NURSING SERVICES IN UTAH PUBLIC SCHOOLS

2015-2016

Annual Report

Utah Department of Health
Healthy Living Through Environment, Policy, and Improved Clinical Care (EPICC)
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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 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) defined 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)

The National Association of School Nurses recommends one school nurse to 750 students in the healthy student population; 1:225 for medically complex students; 1:125 for medically fragile students; and 1:1 nursing-dependent students (American Nurses Association [ANA]/NASN, 2011).

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).

SCHOOL NURSING SERVICES IN UTAH

It is the position of NASN that daily access to a registered professional school nurse can significantly improve students’ health, safety, and abilities to learn. They further state 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, it was collected differently. 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 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** – with the annual School Health Workload Census, the school nurse can see through documentation and data collection what services are provided to students in Utah. This also allows them to see where improvements can 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 education, safe sports policies, and practices.

- **Standards of Practice** – The school nurse provides the specialized knowledge, skills, decision making, and standards for school nursing practice. These include clinical competence, clinical guidelines, 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.

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 information is collected by school nurses in Utah which is 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 medical conditions; medications administered at schools; and screenings and trainings done by the school nurses. The following is a summary of some of the data collected in the 2015-2016 school year.

CHRONIC HEALTH CONDITIONS IN UTAH

In the 2015-2016 school year, the school nurses submitted data on the following:

Asthma
- 21,455 students reported by parent to have asthma
- 8,963 students documented to have asthma by a healthcare provider submitting information to the school
- 7,689 students with an individualized healthcare plan (IHP) or emergency action plan (EAP) at school
- 7,950 students had orders for inhalers at school

Anaphylaxis (to anything)
- 9,606 students reported by parent to have anaphylaxis
- 6,629 students documented to have anaphylaxis by a healthcare provider submitting information to the school
- 6,289 students with an individualized healthcare plan or emergency action plan at school
- 5,464 students had orders for emergency epinephrine at school

Type I Diabetes
- 2,000 students had type I diabetes
- 1,957 students with an individualized healthcare plan on file
- 1,677 students had orders for glucagon at school
- 1,897 students had orders for insulin at school

Type II Diabetes
- 57 students had type II diabetes
- 49 students with an individualized healthcare plan or emergency action plan at school
- 10 students had orders for glucagon at school
Seizures (all types)
- 2,372 students had any type of seizure diagnosis
- 2,300 students with an individualized healthcare plan or emergency action plan at school
- 303 students had orders for emergency rescue medication at school

MEDICATIONS IN UTAH SCHOOLS
- 43 students received emergency epinephrine injections at school
- 2 staff/visitors received stock epinephrine injections while at a school
- 13 of the 41 school districts in Utah do not currently have a stock epinephrine policy
- 8 students had glucagon administered while at school
- Currently no schools in Utah have a stock naloxone (Narcan) policy in place

HEALTH SCREENINGS IN UTAH SCHOOLS
School nurses in Utah perform a variety of screenings, including vision screening as required by law. They may also provide hearing, oral, and postural (scoliosis) screenings, as determined by district or school policy.
- 283,864 students received distance vision screening
- 18,208 students received referrals for distance vision screening
- 4,731 students were under treatment for vision issues
- 2,770 students were offered financial help for vision exam/glasses
- 20,085 students received oral screening
- 29,297 students received oral varnish application
- 21,700 students received 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 medical 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.
- 35,510 staff trained by school nurse on general anaphylaxis information
- 18,859 staff trained by school nurse on general diabetes information
- 22,664 staff trained by school nurse on general seizure information
- 20,336 staff trained by school nurse on general asthma information
- 4,360 staff trained by school nurse on medication administration
In the 2015-2016 school year, students received the following trainings by the school nurse:

