

summary 2023

School Nurse Staffing and Funding in Northeastern Pennsylvania





About

Moses Taylor Foundation

Moses Taylor Foundation is a private foundation dedicated to building healthy communities and providing opportunities for people in Northeastern Pennsylvania to lead healthier lives. The Foundation was endowed in 2012 with the net proceeds from the Moses Taylor Health Care System sale to Community Health Systems of Franklin, Tennessee. Since its formation, the Foundation has grown to support approximately \$4 million in annual grantmaking in Bradford, Carbon, Lackawanna, Luzerne, Monroe, Pike, Schuylkill, Sullivan, Susquehanna, Wayne, and Wyoming counties.

The Foundation's mission, vision, and values reflect a commitment to advancing the legacy of health started when Moses Taylor Hospital opened in 1892 in Scranton, Pennsylvania, to treat injured miners and railroaders who were unable to access healthcare at other hospitals in the community. A few years later, the hospital also began treating workers' families and eventually expanded to serve the broader community, as well. The Foundation remains committed to championing the evolving health needs of Northeastern Pennsylvania.

MISSION

The mission of Moses Taylor Foundation is to improve the health of people in Northeastern Pennsylvania.

VISION

Moses Taylor Foundation is a catalyst in continuing the philanthropic legacy of Moses Taylor by providing opportunities for people in Northeastern Pennsylvania, especially the most vulnerable, to lead healthy lives.

CORE VALUES

We embrace these values for ourselves and for the communities that we serve:

- Honor our history by operating with compassion, respect, and dignity
- Ethics, integrity, and trust
- Stewardship, transparency, and accountability
- Courage, open-mindedness, and diversity
- Informed decision-making and fairness

About

The Center for School Health Innovation & Quality

The purpose of The Center for School Health Innovation & Quality is to reinvent school health and school nursing practice to better serve all students, with a special focus on students from underserved groups facing inequities. The initial goals of The Center are to:

- Reimagine data-driven school health
- Innovate and research
- Promote leadership

The Center is housed in the Public Health National Center for Innovations, which is part of the Public Health Accreditation Board, a nonprofit organization established in 2007.

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Introduction

OVERVIEW

School nurses play a critical role in helping students be safe and ready to learn in school. The COVID-19 pandemic helped many schools better understand the importance of school nursing. At the same time, the extended hours and stress caused by COVID-19 impacted the complexity of the school nursing position. Coupled with an aging workforce, across the country many school nurses are retiring or leaving school nursing. Other nurses have expressed concern about not having adequate support or substitutes. This project investigated current staffing concerns, including



adequate staff, the impact of COVID-19, availability of substitute school nurses, and the future pipeline of school nursing. The project also examined how school nursing is funded, and provides recommendations for innovative, new solutions to address and strengthen the future of school nursing in Northeastern Pennsylvania (NEPA) and beyond.

RESEARCH METHODOLOGY

Data gathering for this study included both collection and review of existing information as well as original research. Existing information included staffing and school nursing activity data from Pennsylvania's School Health Annual Reimbursement Request System (SHARRS), an environmental scan of related articles, and review of school nurse listervs. Original research focused primarily on an online survey completed by 2,392 school nurses (based both regionally in NEPA and nationwide for comparison) in May 2022 regarding models of staffing, number of substitute school nurses, retention/recruitment of school nurses, and funding. In addition, more than 100 school nurses shared ideas, many of which had not been tested, and were either interviewed on a one-on-one basis or invited to a town hall to discuss further. Two meetings with Pennsylvania school nurse educators held during the fall of 2022 helped provide information about the current pipeline of school nurses in Pennsylvania. Finally, a think tank of six health finance experts from across the country provided insight into innovative funding models for school nurses.

A Note About School Nursing Licensure

When discussing school nurse staffing, it is important to understand the varying licenses and certificates a school nurse can hold, and the scopes of practice that apply to each. The National Association of School Nurses (NASN) recommends that school nurses be baccalaureate-prepared Registered Nurses (RNs). Although the recommendation is an RN, Licensed Practical Nurses (LPNs) are also employed in the schools. RNs have a broader scope of practice than LPNs. Whereas LPNs provide basic student care and monitor students' health, RNs have training to perform more complex treatments, work with other healthcare providers, and develop a plan of care for the student (American Nurses Association, n.d.).

A Certified School Nurse (CSN) is a designation specific to Pennsylvania. CSNs are Registered Nurses who have completed a four-year Bachelor of Science degree in Nursing, as well as additional graduate school credits from an accredited program in Pennsylvania that is specific to school nursing. Only a CSN can carry a caseload of students in Pennsylvania. However, many schools in Pennsylvania employ supplementary help for the CSN in the form of other RNs or Licensed Practical Nurses.

Staffing Decision-Making and Models

Experts maintain that school nurse staffing for safe care must account for acuity, social needs of students, community/school infrastructure, and characteristics of the nursing staff (Jameson et al., 2022; Jameson et al., 2018). However, a uniform standard or process to determine school nurse staffing levels and workload does not exist at the state or federal level.

