



A REVIEW OF THE SCHOOL HEALTH SERVICES PROGRAM

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EXECUTIVE SUMMARY

Across the country, schools have become an important place for coordinating efforts to achieve education and health goals. State law assigns the County Government and Board of Education shared responsibility for providing school-based health services. In Montgomery County, the Department of Health and Human Services (DHHS) funds and staffs the School Health Services program. The program's FY 98 operating budget of \$8.9 million represents 9% of DHHS' General Fund budget.

School Health staff provide an important set of services to the school community, often working in partnership with other County, MCPS, and private sector staff. Factors contributing to the demand for School Health Services include: more students and schools; more students with special health needs; and a significant number of students without health insurance.

Services provided by School Health staff include emergency care, health assessments, communicable disease control, and health education and counseling. For some students, staff also administer medications, perform prescribed treatments, assist with activities of daily living, and facilitate access to health care. School Health staff also participate in some inter-agency programs, including Linkages to Learning and Head Start.

More than 90% of School Health staff are school-based School Community Health Nurses and Health Room Technicians. Between FY 96-98, the ratio of students to technicians remained the same; the ratio of students to school nurses increased 3.5%. This year's budget supports technicians for six hours per day in all schools except for 29 elementary schools.

While it is commonly believed that health and education are inextricably linked, there is little empirical evidence to document the link between health services and educational outcomes. At present, School Health staff manually collect activity data, which track the volume of work, but do not measure the quality of the services performed, the amount of time spent, or the health and educational outcomes. Recognizing this limitation, School Health is in the process of re-designing the program's data collection system.

To improve School Health Service operations and enhance the Council's understanding of the program, OLO recommends:

- The County Government and MCPS develop an inter-agency memorandum of understanding on School Health Services that identifies the respective agency roles and establishes an ongoing process for resolving issues between the two agencies. Examples include health room coverage and meeting health-related needs of students receiving special education services.
- As part of the annual budget process, the Council should receive an improved package of information about School Health program needs and performance.
- The Council should support DHHS' initiative to re-design the data collection system for School Health Services.
- The Council should discuss a number of school health specific issues with agency staff, including: hearing/vision screening; health room facilities; and the future relationship between School Health Services and the Linkages to Learning program.

I. AUTHORITY, SCOPE, METHODOLOGY, AND ACKNOWLEDGMENTS

A. Authority

Council Resolution No. 13-939, FY 1998 Work Program of the Office of Legislative Oversight, adopted by the County Council on June 24, 1997.

B. Scope

This Office of Legislative Oversight project addresses questions raised by the Council's Health and Human Services Committee about the County's School Health Services program. The \$8.9 million allocated for School Health Services in the County Government's approved FY 98 operating budget represents almost nine percent of the Department of Health and Human Services (DHHS) total approved General Fund budget. The scope of this OLO project was to:

- Describe the legal and regulatory framework for School Health Services;
- Compile available data on student health needs and program activities;
- Review program funding and staffing;
- Follow up to see what actually occurred during FY 97 and FY 98 in terms of School Health Services resource allocation and school coverage;
- Develop a matrix that describes how the School Health Program relates to other DHHS and MCPS activities;
- Compile information on the space allocated for health services in the schools; and
- Recommend a data collection/reporting system for continued tracking of resource allocation and service delivery of School Health Services.

C. Methodology

This project was conducted by Karen Orlansky, Director, Office of Legislative Oversight (OLO) and Jennifer Kimball, OLO Research Assistant. Joan Planell, Senior Legislative Analyst for the County Council consulted with OLO throughout the project.

The research design included: document reviews; library and Internet research of journal articles; analysis of program data; site visits, focus groups with selected groups of DHHS and MCPS staff; and individual interviews with other agency staff. OLO also met

with representatives from the County Government's Commission on Health and the MCPS' Medical Advisory Committee. In addition, OLO used the results of a survey of health conditions conducted by School Health Services staff in November 1997.

D. Acknowledgments

The Office of Legislative Oversight acknowledges the full cooperation and support from the Department of Health and Human Services (DHHS) and Montgomery County Public Schools (MCPS). In particular, OLO appreciates the assistance provided by Charles Short, Director of DHHS and many other DHHS staff members including: Toko Ackerman, Dr. Carol Garvey, Bennett Connelly, Lynn Frank, Daryl Plevy, Pat Horton, Richard Helfrich, and several members of the Commission on Health. Extra special thanks are owed to Judith Covich, School Health Administrator and numerous members of the School Health Services program staff, who took many hours out of their demanding schedules to answer our questions. OLO also thanks Thomas Gates from the Office of Management and Budget for his contributions.

OLO also appreciates the assistance provided by Montgomery County Public Schools staff members. OLO owes special thanks to Jerrilyn Andrews for arranging our series of focus groups with principals, and appreciates the principals for their participation and valuable input. OLO also appreciates the input provided by Robin Confino, Larry Bowers, Steve Seleznow, Mary Helen Smith, Raymond Bryant, Russell Henke, Robin King, Kathleen Lazor, Kathy McGuire, Rita Rumbaugh, Pamela Prue, Lois Bell, Janice McCall, Marshall Spatz, and members of the Medical Advisory Committee.

Finally, Joan Planell, Senior Legislative Analyst for the County Council deserves special recognition for the advice and guidance she provided to us throughout the study period.

II. ORGANIZATION OF REPORT

This report is organized as follows:

Chapter III, OVERVIEW OF SCHOOL HEALTH SERVICES, provides a national perspective on the connection between health and education; explains the legal framework for School Health Services, and describes how the Department of Health and Human Services (DHHS) currently defines the program's mission and goals.

Chapter IV, HEALTH-RELATED NEEDS OF THE COUNTY'S CHILDREN, presents available data on the health needs of the County's children based on the Public Health Officer's 1997 status report, a survey of health conditions conducted by School Health Services' in November 1997, and some data compiled by MCPS.

Chapter V, PROGRAM DATA, summarizes the services provided by School Health Services staff and presents available quantitative data on health room activities. This chapter concludes with general information on the School Health Services' current and planned data collection system.

Chapter VI, FUNDING AND STAFFING, examines the School Health Services program budget from FY 96 to FY 98. This chapter includes a review of DHHS budget allocations to School Health, a staffing analysis, and information about the in-kind contributions of space and supplies from MCPS.

Chapter VII, MATRIX OF RELATED PROGRAMS AND SERVICES, describes how the School Health Services program relates to multiple other programs in DHHS and MCPS.

Chapter VIII, FEEDBACK, reports the most commonly held views reported by those interviewed throughout the course of this study.

Chapter IX, FINDINGS AND RECOMMENDATIONS, summarizes the major findings of this report and sets forth OLO's recommendations.

Chapter X, AGENCY COMMENTS ON DRAFT REPORT, contains the written comments received from the County Government's Chief Administrative Officer and the Superintendent of Schools on a final draft of this report.

III. OVERVIEW OF SCHOOL HEALTH SERVICES

A. The National Perspective

Across the country, schools have become an important place for coordinating efforts to achieve health and education goals. Traditionally, the school health program has included three components:

- health education;
- health services; and
- health environment.

Many of the goals outlined in Healthy People 2000 (the nation's health agenda), and Goals 2000 (the nation's education agenda) recognize the relationship between health and education. For example, one of the Healthy People 2000 objectives is to, "Increase to at least 75 percent the proportion of the nation's elementary and secondary schools that provide planned and sequential K-12 quality school health education." (Objective 8.4)

Another objective cited in Healthy People 2000 directly connects health and education. Objective 13.12 is to, "Increase to at least 90 percent the proportion of all children entering school programs for the first time who have received an oral health screening, referral and follow-up for necessary diagnostic, preventive and treatment services."

Similarly, there are numerous national education goals set forth in Goals 2000 that relate health to education. For example, the first education goal is that:

By the year 2000, all children in America will start school ready to learn . . . children will receive the nutrition, physical activity experiences, and health care needed to arrive at school with healthy minds and bodies. (Goals 2000)

The seventh national education goal also makes a further connection among education, good health, and public safety, by stating that: "By the year 2000, every school will be free of drugs, violence, and the presence of unauthorized firearms and alcohol and will offer a disciplined environment conducive to learning."

While most people believe that health and education are inextricably linked, according to the US Department of Health and Human Services, Public Health Service, there is little empirical evidence from well-designed evaluations to document the link between health and educational outcomes. There are a number of efforts currently underway to address the lack of this critical evidence. Appendix A includes an abstract from a report on evaluating educational outcomes of school health programs.

As part of its School Health Policies and Programs Study (SHPPS), the Centers for Disease Control and Prevention (CDC) identify the following eight interactive components of a more comprehensive school health program:

- health education;
- physical education;
- health services;
- food service;
- school counseling and social services;
- integrated school and community efforts;
- faculty and staff health promotion; and
- school environment.

The CDC designed SHPPS to survey various components of school health programs at the state, district, school and classroom levels. Appendix B contains an article summarizing key findings from the most recently published survey results.

B. State of Maryland Mandate for School Health Program

State law includes a general requirement for a school health program, that is consistent with the general approach taken by many other jurisdictions. Specifically, Education Article, Subtitle 4, Section 7-401(a) mandates that each county board of education with the assistance of the county health department provide:

- adequate school health services,
- instruction in health education, and
- a healthful school environment.

Section 7-401(b) further requires that the State Department of Education and Department of Health and Mental Hygiene jointly develop public standards and guidelines for school health programs; and offer assistance to the county boards and county health departments in their implementation.

Other sections of State law and associated State regulations mandate specific components of a school health program. These include State standards and reporting requirements for:

- physical examinations for students entering public school;
- immunizations for students entering public school;
- hearing and vision screening for all students in public and private schools;
- scoliosis screening for all students in public school;
- dealing with communicable diseases;
- providing school health services to students with special health needs;
- emergency care procedures; and
- standards for health suites in school buildings.

In addition to the State laws that outline what a school health program must include, numerous other federal and state laws and regulations directly affect the management and operation of school health services. These legal requirements include:

- State requirements for a comprehensive health instruction program in public schools for grades K-12, including a high school graduation requirement for a health course;
- State requirements for all local school systems to provide a coordinated program of pupil services, which are defined to include guidance, pupil personnel, school psychology, and health services;
- Federal requirements for all school systems to provide a free and appropriate education for students with disabilities in the least restrictive environment to meet the students' needs, including school health services; and
- State guidelines (the Nurse Practice Act) that specify what nursing tasks can and cannot be delegated to an unlicensed individual in specific situations, including school settings.

C. The School Health Services Program in the County's Department of Health and Human Services

As outlined above, State law assigns both County Government and Montgomery County Public Schools shared responsibility for providing health services to students. The program titled "School Health Services" is funded and staffed by the County's Department of Health and Human Services (DHHS), whose adopted mission is "to foster healthy, safe, self-sufficient communities."

DHHS describes School Health Services role as carrying out the Department's mission in the school community by assuring health standards specified in Maryland law. DHHS sets forth the following goals for School Health Services:

- To prevent injury and provide first aid, emergency and crisis intervention;
- To prevent the spread of communicable disease;
- To assess health needs of students and facilitate access to health care and other human service interventions;
- To provide case management for students with chronic health conditions, drug and alcohol abuse, child abuse or neglect, depression and suicide, adolescent pregnancy, and other health conditions which place them at risk;
- To evaluate health needs of students in the placement process;
- To promote a healthy, safe environment;
- To provide health promotion and education; and
- To educate the school community about public health issues.

The County's approved FY 98 operating budget allocates \$8.9 million in DHHS to the School Health Services program. The program represents almost 9 percent of DHHS' total approved FY 98 General Fund budget, and 13.5 percent of DHHS' total workyears.

The FY 98 School Health Services budget supports 163 workyears of School Community Health Nurses and Health Room Technicians, who staff the health rooms in MCPS schools. School Health Services personnel also include five nurse managers and six administrative support staff. As later chapters will detail, the nurse managers supervise the School Community Health Nurses, who in turn are each responsible for supervising the work of one to four Health Room Technicians.

In addition to staffing the health rooms, the School Health Services program administers the health components of some inter-agency programs, including Head Start, the Infants and Toddlers Early Intervention Program, and Child Find/Developmental Evaluation Services for Children program. School Health Services staff also provide health-related services at the two Linkages/School Based Health Centers and the School Health Services Center at Rocking Horse Road Center.

D. School Health Services Works in Partnership with Others

School Health Services is an atypical County program in that the program staff are employees of one agency (County Government, DHHS), who work routinely in buildings staffed and managed by another agency (MCPS). By law, School Health Services and MCPS share responsibility for providing a broad range of school-based health services to a complex group of customers, including students, parents, other DHHS and MCPS programs, and the general public.

Other DHHS programs, along with various MCPS departments, share many of the goals adopted by School Health Services. To accomplish its mission, School Health Services must work collaboratively with these related programs and activities. Some of the key programs that School Health personnel regularly work with are funded and operated by DHHS, while others are funded and operated by MCPS.

Consistent with DHHS' efforts to integrate service delivery, School Health Services staff describe themselves as working collaboratively with other DHHS units, MCPS staff and other public and private sector programs to promote the health, safety, and self-sufficiency of the community at large.

In particular, DHHS describes School Health Services as being integrated with Community Health Services case management, access to care services, and other community health programs and initiatives. School Health Services also works in close partnership with the Communicable Disease and Epidemiology, Health Promotion and Prevention, and Protective Service units. Chapter VII contains a more detailed description of the connections between School Health and other DHHS and MCPS programs.

IV. HEALTH-RELATED NEEDS OF COUNTY CHILDREN

This chapter summarizes data about the health-related needs of the County's children based upon the Public Health Officer's April 1997 Health Status Report, a survey of student health conditions conducted in November 1997 by School Health Services, and data compiled by MCPS.

A. Public Health Officer's Health Status Report

1. General

The County's Public Health Officer provides regular status reports to the County Council sitting as the Board of Health. The Public Health Officer's April 1997 report included a Health Status Report on the County's population. The report was based on 1995 discharge data for the five Montgomery County hospitals. The data were broken down by age, gender, and race.

The Health Status Report identified asthma as the leading reason (other than being born) for hospitalizing children under the age of ten. For children two and under, other respiratory illnesses such as pneumonia and bronchitis together result in similar numbers of hospital admissions.

Other major causes of hospital admissions for children include injuries, with the type of injury varying by age. More sports injuries, for example, occur with older children. In addition, dehydration is a common problem for infants and appendicitis is a common problem for children 10-14 years old.

For adolescents age 15-17, the most frequent reasons for hospitalization in the County are drug and alcohol abuse, depression, and other emotional disorders. Pregnancy-related hospitalizations begin to appear in 10-14 year olds and increase significantly with 15-17 year olds.

