,458 students attended a school nurse led dental care class
- School nurses also taught classes/trainings on healthy eating, lifestyle, health, nursing careers, basic first aid, nutrition, tobacco cessation, HIV/AIDS, STD prevention, hearing loss prevention, bullying, abstinence, adoption, blood-borne pathogens, heart disease, head injury, bike safety, diabetes awareness, food allergy awareness, poison control, lice, sleep, human relationships, mental illness, body image, media influence, addiction, vaping/chewing tobacco, and alcohol and drug abuse

UTAH SCHOOL NURSE TO STUDENT RATIOS FOR SCHOOL YEAR 2016-2017

While a ratio of one school nurse to 750 students has been widely recommended and was acknowledged in Healthy People 2020, (U.S. Department of Health and Human Services [USDHHS], 2014) and by the American Academy of Pediatrics [AAP] (2008), a one-size-fits-all workload determination is inadequate to fill the increasingly complex health needs of students and school communities (AAP, 2008; ANA/NASN, 2011). Each school district is a different community, with different needs. Where some school districts may need one nurse for each school, another may have one registered nurse covering several schools, and some school districts may have the assistance of health clerks (who must be supervised by a registered nurse). The National Association of School Nurses (NASN) recommends a professional registered school nurse be present in every school all day, every day, to optimize student health, safety, and learning.

School nurses consistently return more students to class than other school personnel. This keeps students in school and ready to learn. The following charts show that registered school nurses (RN) returned more students to class after a health-room visit than did unlicensed assistive personnel (UAP).



RTC-Returned to class following health-room visit; 911-911 called; Home-student sent home following health-room visit

| 2016-2017 School Year | Number of Utah Students Enrolled in School Districts | Number of Utah School District School Nurse (RN) FTE | Ratio of School Nurses to Students |
|--------------------------------------------------------------------------------------------|------------------------------------------------------|------------------------------------------------------|------------------------------------|
| Typical Students Typical school nurses and students only, no special education included | 563,337 | 124 | 1:4543 |

2016-2017 Student to School Nurse (RN) Ratios by District

| District | Student Enrollment | School Nurse (RN) FTE | Ratio |
|---------------|--------------------|-----------------------|---------|
| Alpine | 77,343 | 12 | 6,445 |
| Beaver | 1,519 | 0.29 | 5,238 |
| Box Elder | 11,572 | 2.67 | 4,334 |
| Cache | 17,536 | 3 | 5,845 |
| Canyons | 34,018 | 8 | 4,252 |
| Carbon | 3,348 | 0.75 | 4,464 |
| Daggett | 183 | 0.1 | 1,830 |
| Davis | 71,021 | 9.75 | 7,284 |
| Duchesne | 5,009 | Unknown | unknown |
| Emery | 2,174 | 0.4 | 5,435 |
| Garfield | 904 | 0.5 | 1,808 |
| Grand | 1,483 | 0.1 | 14,830 |
| Granite | 67,177 | 12 | 5,598 |
| Iron | 9,074 | 3.4 | 2,669 |
| Jordan | 52,507 | 7.5 | 7,001 |
| Juab | 2,513 | 0.75 | 3,351 |
| Kane | 1,256 | 0.5 | 2,512 |
| Logan | 5,719 | 0 (LPN) | 5,719 |
| Millard | 2,840 | 0.7 | 4,057 |
| Morgan | 2,994 | 0.5 | 5,988 |
| Murray | 6,494 | 2.375 | 2,734 |
| Nebo | 32,437 | 6.75 | 4,805 |
| North Sanpete | 2,360 | 0.5 | 4,720 |
| North Summit | 1,042 | 0.325 | 3,206 |
| Ogden | 12,192 | 3 | 4,064 |
| Park City | 4,891 | 5.475 | 893 |
| Piute | 280 | 0.1 | 2,800 |
| Provo | 17,840 | 2.25 | 7,929 |
| Rich | 497 | 0.1 | 4,970 |
| Salt Lake | 23,047 | 5 | 4,609 |
| San Juan | 2,940 | 2 | 1,470 |
| Sevier | 4,513 | 1.25 | 3,610 |
| South Sanpete | 3,221 | 0.5 | 6,442 |
| South Summit | 1,574 | 2 | 787 |
| Tintic | 244 | 0 | 0 |
| Tooele | 14,332 | 4 | 3,583 |
| Uintah | 7,034 | 3.875 | 1,815 |
| Wasatch | 6,605 | 1 | 6,605 |
| Washington | 29,355 | 8.3 | 3,537 |
| Wayne | 450 | 0.15 | 3,000 |
| Weber | 31,445 | 12.05 | 2,610 |

Students with Chronic Health Conditions

Utah law allows school nurses to train and delegate nursing responsibilities to non-health professionals or unlicensed assistive personnel (UAP) to meet the needs of medically complex students. In Utah, it is common for one nurse to train and oversee many UAPs who then perform the medically related tasks delegated by the school nurse. The Utah Nurse Practice Act and Administrative Rules allow this under certain circumstances (R156-31b-701a).

