

REQUEST FOR PROPOSAL (RFP) 2021: ANALYSIS OF EXISTING SCHOOL HEALTH SERVICES DATA

Applications due Oct 31, 2021 (11:59pmET)

NASN is seeking proposals for the analyses of existing school, district, or state school health service data. School health services (SHS) are a hidden health care system. This system is well-positioned to reach the nation's youth, foster youth development, buttress struggling families, and assist the existing public health infrastructure in carrying out its mission (Lear, 2007). School nurses make up the majority of SHS. School nurses address acute and chronic conditions, as well as social determinants of health; conduct surveillance and screening of students; and deliver individual and population-level evidence-based interventions. School nurses are positioned to track and address child and family issues impacting community health and, in many ways, already do. NASN's [Framework for 21st Century School Nursing Practice](#) organizes the key principles of contemporary school nursing practice. Data is the foundation of evidence-based practice school nursing practice.

Structure, process and outcome measures are a valid way of measuring quality in health care systems (Donabedian, 2005). Appendix A describes the 3S (Student-School Nurse-School Community) model, which also provides a visual representation of how structure, process, and outcome data points are linked in school health services (Wolfe, Maughan, & Bergren, 2019).

Researchers have shown when a school nurse is present, students have greater immunization adherence (Salmon et al, 2014; Keck et al, 2013). School nurses help students stay in school and decrease absenteeism by helping students manage chronic conditions, and addressing the SDOH impacting students (Hill & Hollis, 2013; Moricca, et al, 2013; Pennington & Delaney, 2012). School nurses are an investment, saving communities \$2.21 for every \$1 spent on school nurses (Wang et al, 2014). Despite this research, there is a dearth of evidence regarding school health services, particularly school nursing. School nurses document their actions through the stages of the nursing process: Assess, diagnose, determine outcomes, plan, implement, and evaluate. This documentation provides a rich data source that is under-examined. Analyzing these data will advance the understanding of the structure and processes most likely to improve student health and academic outcomes. Studies that have used existing data to look at the relationship of school health infrastructure on outcomes have provided valuable insight (Best et al, 2021; Schroeder et al, 2021).

This RFP seeks to increase the analysis of existing school health service data that address [NASN's research priorities](#) (particularly studies regarding the infrastructure of school nursing and school nurse interventions that address COVID, diversity/inclusion/equity, mental health, vaccine hesitancy, substance use, or caring for the caregiver) in relation to school nurse sensitive health or academic outcomes. Health or academic outcomes must be included in the application,

with preference given to applicants that include at least one of NASN's priority school nurse sensitive indicators (See Appendix B for definitions). These indicators include:

- Chronic Absenteeism
- Early Dismissal
- Seat time
- Health Office Visits
- Immunization Rates
- Medication Administration Accuracy

NASN is a nursing specialty professional association, organized in 1968, incorporated in 1977, and is classified as a non-profit organization under section 501(c)(3) of the Internal Revenue Code. NASN's purpose for incorporating in 1977 was to promote and advance quality SHS, i.e., providing school nurses with educational programs, resources, and tools to build capacity for schools and school nurses. NASN is the only national organization with a mission to optimize the health and education of all students by advancing school nursing practice.

TOTAL AMOUNT AVAILABLE: \$40,000.

Applications may range from \$1000-\$40,000. The number of grants awarded will depend on the quality of application and funding requested. Several small grants or one grant for \$40,000 may be awarded. If no application meets minimum criteria, NASN reserves the right to not fund any application.

APPLICATION/APPLICANT QUALIFICATIONS

- The principal investigator or a member of the research team who participates in the entire process including proposal, design, and implementation of the research project must be a:
 - school nurse(s) engaged in the practice, education, or leadership of school nursing; and
 - current member of NASN.
- Applications must be for the analysis of existing data and not for the collection of new data. The data can be at a school, district, or state level as long as the study is powered sufficiently for the proposed analysis.
- The grant applicant must sign NASN's Memorandum of Agreement (MOA) [[Form 212](#)] that lists expectations for the project. This includes submitting completed research results to *The Journal of School Nursing (JOSN)* following the guidelines outlined by *The JOSN*.
- The funds may be used for applicant's release time for purpose of the research, statistical services, travel expenses, or other appropriate expenses directly related to the research project. Purchase of equipment is not an allowable cost. A budget with a narrative budget justification must be included in the application package. The analysis of data shall begin within the first year of receiving funding.