The Health Officer identified six activities as appropriate public roles for the County Government in reducing hospitalizations:

- health education;
- community measures to address substance abuse;
- mental health awareness, evaluation, and treatment;
- assuring access to primary care during pregnancy and childhood;
- advocacy to reduce injuries and exposures; and
- monitoring and control of communicable diseases.

Chapter V (beginning on page 13) describes the multiple services provided by School Health Services staff. Many of the services performed by School Health play a role in all six of the activities listed by the Public Health Officer.

2. Numbers of Uninsured Children

Providing health care to indigent and working poor families continues to be a priority objective of DHHS. According to DHHS, there are approximately 26,000 uninsured children in the County below age 18.

The April 1997 Health Officer's report to the Board of Health indicated that an estimated 42,000 County children below 18 years of age are below 250 percent of poverty. Of these children:

- 16,000 fall within Medicaid income limits (federal/state funding);
- 9,000 fall within eligibility criteria for Maryland Kids Count (state funding); and
- 17,000 fall within Care for Kids income guidelines (County funding).

3. Student Participation in the Free and Reduced-Price Meals Program (FARMS)

According to research on the effects of economic hardship, the relation between low income and poor health is well established. MCPS uses data on the number of students eligible to participate in the Free and Reduced-price Meals Program as a means of tracking the number of students from low-income households.

Eligibility for the FARMS program is based on poverty guidelines established by the federal government. Over a 20-year period, from 1975 to 1995, the percent of MCPS students eligible to participate in the Free and Reduced-priced Meals program almost quadrupled, from six to 22 percent of total enrollment.

Table 1 (page 9a) shows the percent of MCPS students participating in the FARMS program between FY 91 and FY 98. The percent of participating students increased from 15.2 percent in FY 91 to 23.2 percent in FY 98.

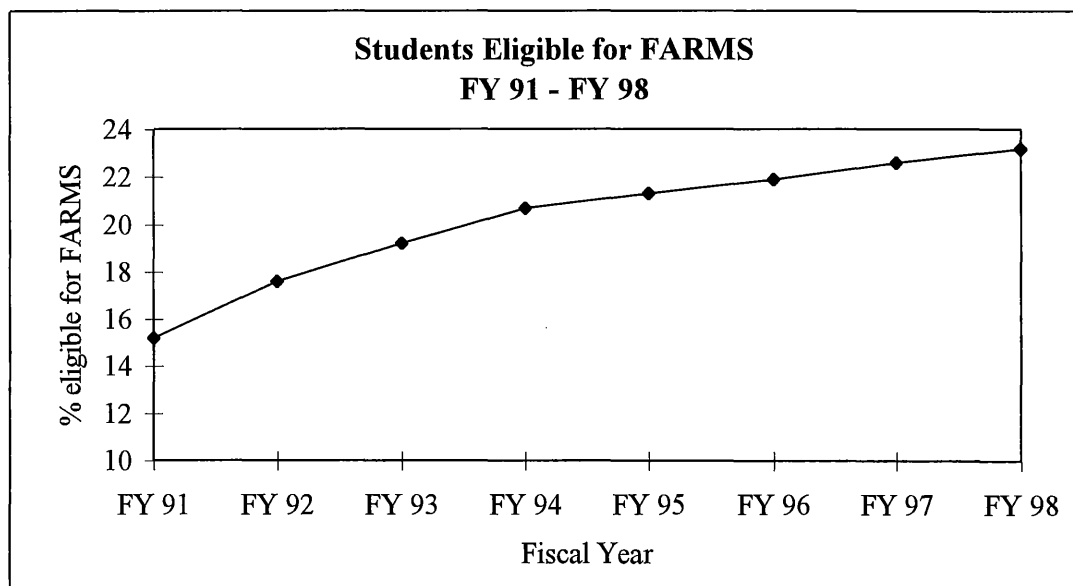
B. The School Health Services' Survey of Health Conditions

Every September, School Health Services staff compile data for each school on students with health conditions which place them at risk.¹ These students' health

¹ See pages 16-17 for a more detailed explanation of the Health Conditions list process.

Table 1
Students Eligible for Free and Reduced-Price Meals System (FARMS)
FY 1991 - FY 1998

	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98
% of Total Enrollment	15.2	17.6	19.2	20.7	21.3	21.9	22.6	23.2



Source: The Citizens Budget FY 1999, MCPS, December 1997

conditions are shared with school staff on a need to know basis so that their health needs can be met. School Health Services staff do not routinely compile systemwide data about these health conditions and historical data are not readily available.

In November 1997, School Health Services management staff initiated a survey to determine the most prevalent health conditions in the schools. Table 2 (page 10a) summarizes the results, which include responses from 161 out of 183 MCPS schools. The summary data that are available at this time indicate that asthma, attention disorders (ADD/ADHD), and allergies are the most prevalent health conditions. Other health conditions reportedly affecting at least 500 students each are: anaphylaxis, cardiac problems, headaches, and problems with vision or hearing.

At the time of this writing, School Health staff are still in the process of reviewing the data, which they intend to analyze by school level (elementary, middle, and high) as well as by cluster. In the future, School Health staff intend to update and refine this information annually and separate out the data reported for MCPS special schools.

C. Health-related Needs of Students Receiving Special Education Services

Federal law, the Individuals with Disabilities Education Act (IDEA, PL 101-476), mandates a free and appropriate education (FAPE) for students with disabilities in the least restrictive environment (LRE) to meet the students' needs. IDEA also requires the provision of "related services" to students with disabilities, from birth through age 20. These "related services" include:

- speech therapy;
- occupational therapy;
- physical therapy;
- transportation;
- mobility training;
- physiological services; and
- school health services.

The Department of Special Education (DSE) is responsible for ensuring the provision of a free and appropriate public education to MCPS students identified as disabled and needing special education services. For the 1997-98 school year, MCPS reports approximately 15,000 students (ages birth through 20) are identified as disabled and needing special education services. This year, five percent of MCPS' total student enrollment, (6,589 students), receive Intensity 4 and 5 special education services.²

² State regulations define five different categories of special education services, with "Intensity 4 and 5" being the higher level of services. Intensity 4 is where a student receives services for more than three hours per day, including special education provided by a special education teacher. Intensity 5 is where a student receives special class placement and comprehensive services for the entire school day.

Table 2
Most Prevalent Health Conditions Reported for MCPS Students
1997-1998 School Year

Health Condition	Number of students
Asthma	6,060
Allergies	4,368
ADHD	4,225
Other**	1,062
Vision	760
Anaphylaxis	696
Hearing	603
Cardiac	510
Headaches	506
Seizures	341*
Genetic Disorders	328
Blood Dyscrasias	287
Gastro-intestinal disorders	224
Communicable Disease	194
Diabetes	173
Cancer/malignancies	81
Cerebral Palsy	62*
Cystic Fibrosis	18

* Cerebral palsy and seizures were under-reported in their categories because some were counted in the "other" category.

** Other

Amputation	Eating Disorders	Malnutrition
Arthritis	Fibromyalgia	Mental Health Disorders
Bleeding Disorder	Hemiparesis	Neuromuscular Weakness
Blindness	Hydrocephalus	Obesity
Blood Clotting Disorder	Ricketts	Ostomy
Cataract	Kidney disease	Paraplegia
Cerebral Palsy	Lactose Intolerance	Post-Polio syndrome
Collagen Vascular Disease	Lead Toxicity	Scoliosis
	Lupus	Spastic Hemiplegia
Depression	Lyme Disease	Thyroid Disease
Detached Retina	Malignant Hypertension	

Source: School Health Services' survey of health conditions, November 1997, 161 of 183 schools responded to survey

According to MCPS' 1996-97 Citizens Accountability Report, national special education enrollment among students ages 6 to 17 rose at 3.5 times the rate of general education enrollment since 1987. National data also show that with early identification efforts, increasing numbers of infants, toddlers, and preschoolers are being identified for special education services.

MCPS' enrollment data reflects this trend. Table 3 (page 11a) shows MCPS' regular and special education enrollment between since FY 91. Between FY 91 and FY 98, enrollment in special education services increased 37 percent. In recent years, special education enrollment increased at a rate higher than overall enrollment. For example, between FY 97 and FY 98, regular enrollment increased 1.8 percent and Intensity 4 and 5 special education enrollment increased 5.4 percent. For FY 99, the Board of Education's recommended budget projects that Intensity 4 and 5 special education enrollment will increase by 6.6 percent (435 students).

Except for preschool students enrolled in special programs for children with developmental delays, the Department of Special Education (DSE) does not separately record and track the medical needs of students receiving special education services. However, interviews with MCPS and DHHS staff suggest that, compared to the regular student population, a larger portion of these students are likely to require some type of medical attention during the school day.

The Board of Education has endorsed "cluster-based" programming for special education services. The Superintendent's Recommended FY 99 budget reports that the Department of Special Education plans to develop programs that enable 90 percent of all students who need Intensity 4 and 5 special education services to receive those services in their home school cluster. The emphasis on cluster-based programming has resulted in fewer students attending separate schools (e.g., Longview and Stephen Knolls) to receive special education services, and an increase in resource teacher and special education assistant positions assigned to home schools.

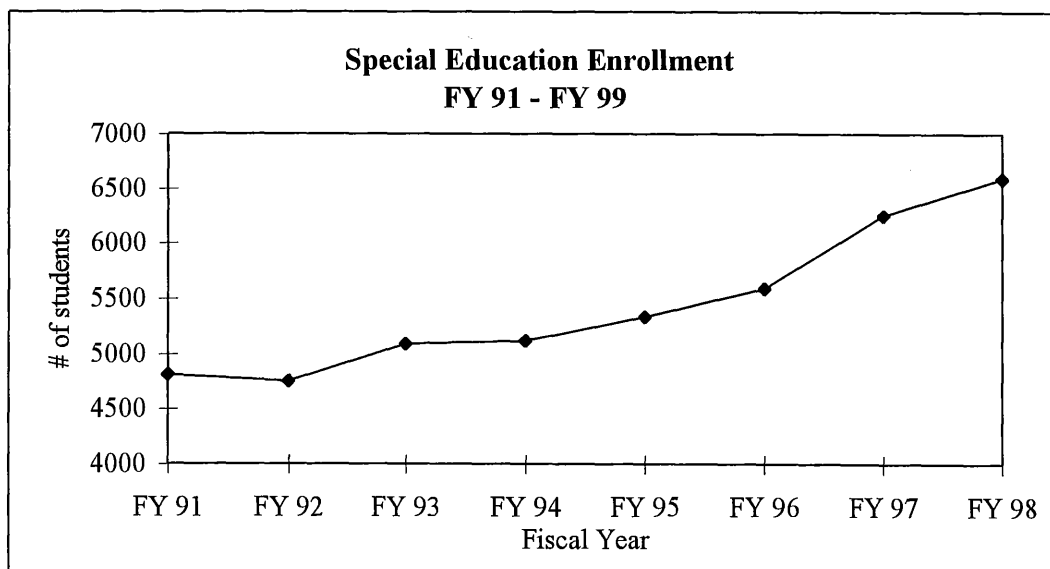
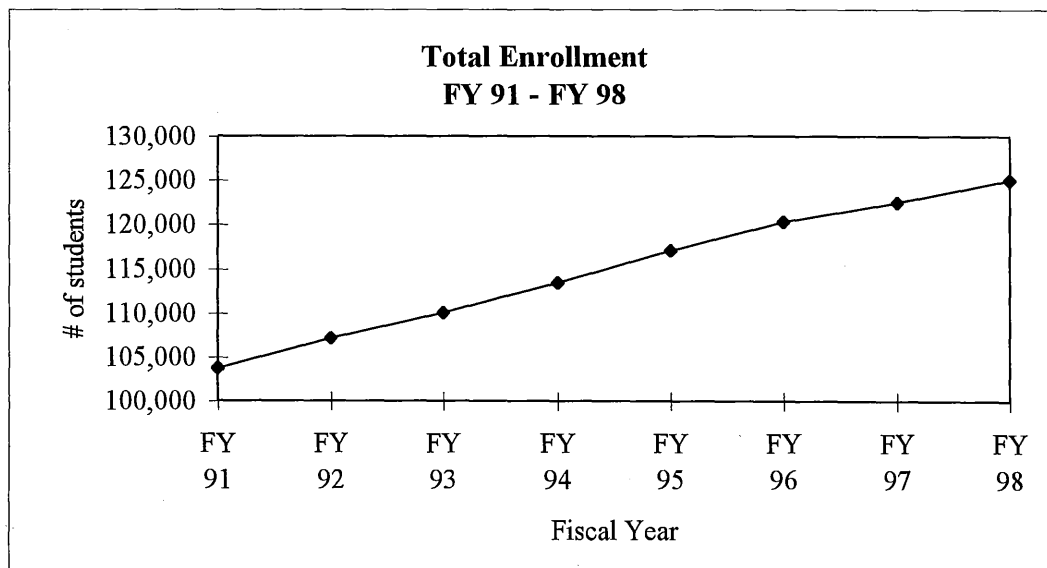
MCPS reports that the number of students attending special schools (Longview, Stephen Knolls, Rock Terrace, Carl Sandburg, and Mark Twain) decreased 2.5 percent from FY 97 to FY 98. This decrease, from 689 students to 672 students, occurred at a time when overall special education enrollment increased 5.4 percent.

Table 3
MCPS Student Enrollment
FY 1991 - FY 1998

	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98
Regular ^a	98,919	102,385	104,948	108,307	111,745	114,699	116,254	118,446
Special Education ^b	4,813	4,755	5,089	5,122	5,337	5,592	6,251	6,589
Total	103,732	107,140	110,037	113,429	117,082	120,291	122,505	125,035

^a Includes regular education students and students receiving Intensity 1, 2, and 3 special education services.

^b Includes students receiving Intensity 4 and 5 special education services.



Source: The Citizens Budget FY 1999, MCPS, December 1997

As more special education students with significant health care needs attend their neighborhood schools, demands for health-related services in those schools increase. When students receiving special education services have health-related needs during the school day, these needs are met by a combination of School Health staff and/or Special Education staff. These needs can include a range of services, including:

- administering prescribed medications;
- providing prescribed treatments; and/or
- providing assistance with activities of daily living.

The Department of Special Education reports that for the 1997-98 school year, 148 students require constant individualized supervision or assistance during the school day. Six of these students attend special schools. At present, the Special Education Department assumes lead responsibility for providing this individual support to students. In most cases, the Special Education Department hires a special education instructional assistant to provide the needed assistance.