In NEPA and throughout Pennsylvania, individual districts make school nurse staffing decisions. The top three decision-makers are:

- District administrators (65%)
- School nurse leaders (21%)
- Others (14%)

In other states, principals were more involved in the decision-making.

School Nurse Staffing Decision-Makers

	All PA n = 967 n (%)	NEPA n = 132 n (%)	Other States n = 1425 n (%)	Total Sample n = 2392 n (%)
District administrator	645 (66.7)	86 (65.2)	760 (53.3)	1405 (58.7)
Principal	126 (13.0)	15 (11.4)	299 (21.0)	425 (17.8)
School nurse leader (not a nurse)	113 (11.7)	15 (11.4)	105 (7.4)	218 (9.1)
School nurse leader (nurse)	241 (24.9)	27 (20.5)	455 (31.9)	696 (29.1)
School nurse	90 (9.3)	12 (9.1)	220 (15.4)	310 (13.0)
Other	136 (14.1)	19 (14.4)	175 (12.3)	311 (13.0)

Note: Percentages may sum to more than 100 because multiple responses were allowed.

One thing to note is that in instances where a non-nurse leader was the decision-maker on staffing, only 35.2% of respondents in NEPA indicated a school nurse was asked for input, similar to other states where only 37.7% reported school nurses being asked for input.

Once the decision-makers were identified, the researchers explored what factors were used by those decision-makers when determining how many school nurses to employ.

The top factors determining staffing ratios in NEPA and Pennsylvania were:

- CSN to school building ratio
- CSN to student ratio

Under Pennsylvania law, at least one CSN is required for every 1,500 students, so it makes sense that within the Commonwealth, the number of students would be a major deciding factor. Using the number of schools or number of students was also commonly cited in other states (32%). However, these ratios do not account for varying levels of health needs and social complexities within the specific school population. Some survey participants reported that they included some of these other factors when determining staffing, yet, when asked how, there were not well-defined measures nor were formulas used.

In addition to CSNs, districts in NEPA and across the Commonwealth employ supplemental nurses and staff, such as RNs (who are not CSNs), LPNs, and Unlicensed Assistive Personnel (usually administrative assistants). Nationwide, many districts indicate that when a trained aid or LPN is able to address first aid and routine medications, the RN is able to address more complex treatments, perform diagnostic screenings, administer medications, educate patients on how to manage their health after treatment, and assist students in addressing social needs that impact health (like lack of a medical home or food insecurity). The RN can also help with social factors (food insecurity, lack of access to care, and homelessness) that impact students' health. When an RN works alone, the focus tends to be on immediate and acute needs, leaving minimal time to address the more complex issues better suited to an RN's scope of practice.

National workforce data indicate that 70% of schools that have a school nurse employ an RN alone, and 14% utilize a model of an RN and LPN working together (Willgerodt et al, 2018). Our School Nurse Survey confirmed a CSN working alone in a school was the common model, although 36.4% worked with another RN (non-certified) to assist with various tasks.

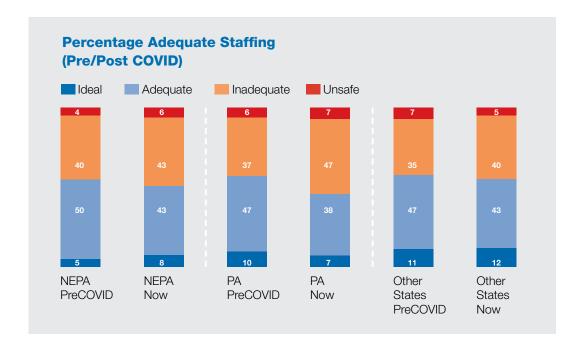
Certified School Nurse Partners Pennsylvania Only

Pennsylvania Only	All PA	NEPA
	n = 967	n = 132
	n (%)	n (%)
RNs to assist the Certified School Nurse	408 (42.2)	48 (36.4)
Licensed Practical Nurses to assist the Certified School Nurse	437 (45.2)	68 (51.5)
Nurse extenders (aides) to assist nurses	27 (2.8)	5 (3.8)
Partnership with health department to provide school nurse	6 (0.6)	0 (0.0)
positions or other staffing		
Partnership with healthcare system/hospital to provide	15 (1.6)	0 (0.0)
school nurse positions or other staffing		
Partnership with local agencies to provide nursing for specific student	151 (15.6)	16 (12.1)
Partnership with local agencies to provide general nursing care	107 (11.1)	7 (5.3)
(NOT care for a specific student)		
Other	60 (6.2)	10 (7.6)
None of these	176 (18.2)	30 (22.7)

Note: Percentages may sum to more than 100 because multiple responses were allowed.

Adequacy of Staffing

While, as mentioned above, Pennsylvania is one of only 12 states that have policies addressing recommended or required school nurse staffing ratios, the question as to whether this ratio (one CSN per 1,500 students) and school nurse staffing in general, is adequate to meet needs, is a different story. The survey for this study asked about "adequate" staffing before COVID and currently. Before COVID, a little less than half of participants felt there was adequate staffing. After COVID, more districts felt there was inadequate staffing, although not to the level of a statistical difference.