- 28,068 students attended a school nurse led maturation class (18,356 led by someone other than school nurse)
- 1,034 students attended a school nurse led asthma class
- 2,132 students attended a school nurse led CPR class
- 25,037 students attended a school nurse led handwashing class
- 23,259 students attended a school nurse led hygiene class
- 10,440 students attended a school nurse dental hygiene class
- 12,817 students attended another class led by the school nurse. Other classes the school nurses were requested to teach included those on healthy eating, lifestyle, health, nursing careers, basic first aid, nutrition, tobacco cessation, HIV/AIDS, STD, 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 2015-2016

<table>
<thead>
<tr>
<th>2015-2016 School Year</th>
<th>Number of Students</th>
<th>School Nurse FTE</th>
<th>Ratio of School Nurses to Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical Students</td>
<td>544,176</td>
<td>126</td>
<td>1:4318</td>
</tr>
<tr>
<td>Typical school nurses and students only, no special education included</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Education Students*</td>
<td>13,261</td>
<td>27.75</td>
<td>1:478</td>
</tr>
<tr>
<td>Special education nurses and students only</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Defined as those spending less than 40% school day in a typical class, or attending a separate school
<table>
<thead>
<tr>
<th>District</th>
<th>Student Enrollment*</th>
<th>Typical RN FTE</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpine</td>
<td>75,307</td>
<td>12</td>
<td>6,276</td>
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<tr>
<td>Beaver</td>
<td>1563</td>
<td>0.29</td>
<td>5390</td>
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<tr>
<td>Box Elder</td>
<td>11,341</td>
<td>2.25</td>
<td>5040</td>
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<tr>
<td>Cache</td>
<td>16,976</td>
<td>2.7</td>
<td>6287</td>
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<tr>
<td>Canyons</td>
<td>33,899</td>
<td>8</td>
<td>4237</td>
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<tr>
<td>Carbon</td>
<td>3,383</td>
<td>0.75</td>
<td>4511</td>
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<tr>
<td>Daggett</td>
<td>181</td>
<td>0.1</td>
<td>1810</td>
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<tr>
<td>Davis</td>
<td>69,879</td>
<td>14.53</td>
<td>4809</td>
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<tr>
<td>Duchesne</td>
<td>5,076</td>
<td>0.6</td>
<td>8460</td>
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<tr>
<td>Emery</td>
<td>2220</td>
<td>0.4</td>
<td>5550</td>
</tr>
<tr>
<td>Garfield</td>
<td>922</td>
<td>0.5</td>
<td>1844</td>
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<tr>
<td>Grand</td>
<td>1,451</td>
<td>0.15</td>
<td>9673</td>
</tr>
<tr>
<td>Granite</td>
<td>67822</td>
<td>15</td>
<td>4521</td>
</tr>
<tr>
<td>Iron</td>
<td>8933</td>
<td>3.4</td>
<td>2627</td>
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<tr>
<td>Jordan</td>
<td>52,324</td>
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<tr>
<td>Juab</td>
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<tr>
<td>Kane</td>
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<td>Logan</td>
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<td>Millard</td>
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<td>Murray</td>
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<td>Nebo</td>
<td>31,895</td>
<td>6.75</td>
<td>4725</td>
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<tr>
<td>N SanPete</td>
<td>2377</td>
<td>0.5</td>
<td>4754</td>
</tr>
<tr>
<td>N Summit</td>
<td>1034</td>
<td>0.33</td>
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<tr>
<td>Ogden</td>
<td>12128</td>
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<tr>
<td>Park City</td>
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<td>3.375</td>
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<tr>
<td>Piute</td>
<td>291</td>
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<td>1455</td>
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<tr>
<td>Provo</td>
<td>16,983</td>
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<td>9705</td>
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<tr>
<td>Rich</td>
<td>492</td>
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<td>4920</td>
</tr>
<tr>
<td>Salt Lake</td>
<td>23,600</td>
<td>5</td>
<td>4720</td>
</tr>
<tr>
<td>San Juan</td>
<td>2975</td>
<td>1</td>
<td>2975</td>
</tr>
<tr>
<td>Sevier</td>
<td>4520</td>
<td>1.2</td>
<td>3767</td>
</tr>
<tr>
<td>S SanPete</td>
<td>3157</td>
<td>0.5</td>
<td>6314</td>
</tr>
<tr>
<td>S Summit</td>
<td>1537</td>
<td>1</td>
<td>1537</td>
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<tr>
<td>Tintic</td>
<td>258</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Tooele</td>
<td>13988</td>
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<td>3497</td>
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<tr>
<td>Uintah</td>
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</tr>
<tr>
<td>Wasatch</td>
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<td>Washington</td>
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<tr>
<td>Wayne</td>
<td>469</td>
<td>0.14</td>
<td>3350</td>
</tr>
<tr>
<td>Weber</td>
<td>31,184</td>
<td>12.05</td>
<td>2588</td>
</tr>
</tbody>
</table>

