

SCHOOL NURSE PROGRAM DATA ASSESSMENT 2018-2019



Introduction

Since the 2007 Legislative Session, the Mississippi Department of Education (MDE) has been responsible for the administration and supervision of the school nurse program in Mississippi (MS) public schools. The program is known as the "Mary Kirkpatrick Haskell-Mary Sprayberry Public School Nurse Act of 2007" (37-14-7) or School Nurse Intervention Program. This report is intended to meet requirements of this act and to analyze the progress that is being made within MS public schools through this health services model.

This report provides specific school nurse information such as numbers and locations with comparison data. It looks at the challenges of school nurses, and data specific to the clinical aspect of school nursing. The Office of Healthy Schools directs the progress of this program by providing training, resources, partnerships, and a performance measure data summary reflected through monthly reporting. This report is made up of data reported for August 2018 through May 31, 2019.

School nurses advance the well-being, academic success, and life-long achievement of students. Their role is also critical to the health and success of teachers, as well as, contributing to the overall goals of the MDE.

School Nurses

Thanks are directed to the Mississippi State Legislature for their support of the school nurse program. The total number of nurses has decreased since the 2018 report. In Table 1 you will find trending data for 2011-2019. The MS Board of Nursing defines a "School Nurse" (SN) as a Registered Nurse (RN). The Licensed Practical Nurse (LPN) has a role in the school setting but must be supervised by an RN. Based on the Full time equivalent (FTE) data there is a positive growth (0.40) for 2019. The 2019 nurse to student ratio has improved to 1:1063 but clearly does not meet the national standard of 1:750. Only 41% of school nurses reported working within this recommended ratio. Many school nurses work on multiple campuses. The school nurse role includes managing chronic conditions thereby impacting student absenteeism and academic success. These variables should be considered when evaluating the nursing workforce needed. Mississippi does not currently have a state standard.

National Certified School Nurses

Registered nurses with a bachelor's degree or higher are eligible for a \$6,000 annual salary supplement following completion of the National Certification Examination for School Nurses (NCSN). Mississippi currently has 63 NCSN nurses with 49 eligible for the supplement. There is a cap at 35 slots for the school nurse certification supplement. There are opportunities throughout the year for school nurses to sit for the exam. School nurses that are currently enrolled in bachelor nursing programs will be eligible to sit for the certification exam within the next year. Currently there are 14 school nurses on the waiting

list for supplement; the expectation is that this list will see more growth before the end of the year.

Table 1:

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2018 | 2019 |
|--|-------------|--------|--------|--------|--------|--------|--------|--------|
| Number of Nurses | 442 | 452 | 460 | 463 | 451 | 460 | 481 | 466 |
| | 1:1110 | 1:1102 | 1:1136 | 1:1179 | 1:1112 | 1:1192 | 1:1084 | 1:1063 |
| School Districts with no | 14 | 14 | 11 | 11 | 14 | 13 | 14 | 13 |
| School Nurse | | | | | | | | |
| Registered Nurse (RN) | 409 | 420 | 420 | 423 | 457 | 456 | 452 | 448 |
| Licensed Practical Nurse (LPN) | 27 | 26 | 27 | 29 | 25 | 27 | 29 | 18 |
| Advanced Practice Nurse Nurse Practitioner (CNP) | 6 | 5 | 5 | 6 | 4 | 4 | 4 | 4 |
| Masters in Nursing (MSN) | 7 | | 6 | 8 | 10 | 8 | 10 | 10 |
| Full Time Equivalent (FTE) | 37 0 | | 432 | 433.8 | 436.03 | 441.65 | 441.25 | 441.65 |

^{*}FTE-based on RN only data

Challenges

National trends have included the elimination and or decrease in School Health Services. MS has seen this happen for some school districts. Even with an overall increase in the number of school nurses in MS, there are districts that have decreased services, or realigned services through the utilization of part-time nurses or a lesser qualified nurse category. The part-time nurse is less likely to have a commitment to the whole school community, resulting in limited ownership of school health initiatives.

School nurses (68%) participated in data collection this year which is an increase from 61% in 2018. The data reported reflects 72% of the student population. The key elements of SN data include health promotion encounters with students, incidence of chronic disease, and SN demographics. These data clusters are slightly different from previous years but will allow us to compare Mississippi's school nurse program with other states.

The number of students with chronic diseases remains at high levels resulting in a high acuity level of care needed. MS remains a state with a large student to nurse ratio at 1:1063. An improvement in this ratio has been seen since 2018. The ratio rank assessment in MS has remained consistent since 2008, including the following categories: National Standard ≥1:750 students, Vulnerable 171 ≤ 1500 students, and Extreme 1501 ≤ students. When applying this measure to our current ratio there is more work to done to move from vulnerable to the national standard. Consideration also needs to be given to the number of school campuses that a SN is assigned. Even with the challenges of ratios, campuses, and chronic diseases, school nurses continue to provide

services for students, parents and families, and school personnel, often at multiple school sites. Please find the supporting data included in this report.