- Applicant(s) must follow all instructions, inclusive of specified format and application completeness.

SPECIFIC FORMAT OF APPLICATION (Applications not meeting these criteria will not be reviewed)

- Page size 8 ½ x 11.
- Double spaced.
- Margins one (1) inch.
- Font size Times New Roman, 12 point.
- The header for the project narrative and budget pages for proposed research must the page number and the title of the project.
- Project narrative for proposed research is limited to 10 pages, excluding title page, references, budget, budget narrative, or attachments.
- References and within text citations should be included, using the American Psychological Association Publication Manual (version 7).

Title Page: Descriptive title of your project

Narrative: This is the main body of information which describes the plan of analysis for the existing data. This includes a detailed description of the project, study aims, design and how it will be implemented, what results are expected, what data will be used, and how it will be analyzed. Do not include names of researchers in the narrative portion of the application.

When preparing the project narrative section, address each of the areas listed in the following sequence:

- A. Study Aim/Hypothesis/Research Question for Research Project. Outline the purpose of the study using specific aims, hypotheses and/or research questions. This section should not repeat the purpose outlined in the RFP; rather it should be specific to the data points and proposed analysis of existing data.
- B. Background/Review of Literature/Theoretical Discussion/Gaps in Knowledge. Succinctly summarize the problem or concern and theory for which the study is based, leading up to how the proposed analyses of existing data will address the gap or concern.
- C. Research Plan/Methodology. Describe the research plan including the data set you will be using for the analyses (how it was obtained, permission to access the data, sample, setting, etc.). Also include a description of how you have ascertained the rigor and accuracy of the existing data; as well the appropriate sample size for this study. Describe the specific data points that will be analyzed. Be very clear which of the required school nurse sensitive data points (as listed above) are being used and the analyses that will be performed to answer the research question or test the hypothesis. Include evidence as justification for the inclusion of the structure and process data points (3S model) that are appropriate for the school nurse sensitive indicators you have identified.

Also include a proposed schedule for completing the major steps of the study. The

analysis must begin in 1 year, and the write up and presentation completed in 2 years of when the funds are awarded.

Suggested outline for the study methodology:

- I. Design (analysis of existing data)
 - II. Sample/Setting/Procedures (context of the data being used; power analysis for appropriate sample size. Include evidence such as a letter on organization letterhead put in the appendix of the application that you have been granted access to the data.)
 - III. Data Collection (how data was collected, including assurances of rigor)
 - IV. Data Analysis (explanation and rationale of what analysis will be performed)
 - V. Timeline (schedule for obtaining and analyzing data, as well as writing manuscript and disseminating findings)
 - VI. Brief budget overview. Include the total amount sought and a budget breakdown by key categories and include other funding for the project. No names of the research team or their institutions should be included in this brief overview.
- D. Significance to School Nursing. Describe how the proposed analysis of existing data is significant in addressing student health and advancing the profession of school nursing.

Additional Information: In addition to the narrative, include a budget and description of the research team qualifications:

- E. Budget. Include an itemized budget and brief budget narrative. The funds may be used for applicant's release time for purpose of the research, statistical services, travel expenses, or other appropriate expenses directly related to the research project. Purchase of equipment is not an allowable cost. Up to 10% of direct costs can be accounted in the "other costs" category. Other costs may include, but are not limited to, expenditures that are specifically associated to the project's performance.
- F. Research Team Qualifications: Qualifications of researcher and/or member(s) of the research team (including experience analyzing existing data). Include information, if applicable, of how this research is interdisciplinary; and how this research connects with a university or other research focused entity in the community. Include CVs or biosketches (less than 5 pages) of main (PI, Co-PI) research team members.

SUBMISSION AND DEADLINE INSTRUCTIONS

Research proposals must be emailed in one email that includes two pdf documents: one file containing the narrative (A-D) and a separate pdf containing the cover page (form 201) and 'additional information (E and F). Emails to awards@nasn.org with the subject line: Research application –RFP Existing Data Analysis.

Applications must be emailed no later than **Oct 31, 2021 11:59pmEST.**

Faxed and hard copies of the application are not accepted.

