A Baseline Assessment of the District of Columbia School Health Nursing Program

ANITA CHANDRA, SHANNAH THARP-TAYLOR, AMBER PRICE, PRIYA SHARMA, TEAGUE RUDER, DEBRA LOTSTEIN, CAROLE ROAN GRESENZ, NICOLE LURIE

WR-630
October 2008
Submitted to: D.C. Department of Health

This product is part of the RAND Health working paper series. RAND working papers are intended to share researchers’ latest findings and to solicit additional peer review. This paper has been peer reviewed but not edited. Unless otherwise indicated, working papers can be quoted and cited without permission of the author, provided the source is clearly referred to as a working paper. RAND’s publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark.
EXECUTIVE SUMMARY

Health services provided in schools can address a key gap in children’s health care by screening for health issues early and providing a convenient and accessible place for acute illness services, chronic disease management during school hours, and health education. Coordinated school health programs that build on nursing services can further these efforts by using prevention and education strategies to address the types of health issues that often impede student learning.

Currently, the core of the school health program in the District of Columbia (D.C.) is the School Health Nursing Program (D.C. SHNP). The D.C. SHNP is a program of the D.C. Department of Health. It is currently coordinated by the Children’s National Medical Center (CNMC) under the auspices of their office, Children’s School Services (CSS). While there are some data describing the types of nursing services delivered, we have not had the opportunity to examine the full extent of the program’s offerings prior to this study. This report documents findings from a baseline assessment, which will set the stage for a longer-term evaluation of how the D.C. SHNP is being implemented and whether the program is having a positive impact on students and the school community.

Specifically, a comprehensive evaluation of the D.C. SHNP includes gathering information on: a) the services that youth access and whether the services used meet their health needs; b) the barriers and facilitators to care as articulated by students, parents, and other key stakeholders; c) the challenges confronted by school nurses to provide services; d) the perceived quality of the care that is offered as reported by students, parents, and school staff; and e) the resources that are invested in the program and how these resources map to improvements in youth health outcomes.

The baseline assessment presented in this report includes an examination of:

- stakeholder perspectives on gaps in student health care and how the D.C. SHNP should contribute,
- the linkages between school nurses and community health services, and
- the essential features of a comprehensive school health program including the roles and responsibilities of school nurses.

Methods

The baseline assessment includes three data collection strategies: 1) a review of existing data on the D.C. SHNP using CSS information from the last two years of available data (2005-2006; 2006-2007), 2) stakeholder interviews, and 3) stakeholder surveys. CSS data were analyzed to obtain a general understanding of services provided and to assess how the provision of school health service matches perceived need for services by geographic area and school level. We also surveyed students (5th, 7th, 9th, and 11th), parents, school staff members, and nurses about use of nursing services, satisfaction with care, facilitators and barriers to obtaining or delivering care, and ideas for program improvement. Finally, key informant interviews with nurses, teachers, and principals provided a targeted, in-depth examination of how nurses and school staff view the D.C. SHNP, identified facilitators and barriers to delivering services, and offered
recommendations for program improvement. In addition, we interviewed community health providers about their relationships with school nurses and their roles in health service referrals. At the conclusion of this report, we provide a plan for a longer-term, outcomes-based evaluation.

**Key Findings**

In the next sections, we highlight key findings from the nursing data analysis. In many cases, our findings are presented by Ward, based on the fact that civic and policy discussion of issues in D.C. is commonly presented in this way. Additionally, analyses of health need using data from the National Survey of Children’s Health (NSCH) suggest that unmet health need varies by Ward and supports Ward as both a statistically and policy relevant descriptor. We know from prior work (Lurie et al., 2008) that residents of Ward 3 have the highest incomes, and Wards 7 and 8 have the greatest percentages of residents living in poverty (22 and 33 percent, respectively) and the lowest median family incomes. Approximately one-third of residents of Wards 7 and 8 are children.

In addition, we summarize results from our stakeholder surveys and interviews with respect to experience with nursing services and facilitators and barriers to care.