Specific numbers of students with health concerns, medically complex students, medically fragile students, and nursing-dependent students were collected for the first time during the 2016-2017 school year.

Students are classified into five levels:

- **Level 1:** No/minimal occasional healthcare concerns: The student's physical and/or social-emotional condition is stable and they see the school nurse only once a year for screening and occasionally as needed.

- **Level 2: Health Concerns:** The student's physical and/or social emotional condition is currently uncomplicated and predictable. Occasional monitoring by the school nurse varies from biweekly to annually. These students may require an Individualized Healthcare Plan (IHP) or Emergency Care Plan (ECP). Examples of chronic health conditions these students may have include, but are not limited to:
 - Attention Deficit Disorder (ADD) or Attention Deficit with Hyperactivity Disorder (ADHD)
 - Mild asthma
 - Mild allergies
 - A condition which required administration of medication

- **Level 3 – Medically complex.** The medically complex student has a complex and/or unstable physical and/or social-emotional condition that requires daily treatments and close monitoring by the school nurse. These students should have an IHP or EAP. Examples of chronic health conditions these students may have include, but are not limited to:
 - Anaphylaxis potential (requires epinephrine)
 - Cancer
 - Diabetes without complications
 - Moderate to severe asthma (requires use of an inhaler)

- Mild to moderate seizure disorder (may or may not need to have emergency seizure rescue medication)
 - Spina Bifida who self-catheterize
 - Students requiring less than 15 minutes of daily care (such as catheterizing, supervising diabetes care, tube feeding, etc.)
- **Level 4 – Medically Fragile.** These students live with the daily possibility of a life-threatening emergency. These students must have an IHP. Examples of chronic health conditions these students may have include, but are not limited to:
 - Unstable or newly diagnosed diabetes (needs supervision)
 - Spina bifida that requires assistance with catheterization
 - Frequent, severe seizure disorder requiring emergency seizure rescue medication
 - Students requiring more than 15 minutes of daily care (such as catheterizing, supervising diabetes, tube feeding, etc.)
 - **Level 5 – Nursing Dependent.** Nursing dependent students require 24 hours/day, frequently on-to-one, skilled nursing care for their survival. Many are dependent on technological devices for breathing. These students must have an IHP. Examples of chronic health conditions these students may have include, but are not limited to:
 - Students with a trach requiring suctioning

During the 2016-2017 school year it was reported that in Utah public schools there were 37,188 students with health concerns (level 2), 13,662 students with a medically complex health condition (level 3), 1,299 students are medically fragile (level 4), and 180 students considered nursing dependent (level 5).

School Nurse Funding

Funding sources vary across the country for school nurses. Most school nurses in Utah are hired by the school or school district, with about one-third of school nurses being funded through a local health department. In one school district, the school nurse is hired through the local medical center and their home health division.

There is a Request for Proposal (RFP) which local education agencies (LEA) can apply for through the Utah State Board of Education (USBE) to provide matching funds for the LEA to hire school nursing services.

WHAT WOULD IT TAKE?

- 644,477 students in Utah public schools in the 2016-2017 school year
- 1,095 total public schools in Utah
- 209 total school nurses in Utah (including part-time, charter schools, typical, and special education nurses)
- 137 school nurse full-time employee (FTE) equivalent (not including special education nurses)
- For each school in Utah to have a full-time nurse, additional 958 school nurses would need to be hired
- \$95,000 estimated additional cost for one FTE school nurse (including benefits, Bachelor's degree prepared registered nurse)
- \$91,010,000 estimated additional cost to have one full-time school nurse for every Utah school¹

SUMMARY

As school nurse staffing is determined there are many factors to consider. While total student enrollment has been used primarily in the past, student needs should also be addressed, such as specific healthcare needs of the population and social determinants of health (poverty, language barriers, etc.). As a result, there is no “one size fits all” number that will work in all cases.

¹1095 schools minus 137 current FTE = 958 x \$95,000

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