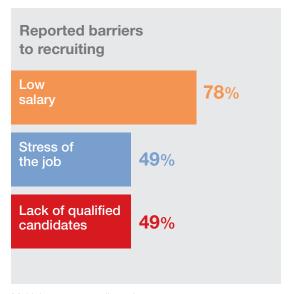


More work is needed to standardize what adequate staffing means in order to better identify the potential nursing shortage and develop a plan to address it. Much of the data collected by SHARRS could be used to help identify needs and appropriate staffing if the data were more accessible. For example, a significant limitation to this study's results is that data were only accessible at the county level, although each district enters it separately. In addition, the supplemental school health staff numbers were only available by region through SHARRS, so we could not include that data in the analysis.

School Nurse Recruitment and Retention

Recruitment and retention are important factors to consider when looking at school nurse staffing. One-third of survey participants in NEPA reported them as challenges for their district, and they were also identified as issues by statewide and national respondents.

Reported barriers to recruiting school nurses include low salary (78%), stress of the job (49%), and lack of qualified candidates (49%). Several nurse managers indicated salaries are not competitive, especially for newer graduates who have student loans to pay back. One school nurse manager found that close to half of nurses given offers declined the job due to low salary.



Multiple responses allowed.

Another challenge frequently noted by school nurses is their contract and benefits with the school district. In Pennsylvania, the school teachers are unionized. Depending upon the structure of the union in each school district, school nurses are not always hired through the union on a teacher contract, which impacts their benefits and ability for promotion and professional development. In other instances, school nurses may be hired on the teacher union contract, but they are considered "entry-level" employees. This means that school nurses with years

of experience in nursing, but no experience working in a school district, are paid the same as newly graduated teachers just beginning their careers. This beginning-level pay scale for nurses with experience may lead some to not consider school nursing as an option.

Looking further upstream, focus groups were held with school nurse educators in the Certified School Nurse programs across the Commonwealth to learn how these programs view the current adequacy of the pipeline of school nurses. Interestingly, the educators have not suffered from a lack of students. Many programs consistently admit small numbers (3-15 students). The larger programs have even had an increase in emergency certifications due to turnover.

Beyond certification and recruitment, retention is the next step to consider in monitoring the school nurse workforce. Nursing is a stressful profession due to the need to make urgent life-altering decisions, working long hours, workload imbalances, and staffing shortages. In a pre-pandemic study, Jameson and Bowen (2020) found that approximately 30% of school nurses were moderately to severely burned out. In a nationwide 2022 survey by the Centers for Disease Control and Prevention (2022), almost half (45%) of school



nurses reported symptoms of at least one adverse mental health condition in the two weeks prior to completing the survey.

Even more concerning were the themes that arose from participants who shared regarding the consequence of burnout. Some spoke about feeling tired or exhausted all the time, while others indicated the stress and anxiety were impacting their home/family life to the point some retired early, are contemplating retirement, or are looking for a new job.

Substitutes

One final piece of the school nurse staffing puzzle is access to substitutes. The survey indicated that 89% of school nurses in NEPA (90% in Pennsylvania) stated they did not have adequate school nurse substitutes. Several districts indicated they were required to use a staffing agency to

find substitutes, who were often not oriented in school nursing and not reliable. These substitutes could cover administering some medications and medical procedures, but were not trained in other tasks such as screenings and care coordination. A school setting and hospital/clinical setting are very different. In hospitals there are more resources, such as other nurses and medical providers and additional equipment to monitor situations. In schools, the nurse often works alone, relying on their assessment skills, with minimal technological monitoring. Substitute nurses have expressed to school nurses in Pennsylvania they do not feel like they give safe care because they do not have



the proper training and are not familiar with the setting. School nurses also spoke to challenges of substitutes not having access to the electronic health records (EHRs) until later in the day when the informational technologists can come set up their account. School electronic records are also very different from hospital EHRs, which may make them difficult to navigate.

When survey participants were asked to describe the biggest barriers, overwhelmingly the response was low pay. Participants indicated the pay rate for substitute nurses was less than what RNs would make working in a hospital or at an agency.

The reported consequences for not having adequate school nurse substitutes varies. Often (53%) school staff are pulled from other buildings to cover a nurse who is out when a substitute cannot be found. In nearly one-fifth (19%) of the cases, nothing happens, and a school is left without coverage. Many school nurses indicate they just do not take days off, even when they aren't feeling well, because they know it would leave their school without a nurse.

Staffing Innovations

In addition to examining the current state of school nurse staffing, another goal of this study was to identify innovative solutions and models being used to address the current challenges in this area. Although there is a significant lack of data and research across school health, below are some ideas that were identified as having potential.

School Nurses Employed External to the School District

In some places across the country, school nurses are not employed directly by school districts. In these cases, they are most commonly employees of either a healthcare system or public health department. Both models were identified as having advantages and disadvantages. Advantages were related

to access to increased resources from the employers. In the case of healthcare systems, there is access to the expertise of other medical professional colleagues, relevant professional development opportunities, a built-in pool of substitute nurses, and robust EHR systems (Becker & Maughan, 2017). For health department employed school nurses, there are greater resources in terms of health promotion, prevention, data, and immunizations (Becker & Maughan, 2017). Challenges that sometimes occur with these models include the potential for school nurses to be seen as "outsiders" either by the school or at their place of employment. They may, therefore, need to be more intentional about gaining access and trust. The employer



can also influence the focus of the school nurses; for example, an observation of school nurses employed by healthcare systems is that they focus more on chronic conditions and acute issues of individual students, and not as much on the school nurses' role in health promotion and population-based care (Becker & Maughan, 2017). Local laws, policies, and culture are contributing factors to the success of both these models. It should be noted that even if school nurses are employed through other agencies, sometimes funding is pooled with education dollars and sometimes it is not.