**D.C. SHNP trends in service provision**

As part of the D.C. SHNP, school nurses provide health services that include 1) assessment and care for acute illness or injury, health education and counseling, medication administration, and treatment for students with medical conditions; 2) hearing, vision, and scoliosis screenings and referrals; 3) immunization surveillance; 4) promotion of a healthy school environment; and 5) liaison services between school staff, parents, and community health providers.

Rates of health suite visits were greater among middle school students compared to other grade levels. For elementary school students, common reasons for health suite visits included ear, nose, and throat (ENT) difficulties; gastrointestinal (GI) difficulties, and skin issues. Middle school students reported far more GI issues; and high school students presented with issues that were diverse and could not be categorized into existing groups. There were no significant differences by month in the illnesses presented, although October and November appeared to be months during which there were more frequent GI related visits by high school students.

The rate of health suite visits varied by ward and school level, as elementary school use was greater in Wards 2 and 3 and visits among older students were greater in Wards 1 and 5. For elementary and middle school visits, most students were returned to class after visiting the nurse. Parents were called slightly more often in high schools compared with elementary and middle schools. In general, referrals for outside care were more common among elementary school students, yet there was significant variation across wards. Referrals for community health services were more frequent in Wards 1, 4, and 7, particularly for middle school students in Wards 4 and 7.

The overall number of health education session that students received as part of the D.C. SHNP was somewhat low, though a clear directive on the required number of sessions is lacking.
Health education sessions were more common among elementary schools in Wards 2 and 4. In Wards 1 and 4, many of these health education visits were related to mental or behavioral health issues. Nutrition sessions were more frequent in elementary schools in Ward 2.

**Perspectives and overall experience with school nursing**

**Students.** Respondents generally reported good experiences with the school nurse and high satisfaction with the quality of the care they received in the school health suite; however, some students reported a desire for access to additional resources. For example, students shared frustrations that the nurse was unable to provide over-the-counter medicine. Middle and high school students also expressed dissatisfaction with the size of cots or beds in the health suite and the limited number of resting places in the suites. Students also wanted more health information materials and health education sessions with the nurse. Fifth grade students requested assistance on nutrition and sexual health issues, while middle and high school students asked for more help with nutrition and mental health concerns.

**Parents.** While parents were generally pleased with their children’s care, they noted some dissatisfaction. Namely, they expressed concern about the opportunities to obtain referrals for community health providers from nurses and the nurses’ abilities to help with their children’s medications (e.g., limitations on administering over-the-counter medication; requirements for keeping prescriptions current with the nurse).

**School staff.** School staff members were supportive of nursing services. For example, teachers reported the benefits of being able to send students to the school nurse when students were experiencing mental health or behavioral problems. However, principals and teachers also were unclear about the health services nurses provided and reported some dissatisfaction with the overall program. For example, while staff members overwhelmingly reported a need for the D.C. SHNP and satisfaction with the services that their students received, approximately 40% of school staff rated the overall program as only fair or poor. Some of this dissatisfaction was related to the perception that the scope of services provided by various nurses was too limited and that the nurse was not always available during peak times for student needs (e.g., lunch, recess). Teachers also reported an interest in having nurses involved in more health education and promotion activities as an expansion of nurses’ current services. An undercurrent to principals’ dissatisfaction entailed a feeling that principals did not have adequate input into the services their schools received or a platform for contributing to their nurses’ performance evaluations.

**Nurses.** Job satisfaction was quite high among D.C. SHNP nurses. Few nurses reported negative factors related to their job roles or responsibilities. However, nurses did share concerns about their ability to follow-up on student referrals for community health services, and their ability to communicate with parents. Further, they expressed concerns about their opportunities to provide health education for students and also the quality of the health suites’ equipment and physical space.
**Facilitators and barriers to obtaining or delivering services**

**Students.** Students in our sample reported that easy access to the nurse and a positive experience when in the health suites were important facilitators for visiting the school nurse. However, the health suite schedule (e.g., uncovered time during nurse lunch break and after-school activities) was a barrier for some students.

**Parents.** Parents appreciated that school nursing services were being provided. They also indicated that a key reason for using nurses’ services was their trust in the program because it is located within the schools. They also appreciated the convenience of services so that their children did not have to miss classes to visit an outside provider.