The estimated FY 98 cost to MCPS for providing individualized supervision to students with disabilities is \$1.97 million. This is almost three times the amount spent in FY 95 to provide this type of assistance. MCPS projects that the cost of providing individualized supervision to students with disabilities will increase in FY 99 to \$2.05 million. According to MCPS, the increasing cost of providing individualized supervision results from two factors: a larger number of students with disabilities; and the re-authorization of federal legislation (IDEA), which requires a greater number of students with disabilities be educated within the regular classroom.

Chapters V and VII provide additional information about the relationship between School Health Services and the Department of Special Education.

V. PROGRAM DATA

A. School Health Services Program Activities

1. Introduction

The School Health Services program provides health-related services to students enrolled in Montgomery County Public Schools (MCPS.) School Health Services staff provide one set of services to all MCPS students, plus additional services to a subset of students who have specific health needs. School Health Services also staff the health services component of some inter-agency programs and the School Health Services Center at the Rocking Horse Road Center

Number of Students and Schools. For the 1997-98 school year, MCPS reports a total student enrollment of 125,035. By the year 2004, MCPS expects an additional 8,400 students to enroll, for a total of more than 133,400 students. Table 3 (page 11a) shows that between FY 91 and FY 98, between FY 91 and FY 98, MCPS enrollment increased 21% from approximately 103,700 to 125,000 students.

For the 1997-98 school year, 118,446 students (95%) are regular education students and 6,589 students (5%) receive Intensity 4 or 5 special education services.³ Of the regular education enrollment, approximately 60,000 students are in elementary school (51%), 26,000 are in middle school (22%), and 33,000 are in high school (28%).

This year, MCPS students attend 183 different schools, including 123 elementary schools, 32 middle schools, 21 high schools, seven special schools⁴, and one career center. Between FY 91 and FY 98, MCPS opened 12 new schools. Over the next two fiscal years, MCPS plans to construct at least one elementary school, three middle schools, and two high schools.

The rest of this chapter describes the services provided by School Health Services staff and presents available program activity data. A concluding section reviews School Health Services' current and planned data collection systems.

³ See footnote on page 10 for definition of Intensity 4 and 5 special education services.

⁴ Longview, Rock Terrace High School, Mark Twain, Carl Sandburg Center, Stephen Knolls, and McKenney Hill Center and RICA

2. Description of Services Provided

Table 4 (page 14a) lists the major services provided by School Health staff and indicates the related State law or regulation. While almost all of the services provided by School Health respond to a State requirement, the specificity of each requirement varies considerably.

School Health staff deliver services primarily on-site and most often in the health room of individual schools. A School Community Health Nurse and/or a Health Room Technician provide most of the direct services to students. Individuals on contract to School Health provide primary medical care services at the two Linkages to Learning/School Based Health Centers, the medical component of the Head Start program, and scoliosis screening.

The School Community Health Nurse (school nurse) provides comprehensive nursing services in the school, including direct first aid and emergency care, disease prevention and control, health counseling and case management, and health education. For students with special health needs, the school nurse develops Individual Health Care Plans and performs prescribed treatments. The school nurse also supervises the Health Room Technician. The school nurse position requires a Bachelor's degree in nursing or equivalent experience, a current license to practice as a registered nurse in Maryland, and one year of post-licensure nursing experience.

The Health Room Technician (technician) provides a range of services to students under the direct supervision of the school nurse. In most schools, the technician staffs the health room on a day-to-day basis, providing emergency care for injury and illness, administering prescribed medications and treatments under the supervision of a school nurse, and assisting special needs students with activities of daily living. Technician qualifications include a high school diploma, one year experience working with children, and certification in CPR and standard first aid.

All staff employed by School Health Services attend a new employee orientation and receive annual training in universal precautions/bloodborne pathogens and CPR. All new nurses are required to attend a first-line supervision class offered by the County's Office of Human Resources. Additional School Health staff training this year included: an asthma update; a panel discussion of nurse case management; training in child protective services; a two-part class in child development, training in working effectively in teams and collaborative models, workplace diversity training, and sexual harassment training.

The following sections describe the major services listed on Table 4 (page 14a) and clarify MCPS' role in providing the service. MCPS' role ranges from providing back-up coverage to playing a lead part in providing the service. The text also presents any available quantitative activity data.

Table 4
**Summary of School Health Services Provided by
Montgomery County's School Health Services Program**

SCHOOL HEALTH SERVICES PROVIDED	SERVICE MANDATED BY STATE LAW OR REGULATION
A. Services to all MCPS Students:	
1. Provide emergency care for injury and illness.	State law mandates that each county board of education with the assistance of the county health department provide "adequate school health services." State regulations require that emergency services be available onsite during the regular school day and at all school-sponsored athletic events.
2. Assess and appraise students' health needs that might interfere with effective learning. Specific activities include: <ul style="list-style-type: none"> review student health records and immunization records; prepare Medical Conditions list; conduct vision/hearing screening; and coordinate scoliosis screening. 	State regulations require: <ul style="list-style-type: none"> a physical examination of each child entering the public school system for the first time; review of student health record by a school health professional; health appraisal by a school health professional when the student's record review identified a health problem; the designated school health professional to inform appropriate school personnel of health problems that impede learning or require special care; hearing and vision screening of every student entering school, and in the 4th and 9th grades (Montgomery County has permission to test in 8th grade instead of 9th grade); and scoliosis screening tests for all students at least once in grades 6-8.
3. Work with others to provide a healthful school environment, including a safe physical environment, and communicable disease prevention and control.	State law mandates that each county board of education with the assistance of the county health department provide a "healthful school environment." State regulations requires the development of written policies and procedures for dealing with outbreaks of communicable diseases.
4. Provide health education.	State law mandates that each county board of education with the assistance of the county health department provide "instruction in health education."

Table 4 continued

SCHOOL HEALTH SERVICES PROVIDED	SERVICE MANDATED BY STATE LAW OR REGULATION
B. Services to subset of MCPS students:	
1. Develop Individual Health Care Plans (IHCP).	<p>State regulations require that the local board of education in conjunction with the local health department shall formulate written policies ensuring the provision of school health services to students with special health needs.</p> <p>State regulations require that a student with special health needs that may require particular attention during the school day shall have a statement of those health needs and a nursing care plan for emergency and routine care.</p>
2. Administer prescribed medications.	State regulations require local board of education in conjunction with the local health department to formulate written policies regarding storage and administration of medication during school hours.
3. Perform prescribed treatments.	<p>Federal and State law require all school systems to provide a free and appropriate education for students with disabilities in the least restrictive environment; and to provide related services, including health services.</p> <p>State regulations require the principal, in consultation with the designated school health professional, to identify school personnel who shall receive in-service training in providing services for students with special health needs.</p>
4. Provide assistance with Activities of Daily Living (ADLs).	Same as above.
5. Provide individual and/or group counseling related to health issues.	State regulations require the designated school health services professional to offer health counseling after a health need has been identified; and to assist students and families in selecting any additional counseling services.
6. Facilitate the process of linking students without primary health care to State and County programs that provide needed services.	State regulations require that for "students without a usual source of care," the designated health services professional shall assist the student/family to identify a primary care provider, and to be responsible for follow up.
7. Serve on the pupil services team and participate in the health-related component of the EMT and ARD committee process.	State regulations provide that a designated school health services professional serves on all levels of the pupil services teams, and as appropriate, participate in the Educational Management Team (EMT) and Admission/Review/Dismissal (ARD) committee process.

Table 4 continued

SCHOOL HEALTH SERVICES PROVIDED	SERVICE MANDATED BY STATE LAW OR REGULATION
C. Special services provided by School Health staff to inter-agency programs	
<u>Linkages to Learning (LTL)</u> : School Health staff provide the general health component at all LTL sites. School Health also manages contracts for primary medical care services at the two LTL/School Based Health Centers and collaborates with Community Health to facilitate enrollment in State and County funded programs.	State regulations require that school health staff assist students/families without a usual source of health care to identify a primary health care provider.
<u>School Health Services Center at Rocking Horse</u> (one of the eight LTL sites): School Health staff provide health-related services to: international students entering MCPS; students needing immunizations; and uninsured students needing ADHD evaluations.	State regulations require facilitation of immunizations and physical evaluation upon school entry.
<u>Head Start</u> : School Health Services receives federal funds to provide health services component of the Head Start program.	Health-related services required by federal Head Start program.
<u>Montgomery County Infants and Toddlers Program</u> : School Health Community Nurses serve on an inter-agency team, which evaluates infants and toddlers for health conditions or delays that may interfere with normal development.	No legal requirement.
<u>Child Find/Developmental Evaluation Services for Children (DESC)</u> : School Health Community Nurses provide support to inter-agency team, which evaluates the needs of preschool children who are at risk for developmental delays.	No legal requirement.

PROVIDE EMERGENCY CARE FOR INJURY AND ILLNESS

Providing emergency care for injury and illness in the school is the most traditional and well-known School Health service. State regulations require that emergency services be available on-site during the regular school day and at all school-sponsored athletic events. Various MCPS staff members, ranging from physical education teachers to the principal's secretary, provide back-up first aid services when School Health personnel are not available.

DHHS procedures require School Health Services staff to record all student visits to the health room on the Health Room Visitation Log. The Health Room Log data provide a reasonable proxy for the number of annual visits to the health room for emergency care for injury and illness because health room visits for medications, treatments, and ADL services are tracked separately. (See page 27 for more details about the Health Room Log.)

During the 1996-97 school year, health room staff recorded 616,000 visits to MCPS health rooms in the Health Room Logs. (See Table 5, page 15a). 57 percent of these visits occurred at the elementary school level, 22 percent at the middle school level, 20 percent at the high school level, and one percent at special schools.

Health room log data for the 1996-97 school year showed that the ratio of students to health room visits varies by school level. The data indicated, on average:

- 9-10 visits to the health room for every special school student;
- 5-6 visits to the health room for every elementary school student;
- 5 visits to the health room for every middle school student; and
- 3-4 visits to the health room for every high school student.

According to the 1996-97 Health Room Log data (Table 6, page 15a), Health Room Technicians handled approximately 88 percent of the health room visits reported at elementary and middle schools; 83 percent at high schools; and 77 percent at the special schools. The high percent of visits handled by the Health Room Technician reflects the scope of information collected on the Health Room Logs. The health room logs track the activities usually performed by the technicians and does not record the activities typically performed by the school nurses.

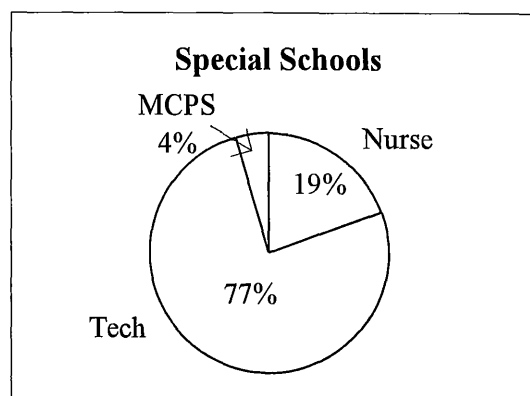
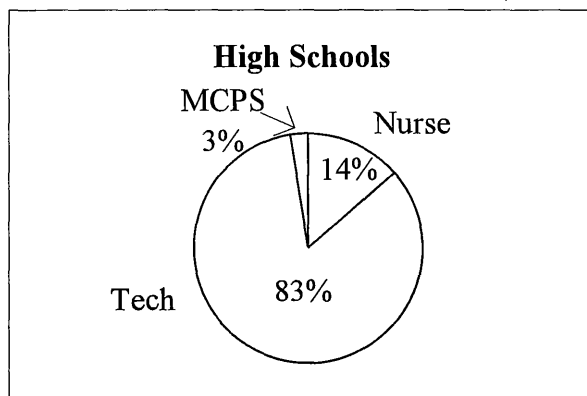
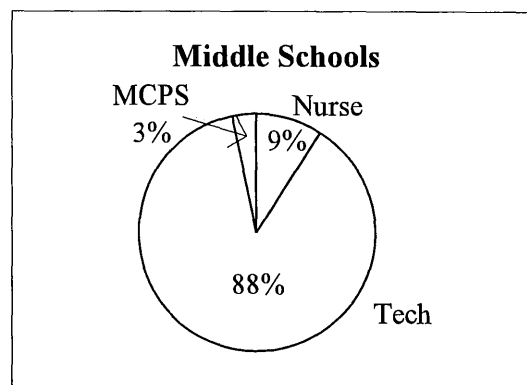
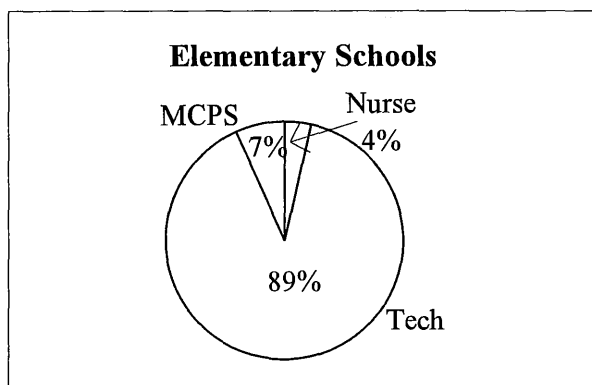
The school nurse and MCPS staff handled the remaining visits, with somewhat different percentages reported by school level. For example, the school nurse handled 19 percent of the visits reported at special schools, but only 4 percent of visits reported at elementary schools. MCPS staff handled 3-4 percent of the visits at middle, high, and special schools, and seven percent at the elementary schools.

Table 5
Health Room Visits *
1996 - 97 School Year

	# of Health Room Visits	% of Total Visits	Enrollment	Ratio of Visits to Enrollment
	(A)		(B)	(A/B)
Elementary	348,185	57%	62,534	5.6 to 1
Middle	135,794	22%	27,403	5 to 1
High	125,078	20%	34,426	3.6 to 1
Special	6,943	1%	722	9.6 to 1
All Schools	616,000	100%	125,085	4.9 to 1

* As reported on Health Room Logs, which do not count visits for medications, treatments, or ADLs.

Table 6
Staff Providing Health Room Services *
1996 - 97 School Year



* As reported on Health Room Logs, which do not count visits for medications, treatments, or ADLs.

Out of the 616,000 health room visits reported on the Health Room Logs during the 1996-97 school year:

- 85 percent resulted in students being sent back to their class;
- 14 percent resulted in students sent home; and
- less than 1% visits resulted in calls to 911.

ASSESS AND APPRAISE STUDENTS' HEALTH NEEDS

State regulations mandate that each county school system, with the assistance of the local health department, conduct various health assessment and appraisal activities. The activities include:

- reviewing student health records and immunization records for all incoming students;
- reporting the number of children entering the public school system who have not had a physical examination and facilitating access to a physical exam;
- conducting vision/hearing screening;
- coordinating scoliosis screening;
- preparing Medical Conditions list; and
- preparing Individual Health Care Plans.