TERMS OF AGREEMENT

- The application will, upon receipt of award, submit a proposed 1 year budget that will determine the amount allotted at the 6 month and 1 year mark. The budget must be approved by the NASN Director of Research before disbursement of funds can occur. Funds will not be released until a letter of exemption or approval from an institutional review board is provided.
- Awardees must submit reports to NASN every 6 months and will not receive the next allotment of funding until the report is reviewed and progress approved by NASN. The report, no longer than 2 pages, will include progress of the project and request for the amount for the next 6 months.
- Money must be used within 2.5 years of the award. The grant will be announced around March 2022.

AWARD PROCESS

- Proposals will be awarded through a competitive process.
- All applications that are complete, submitted by the due date, and meet the qualifications listed and follows the required format will be read and rated by an independent review panel. The reviewers will assign a score to each application using Scoring Criteria/Ranking Sheet [Form 503]. The application(s) with the highest ranking will be considered for funding.
- Scoring criteria [as seen on Form 201] include the overall impact; and the strength and weaknesses of: study design, significance, qualifications of investigators, innovation, and quality of the dataset.
- Selected applications will be notified by the NASN President.
- NASN reserves the right to negotiate the budget and not to make the grant or award if negotiations are unsuccessful or if no application meets minimum scoring criteria as determined by review committee.
- The decision of the independent review panel shall be final.

FORMS

- Cover page and scoring criteria for all NASN grants. [Form 201](#)
- NASN Research Grant for Funding of Proposed Research Checklist for Applicant's Use: [Form 203](#)
- Sample Research Memorandum of Agreement: [Form 212](#)

RESOURCES

- NASN's [Framework for 21st Century School Nursing Practice](#)
- Wolfe, L.C., Maughan, E.D., & Bergren, M.D. (2019). [Introducing the 3S \(Student-School Nurse-School Community\) Model](#). *NASN School Nurse*, 34(1).
<https://doi.org/10.1177/1942602X18814233>

QUESTIONS

Please send questions of clarification regarding this RFP to: data.research@nasn.org.
(note that this is a different email than where applications are submitted.)

NASN does not provide critiques on specific applications before submission.

REFERENCES

- Best, N., Nichols, A.O., Oppewal, S., Pierre-Louis, B. Waller, A.E., Zomorodi, M., & Travers, D. (2021). An appraisal of school nurse health services and programs in North Carolina public schools, 2006-2016. *Journal of School Nursing*, 37(3), 146-156.
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- Donabedian, A. (2005 (reprinted from 1966)). Evaluating the quality of medical care. *The Milbank Quarterly*, 83, 691-729.
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- Lear , J.G. (2007). Health at schools: A hidden health care system emerges from the shadows. *Health Affairs*, 26(2), 409-419. doi.org/10.1377/hlthaff.26.2.409
- Moricca, M. L. et al. (2013). School asthma screening and case management: Attendance and learning outcomes. *Journal of School Nursing*, 29(2), 104-112. doi: 10.1177/1059840512452668
- Pennington, N & Delaney, E (2008). The number of students sent home by school nurses compared to unlicensed personnel. *Journal of School Nursing*, 24: 290 – 297. doi: 10.1177/1059840508322382
- Salmon, D.A. et al. (2005). Knowledge attitudes and beliefs of school nurses and personnel and association with nonmedical immunization exemptions. *Pediatrics*, 113, e552-e559.
- Schroeder, K., Young, A., Adman, G., Ashmeade, A.M., Bonas, E., Day, S.E.& Konty, K. (2021). The association of school nurse workload with student health and academic

outcomes: A cross-sectional study. *The Journal of School Nursing*, online first.