**Nurses.** Nurse also cited convenience for students as a facilitator to service use. However, nurses reported some difficulties in providing health services. Nurses discussed the challenges of providing medication, including the medicine renewal process, even when they had the clinical expertise. Other challenges included poorly outfitted facilities that were not conducive to quality care and a need for more appropriate health education materials (e.g., brochures, videos/DVDs). Nurses reported that administrative time, while important, distracted them from providing care. In response to this concern, many nurses requested assistance with non-clinical tasks so they could focus on tasks requiring their expertise. Further, nurses reported that they were not able to fully use technology to communicate quickly with community providers and nurse administrators (e.g., email) or to utilize the internet to collect intellectual resources that could assist nurses in delivering care because they lacked timely computer and internet support. Communicating in a multi-lingual city was also a challenge for some nurses who reported difficulties in conversing with parents to help them to negotiate the health care system.

Nurses also reported that communication with community providers was often challenging, particularly in terms of follow-up; however both the community providers and nursing staff reported interest in improving their relationships. Nurses requested training in core areas, specifically mental health, public health surveillance, general health education, and assistance with referrals to health services.

**Community health providers.** Community health providers reported similar concerns as nurses regarding the challenges to completing referrals; and they indicated that they would like opportunities to engage the school nurses in their neighborhoods as a start to providing better continuity of care. Some providers reported that once they completed services in response to a referral from a school nurse, they were unable to make a referral back to the nurse for follow-up. Community health providers also shared an interest in receiving information on their clients’ mental health or behavioral issues, follow-up information on services provided during school, and information of any chronic disease management that may be occurring during school hours. Providers reported that although they may not always be able to attend meetings such as Individualized Education Plan (IEP) sessions, they would like to submit recommendations or other input.
Recommendations

This assessment generated several recommendations in the areas of nursing service changes, facility upgrades, program awareness, nurse training and support, and other school health enhancements.

Nursing service changes or expansions

1. Support and encourage flexible lunch hours so that nurses’ schedules correspond better with student demand.
2. Take advantage of nurse practitioners within the D.C. SHNP who are licensed to give medicines or rapid strep tests with a standing order from a doctor.
3. Reduce the number of forms that nurses must fill out throughout the day to those that are completely necessary.
4. Change medication renewal schedule to renewal on an annual basis and require only a note/letter from the doctor specifying use and expiration date.
5. If hiring a second referral coordinator, consider a bilingual applicant. Alternatively, encourage schools to identify a school staff member proficient in parents’ native language as a liaison for students health needs.
6. Consider hiring two clerks who will be shared among the nursing staff group in order to help nurse managers with filing and other administrative tasks.

Facilities improvements

1. Continue to conduct regular quality assessment of the physical space, equipment and supplies of health suites; and include nurses in the design of new suites or the remodeling of existing ones.
2. Purchase kid-friendly manuals and handouts as well as modern videos/DVDs and multimedia materials on adolescent issues.
3. Closely monitor implementation of the information technology contract with OCTO/DCPS to ensure that all computers/fax machines/internet are properly set up and in working order.

D.C. SHNP awareness and communication with school staff members and community health providers

1. Increase school awareness about the D.C. SHNP, including explanations of the nurse role and responsibilities and information about services provided.
2. Ensure that parents are clear about the nurse role and services provided in schools.
3. Consider using email as well as face to face meetings to improve communication between nurse managers and principals.
4. Focus initially on enhancing communication between nurses and community providers in the areas surrounding schools.
5. Conduct an in-depth assessment to determine the reasons for parental non-compliance with health requests for paperwork and referral follow-up (e.g., poor communication, lack of understanding about the value of the referral etc.).
Nurse training and related support

1. Support nurses in linkages with community health providers. Provide contact information for nurses and community health providers and a systematic process for introducing these professionals to their counterpart within each ward/neighborhood/area code.
2. Provide training for nurses in improving mental health skills and public health surveillance activities.
3. Provide additional training for nurses on how to deliver age-appropriate health education.

Other school health enhancements

1. Partner with community health providers to ensure that students obtain adequate well-child care.
2. Expand health education offerings, particularly in the areas of nutrition, mental health, and sexual health.
3. Engage school staff members and the nurse (e.g., during a staff meeting) in conversations about which priority health topics to address and additional opportunities to provide health education services.