School nurses and technicians assume the lead role in performing most of the health assessment activities, except that MCPS physical education teachers conduct the scoliosis screening.

Most of the health appraisal work is cyclical. School Health Services staff review all incoming student health records and immunization records at the beginning of the school year. A review of immunization records is also required for the Maryland State Department of Education audit of enrollment reports.

Hearing, vision, and scoliosis screenings take place at different times throughout the year according to a master schedule. Until several years ago, a special team of Health Room Technicians traveled from school to school to conduct the vision and hearing screenings. In FY 96, DHHS eliminated these technician positions. Currently School Health trains all school nurses and technicians to conduct the hearing/vision screenings in their own schools.

Every September, School Health staff compile data (by school) on students with reported health conditions. School Health Services staff prepare two Health Conditions Lists (HCL) for each school. Only School Health Services personnel have access to the master or comprehensive list called the "HCL-A". The HCL-A includes all identified health conditions, including potentially life threatening conditions and conditions of a sensitive nature, e.g., mental/emotional health, pregnancy/sexuality, substance abuse.

The "HCL-B" contains a subset of the information included on the HCL-A list. The HCL-B, which is shared with appropriate MCPS staff, identifies students with health conditions which may:

- require immediate intervention (either routine or emergency) during the school day, e.g., anaphylaxis, diabetes, seizures, bleeding disorders, or asthma;
- require activity restriction, e.g., cardiac problem; or
- affect learning, e.g., vision and hearing problems.

For a subset of students listed on the Health Conditions List, School Health staff work with the parent, private physician, and the student to develop an Individual Health Care Plan (IHCP). The DHHS manual defines an IHCP as "... a written specific plan of action for students with special health related needs which may necessitate the provision of routine and/or emergency care during the school day." Students only receiving medication in school do not require an IHCP.

PROVIDE A HEALTHFUL SCHOOL ENVIRONMENT

State law includes a general mandate that each county board of education, with the assistance of the county health department, provide a "healthful school environment." This includes providing a safe physical environment and preventing and controlling communicable disease.

MCPS' Safety and Environmental Health Unit assumes lead responsibility for investigating all safety and environmental health concerns in MCPS facilities. School Health staff help by identifying matters of environmental safety that need investigation. The issues identified for investigation can range from loose banisters to unsafe playground equipment. MCPS' Environmental Health Unit has been working recently to resolve environmental health concerns related to indoor air quality in schools.

DHHS takes the lead in handling communicable disease prevention and control. School Health Services works closely with Communicable Disease and Epidemiology and MCPS to manage and control communicable diseases, e.g., meningitis, tuberculosis, mononucleosis, and influenza. During the 1996-97 school year, School Community Health Nurses reported intake of 822 new cases of communicable diseases, excluding lice infestation.

School Health Services and MCPS collaborate to provide health education and prevention to minimize the potential for lice infestation. When an infestation occurs, School Health Services takes the lead to control the outbreak by providing lice

inspections, education/prevention sessions to PTA, parents and staff, and direct contacts with parents. During the 1996-97 school year, School Health staff:

- conducted 5,734 lice inspections,
- provided 362 education/prevention sessions on lice, and
- provided 3,468 contacts with parents to educate and answer questions about lice.

PROVIDE HEALTH EDUCATION AND PROMOTE WELLNESS

State law mandates that each county board of education, with the assistance of the county health department, provide "instruction in health education." While MCPS staff have the lead role in terms of formal classroom health education, School Health Services staff frequently provide health instruction to individuals and groups of students. Many of the School Health staff interviewed see each contact with a student as an opportunity for sharing health information.

School Health staff serve as resource persons for MCPS staff and parents. For example, most school nurses attend at least one school staff meeting each year to present information on current health needs of the school or provide training on a health topic, such as universal precautions for bloodborne pathogens. Many school nurses also serve as resource speakers to classroom teachers or parent groups on health topics.

In addition, each school nurse develops an annual plan to promote health and wellness in the school community. This most often includes providing health messages for the principal and/or PTA newsletters, providing health tips to announce on the school's public address system, providing health information on bulletin boards, and distributing age-appropriate health materials. School Health staff also work in partnership with DHHS' Health Promotion and Substance Abuse Prevention Unit.

Activity data collected by School Health Services show that during the 1996-97 school year, School Health staff: made 70 presentations to 1,949 students on self-care; made 231 other classroom presentations to 12,669 students on health-related topics; convened Health Promotion Club meetings with 294 students; and included health education information in 87 PTA newsletters, 352 principal newsletters, and 455 other newsletters.

Chapter VII describes the related health education activities of MCPS and DHHS' Health Promotion Unit in more detail (see page 45).

ADMINISTER PRESCRIBED MEDICATIONS

According to many of the DHHS and MCPS staff interviewed, administering prescribed medications is a critical daily function of the School Health staff. According to School Health Services' written policies, the administration of medication is a nursing function which may only be delegated by the nurse as designated in the Nurse Practice Act of Maryland. In most schools, the school nurse delegates medication administration and record keeping to the Health Room Technician.

Procedures developed jointly by DHHS and MCPS dictate that DHHS staff members do not administer any medication to an MCPS student, except as authorized by a parent or guardian. A special MCPS form authorizing the administration of prescribed medication must be completed and signed by both the parent and attending physician or nurse practitioner. A newly executed form is required at the beginning of each school year.

Medication distribution can take several hours in some schools. When School Health personnel are not present, the principal arranges for the medication to be given and recorded by a MCPS staff member. Most often, the responsibility rests with the principal's administrative staff. A frequent comment from those interviewed concerned how disruptive it can be to the main office when School Health staff are not available to administer medications.

School Health staff record student visits to the health room for medication separately from the Health Room Visit Log. DHHS' current data collection system only captures the total number of medications dispensed by each school. School Health does not currently collect data on the types of medications or the number of students taking the medications. According to DHHS records for the 1996-97 school year, staff dispensed approximately 3,530 medications each school day, for a total of 653,200 medications during the school year.

PERFORM PRESCRIBED TREATMENTS AND PROVIDE ASSISTANCE WITH ACTIVITIES OF DAILY LIVINGS

Federal and state law require all school systems to provide a free and appropriate education for students with disabilities in the least restrictive environment and to provide related services to students with disabilities, including health services. State regulations require that the principal, in consultation with the designated school health professional, identify school personnel who will receive in-service training to provide services for students with special health needs.

School Community Health Nurses perform most of the medical treatments, as determined in the student's Individual Education Plan (IEP) and/or Individual Health

Care Plan (IHCP). Examples of treatments include enterostomal (ostomy) care, administration of oxygen, gastrostomy feedings, tracheotomy care, and catheterization.

Some students with special health needs require assistance with activities of daily living (ADLs). The most often cited ADL service is assistance with toileting. The division of responsibility between School Health and MCPS staff varies from school to school. Special Education Instructional Assistants and Health Room Technicians provide most ADL services. Chapter VII contains more information about the shared responsibilities of School Health and Special Education staff (see page 45).

School Health staff record data on the numbers of treatments and ADL services provided by School Health staff.⁵ DHHS data indicate that School Health staff administered approximately 22,857 prescribed treatments during the 1996-97 school year. Of the total:

- 63 percent were for elementary school students;
- 23 percent were for students enrolled at special schools;
- 7 percent were for middle school students; and
- 8 percent were for high school students.

School Health Services provided assistance for activities of daily living 9,004 times during the 1996-97 school year. Of the total:

- 38 percent of the assistance was provided to elementary school students;
- 29 percent to middle school students;
- 29 percent to high school students; and
- 5 percent at the special schools.

PROVIDE INDIVIDUAL AND/OR GROUP COUNSELING RELATED TO HEALTH ISSUES

State regulations require the designated school health services professional to offer health counseling after identifying a health need, and to assist students and families in selecting any additional counseling services. As defined by the State Department of Education, health counseling is, “. . . a professional service which provides an opportunity for students and parents to explore options, make decisions, and receive support for understanding, coping, and adjusting to health needs.”

Health Room Technicians frequently identify students who need health counseling and refer them to the school nurse. The school nurse may work with other DHHS and MCPS staff to address the student's needs. School nurses often work with individual

⁵ These data compiled by DHHS only include services provided by School Health staff and do not include the many ADL services provided routinely by Special Education staff.

teachers, the school counselor, and/or a MCPS psychologist. The school nurse's counseling services may include:

- providing assistance to students and/or their families in identifying health problems;
- motivating students and/or their families to take action toward resolving health problems;
- making referrals to appropriate agencies; and
- providing health counseling sessions to individual students or groups of students.

The school nurse's monthly report includes data on the number of selected counseling activities. Data from the 1996-97 school year indicate that school nurses held 233 group counseling sessions, involving 2,787 students; made 135 referrals to child protective services; and made 1,146 referrals to other health units in DHHS.

FACILITATE ACCESS TO PRIMARY HEALTH CARE

State regulations require that for "students without a usual source of care," the designated health services professional or designee shall assist the student/family to identify a primary care provider, and be responsible for follow up.

School nurses in some schools spend significant amounts of time helping students and their families gain access to medical care. School Health staff work closely with staff from DHHS' Community Health Service area to identify appropriate programs that provide medical care. Data from the School Nurse monthly reports for the 1996-97 school year show that School Health nurses made 1,575 referrals to the Service Eligibility Unit. The Service Eligibility Unit determines eligibility and facilitates access to community health care services.

Increasing access to primary care is a mutual outcome of School Health and Community Health Services. The Public Health Officer estimates that 26,000 children under the age of 18 in the County are uninsured. The integration of School Health and Community Health is discussed in more detail in Chapter VII (page 40).

SERVE ON THE PUPIL SERVICES TEAM AND PARTICIPATE IN THE ADMISSION, REVIEW, DISMISSAL (ARD) COMMITTEE PROCESS

State regulations provide that a designated school health services professional may serve on all levels of the pupil services teams and, when appropriate, in the health services component of the Educational Management Team (EMT) or ARD committees. MCPS convenes these committees to develop an appropriate educational program for students identified with special needs.

The EMT is a forum for problem solving and early intervention. Principals select the school staff that are on each team. The teams review the students' problem and may recommend services of an alternative teacher (e.g., reading teacher, counselor) or request additional consultation from other specialists (e.g., Pupil Personnel Worker, psychologist). A principal will typically request the school nurse to attend an EMT meeting if there appears to be a health-related component to the student's problem.

The Admission, Review, and Dismissal (ARD) committee determines eligibility for entry and removal from the special education program and examines the effectiveness of the special education services assigned to each student. The process begins with an ARD screening and proceeds with a series of ARD meetings.

State regulations require the school nurse to participate in the ARD process to discuss health-related concerns. As part of the screening process, the school nurse must complete a health appraisal form for the student. Until several years ago, the general practice was for the school nurse to attend all ARD meetings. According to DHHS, the current practice is for the school nurse to attend ARD meetings if health is an essential issue, if the principal requests the nurse's participation, or for non-health issues where the nurse's input will benefit the process. Nurse monthly report for the 1996-97 school year shows that school nurses attended 3,467 EMT and ARD meetings.

3. Inter-Agency Programs

School Health Services staff also provide health-related services to a number of special inter-agency programs including:

- Linkages to Learning,
- Head Start,
- Infants and Toddlers, and
- Developmental Evaluation Services for Children.

LINKAGES TO LEARNING

Linkages to Learning is a collaborative school-based system that provides health and human services to children and their families. Established in 1991 through a Montgomery County Council resolution, Linkages to Learning now operates at eight schools in the County, including Broad Acres, Greencastle, Harmony Hills, Highland, and Summit Hall Elementary Schools, Gaithersburg Middle School, Mark Twain School, and the School Health Services Center at the Rocking Horse Road Center.

DHHS and MCPS collaborate with private non-profit agencies, local organizations and businesses, and volunteers to provide services at each Linkages site. The County Government, businesses, community groups, and a number of grants fund the program. MCPS provides in-kind donations of space and staff time.

At all of the Linkages sites, the School Health Community Nurse and Health Room Technician assigned to the school provide general health services. Mental health and social services professionals also counsel students and link them to social services in the community.

School Based Health Centers. As of September 1997, two of the Linkages sites (Broad Acres and Harmony Hills Elementary Schools) include School Based Health Centers (SBHC). At the present time, the two School Based Health Centers offer primary medical care to students enrolled at Broad Acres or Harmony Hills. These children can receive routine well care, sick care, physical examinations, lab work, immunizations, prescriptions, and follow up services at the SBHC. SBHC staff refer other family and community members to other community resources.

Funding for the construction of the SBHCs came from a Community Development Block Grant and State school construction moneys. The Robert Wood Johnson (RWJ) Foundation also provides a \$400,000 grant (\$100,000 per year for four years). As of March 1998, School Health Services use the grant funds to contract for a part-time nurse practitioner, a consulting physician, and after hours on call service to provide direct health care services at Broad Acres and Harmony Hills Elementary Schools. These staff resources supplement a School Community Health Nurse and Health Room Technician also assigned to these two sites. In addition, School Health Services uses some of the grant funds to support a part-time administrative specialist, whose job includes helping with start-up of the two SBHCs and creating a strategy for ongoing future funding.

At the Broad Acres Elementary School site, the College of Education at the University of Maryland at College Park is conducting a comprehensive evaluation of the Linkages to Learning program. The evaluation project, which will gather data over the course of four years (1996-1999), does not include evaluation of the health component. According to a summary description of the project, the purpose of the evaluation is:

“... to provide an objective measure of the effectiveness of the Linkages School-Based Health Center in helping children to perform better in school, be healthier physically, and to be better adjusted and functioning socially and emotionally. Researchers also seek to determine the impact of the program on families and the school environment.”

School Health Services Center. The School Health Services Center is a Linkages to Learning site located at the Rocking Horse Road Center. The School Health Services Center serves the international students enrolling in MCPS, school age County residents in need of immunizations and immediate health care, and uninsured MCPS students in need of an initial attention deficit hyperactivity disorder evaluation.

The School Health Services Center staff:

- perform school entry physical examinations to newly enrolled international students in need of special education placement;
- provide immunizations, vaccines, and tuberculosis screenings;
- evaluate uninsured students for ADHD and place students diagnosed with ADHD on a medication trial;
- refer uninsured students to Service Eligibility Units to access additional health services.

For FY 98, School Health Services provides the following full-time and part-time staff for the School Health Services Center:

- one full-time School Community Health Nurse;
- one full-time Health Room Technician;
- part-time physician (approximately four hours per week); and
- part-time administrative aide (approximately one day per week).