<https://doi.org/10.1177/10598405211012957>

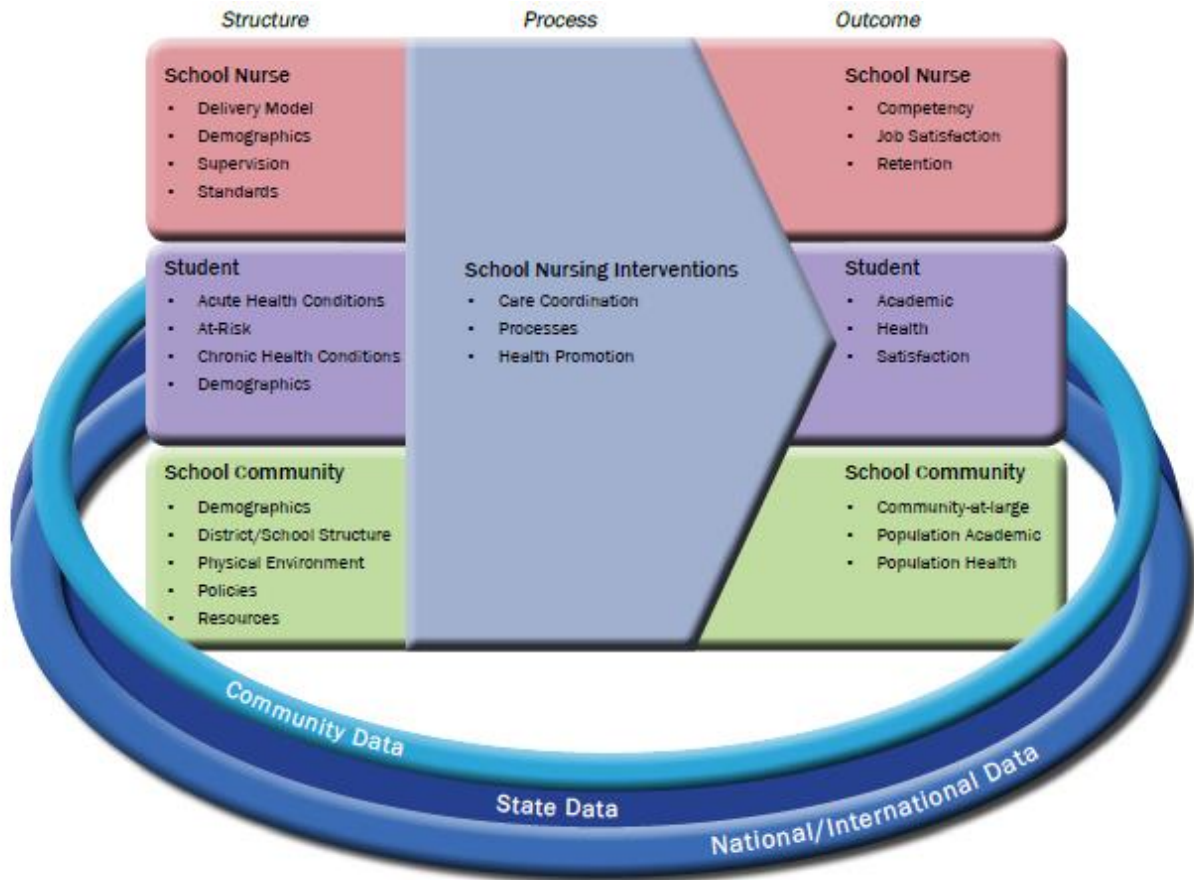
Wang, L.Y, Vernon-Smile, M., Gapinski, M.A., Desisto, M., Maughan, E., & Sheetz, A. (2014). Cost-benefit study of school nursing services. *Journal of the American Medical Association (JAMA) Pediatrics*, 168(7), 642-648. doi:10.1001/jamapediatrics.2013.5441

Wolfe, L.C., Maughan, E.D., & Bergren, M.D. (2019). [Introducing the 3S \(Student-School Nurse-School Community\) Model](#). *NASN School Nurse*, 34(1).