Another potential staffing model innovation that was found during the course of this study is employing school nurses as an extension of a school-based health center (SBHC). Many schools across the country, including Pennsylvania, have SBHCs and school nurses. However, the

common model is for the two to have two different employers. School nurses are most often employed through education. SBHCs are often funded through healthcare systems or community organizations. Many SBHCs are also Federally Qualified Health Centers (FQHCs), which is a reimbursement designation that allows them to be reimbursed at higher rates from the Centers for Medicare and Medicaid Services (CMS) because FQHCs provide primary care and are seen as a safety-net provider in areas of greatest need (Healthcare.gov, n.d.). The SBHCs and school nurses sometimes work well together as a team, and



sometimes work in silos. If the two were employed by the same employer, there may be increased communication and a more coordinated delivery model.

Increasing Benefits

One study of nurses (not school nurses) indicated pay alone did not alleviate the challenge of obtaining adequate nurses (Shields, 2004). Since budgets are also stretched thin in education and beyond the control of some school nurse leaders, other strategies related to benefits may be a possible solution (unpublished discussion at Virginia Nurses Association meeting, Oct 2022). Such options may include job sharing, telehealth (working from home), tuition reimbursement, and professional development opportunities. Several school districts in Pennsylvania offer tuition reimbursement per their union contract.

In Phoenixville Area School District in Pennsylvania, they have begun working to promote their own school nurses by offering to pay for supplemental nurses to obtain their certification and working with education programs to allow practicum hours to be completed in their district. The

idea has been well received. However, the timing of openings has not always worked in favor of the district and the nurses may leave to neighboring districts who have openings for a CSN. In rural areas, loan forgiveness may be an option. Presently, a loan forgiveness program exists for individuals working in "eligible facilities" in areas experiencing a nursing shortage (designated as a Health Professional Shortage Area). There may be potential in this program if eligibility guidelines could be expanded to include school nursing (Benefits.gov, 2023).

Workload Analysis

Other support professionals in school districts are also currently experiencing shortages, such as speech-language specialists, school psychologists, bus

drivers, and even substitute teachers (Schneider, 2022). One solution tried by school-based speech-language pathologists that may translate well to school nurses was to develop a model for workload analysis to establish need and improve retainment (Woltmann & Camron, 2009). The American Speech-Language-Hearing Association, in conjunction with researchers, identified four key factors of speech-language pathologist workload: direct services to youth; indirect services to support individualized education plans; indirect services to support student placement;

and compliance with federal, state, and local mandates. Several districts used this analysis and created a model

of a 3:1 ratio, meaning they ensure their staff are able to spend one week on indirect services for every three weeks of direct services provided. Participating employees reported increased job satisfaction.



New School Nurse Residency Programs

New nurse residency programs have proven to be successful for retention in healthcare systems, and some school districts have tried replicating this model (Cadmus & Roberts, 2022). Nurse residency programs are longer orientation and guided mentoring programs designed to support new graduate nurses as they transition to competent professionals. In Arizona, COVID-19 funding was used to

create a program to recruit and retain 60 newly licensed school nurses. This transition program includes advanced training and mentorship to support the school nurses to also receive their national certification in school nursing (Arizona Foundation for the Future of Nursing, n.d.). This program is still in progress, with no data yet available as to its success.

Hiring "Float" Nurses

Float or per diem school nurses have been successfully utilized for assistance with screenings, field trips, and as substitutes. This works well in larger districts that have the budget to hire extra coverage. Smaller districts wondered if they could utilize shared float nurses through their Intermediate Unit (IU) for a similar model. Some IUs already provide occupational and physical therapists in this way, so it seems feasible.

Maximize Use of Retired School Nurses

Retired school nurses know the system and appreciate the flexibility of being a substitute. Districts throughout the country spoke to having a

nurse who retired continue working as a substitute. It should be noted that several school nurses in Pennsylvania indicated this was not allowed due to rules concerning retirement benefits. This option warrants further investigation and awareness to ensure that the knowledge and skills of retired school nurses can benefit students as much as possible. It should be noted that the state of Virginia has similar stipulations regarding retired employees. Due to the current shortage of teachers and specialized support staff, in 2023 the Virginia State Legislature passed House Bill 1630, which eased some of the requirements around retirement benefits. A similar initiative could be done in Pennsylvania.