In addition, four or five substitute School Community Health Nurses work in August, September, and January when the Center is busiest.

As the International Student Admissions Office enrolls students, families are surveyed to determine individual student needs. The School Health Center referred 619 families for health services in FY 96 and 548 families in FY 97.

HEAD START

The Head Start program provides education, social services, and health services to eligible pre-kindergarten (four-year old) children. MCPS operates the Head Start program under governance standards established by the federal government.

The Head Start program explicitly requires a health services component. According to program literature, the goal of including health services in the Head Start program is to "maintain children at their optimal health so they can derive the maximum benefit from their educational experience." The longer-term goals are to "ensure each child's future" by: providing preventive services; providing health education for the students and their families; and assisting the families to arrange for ongoing health care.

During the 1996-97 school year, 1,746 children were enrolled in 99 MCPS Head Start classes in 60 schools. For the 1997-98 school year, 1,753 children are enrolled in 98 Head Start classes in 59 schools. For FY 98, School Health Services received \$310,039 on the federal Head Start funds for health services. This compared to \$249,899 in FY 97.

Each year, the School Health Services program provides the followings services to the Head Start population:

- medical evaluations and follow-up consultations;
- immunizations and tuberculin skin tests;
- dental evaluations and treatments;
- health screenings (including vision, hearing, blood pressure, height, weight, and sickle cell upon request);
- general health and dental education for students and parents; and
- referrals for remediation for health problems.

In FY 98, approximately \$150,000 of the grant dollars pay for Head Start personnel, including one nurse manager, two dental hygienists, and a driver. The other \$159,000 funds a contract for dental, nurse, and technician services, as well as other miscellaneous operating expenses.

In FY 97, MCPS completed the fourth year of the Head Start Transition Demonstration Project. The project provides services similar to the pre-kindergarten Head Start services through first and second grade. The University of Maryland is conducting an evaluation of the Transition Project, and MCPS will continue to operate this program.

INFANTS AND TODDLERS PROGRAM

The Montgomery County Infants and Toddlers Program (MCITP) helps families identify newborn infants and toddlers (0-3) with developmental delays. The program assesses development, determines outcomes, provides intervention services, and develops a transition plan to be implemented by age three.

DHHS staff, MCPS staff (Early Intervention, Evaluation, and Assessment Services), community agencies, and contractors operate the Infants and Toddlers Program. FY 98 funding for the Infants and Toddlers program totals \$5.1 million. MCPS receives \$3.8 million and DHHS receives \$0.4 million.

Approximately \$34,000 in funds from the Infants and Toddlers Programs pays for a part-time (0.7 of a workyear) School Community Health Nurse. The school nurse serves as a member of the interdisciplinary team which evaluates infants and toddlers suspected of having health conditions or delays which interfere with normal development. The team also provide case management and works to link families with resources that can help meet educational, health and other human services needs.

CHILD FIND/DEVELOPMENTAL EVALUATION SERVICES FOR CHILDREN (DESC)

For children between the ages of three and five, the Child Find/Developmental Evaluation Services for Children (DESC) program conducts developmental screenings and makes referrals to an interagency assessment team at the local school. MCPS staff also provide a range of direct services to children with developmental delays through the Beginnings Program and Preschool Education Program.

For FY 98, a part-time School Community Health Nurse (0.8 of a workyear, \$51K) provides support to an interagency, interdisciplinary team which evaluates the needs of preschool children who are at risk for developmental delays, and makes recommendations for educational placement.

B. School Health Services Current and Planned Data Collection

1. Current Data Collection System

Currently, the School Health Services program primarily collects health room activity data. School-based staff (school nurses and technicians) record the data by hand on special forms and submit the data on a regular basis to School Health management staff. School Health administrative support staff enter the information into an automated data base. Comprehensive reports are currently produced annually rather than quarterly or monthly.

As the following paragraphs describe, the focus of the current data collection is on the number of different activities. As a result, the data collected reflect the volume of work performed. The data collected do not measure the quality of the services delivered, the eventual outcome of those services, or the amount of time spent delivering the different services.

According to School Health staff, the data collected under the current system are probably a reasonably good indicator of health room activity. According to staff, problems with data collection include:

- the activity forms do not capture all of the health room staff activities;
- staff do not always have time to complete the forms;
- staff interpret and complete the forms differently; and
- errors may occur during data entry.

As a result of these problems and the volume of data, School Health staff report finding it difficult to fully and effectively analyze the data collected.

Health Room Log System. DHHS procedures require School Health Services staff to record all student visits to the health room on the Health Room Visitation Log. Staff record visits for medications, treatments, or assistance with ADLs separately. The health room log records the:

- student's name and grade;
- name of the person who referred the student to the health room;
- student's arrival and departure times;
- the health room staff who provided service to the student, e.g., the technician, the school nurse, or other school staff;
- whether the health room staff sent the student back to class, sent the student home, or called 911; and
- whether the health room staff referred the student to a physician, a dentist, or the School Community Health Nurse for follow-up.

The daily activity logs become the basis for monthly reports due from each school to School Health Services management staff. School Health management prepare annual summaries of the data collected on the number of health room activities.

DHHS procedures require that health room staff summarize the information from the daily Health Room Visitation Log plus additional data on a separate form. This Health Room Daily Summary shows the following information:

- number of visits to the health room;
- number of interventions provided by the technician, school nurse, or other staff;
- number of students sent home, sent back to class, number of 911 calls;
- number of referrals to the school nurse or a physician;
- number of medications, treatments, ADLs; and
- hours health room not staffed by DHHS personnel.

The Health Room Daily Summary is submitted at the end of the month to the School Health Services central office and the school principal. The daily summary includes monthly totals from the Daily Report.

School Nurse Monthly Reports. All School Nurses are required to submit information on the number of nursing cases/interventions. A separate form, the School Nurse Monthly Report, must be filed monthly. Appendix D contains a summary of the data collected last year, such as:

- the number of health records reviewed,
- number of lice inspections,
- number of group counseling sessions, and
- number of referrals made to Protective Services.

In addition, there are separate procedures for tracking information about special types of cases, e.g., pregnant adolescent students, students with positive TB tests. Appendix D also contains a blank form for data being collected for the 1997-98 school year.

2. Student Health Records

By law, School Health staff must document services to students. School Health staff maintain each student's school health record information such as the student's health inventory, immunization certificate, and vision/hearing screening results. The student's health record is also the repository of special health-related information such as a Individual Health Care Plan, the previous year's Medication Card, Student Accident report, and other information about services provided by the School Nurse or Health Room Technician. Access to information in the records must follow MCPS and DHHS procedures governing student confidentiality.

School Health Plans for Data Collection System. As of this writing, School Health staff are in the process of redesigning their data systems. The first phase of assessing the current systems is in process.

School Health staff cite the following goals for the new data collection system:

- provide for electronic data collection from all health room and Linkages to Learning sites;
- allow for integrated School Health/Community Health case management; and
- link School Health to the Service Eligibility Unit and other Public Health Services.

During the past year, the Department has also undertaken a project to make Current Procedural Terminology or CPT coding part of all data collected. This will assist the Department with collecting the necessary data about service delivery in order to receive State reimbursement. To facilitate the CPT coding project, School Health must reconfigure several of the forms and reports currently produced. In addition, the CPT project will require more detailed reporting of information.

VI. FUNDING AND STAFFING

A. Introduction

This chapter reviews the funding, staffing, and facilities of the School Health Services program. It examines resources allocated to the Department of Health and Human Services (DHHS) for School Health between FY 96 and FY 98, and the in-kind support provided by Montgomery County Public Schools in the form of space and health room supplies.

In July 1995, the County created a new Department of Health and Human Services (DHHS) by consolidating four previously independent health and human service departments: Addiction Services, Victim and Mental Health Services; Family Resources; Health; and Social Services. Today, the new department consists of five service areas:

- Adult Mental Health and Substance Abuse Services;
- Aging and Disability Services;
- Children, Youth, and Family Services;
- Crisis, Income, and Victim Services; and
- Public Health Services.

Before the reorganization, School Health Services operated as a separate division of the Health Department. The 1995 reorganization placed School Health Services in the Children, Youth, and Family Services area. DHHS operates with a philosophy of “service integration” among related program areas, which means that School Health Services staff regularly work “collaboratively” with other staff units in the Department.

B. School Health Services Budget: FY 96 to FY 98

1. General

The County’s approved FY 98 operating budget allocates \$8.9 million in DHHS to the School Health Services program. This represents almost 9 percent of DHHS’ total approved General Fund budget of \$101.6 million.

Tables 7-11 (pages 29a-29c) summarize School Health Services’ personnel and operating budget data from FY 96 to FY 98. Unless otherwise noted, FY 96 and FY 97 data represent actual expenses, and FY 98 data reflect the approved program budget. In sum:

- personnel expenses account for at least 95% of the School Health Services program budget;
- operating expenses more than doubled between FY 96 and FY 98, but remain less than 5% of the total School Health program budget; and
- the FY 98 budget for School Health Services is \$1.5 million (20%) more than the actual program expenditures in FY 96.

Table 7
School Health Services Program Budget: Overview
FY 1996 - FY 1998

	FY 96 Actual (\$000)	% of Total	FY 97 Actual (\$000)	% of Total	FY 98 Budget (\$000)	% of Total
Personnel*	\$ 7,240	97%	\$ 8,132	98%	\$ 8,489	95%
Operating	\$ 187	3%	\$ 197	2%	\$ 405	5%
Total	\$ 7,427	100%	\$ 8,329	100%	\$ 8,894	100%

* Includes School Health Administrator's salary from the Public Health Services division.

Table 8
Grant Funds Received by School Health Services
FY 1996 - FY 1998

	FY 96 Actual (\$000)	FY 97 Actual (\$000)	FY 98 Budget (\$000)
Head Start	\$ 303	\$ 250	\$ 310
Robert Wood Johnson		\$ 32	\$ 100
Teen Pregnancy		\$ 7	\$ 8
Total	\$ 303	\$ 289	\$ 418

Source: School Health Services, DHHS

Table 9
Source of Funds: School Health Personnel Costs
FY 1996 - FY 1997

	FY 96 Actual (\$000)	% of Total	FY 97 Actual (\$000)	% of Total	FY 98 Budget (\$000)	% of Total
General Fund	\$ 7,002	97%	\$ 7,956	98%	\$ 8,324	98%
Children, Youth, and Families	\$ 6,932		\$ 7,882		\$ 8,246	
Public Health	\$ 70		\$ 74		\$ 78	
Grant Fund	\$ 238	3%	\$ 176	2%	\$ 166	2%
Head Start	\$ 238		\$ 164		\$ 151	
R.W. Johnson	\$ -		\$ 12		\$ 15	
Teen Pregnancy	\$ -		\$ -		\$ -	
Total	\$ 7,240	100%	\$ 8,132	100%	\$ 8,489	100%

Table 10
Source of Funds: School Health Operating Expenses
FY 1996 - FY 1998

	FY 96 Actual (\$000)	% of Total	FY 97 Actual (\$000)	% of Total	FY 98 Budget (\$000)	% of Total
General Fund	\$ 122	65%	\$ 84	43%	\$ 153	38%
Grant Fund	\$ 65	35%	\$ 113	57%	\$ 252	62%
Head Start	\$ 65		\$ 86		\$ 159	
R.W. Johnson	\$ -		\$ 20		\$ 85	
Teen Pregnancy	\$ -		\$ 7		\$ 8	
Total	\$ 187	100%	\$ 197	100%	\$ 405	100%

Table 11
School Health Personnel Costs and Workyears by Category
FY 1996-FY 1998

	FY 1996			FY 1997			FY 1998		
	Dollars Budgeted (\$000)	Percent of Total	Workyears	Dollars Budgeted (\$000)	Percent of Total	Workyears	Dollars Budgeted (\$000)	Percent of Total	Workyears
Management/Admin. Staff									
Management ¹	\$ 968	12%	11.24	\$ 531	6%	5.62	\$ 512	6%	6.00
Program Support ²	\$ 51	1%	1.00	\$ 57	1%	1.00	\$ 103	1%	1.62
Admin. Support ³	\$ 174	2%	5.00	\$ 220	3%	5.00	\$ 203	2%	4.50
Subtotal Admin	\$ 1,193	15%	17.24	\$ 808	10%	11.62	\$ 818	10%	12.12
School-Based Staff									
School Community Health Nurse	\$ 2,783	36%	55.37	\$ 3,085	37%	53.93	\$ 3,386	40%	53.93
Health Room Technician	\$ 3,414	44%	104.54	\$ 4,171	51%	104.86	\$ 4,122	49%	104.86
Substitute Nurses and Techs ⁴	\$ 196	3%	4.50	\$ 71	1%	2.50	\$ 78	1%	2.50
Other ⁵	\$ 233	3%	1.24	\$ 99	1%	1.86	\$ 85	1%	1.86
Subtotal School-Based	\$ 6,626	85%	165.65	\$ 7,427	90%	163.15	\$ 7,671	90%	163.15
Total	\$ 7,819	100%	182.89	\$ 8,235	100%	174.77	\$ 8,489	100%	175.27

¹ Includes the School Health Services administrator(s) and nurse manager positions.

² Includes the administrative specialist and program specialist positions.

³ Includes the office services coordinator and principal administrative aide positions.

⁴ DHHS budgets substitutes in group positions.

⁵ Includes the hearing and vision technician, dental hygienist, and driver positions

Source: School Health Services, DHHS

The \$1.5 million increase since FY 96 results from higher costs of compensation and increases in grant funds, offset by decreases in management staff costs. Almost all of the budgeted increase in personnel costs are due to negotiated pay increases. Another factor that contributes to the almost 20 percent difference shown on Table 7 (page 29a) is that School Health Services' actual personnel expenses in FY 96 were less than budgeted by \$580,000. This significant discrepancy came from a combination of position lapse and the way the budget preparation system used to load the costs of benefits for ten-month employees. (OMB reports that practice has since been changed.)

School Health Services' personnel expenses are almost entirely paid for out of the County General Fund. Between FY 96 and FY 98, grant funds paid for only two to three percent of School Health Services' personnel costs. DHHS budgets almost all of the personnel dollars for School Health Services staff directly in the Children, Youth, and Family Services Area. The exception to this is that the salary of the Nurse Administrator who directs School Health is budgeted in the Public Health Services Area.