School Districts Without a School Nurse

The list below indicates all districts that do not have a school nurse. The number of school districts with no school nurse has remained the same when compared to 2018 data.

The following are districts with no school nurse in the district:

- 1) Attala County School District
- 2) Booneville School District
- 3) Claiborne County School District
- 4) Coahoma County AHS
- 5) East Jasper School District
- 6) Enterprise School District
- 7) Jefferson Davis County School District
- 8) Kosciusko School District
- 9) Leland School District
- 10) Lawrence County School District
- 11) North Bolivar School District
- 12) Webster County School District
- 13) Yazoo City School District

Funding/Appropriation Options

Schools continue to use a variety of sources to fund school nurses. This diversity has been cited in national publications such as *Charting Nursing's Future-A Robert Wood Johnson Foundation publication (August 2010).* The funding streams for the school nurse program, come through legislative grants, district funds, federal funds, and specific Medicaid programs. These streams are noted below:

- District funding/MAEP funding
- Federal funding
 - Title programs
 - o IDEA
- Legislative appropriation/School Nurse Intervention Program
- Hospital/local clinic/Regional Mental Health funding
- Medicaid reimbursement
 - Mississippi Cool Kids (EPSDT)
 - School-Based Administrative Claiming (SBAC)
- Other grants

The state ratio of 1:1063 is calculated using student enrollment (469,869) and the FTE (441.65). The national standard of one school nurse for every 750 well students (1:750) is the recognized standard as agreed upon by the National Association of School Nurses and the American Academy of Pediatrics. This general ratio provides for school nursing services to be available all day, every day, for every student. Based on student enrollment, MS would need a total of 626 school nurses to reach a statewide average nurse to student ratio of 1:750. This equates to 185 additional school nurses at an approximate cost of \$9,250,000 (\$50,000 each). Careful attention to the necessity of dependable funding sources will help to sustain and improve school nursing services. The health and ultimately educational success of students are dependent on these services.

School Nurse Data

School nurses report data each month to document the responsibilities and functions of their positions. School nurses are providing educational opportunities in a variety of settings such as the classroom, staff development, parent organizations and community groups. Data show educational presentations on tobacco education (47%), alcohol/drug prevention (41%) nutrition (18%), and fitness (3%). School Nurses provided 217,145 educational presentations in the 2018-19 school year. Over all, this data indicates that the school nurse is bringing important and timely health information to students.

School nurses are called upon to be knowledgeable in identifying and addressing physical, behavioral, and mental health issues at school. As part of addressing student concerns, school nurses reported 36,289 encounters related to chronic absenteeism in 2018-19. A common behavioral health issue addressed in MS schools is ADD/ADHD. The data show an increase in the diagnosis of ADD/ADHD from 2018 (33%) to 2019 (36%). Nursing interventions for these students include medical referrals, planning and implementation of IEP's, awareness education, and management of prescribed medication.

The data continues to show an alarming number of encounters with students to manage chronic diseases. The special procedures category notes the number of student visits requiring a specific procedure. Diabetes accounts for 63% of the encounters recorded which is a decrease of 4% from 2018 and an increase of 14% since 2008. Other procedures include catheterizations, gastric tube feedings, and tracheostomy care.

Asthma and Diabetes require school nurse expertise and management in the school setting. There were 16,840 diagnosis of chronic conditions in the 2019 data. Asthma is reported at 36% of the diagnosed chronic conditions with diabetes at 2.3%. The percentage of diabetes associated procedures is 63% while the percentage of asthma related procedures is 13.7% This shows a converse relationship to the percentage of students with a diagnosis of diabetes versus asthma. Both asthma and diabetes require special nursing management that could be over looked because of the lower numbers of students or procedures. When considering the work of the school nurse both student numbers and procedure numbers should be compiled to determine student acuity levels.

Medications administered during school were categorized into routine, as needed/over the counter, and emergency medications. Data show routine medications (82%) as the largest category of medications given at school. Followed by as needed/over the counter (16%) and emergency (1%). The emergency category is closely connected to student disposition data with >1% 911 activations.

Of the 164,017 health screenings preformed the following results were reported: Vision 38%, hearing at 28%, and dental at 8%. Vision is the number one educational health disparity identified by Centers for Disease Control and Prevention.

The data collection reported by school nurses is intended to describe the many functions of a school nurse. During the 2018-19 school year there were 1,688,917 clinical encounters,164,017 screening encounters, and 217,145 educational presentations. Each school nurse in MS has touched the lives of 4687 students.

This data verifies that school nurses work diligently regardless of the challenges of high ratio and multiple school sites, to impact the health of the students they serve. They are a necessary component to student success in the classroom and beyond.

The information included in this report was compiled through information submitted through the Mississippi Student Information System (MSIS), the MS School Nurse Data Collection program, and telephone interviews with school district personnel. Information has been considered for all school districts.