<https://doi.org/10.1177/1942602X18814233>

APPENDIX A

3S (Student-School Nurse-School Community) Model



APPENDIX B

Definitions of School Nurse Sensitive Indicators

Indicator	Definition	Numerator	Denominator	Reference
Chronic Absenteeism	Missing 10% of school year; 3 or more days/month. Includes excused, unexcused and withdrawal	Number of students chronically absent	Total student enrollment	Attendance works. (n.d.). https://www.attendanceworks.org/chronic-absence/the-problem/ Attendance Works. (2016). Key research: Why attendance matters for achievement and how interventions can help. Retrieved from https://awareness.attendanceworks.org/wp-content/uploads/Research2016.pdf
Early Dismissal	A health-related event during the school day that required a student to leave school before the end of the school day.	Number of students dismissed for a health related event, illness or injury (excludes previously scheduled routine health and dental visits)	Total student enrollment	Pennington, N & Delaney, E (2008). The number of students sent home by school nurses compared to unlicensed personnel. <i>Journal of School Nursing, 24: 290 - 297.</i> Wyman, L. (2005). Comparing the number of ill or injured students who are released early from school by school nursing and non-nursing personnel. <i>Journal of School Nursing, 21(6), 350-355.</i>
Seat Time	The time (measured in minutes) students were available in school to learn or to access support services.	Seat time calculated by subtracting from the total time the student entered the health/nurses' office and any of the following: returned to	Total number of hours students are in school learning and accessing support services	Van Cura, M. (2010). The relationship between school-based health centers, rates of early dismissal from school, and loss of seat time. <i>Journal of School Health, 80, 371 - 377.</i> http://www.ncbi.nlm.nih.gov/pubmed/20618619

		class or received an early dismissal, return to class, and was then sent home or to another health care provider from total number of hours of student time in the school setting learning or accessing support services		
Health Office Visits	<p>The percentage of students enrolled in the school seen in the school health office/health encounter</p> <p>Do not include mass health screenings or routine medication administration.</p>	The number of discrete encounters	Total number of student enrollment	<p>Joost, J.C., Grossman, L.S., McCarter, R.J., Verhulst, S.J., Wisnted,-Hall, D., & Mehl, R. (1993). Predictors of frequent middle school health room use. <i>Developmental and Behavioral Pediatrics</i>, 14, 259-263.</p> <p>Shannon, R.A., Bergren, M.D. & Matthews, A. (2010). Frequent visitors: Somatization in school-aged children and implications for school nurses. <i>Journal of School Nursing</i>, 26, 169 - 182. doi: 10.1177/1059840509356777</p> <p>Fleming, R. (2011). Use of school nurse services among poor ethnic minority students in the urban Pacific Northwest. <i>Public Health Nursing</i>, 28(4), pp. 308-316.</p>

Indicator	Definition	Numerator	Denominator	Reference
Immunization Rate	The percentage of students fully immunized, along with the percentage of students with personal waivers.	<p>The reported number of students fully immunized per state requirement (not including students with waivers)</p> <p>The number of students compliant with state immunization requirements for school attendance</p>	Total number of student enrollment	<p>Salmon, D. A., Omer, S. B., Moulton, L. H., Stokley, S., deHart, M. P., Lett, S., Norman, B., Teret, S. & Halsey, N. A. (2005). Exemptions to school immunization requirements: the role of school-level requirements, policies, and procedures. <i>American Journal of Public Health</i>, 95: 436-440.</p> <p>Salmon, D. A., Moulton, L. H., Omer, S. B., Chace, L. M., Klassen, A., Talbien, P. & Halsey, N. A. (2004). Knowledge attitudes and beliefs of school nurses and personnel and association with nonmedical immunization exemptions, <i>Pediatrics</i>, 113, e 552 - e559</p>
Medication Accuracy	A preventable event that may cause or lead to inappropriate medication use while the medication is in the control of the school. Exclusion-self-administer Inclusion-UAP	<p>Number of doses included in the denominator that involve a medication error</p> <p><i>Types of errors to be included: missed dose, wrong, dose, wrong medication, wrong student and no documentation of administration</i></p>	Number of doses of medication that are scheduled to be administered school personnel in one day	<p><modified>National Coordinating Council for Medication Error Reporting and Prevention. (2012) <i>About Medication Errors</i>. Retrieved from https://www.nccmerp.org/about-medication-errors</p> <p>McCarthy, AM, Kelly, MW, & Reed, D. (2000). Medication administration practices of school nurses. <i>Journal of School Health</i>, 70(9), 371-376</p> <p>Price, JH, Dake, JA, Murnan, J, & Telljohann, SK. (2003). Elementary school secretaries' experiences and perceptions of</p>

				<p>administering prescription medication. <i>Journal of School Health, 73, 373-379.</i></p> <p>Clay, D, Farris, K, McCarthy, AM, Kelly, MW & Howarth, R (2008). Family perceptions of medication administration at school: Errors, risk factors, and consequences. <i>Journal of School Nursing, 24, 95 - 102.</i></p>
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