Table 11 (page 29c) shows budgeted personnel expenditures and workyears, by employee category. Between FY 96 and FY 98, the budget for school-based staff increased and the budget for administrative staff decreased. (This table contains only budgeted data because actual dollars and workyears were not available in this detail.) Between FY 96 and FY 98:

- The budget for school-based staff increased primarily for compensation adjustments, (increases in pay and benefits), while the complement of school nurse and technician workyears remained essentially constant.
- The number of "management" workyears in School Health Services decreased from 11 to 6. This included eliminating 3.6 nurse administrator positions and reducing a physician's position from full-time to part-time. The decreased budget for administrative/management staff is consistent with DHHS' department-wide goals to flatten the organization.

School Health Services' operating expenses more than doubled from between FY 96 and FY 98. Most of this increase is associated with increased grant funds. The General Fund operating dollars pay for local transportation costs, office supplies and equipment, and some training. Additional training dollars are provided to School Health Services from a central training budget for the Department.

2. Grant Funds

Table 8 (page 29a) summarizes the increasing grant funds received by School Health Services since FY 96. This year, School Health is receiving \$418,000 in grant funds from three different sources.

The Head Start program provides funds to School Health Services to pay for the school-based health services component of the Head Start program, as mandated by the federal government. For FY 98, School Health is receiving a \$310,000 Head Start grant. Approximately half of the grant funds pay for personnel costs, including a nurse manager and two dental hygienists. The other half of the Head Start grant funds a contract with a company that provides health services to Head Start participants.

A Robert Wood Johnson grant partially funds operations at the two Linkages to Learning/School Based Health Centers. In FY 98, School Health Services is receiving \$100,000 as the first installment of a four-year \$400,000 total grant. The grant pays for a program specialist, an enrollment outreach worker, a contract nurse practitioner and consulting physician. The grant also funds after-hours care, supplies and equipment, mileage and public outreach activities.⁶

This year, School Health Services also received an \$8,000 grant to provide services to pregnant teens. \$6,000 of this grant pays for a consultant to coordinate the School Health teen pregnancy programs. The remaining \$2,000 pays for miscellaneous supplies.

B. School Health Services: Organization and Staffing

1. School Health Services Organization

Attached at page 31a (Table 12) is the most recent organization chart for School Health Services. This year, the School Health Services program is budgeted to support 163 workyears of school-based staff and 12 workyears of management and administrative staff.

The management/administrative staff consists of: one School Health Administrator; five nurse managers; one program specialist, one administrative specialist, one office services coordinator, four principal administrative aides, a part-time physician, and a teen pregnancy consultant.

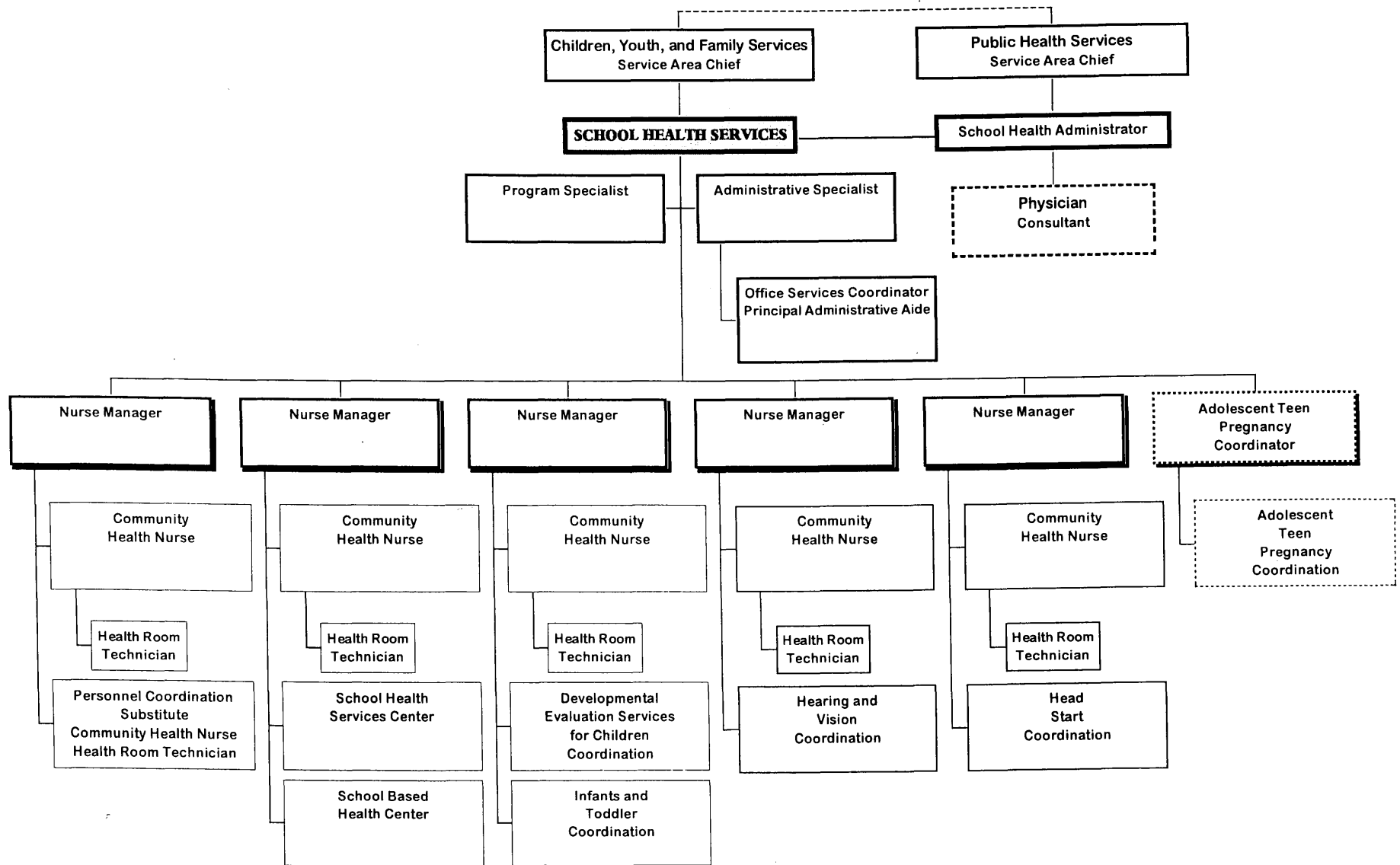
The nurse managers report to the School Health Administrator. Each nurse manager supervises between 12-16 School Community Health Nurses, who in turn supervise between one and four Health Room Technicians. Each nurse manager also

⁶ See Chapter IV for additional details about the service.

Table 12

School Health Services

Department of Health and Human Services



coordinates one or two specific school health programs, such as Head Start, hearing and vision screening, or the Linkages to Learning/School Based Health Centers.

The program specialist helps coordinate the Linkages to Learning and School Based Health Centers program. The administrative specialist handles personnel and budget issues for School Health Services.

A consulting physician now works half time for School Health Services and half time for Child Welfare and Public Health Services. The current physician's responsibilities in School Health include:

- provide consultation services to school nurses, MCPS, and other medical care providers regarding children with special health needs;
- consult with parents when there is disagreement between the services provided by School Health Services and the parents' expectations;
- provide direct patient care for abused, assaulted, and neglected children and testify in court for the children;
- serve on the Board of Education's Medical Advisory Committee, the County's Child Fatality Team, and the American Academy of Pediatrics' Child Protection Committee.

2. Staff to Student Ratios

School health staffing patterns vary across the country. Several national professional associations publish recommended guidelines for staffing school health programs. The National Association of School Nurses recommends the following guidelines:

- one nurse for every 750 students in the general school population;
- one nurse for every 225 students in the mainstreamed special education population; and
- one nurse for every 125 students in the severely/profoundly handicapped population.

The National Education Association's adopted Standards for School Health Services suggest a ratio of one nurse for every 1,000 students. The National Association of Elementary School Principals adopted a resolution stating that school health services are essential to children's' education and should be provided by a nurse in every school.

In some states, the ratio of school nurses to students is mandated by law. For example, State law in Arkansas, Delaware, and Florida mandate one school nurse for every 1,000 students. State law in Pennsylvania and West Virginia require one nurse for every 1,500 students. Tennessee law requires one nurse for every 3,000 students and Louisiana requires one school nurse for every 3,500 students. Massachusetts law mandates one school nurse in every school.⁷

⁷ OLO was unable to find any further explanation of what these various standards are based on.

Table 13 (below) shows the ratios of students to school nurses and students to technicians in Montgomery County between FY 96 and FY 98. OLO compiled these data based on School Health's staffing assignment charts prepared in the Fall of each school year. Data for part-time staff were adjusted so that one nurse position is calculated as eight hours a day of nurse time; and one technician positions is calculated as six hours a day of technician time. The data indicate that between FY 96 and FY 98:

- the student to technician ratio in the County remained essentially the same, with one technician for every 700 students.
- the student to nurse ratio in the County increased 3.6%, with the number of students per nurse increasing by 66 students from 1,854 to 1,920.

Appendix C summarizes the student to school health staff ratios in the more populous Maryland counties. These data, compiled by a State survey, show that Montgomery County has fewer health room staff per students than most of the other large counties in Maryland. Further research is required to know exactly what this comparative information means in terms of the level of services provided.

Table 13

**Ratio of Students to School Nurses and Technicians
FY 1996 - FY 1998**

	FY 96	FY 97	FY 98	Percent change FY 96 - FY 98
Students to School Nurses	1,854:1	1,980:1	1,920:1	3.6%
Students to Health Room Technicians	701:1	700:1	704:1	0.4%

3. General Approach to Staff Assignments

In general, School Health management staff report using their knowledge of the schools, communities and the students, as well as the abilities of School Community Health Nurses and Health Room Technicians to determine staff assignments. In general, the factors considered include:

- location of schools;
- student enrollment;
- prevalence of risk factors that require case management, e.g., pregnancy, substance abuse, students without medical insurance; and
- number of students with chronic illness or handicapping conditions.

As part of the FY 97 budget process, DHHS staff designed a quantitative model to measure the health-related needs of each school. OLO's understanding is that DHHS used the "School Needs Assessment Tool" as one source of information for making Health Room Technician staffing decisions for the 1996-97 and 1997-98 school years.

Formally developed in January 1996, the "School Needs Assessment Tool" identified ten variables related to health room activity at each school and assigned points to each variable according to its impact on the School Health staff workload. Four of the variables counted the quantity of specific services delivered by School Health staff, the other six variables reflected characteristics of each school's student population. Table 14 (page 34a) lists the variables and point values used in the Assessment Tool. (There is no additional quantitative back-up to support the assignment of point values.)

DHHS scored and ranked schools from highest to lowest, according to the number of points received for each variable. DHHS interpreted a high score to mean the school had higher health needs and a low score to mean lower health needs. MCPS' special schools were excluded from the ranking exercise. DHHS used the scores to identify the schools that would receive technicians assigned to work fewer than six hours a day. The School Health Services staff selected a "cut off" point value at which schools did not receive full six hour technicians, although a few schools with point values higher than the "cut off" also did not receive six hour technicians.

In a written response to HHS Committee questions dated July 29, 1996, DHHS staff indicated they would work collaboratively with MCPS to refine the Assessment Tool. In addition, DHHS indicated their plans to also work collaboratively with MCPS to develop a similar quantitative tool for school nurse assignments. It is OLO's understanding that there has been little progress made on either of these initiatives.

Table 14
DHHS School Needs Assessment Tool
January 1996

VARIABLES	IMPACT	NUMBER OF POINTS	
		MIN.	MAX.
Health Room Service Units (DHHS Data):			
Health room visits (not including visits for medications, treatments, or ADLs)	Actual number of students assessed treated and/or referred for illness or injury.	1.5	10.5
Medications	Actual number of prescribed medications administered to students.	2	12
Treatments	Actual number of prescribed treatments administered to students.	2	12
Activities of Daily Living (ADLs)	Actual number of times health room staff assisted students with ADLs; includes toileting and feeding.	2	12
Other Indicators (MCPS Data):			
Enrollment	Increases the potential number of students the health room comes in contact with.	2	22
Mobility rate	Increases the number of student assessments that health room staff must perform.	1	6
Number of special education students in self-contained classrooms	Increases the time needed by health room staff to provide interventions due to potential difficulties communicating and managing students.	1.5	9
Percent of students enrolled in ESOL classes	Increases time needed to provide interventions due to potential difficulty communicating with students and their parents.	1	5
Percent of students eligible to participate in the Free and Reduced-priced Meals Program (FARMS)	Frequently correlated with students' lack of primary health care, psycho-social needs (e.g., security, clothing, food, housing), and difficulty reaching parents due to no phone or disconnected phone.	1.5	9
Number of Head Start classes in a school	Federal program requires more screenings performed by health room staff.	1	3

Source: School Health Services, DHHS

4. School Nurse and Technician Staffing

General. Table 15 (page 35a) lists the allocation of the School Health Services' personnel budget, by positions and workyears for FY 96 to FY 98. The total number of budgeted positions is notably higher than the number of budgeted workyears because of the large number of part-time positions in School Health. Table 15 breaks out the staffing data for FY 98, which indicate that:

- School Community Health Nurses (school nurses) and Health Room Technicians (technicians) account for more than 90% of School Health Services' staff; and
- the number of Technician workyears is approximately double the number of School Nurse workyears.

School Nurse Hours and Assignments. School Health hires school nurses to work from four to eight hours per day (20-40 hours/week) and technicians to work from three to six hours per day (15-30 hours/week.) All technicians and almost all school nurses are hired for 10 months a year. For FY 98, only two of the school nurses work for 12 months of the year. Staff hired to work 20 or more hours a week receive employee benefits.

For the 1995-96, 1996-97 and 1997-98 school years, Table 16 (page 35b) shows the number of school nurses assigned to work from the minimum of four hours to the maximum of eight hours per day. The data are based on staffing assignment charts developed in the beginning of each school year. For the 1997-98 school year:

- 70 percent of school nurses work 8 hour days (40 hour/week);
- 23 percent of school nurses work 6 hour days (30 hour/week);
- Four percent of the school nurses work 7 hour days (35 hours/week); and
- Three percent of school nurses work 4 hour days (20 hours/week).

Table 17 (page 36) shows the number of schools supervised by the nurses. For the 1997-1998 school year:

- 51 percent of the nurses supervise three schools;
- 21 percent of the nurses supervise two schools;
- 21 percent of the nurses supervise four schools; and
- 8 percent of the nurses supervise one school.