*Total of all students enrolled in the district, including special education students
Students with Certain Medical Impairments

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 medically complex, medically fragile, and nursing-dependent students have not previously been collected in Utah.

**MEDICALLY COMPLEX STUDENTS**

Medically complex students are defined as those who may have an unstable health condition and who may require daily professional nursing services. Students in this category have health conditions which require a licensed registered nurse to do an assessment, write an individualized healthcare plan (IHP) and/or emergency action plan (EAP), and teach and oversee tasks delegated to UAP who work directly with the student. An example of a student in this category would be one who has medically stable epilepsy or asthma. The school nurse will access medical orders, assess the student, write an IHP or EAP, teach UAP or other school staff how to recognize a problem, and assist the student in the event of an acute incident.

**MEDICALLY FRAGILE STUDENTS**

Medically fragile students are those students who may have a life-threatening health condition and who may require immediate professional nursing services. Students in this category have a health condition which requires frequent (often daily) one-on-one intervention. An example of this would be a six-year-old student newly diagnosed with type I diabetes. Intervention is required on a daily basis to check blood status, configure correct insulin doses, and administer insulin. As this student’s medical condition becomes more stable and the student matures, the student’s category may change to one which requires less intense school health services (i.e. medically complex).

**NURSING-DEPENDENT STUDENTS**

Nursing-dependent students are those students who may have an unstable or life-threatening health condition and who may require daily, direct, and continuous professional nursing services. These students require direct one-on-one services by a licensed nurse so that they are medically safe in the school setting. An example of a nursing-dependent student would be one with impaired breathing who has a tracheostomy which requires frequent suction.
School Nurse Funding

Funding sources vary across the country for school nurses. Most school nurses in Utah are hired by the school or district, with about one-third of nurses being funded through a local health department. There is also a Request for Proposal (RFP) which local education agencies (LEA) can apply for through the Utah State Board of Education (USBE). This RFP can provide funds that the LEA must match for school nursing services.

WHAT WOULD IT TAKE?

- There were 633,896 students in Utah district and charter schools in the 2015-2016 school year.
- 1,085 total schools in Utah
- 193 total school nurses in Utah (including part-time, charter schools, typical, and special education nurses)
- 126 school nurse full-time employee (FTE) equivalent (not including special education nurses or charter schools)
- For each school in Utah to have a nurse we would need 959 more school nurses
- $95,000 estimated additional cost for one FTE school nurse (including benefits, Bachelor’s degree prepared registered nurse)
- $91,105,000 estimated additional cost for Utah to have one nurse to every school\(^1\)
- $68,305,000 estimated addition annual cost for Utah to have one nurse to every 750 students\(^2\)

SUMMARY

Utah does not meet the recommendation of one nurse for every 750 well students, or even one nurse for every school. As more students with chronic medical conditions enter school, their needs would be better met if each school had a full-time registered nurse available to help meet the medical needs of those students.

\(^1\) 1085 schools minus 126 current FTE = 959 x $95,000

\(^2\) 633,896 students in Utah divided by 750 recommended ratio = 845 nurses needed. Subtract 126 current FTE from 845 = 719 more nurses needed, x $95,000