Substitute Orientation

Several districts highlighted the importance of creating an orientation and training for substitute school nurses (Galemore, 2011; Park, 2020; Vollinger et al, 2011). Districts found that often substitutes did not return because school nursing is so different from other types of nursing (Park, 2020). Providing training and allowing them to get to know the other nurses and schools helped substitutes feel comfortable and be more willing to substitute. Having an orientation may also address some of the barriers cited by nurses wanting to be substitutes, such as cumbersome paperwork, fingerprinting, and long timelines for hire. Several districts in Pennsylvania have been able to provide a short orientation and have the nurses shadow school nurses in the district. Parkway School District in Missouri developed and implemented a more extensive orientation and training that has proved helpful in retaining substitutes (Park, 2020). Other districts have developed manuals that substitutes can use as references while they are working.



The second half of this study focused on detailing the current sources of funding for school nursing, as well as potential innovations and alternative models that could be tested to increase capacity.

Current Funding Sources

Currently, there is no standard funding model for school nurses in NEPA, Pennsylvania, or other states. It is left to the local community and district to decide. District funds and Medicaid reimbursement are common mechanisms used.

Numerous attempts to speak to the Medicaid office for this report were unsuccessful (in fairness, they have been stretched thin with COVID-related impacts), so unfortunately, it is unclear exactly how many schools curently submit for Medicaid reimbursement in Pennsylvania. During the school nurse focus group, several of the nurses in Pennsylvania indicated that although they used to bill for Medicaid, due to the complexity, amount of paperwork required, and low reimbursement rates, they or their districts determined it was not a good use of their time. They also indicated that most of their EHR systems were not able to run the reports needed for Medicaid reimbursement, making the process even more cumbersome.

Beyond Medicaid and district funds, a unique funding source in Pennsylvania is the SHARRS. SHARRS is a data tracking system, as well as a reimbursement tool. The purpose of SHARRS is:

- 1) To provide a mechanism for school entities to document the provision of, and receive reimbursement for, health services.
- 2) To obtain information about Pennsylvania's school health programs, including student health status, dental and medical health service utilization, and selected nursing activity (Commonwealth of Pennsylvania Division of School Health, 2016).

Pennsylvania school districts are required to participate in SHARRS, yet only half the survey participants in Pennsylvania (45.7%) and NEPA (48.5%) indicated SHARRS funded school nursing, and very few knew what percentage of their funding was from SHARRS - some indicated all; others said the majority. The lack of clarity may be because many districts pool SHARRS funding with the district's general fund.

It should be noted that the current SHARRS reimbursement rate appears to have not changed since 1991. We could not find any new documentation since then, and school nurses who have worked more than 20 years confirm that no changes in reimbursement have occurred. Inflation alone would indicate the rates from 1991 are not appropriate in 2023.

Sources of School Nurse Funding in Your District. Pennsylvania Only

Tour Diourion, Formoyruma omy	All PA	NEPA
	n = 967	n = 132
	n (%)	n (%)
Pennsylvania Department of Health (SHARRS)	442 (45.7)	64 (48.5)
Local school district funds	360 (37.2)	48 (36.4)
Medical Access Billing	144 (14.9)	15 (11.4)
Other	23 (2.4)	1 (0.8)
I don't know	468 (48.4)	62 (47.0)

Multiple responses allowed.

From the data obtained, school nursing services in Pennsylvania are funded similarly to other school nursing services across the country, with the exception of the SHARRS funding, which is a unique contributor and major funder for many school districts. Nationally and in NEPA, it is a consistent struggle to fund school nursing services, especially to the level needed.

The majority (70%) of participants from other states indicated that school nurses were funded through local school district funds. Other sources of funding included state department of education (15.7%), Medicaid reimbursement (12.6%), and state or local health departments (2.2-2.4%). Close to one-fifth of participants did not know how their position was funded.

These funding sources are consistent with data from NASN's workforce study (Willgerodt et al, 2018). Recently, federal funding from the Centers for Disease Control and Prevention and other agencies has been passed down through states to address the pandemic, as well as mental health crises. Grants related to mental health have also supported school nurse funding. However, these are soft funding solutions, which end when the grant or program ends.

Funding Innovation

Although funding for adequate school nurses is a known challenge, minimal discussion exists related to innovative models, and little could be found in the literature on the subject. Due to the lack of diverse ideas and the urgent need for different funding models, we convened a six-member think tank group of health finance experts. Below is a mix of ideas discussed within the think tank, as well as a few models that were identified through the environmental scan and survey.



Taxes

Several locations have created specific taxes that are designated to help school health services. For example, in Seattle, Washington, the Family & Education Levy funds much of the school health services (school nurses and school-based health centers). The city manager works with the district to determine where and how the funds are spent.

Sara O'Toole, director of nursing and medical services in Pinellas County Schools (Florida), worked with her county commissioners and the local Department of Health to have a portion of property taxes specifically fund school nursing (personal communication, July 2022). Several years before approaching the county, she collected data in her districts and developed a plan that projected the cost needed for adequate school nurse coverage

for each school. She then worked with a team and approached a county commissioner who they believed would help champion the cause. The earmarked tax was successfully passed due to the work of the team. A lesson learned was that the tax was based on current need at the time (approximately five years ago), and the funding has remained flat despite local property values and district salaries rising. No provision was included in the tax for this growth and so they would need to ask for a tax increase to continue funding the same nursing coverage.