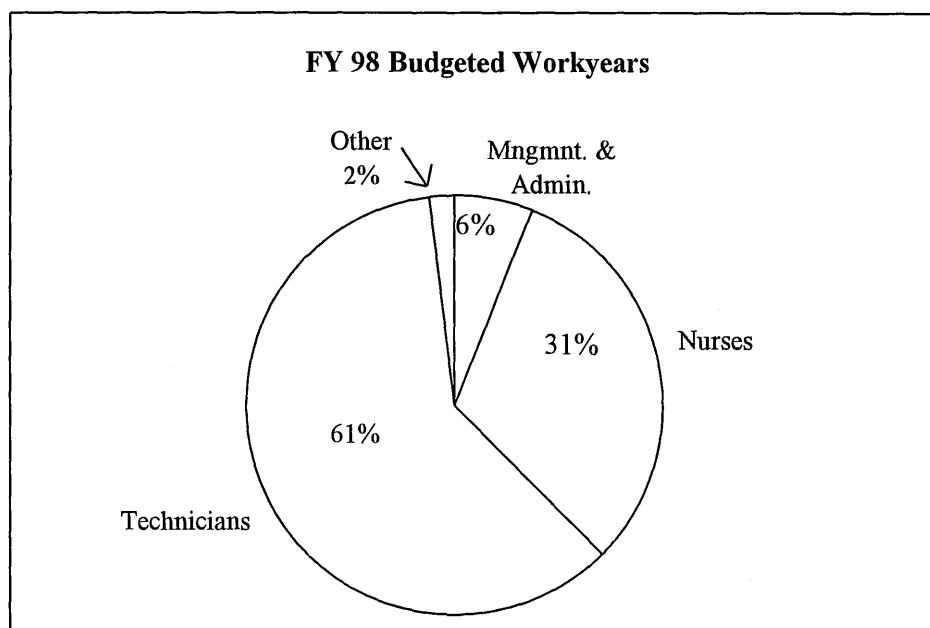
School Health management staff reserve the single school assignments for the largest high schools, special schools, and regular schools with programs for physically handicapped students. The nurses assigned to two schools are typically responsible for supervising one high school and one elementary school. The nurses assigned to three schools are responsible for either one high school and two elementary schools; one

Table 15
School Health Budgeted Positions and Workyears
FY 1998

Position Category	Budgeted Positions	Budgeted Workyears	Workyears as Percent of Total
Management ¹	6	6.00	3%
Admin/Program Support	7	6.12	3%
School Nurse	69	53.93	31%
Health Room Technician	182	104.86	60%
Other ²	5	4.36	2%
Total	269	175.27	99%

¹ Management category includes 5 nurse managers in School Health budget and one nurse administrator in the Public Health Services budget.

² "Other" category includes: dental hygienist and driver for Head Start program and group positions for school nurses and technician substitutes.



Source: School Health Services, DHHS

Table 16
School Nurse Hours ¹
FY 1996 - FY 1998

Hours worked per day ²	FY 96		FY 97		FY 98	
	Number of school nurses	Total hours per Day	Number of school nurses	Total hours per Day	Number of school nurses	Total hours per Day
8	51	408	47	376	48	384
7	1	7	3	21	3	21
6	16	96	15	90	16	96
5	0	0	0	0	0	0
4	2	8	2	8	2	8
Total	70	519	67	495	69	509

¹ As reported on staffing assignment charts prepared in the fall of each school year.

² All school nurses work for 10 months of the year, except for one 12 month nurse in the 1996 - 97 school year, and two 12 month nurses in the 1997 - 98 school year.

Table 18
Health Room Technician Hours ¹
FY 1996 - FY 1998

Hours worked per day ²	FY 96		FY 97		FY 98	
	Number of technicians	Total hours per Day	Number of technicians	Total hours per Day	Number of technicians	Total hours per Day
6	155	930	153	918	154 ³	924
5	0	0	8	40	7	35
4	0	0	2	8	5	20
3	26	78	19	57	16	48
Total	181	1008	182	1023	182	1027

¹ As reported on staffing assignment charts prepared in the fall of each school year.

² All health room technicians work for 10 months of the year.

³ Includes 153 technicians assigned to schools and additional technicians assigned to the hearing and vision program, Head Start, the Smith Center, and the School Health Services Center at the Rocking Horse Road Center.

middle school and two elementary schools; or three elementary schools. Nurses assigned to four schools are usually responsible for one middle school and three elementary schools.

Table 17
School Nurse Assignments *
FY 1996 - FY 1998

Ratio of nurses to schools	Number of Nurses Assigned		
	FY 96	FY 97	FY 98
1 to 1	6	5	7
1 to 2	12	13	13
1 to 3	43	32	34
1 to 4	5	13	12

* This data excludes nurses assigned to special programs (DESC, Infants and Toddlers, and School Based Health Centers)

Health Room Technician Hours and Assignments. Table 18 (page 35b) shows the number of Health Room Technicians (technicians) assigned to work from the minimum of three hours to the maximum of six hours per day. The data are based on staffing assignment charts developed in the Fall of each school year.

During the 1995-96 school year, 86 percent of the technicians worked six hour days and the remainder of the technicians (14%) worked three hour days. During the 1996-97 school year, some of the three hour technician positions were changed to four and five hour per day positions, leaving only 10 percent of the technician assignments at three hours per day. For the 1997-98 school year:

- 85 percent of the technicians work six-hour days (30 hours/week);
- 9 percent of the technicians work three-hour days (15 hours/week);
- 4 percent of the technicians work five-hour days (25 hours/week); and
- 3 percent of the technicians work four-hour days (20 hours/week).

DHHS and MCPS staff generally concur that a school is considered "covered" by School Health Services when a technician is present and the health room is open. As a result, the analysis of technician hours seems to be a valid proxy for describing the minimum number of hours that MCPS' school health rooms are covered by School Health personnel.⁸

⁸ The technician time provides a description of minimum coverage because the presence of a school nurse at a school site often extends the number of hours that the health room is actually open and staffed at a particular school. However, because school nurses divide their time as needed each week among the multiple school locations that they supervise, a school nurse cannot consistently be counted on to extend the hours of coverage at specific schools.

Using data on technician assignments as a proxy for coverage indicates that for the 1997-98 school year, the health room in 153 of the 183 MCPS schools is staffed by School Health Services for at least six hours of every school day. The 153 health rooms with at least 6 hour technician coverage include:

- all 21 high schools;
- all 32 middle schools;
- six special schools; and
- 94 out of 123 elementary schools.

For the current school year, there are 29 elementary schools (24% of total number) without six hour a day technician coverage. Of these 29 schools:

- 8 have five hour coverage;
- 5 have four hour coverage; and
- 16 have three hour coverage.

The Health Room Activity Log maintained by School Health staff report the number of days that each health room was “uncovered.” According to these data, elementary school health rooms were uncovered approximately six percent of the time, middle school health rooms approximately eight percent of the time, and high schools only one percent of the time. OLO notes that these data may not fully capture partial days that the health room is not staffed and may not accurately report the number of uncovered days; this is because the Health Room Log are not consistently filled out when health staff are not present.

D. In-Kind Contributions from MCPS for Health Rooms and Supplies

School Community Health Nurses and Health Room Technicians deliver health services in each school’s health room. MCPS provides health room facilities and the health room supplies as an in-kind contribution to the School Health Services program.

1. Education Specifications for Health Suites

Architects base new or modernized school designs on MCPS’ education specifications. The education specifications identify facility layouts and designs that satisfy specific program requirements. The specifications outline the numbers of classrooms, offices and other core spaces required, the size of the spaces, and the relationship between the spaces. The Board of Education approves the final education specifications for each new construction or modernization project.

The education specifications direct the architect’s design for the health room, also known as the “health suite.” MCPS last updated the education specifications for health suites in 1984. Table 19 (page 37a) summarizes the standard education specifications for elementary, middle, and high school health suites. Similar to all other space

Table 19
Education Specifications for Health Suites*

Elementary School Health Suite	Middle School Health Suite	High School Health Suite
<p><u>Size:</u> 400 square feet</p> <p><u>Spaces:</u></p> <ol style="list-style-type: none"> 1. resting area 2. storage area 3. toilet room 4. treatment area 5. waiting area <p><u>Other:</u></p> <ol style="list-style-type: none"> 1. include window to the general office 2. accessible from 2 doors (1 connects to the corridor) 	<p><u>Size:</u> 730 square feet</p> <p><u>Spaces:</u></p> <ol style="list-style-type: none"> 1. nurse's office 2. two resting areas 3. storage area 4. two toilet rooms (1 handicapped accessible) 5. treatment room 6. waiting area <p><u>Other:</u></p> <ol style="list-style-type: none"> 1. permit good supervision from the main office 2. accessible from 2 doors (1 connects to the main corridor) 3. accessible to persons with disabilities 	<p><u>Size:</u> 830 square feet</p> <p><u>Spaces:</u></p> <ol style="list-style-type: none"> 1. nurse's office 2. two resting areas 3. storage room 4. two toilet rooms (1 handicapped accessible) 5. treatment room 6. waiting space <p><u>Other:</u></p> <ol style="list-style-type: none"> 1. permit good supervision from the main office 2. accessible from 2 doors (1 connects to the main corridor) 3. accessible to persons with disabilities 4. place adjacent to a classroom to permit future expansion

* Education specifications for health suites most recently revised in 1984.

Source: Department of Educational Facilities Planning and Capital Programming, MCPS

requirements, the architect is allowed a 10 percent deviation from the requirements outlined in the education specifications.

The education specifications summarized on Table 19 indicate that the specifications for elementary, middle, and high school health suites vary. Specifically:

- The elementary school education specifications require 400 square feet of space and do not include a separate nurse's office; unlike the middle and high school education specifications, the elementary school specs do not indicate how much of the total square footage to designate for each component space, e.g., waiting area, examination room.
- The middle and high school suites require 730 square feet and 830 square feet, respectively. The component square foot requirements for middle and high school health suites are identical, except that the treatment room must be 300 square feet in middle schools and 400 square feet in high schools.

2. Health Suites Consistent with Current Education Specifications

According to MCPS staff, schools modernized or newly constructed since 1984 include health suites that are consistent with the educational specifications summarized above. Table 20 (page 38a) indicates the number of schools constructed and modernized since 1984.

Since 1984, MCPS has constructed 31 new schools and modernized 47 additional schools. This means that at least 78 (43%) of MCPS' 183 schools include health suites built consistent with the current education specifications.

Comprehensive data on the size and characteristics of the health room facilities in the other 105 schools were not readily available. OLO's interviews with DHHS and MCPS staff suggest that the adequacy of these health rooms varies considerably. The most frequent complaints heard from DHHS staff were that the space allocated for the health room in older schools is too small and does not allow sufficient privacy for staff or students.

3. School Based Health Centers and Rocking Horse Road School Health Services Center

The exceptions to the standard health suite facility for School Health Services are the two School Based Health Centers and the Rocking Horse Road School Health Services Center.

Table 20
Number of MCPS Schools Constructed or Modernized Since 1984

Type of School	Number of Schools Modernized since 1984	Number of Schools Constructed Since 1984	Number of Schools Not Constructed or Modernized Since 1984	Total Number of Schools 1997-98 School Year
Elementary	38	23	62	123
Middle	6	7	19	32
High	3	1	17	21
Other*	0	0	7	7
TOTAL	47	31	105	183

* Other schools include: Edison Career Center, Mark Twain, Carl Sandburg, Longiew, Stephen Knolls, Rock Terrace, RICA. There is no health suite at the Edison Center.

Source: Department of Educational Facilities Planning and Capital Programming, MCPS

In September 1997, School Based Health Centers opened at Broad Acres Elementary School and Harmony Hills Elementary School, as part of the Linkages to Learning program. A Community Development Block Grant and State school construction funds paid for construction of the School Based Health Center at Broad Acres Elementary School.

The School Based Health Center at Broad Acres operates in a full-service modular facility located next to the main school building. Health services staff currently serve Harmony Hills Elementary School students from a temporary suite within the school and in a portable building adjacent to the school. During the 1998-99 school year, Harmony Hills Elementary School will relocate to North Lake while the school is renovated. The renovated Harmony Hills school will include space for the School Based Health Center.

School Health Services staff also work at the Rocking Horse Road School Health Services Center. This site serves international students enrolling at the International Student Admissions Office, walk-in school age County residents needing immunizations, and uninsured students in need of an Attention Deficit Hyperactivity Disorder (ADHD) evaluation.

4. Health Room Supplies

MCPS also supports the School Health Services program by buying furniture, supplies, and equipment for all health rooms, as well as first aid kits placed throughout the school. MCPS also provides health supplies for the School Based Health Centers and the Rocking Horse Road School Health Services Center.

Each school's operating budget, managed by the principal, is the source of funds for purchasing health room and first aid supplies. In late spring of each year, the School Community Health Nurse or Health Room Technician submits to the principal a list of supplies needed for the following school year. MCPS delivers the supplies to the school before the beginning of the school year. If needed, School Health staff request the principal to order additional supplies during the year.

MCPS' Office of Procurement reports that the school system will spend an estimated \$153,700 on routine health room and first aid supplies during the current (1997-98) school year.

VII. MATRIX OF RELATED PROGRAMS AND SERVICES

Many of the goals adopted by School Health Services are shared by other County programs as well as by various MCPS departments. To accomplish its mission, School Health Services works collaboratively with related programs administered by the County Government and Montgomery County Public Schools, as well as numerous private and non-profit organizations.

For each of the services provided by School Health Service staff, Table 21 (page 40a) lists the related DHHS and MCPS programs and activities. For consistency, the list of School Health Services follows the format used earlier in Chapter V.

The rest of this chapter describes service areas where School Health Services staff work in unique partnerships with other DHHS and/or MCPS staff:

- Section A reviews the integration of School Health Services and other DHHS service areas;
- Section B describes DHHS and MCPS activities related to meeting the State mandate for health education;
- Section C provides more details about the relationship between School Health Services and the Department of Special Education; and
- Section D explains the connection between School Health Services and activities of MCPS' Department of Comprehensive Pupil Services.