Finally, in some states, such as Wyoming and North Dakota, mineral or oil funds are used to support county health. This idea was discussed with the Pennsylvania School Nurse focus group. It was noted that approximately 10 to 15 years ago in Monroe County, Pennsylvania, there was a suggestion of adding a daily fee to hotel rooms that could then be applied to the school tax. It was not initiated by the school district, but rather by a local representative. It never progressed to a vote due to opposition from the local vacation bureau (K. Verbel, personal communication, February 9, 2022).

Legislated Funding to Regions of the State

Several states help fund school nurses through a variety of legislative allocations. A sustainable example of this model is the School Nurse Corp in Washington state. The model began in 1999. The state is divided into nine Educational Service Districts (ESDs). Funding (overseen by the State Department of Education) goes



to the ESDs to assist and provide the services that rural and small school districts cannot finance on their own. Each ESD has an administrator to assist with programing and data collection. The state funding supports

regional administrators, local school nurses, and other resources needed. The program has been very successful. However, until last year, there had not been a raise in the funds allocated to support this program, even though the number and complexity of students has been rising steadily over the years. A similar organizational model exists in Oregon where 19 ESDs serve 197 public school districts in 36 counties. The ESDs receive money from general education funds, some of which are earmarked for the ESD component districts. The services offered—and the structure supporting those services—



vary by ESD. Some ESDs fund and employ school nurses to work in one or more districts. Other districts are responsible for directly hiring their own school nursing services. The Pennsylvania IU structure is similar to the ESDs in Washington and Oregon, although not as well funded or consistent statewide.

Population Pooled Funding

Another possible funding source for school nurses is based on ideas of how Massachusetts developed the universal health program. Companies submitted funds that were combined with tax dollars into an uncompensated care pool (UCP) that covered the cost of hospital bills for those unable to pay (Knox, 2006). School nurse advocates wonder if a similar model of pooled funding from insurance companies or even businesses in the area could be used to help support school nurses who are on the frontline of prevention.

Medicaid

As previously mentioned, Medicaid reimbursement is a current funding source for some schools, but others found the process of obtaining reimbursement too cumbersome for the amount of money received. However, there is currently potential for these challenges to be addressed. In August 2022, CMS released

additional guidance related to school-based Medicaid services and indicated even more guidance would come soon that would streamline paperwork and simplify the process of obtaining reimbursement. This additional guidance is expected in summer 2023 (as of this report it has not been released). CMS also created a technical assistance center to help schools and has indicated \$50 million will be given to states/ districts to assist with school-based Medicaid billing (V. Wachino, speaker Healthy Schools Campaign Webinar, February 9, 2023). Much of this increased discussion centered around clarification of the Free Care Rule, which allowed schools to bill for additional services they previously could not bill for if the services were offered to all children. Now schools can bill for those services offered to children covered by Medicaid.



An additional thought concerning Medicaid is looking at whether billing administration could be consolidated through partnerships between districts. This is currently done in Texas, where some of the larger districts assist smaller, rural districts in submitting their Medicaid claims. In Pennsylvania, this could possibly be consolidated through IUs.

Conclusion

School nurses are on the front lines of meeting the health needs of children. Over the past several decades, their work has evolved significantly and goes far beyond bandaging playground scrapes. School nurses are key to helping students manage chronic diseases, connecting families to crucial resources, screening children for health concerns, and much more. In fact, for many students, the school nurse may be the only health provider they see regularly. Wang et al. (2014) established in a cost-benefit analysis that school nurses prevented an estimated \$20 million in medical care costs, \$28.1 million in parents' productivity loss, and \$129.1 million in teachers' productivity loss. However, as is clear from this report, the staffing and funding for this crucial resource to both healthcare and education is firmly entrenched in outdated models. While this report can serve as a starting point, further innovation and research is sorely needed to ensure that the structural supports for school nurses catch up to the significant challenges and changes that the profession has experienced.



References

Aiken, L. H., Havens, D. S., & Sloane, D. M. (2000). The Magnet Nursing Services Recognition Program: A comparison of two groups of Magnet hospitals. *The Journal of Nursing Administration*, 39(7-8 Suppl.), S5-S14. https://doi.org/10.1097/NNA.0b013e3181aeb469

American Nurses Association. (n.d.). How to become a licensed practical nurse. https://www.nursingworld.org/resources/individual/how-to-become-a-licensed-practical-nurse/

Arizona Foundation for the Future of Nursing. (n.d.). *Arizona School Nurse Access Program* (ASAP). https://www.aznurse.org/mpage/ASAP1

Baker, C., & Gance-Cleveland, B. (2021). Linking school nurses with health care systems using EHRs: An integrative review. *Journal of School Nursing*, 37(1), 28-40. https://doi.org/10.1177/1059840520913323

Becker, S.I. & Maughan, E.D. (2017). A descriptive study of differing school health delivery models. *The Journal of School Nursing*, 33(6), 415-425.

Begum, M., Chittleborough, C., Pilkington, R., Mittinty, M., Lynch, J., Penno, M., & Smithers, L. (2020). Educational outcomes among children with type 1 diabetes: Whole-of-population linked-data study. *Pediatric Diabetes* (Advance online publication). https://doi.org/10.1111/pedi.13107

Benefits.gov. (2023). Nursing education loan repayment program. https://www.benefits.gov/benefit/449

Bergren, M. D., Maughan, E. D., Johnson, K. H., Wolfe, L. C., Watts, H.E.S., & Cole, M. (2017). Creating a culture of accurate and precise data. *NASN School Nurse*, 32(1), 39-41. https://doi.org/10.1177/1942602X16682733

Buerhaus, P. I., Skinner, L. E., Auerbach, D. I., & Staiger, D. O. (2017). Four challenges facing the nursing workforce in the United States. *Journal of Nursing Regulation*, 8(2), 40-46. https://doi.org/10.1016/S2155-8256(17)30097-2

Cadmus, E., & Roberts, M. L. (2022). First year outcomes: Program evaluation of a statewide nurse residency program. *The Journal of Nursing Administration*, 52(12), 672-678. https://doi.org/10.1097/NNA.0000000000001230

Childrenshospitals.org. (2023, Jan 4). School-based health expands to meet growing needs. https://www.childrenshospitals.org/news/childrens-hospitals-today/2023/01/school-based-health-expands-to-meet-growing-needs

Centers for Disease Control and Prevention. (2022). *Mental health of school nurses in the United States during the COVID-19 pandemic.* https://health.mo.gov/living/families/schoolhealth/pdf/mental-health-of-school-nurses-results.pdf

Commonwealth of Pennsylvania Division of School Health. (2016). School health annual reimbursement request system (SHARRS) instruction manual. https://www.health.pa.gov/topics/Documents/School%20Health/SHARRS%20User%20Instruction%20Manual%202020.pdf

Endsley, P. (2017). School nurse workload: A scoping review of acute care, community health, and mental health nursing workload literature. *The Journal of School Nursing*, 33(1), 43-52. https://journals.sagepub.com/doi/10.1177/1059840516681423

Galemore, C.A. (2011). Facilitating successful substitute school nurse programs: A multi-school roundtable. *NASN School Nurse*, 26(5), 310-317, https://doi.org/10.1177/1942602X11415691

George Mason University. (n.d.). Early Identification Program. https://eip.gmu.edu

Hartford Public Schools (n.d.). School-based health centers and dental clinics. https://www.hartfordschools.org/page/school-based-health-centers-and-dental-clinics

HealthCare.gov. (n.d.). Federally Qualified Health Center (FQHC). https://www.healthcare.gov/glossary/federally-qualified-health-center-fqhc/

Jameson, B. E. (2018). Exploring the factors that influence the role, burnout and job satisfaction of the school nurse: A mixed methods study (Unpublished doctoral dissertation). Rutgers, The State University of New Jersey.

Jameson, B. E., Anderson, L. S., & Endsley, P. (2022). Identification of workload measurement indicators for school nursing practice. *The Journal of School Nursing*, 38(3), 287-298. https://journals.sagepub.com/doi/10.1177/1059840520946833

Jameson, B. E., & Bowen, F. (2020). Use of the worklife and levels of burnout surveys to assess the school nurse work environment. *The Journal of School Nursing*, 36(4), 272-282. https://doi.org/10.1177/1059840518813697

Jameson, B. E., Engelke, M. K., Anderson, L. S., Endsley, P., & Maughan, E. D. (2018). Factors related to school nurse workload. *The Journal of School Nursing*, 34(3), 211-221. https://doi.org/10.1177/1059840517718063

Jennings, R. (2020). Kids can do laundry, get health screenings at 1st N.J. school funded by federal gov't. https://www.nj.com/education/2020/01/kids-can-do-laundry-get-health-screenings-at-1st-nj-school-funded-by-federal-govt.html

Knox, R. (2006). Romney's mission: Massachusetts health care. NPR. https://www.npr.org/2006/04/08/5330854/romneys-mission-massachusetts-health-care

MacGeorge, C. A., King, K., Andrews, A. L., Sterba, K., Johnson, E., Brinton, D. L., Teufel II, R. J., Kruis, R., & Ford, D. (2022). School nurse perception of asthma care in school-based telehealth. *Journal of Asthma*, 59(6), 1248-1255. https://doi.org/10.1080/02770903.2021.1904978

Maier, A., Daniel, J., Oakes, J. & Lam, L. (Summer 2018). *Community Schools: A promising foundation for progress*. The American Federation of Teachers. https://www.aft.org/ae/summer2018/maier

Marrapese, B., Gormley, J. M., & Deschene, K. (2021). Reimagining school nursing: Lessons learned from a virtual school nurse. *NASN School Nurse*, *36*(4), 218-225. https://doi.org/10.1177/1942602X21996432

McFeely, S., & Wigert, B. (2019). *This fixable problem costs U.S. businesses \$1Trillion.* Gallup. https://www.gallup.com/workplace/247391/fixable-problem-costs-businesses-trillion.aspx

Morse, B. L., Anderson, L., Combe, L. G., Delack, S., Ondeck, L., & Homme, C. (2022). U.S. school nursing job analysis. *Journal of School Nursing*, 38(2), 126-137. https://doi.org/10.1177/1059840520930075

National Association of School Nurses. (2020). School nurse workload: Staffing for safe care. https://www.nasn.org/nasn/advocacy/professional-practice-documents/position-statements/ps-workload

NVCC. (n.d.). ADVANCE: Nothing should come between you and a four-year degree. https://www.nvcc.edu/advance/

Olds, D. M., Aiken, L. H., Cimiotti, J. P., & Lake, E. T. (2017). Association of nurse work environment and safety climate on patient mortality: A cross-sectional study. *International Journal of Nursing Studies, 74*, 155-161. https://doi.org/10.1016/j.ijnurstu.2017.06.004

Park, K. (2020). Supporting substitute school nurses: One district's approach. (Poster Presentation at National Association of School Nurses)

Pennsylvania Department of Education. (2022). CSPG 13: Emergency permits. https://www.education.pa.gov/Educators/Certification/Staffing%20Guidelines/Pages/CSPG13.aspx

Pennsylvania Department of Education. (n.d.). School-based ACCESS program. https://www.education.pa.gov/K-12/Special%20Education/FundingGrants/Pages/School-Based-ACCESS-Program-Guidelines.aspx

Pennsylvania Department of Health. (2018). 2018 school health update March 2018. https://www.health.pa.gov/topics/Documents/School%20Health/2018%20School%20Health%20Update%20March%202018.pdf

Pennsylvania State Education Association. (n.d.). Position description: Certified school nurse. https://www.psea.org/globalassets/membership-categories/pupil-services-dps/school-nurses/certifiedschoolnursejobdescription.pdf

Potempa, K., Auerbach, D. I., Buerhaus, P. I., & Staiger, D. O. (2012). A future nursing shortage? *Health Affairs*, 31(3), 652. https://doi.org/10.1377/hlthaff.2012.0119

Randolph, A., & Mattey, B. (2023). Moving upstream to address health inequity: A middle school program to introduce students to a career in nursing. *NASN School Nurse*, *38*(1), 33-39. https://journals.sagepub.com/doi/10.1177/1942602X221133125

Rattermann, M. J., Angelov, A., Reddicks, T., & Jess, M. (2021). Advancing health equity by addressing social determinants of health: Using health data to improve educational outcomes. *PLOS ONE, 16*(3), e0247909-e0247909. https://doi.org/10.1371/journal.pone.0247909

School Health Services Act of 1957 PSC § 1402 (a.1). (1957). https://www.pacodeandbulletin.gov/

Selekman, J. (2017). Students with chronic conditions: Experiences and challenges of regular education teachers. *The Journal of School Nursing*. 33(4), 307-315. https://doi.org/10.1177/1059840516674053

Selekman, J., Wolfe, L. C., & Cole, M. (2016). What data do states collect related to school nurses, school health, and the health care provided? *The Journal of School Nursing, 32*(3), 209-220. https://journals.sagepub.com/doi/10.1177/1059840515606786

Shields, M. A. (2009). Addressing nurse shortages: What can policy makers learn from the econometric evidence on nurse labour supply? *The Economic Journal, 114*(499), F464-F498. https://academic.oup.com/ej/article-abstract/114/499/F464/5089272?redirectedFrom=fulltext

Schneider, C. (2022). What To Know: For LI Schools, Daily "Scramble" To Fill Positions: Hiring and retaining substitute teachers, nurses, custodians, bus drivers a problem. *Newsday*, Combined Editions, 2.

Steed, H., O'Toole, D., Lao, K., Nuñez, B., Surani, K. & Stuart-Cassel, V. (2022, August 9). State laws on school nursing outline copious responsibilities for nursing. *Child Trends*. https://www.childtrends.org/publications/state-laws-on-school-nursing-outline-copious-responsibilities-for-nurses

U.S. Department of Education. (2022). U.S. Department of Education emphasizes importance of full-service community schools through competitive grant program. https://www.ed.gov/news/press-releases/us-department-education-emphasizes-importance-full-service-community-schools-through-competitive-grant-program

U.S. Department of Health and Human Services, Health Resources and Services Administration, & National Center for Health Workforce Analysis. (2017). Supply and demand projections of the nursing workforce. 2014-2030. https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/data-research/nchwa-hrsa-nursing-report.pdf

Ulrich, B., Cassidy, L., Barden, C., Varn-Davis, N., & Delgado, S. A. (2022). National nurse work environments - October 2021: A status report. *Critical Care Nurse, 42*(5), 58-70. https://doi.org/10.4037/ccn2022798

Vollinger, L.J., Bergren, M.D., & Belmonte-Mann, F. (2011). Substitutes for school nurses in Illinois. *The Journal of School Nursing*, 27(2), 111-119. https://doi.org/10.1177/1059840510388517

Willgerodt, M.A., Brock, D. M., & Maughan, E.M. (2018). Public school nursing practice in the United States. *The Journal of School Nursing*, 34(3), 232-244. https://doi.org/10.1177/1059840517752456

Woltmann, J. & Camron, S. C. (2009). Use of workload analysis for caseload establishment in the recruitment and retention of school-based speech-language pathologists. *Journal of Disability Policy Studies, 20*(3), 178-183. https://doi.org/10.1177/1044207309343427



School nurses from Northeastern Pennsylvania gathered for a professional development session in 2023.