A. Integration of School Health Services and Other DHHS Service Areas

1. Overview of School Health and Community Health Integration Plans

In August of 1996, DHHS initiated a plan to integrate activities provided by Community Health and School Health Services. DHHS described the plans for the integrated program structure to the Council's Health and Human Services Committee (HHS) as follows:

Rather than work independently to develop strategies to accomplish mutual outcomes, School Health and Community Health will organize into collaborative up, mid, and down county teams. The teams will work to identify priority outcomes in their communities and collaborate with other Health and Human Services, County, and community entities to develop, implement, and evaluate strategies. They will serve common service areas. (July 29, 1996 memorandum from DHHS Director to HHS Committee)

Table 21
School Health Services and Related DHHS and MCPS Programs/Activities

MAJOR SERVICES PROVIDED BY SCHOOL HEALTH SERVICES STAFF	RELATED DHHS PROGRAMS/ACTIVITIES	MCPS ROLE IN PROVIDING SERVICE
A. Services to all students:		
1. Provide emergency care for injury and illness.		MCPS staff provide back-up coverage when School Health Services staff are not available
2. Assess and appraise students' health needs that might interfere with effective learning. Specific activities include: <ul style="list-style-type: none"> • review of physical examinations, including immunization records; • prepare Medical Conditions list; • conduct vision/hearing screening; • coordinate scoliosis screening; 	DHHS administers (directly and on contract) a range of programs for health evaluation and service delivery. Programs that have frequent contact with School Health Services staff include: <ul style="list-style-type: none"> • Service Eligibility Unit • Care for Kids • Specialty Medical Evaluations • Prenatal/Reproductive Health. 	MCPS physical education teachers conduct initial scoliosis screening.
3. Work with others to provide a healthful school environment, including a safe physical environment, and communicable disease prevention and control.	DHHS' Communicable Disease, Epidemiology, and Lab Services program's focus is to investigate, manage, and control infectious diseases. DHHS' Immunization Services unit promotes universal access to immunizations for children under age two.	MCPS staff work with DHHS to inform students and parents of communicable health issues in the school, e.g., lice outbreaks. MCPS Division of Food and Nutrition Services responsible for preparing and serving nutritious meals in schools. MCPS Division of Construction, Safety and Environmental Health Unit works to resolve any unsafe/unhealthy environmental conditions in the schools.
4. Provide health education.	DHHS' Health Promotion and Substance Abuse Prevention Unit administers educational programs that promote healthy life styles for all members of the community, including some programs specifically designed for school-age children.	MCPS curriculum includes health education components at every grade level. High school graduation requirements include a semester of health education. MCPS Safe and Drug Free School Project is a multi-year program to provide alcohol and other drug use prevention and education.

Table 21 continued

MAJOR SERVICES PROVIDED BY SCHOOL HEALTH SERVICES STAFF	RELATED DHHS PROGRAMS/ACTIVITIES	MCPS ROLE IN PROVIDING SERVICE
B. Services to subset of MCPS students:		
1. Develop Individual Health Care Plans (IHCP).	DHHS physician and staff from other DHHS programs may be consulted as School Nurse develops IHCPs, in cooperation with the student and his/her parent and private physician.	
2. Administer prescribed medications.		MCPS staff provides back-up coverage when School Health staff are not available.
3. Perform prescribed treatments.		Special Education Instructional Assistants help to provide prescribed treatments for selected students.
4. Provide assistance with Activities of Daily Living (ADLs).		Special Education Instructional Assistants provide ADL services to selected students.
5. Provide individual and/or group counseling related to health issues.	Multiple DHHS programs and community partners offer counseling to children and families, e.g., Linkages to Learning, Child and Adolescent Mental Health Services.	MCPS staff (e.g., counselor, teacher, administrator) jointly lead selected support groups with School Health Community Nurse.
6. Facilitate connecting students without access to primary health care to State and County programs that provide needed services.	School Health Services works with other DHHS units to facilitate access to primary health care, especially the Service Eligibility Unit and Care for Kids program.	
7. Participate in the health-related component of the EMT and ARD committee process.		Principal convenes EMT and ARD meetings, which can involve various MCPS personnel, e.g., teachers, counselor, pupil personnel worker, psychologist, and Special Education Department staff. The principal requests the School Nurse to attend when a student's health condition is relevant to the issues being discussed.

DHHS presented the Council's HHS Committee with a timeline for integration that showed co-location of School Health and Community Health management and administrative support by November 1996, implementation of the integrated management structure by December 1996, and action on "First Step" service integration initiatives in FY 97. The specific "First Step" initiatives included:

- An Immunization Initiative to increase vaccine completion levels by expanding immunization services to selected schools and other community locations, e.g. TESS, CASA.
- A Tuberculosis (TB) Initiative to improve TB surveillance and access to screening by adding community based test sites in addition to existing sites at clinics and the School Health Services Center.
- An Integrated Teen Pregnancy Prevention Model to provide targeted outreach, case finding, enrollment assistance, and case coordination/management for adolescents.
- An Access to Primary Health Care Initiative to increase access to subsidized health services by operating Service Eligibility Units (SEU) in school settings.

2. Update on School Health and Community Health Integration Plans

According to DHHS staff, the integration of Community and School Health Services continues to be a high Departmental priority. School Health and Community Health staff report progress has been made on many of the service integration initiatives identified in 1996. However, staff members acknowledge that Community Health staff time was diverted during the past year from the integration effort toward implementation of the changes in Medicaid dictated by the State (Health Choice).

DHHS staff summarize their progress on service integration in three target areas: policy and planning, data and technology, and program.

Policy and Planning: The assignment during FY 97 of a Nurse Administrator from the Public Health Services Area as the School Health Administrator provides what HHS calls a "matrixed management model" that links community health and school health. In June 1997, the School and Community Health Management co-located at Piccard Drive to facilitate integration activities. The co-location occurred seven months later than the original target date of November 1996.

School Health and Community Health staff report accomplishing some “collaborative strategic planning” to implement Health Choice, to regionalize services, and to identify shared training needs. In addition, representatives from the two programs worked together to identify five mutual program goals and strategies:

- increase access to primary care during childhood and pregnancy;
- reduce hospitalization and emergency room visits due to asthma;
- reduce teen pregnancies;
- reduce substance abuse; and
- increase violence prevention activities.

Data and Technology: School Health and Community Health staff are working together to identify State data reporting requirements and to design a shared data collection system. School Health and Community Health are also working to automate what is known as “an integrated case management system.”

Program: School Health and Community Health report working together to offer immunization and TB testing at some school sites. In three schools at high risk for TB, children with a positive TB skin test received prophylactic antibiotic treatment from the school nurse. Last year, DHHS administered Hepatitis B immunizations to fifth graders at a school with a significant number of uninsured students. In the future, School Health and Community Health staff plan to provide the immunizations to students at additional schools.

In addition, School Health Services collaborates with Community Health to offer Service Eligibility services at the two School Based Health Centers (Broad Acres and Harmony Hills). School Health and Community Health also developed an integrated case management approach for pregnant teens. The objective is for school-based nurses and community-based nurses to avoid duplication of services (e.g., home visits) and to seek reimbursement for case management services provided to Medical Assistance enrollees. During the summer, Community Health Nurses provide case management services to pregnant teens while 10 month School Community Health Nurses are out.

OLO’s interviews with school nurses and technicians suggest that DHHS successfully communicated the goal of an integrated service delivery system to all program field staff. In practice, anecdotal examples of service integration exist, with some school nurses and technicians working more collaboratively with Community Health Nurses than others.

3. Connections to Other DHHS Service Areas

School Health Services staff also work with multiple other DHHS service units. Specifically:

- For issues concerning communicable disease prevention and control, School Health Services staff work closely with the Communicable Disease, Epidemiology, and Lab Services Program;
- In assessing students' health needs and facilitating access to health care, School Health Services works directly with other DHHS units and community partners that make referrals or provide medical services to eligible children. Examples include the Service Eligibility Unit, Care for Kids, Specialty Medical Evaluations, and the Dental Services unit; and
- School Health Services works with DHHS programs and community partners that offer individual and group counseling to children and families, e.g., Linkages to Learning, Child and Adolescent Mental Health Services.

B. Meeting the State Mandate for Health Education

1. State Requirements for Instruction in Health Education

One of the requirements for a school health program outlined in State law is "instruction in health education." Regulations issued by the Maryland State Department of Education in the early 1990's (COMAR 13A.04.18, Comprehensive Health Education) require local education agencies to provide health instruction for all students every year in kindergarten through 12th grade.

In addition, State regulations also established a one-half credit health education course as a requirement for high school graduation. (COMAR 13A.03.02) Based on the State regulations, MCPS' Office of Instruction and Program Development (OIPD) designate the following topic areas to be covered at every grade level:

- mental health;
- tobacco, alcohol, and other drugs;
- personal and consumer health;
- nutrition and fitness;
- safety and injury prevention;
- family life and human sexuality; and
- disease prevention and control.

Appendix E contains an example from OIPD of what first grade students are expected to learn in each of the topic areas.

Continued implementation of the State requirement for comprehensive health education is the responsibility of MCPS' Division of Aesthetic, Health, and Physical Education. MCPS' Health Education Curriculum Coordinator works to develop teacher training and related instructional material for the comprehensive health education program at all grade levels. In addition to providing planning support and offering in-service training, the Health Education Curriculum Coordinator monitors implementation of the program at the school level.

The Division of Aesthetic, Health, and Physical Education works closely with other MCPS units and other public and private agencies, including School Health Services staff. The School Health Nurses and Health Room Technicians describe providing health education and promoting wellness to members of the school community as one of their daily jobs. In most schools, there are also times during the year when the School Nurse provides health education in a more formal setting, e.g., PTA meeting, staff meeting, classroom.

2. Safe and Drug Free Schools and Communities Project

This project, organizationally located in the Division of Aesthetic, Health, and Physical Education, is a multi-year program supported by federal funds to provide alcohol and other drug use prevention and education. FY 98 funding for the project is \$523,692, which is distributed to MCPS through the State Department of Education.

The adopted FY 98 MCPS budget describes the primary purpose of the Safe and Drug Free Schools and Communities Project is to:

- prevent alcohol and other drug use by students;
- educate students about problems associated with alcohol and other drug use;
- provide support for students at risk of alcohol and other drug use;
- provide violence prevention instruction; and
- help school communities develop community norms that promote safe, healthy, drug-free lifestyles.

Specific programs administered by the project include:

- HELP (Help Elementary Lead Prevention): elementary faculty training to help staff recognize and prevent high risk behavior in elementary students;
- McGruff Program: addresses personal safety and alcohol and other drug use prevention for students in pre-kindergarten through Grade 2;

- Project DARE (Drug Abuse Resistance Education): a joint program with the Montgomery County Police Department and six other law enforcement agencies to teach alcohol and other drug use prevention to 5th grade students;
- Project SMART (Self-Management and Resistance Training): a program for 6th graders that teaches students how to resist peer pressure and other factors that may lead to negative behaviors;
- Just Say No Clubs: led by parents in elementary schools; and
- Montgomery Student Assistance Teams: 46 secondary schools provide early intervention and referral for students with alcohol and other drug abuse related problems.

3. DHHS' Health Promotion and Substance Abuse Prevention Unit

DHHS' Health Promotion and Substance Abuse Prevention Unit also shares the goal of health education and wellness promotion. Current year (FY 98) funding for the Health Promotion Unit is \$801,860.

The Health Promotion Unit is structurally located in DHHS' Public Health Services Area. Largely grant-funded, the Health Promotion Unit administers outreach and educational programs that promote healthy lifestyle behaviors for all members of the community. The connection with School Health Services derives primarily from the specific programs that are designed for school-age children, including:

- A nutrition education program designed for elementary school children (Five-a-Day Program);
- A smoking cessation and prevention program for adolescents;
- A program that works to change community attitudes and behaviors related to adolescent alcohol use (Drawing the Line on Underage Alcohol Use);
- Comprehensive substance abuse prevention and education services; and
- Safety education activities, including Buckle Up Kids (to promote the use of safety seats) and Safe Kids (advocates for changes to prevent childhood injuries).

C. School Health Services and Special Education Services

1. Meeting health-related needs of students receiving special education services

As reviewed earlier, Federal law mandates a free and appropriate education for students with disabilities in the least restrictive environment to meet the students' needs. The law also requires the provision of "related services" to students with disabilities, from birth through age 20. These "related services" include "school health services."

State regulations require the school nurse to participate in the Special Education Admissions, Review, and Dismissal (ARD) process to discuss health related concerns.

According to OLO's interviews with DHHS and MCPS staff, no formal agreement exists between the two agencies that outlines the division of responsibilities for meeting health-related needs of students receiving special education services. In most cases, the School Community Health Nurse, with assistance from the Health Room Technician, assumes lead responsibility for providing prescribed treatments and dispensing medication.

DHHS and MCPS report that school-based staff (i.e., some combination of the School Community Health Nurse, Health Room Technician, Principal, Special Education Resource teachers and assistants) figure out who will assist students receiving special education services with routine ADL services on a school-by-school basis. For example, depending on the school, the Health Room Technician or the Special Education Instructional Aides assume lead responsibility for ADLs. In some cases, the responsibility is split between the Health Room Technician and a Special Education Aide.

As noted in Chapter IV, there are 148 MCPS students this school year who need constant individualized supervision throughout the school day. At present, the Special Education Department assumes lead responsibility for arranging the needed assistance. For additional discussion on School Health Services and the Department of Special Education, see pages 10-12.

2. Early Intervention Services

Federal regulations mandate the provision of early intervention services to infants and toddlers (birth to age three) with disabilities, who are at risk for or who display developmental delays.

MCPS' FY 98 budget states that, "A significant number of children who need intensive services are entering MCPS. This is a result of improved medical care for very premature and low-birth weight babies, as well as an increasing number of children who have been exposed to drugs, alcohol, viral infections, or other prenatal factors. MCPS continues to expand options for these children in public schools in an effort to keep them as close to their home school clusters as possible. This minimizes transportation costs and eases transition to kindergarten programs if special education is still required."

The County and MCPS cooperatively deliver early intervention services to children and their families through the inter-agency Montgomery County Infants and Toddlers Program (MCITP). Through this program, DHHS staff, MCPS staff, and private contractors work with families to identify developmental delays and adopt plans to address them. A School Community Health Nurses consults on health-related issues.

For children between the ages of three and five, the Child Find/Developmental Evaluation Services for Children (DESC) program conducts developmental screening and makes referrals to an interagency assessment team at their local school. As part of the DESC program, a School Community Health Nurse serves on an inter-agency team to evaluate students' needs.

D. School Health Services and Comprehensive Pupil Services

State regulations (COMAR 13A.05.05) require each school system to provide a coordinated program of "pupil services" for all students, including guidance, pupil personnel, school psychology, and health services. The pupil services team includes guidance staff, pupil personnel staff, school psychology staff, and health services staff. This team coordinate "pupil services support" to all MCPS schools, students, parents, and communities.

Guidance and health services staff are located at each school. The MCPS Department of Comprehensive Pupil Services' three field offices house school psychologists and pupil personnel workers. Many of the issues that Pupil Services staff deal with have a health-related component so they frequently consult with School Health staff.

Pupil services field staff help to implement a number of significant federal and state regulations. In particular, pupil services field staff:

- help each school to develop their required pupil services plans;
- participate in the ARD (Admission, Review, and Decision) process to determine eligibility, program options, and related services;
- develop plans for services and provisions of accommodations for students who qualify under Section 504 of the Rehabilitation Act of 1973;
- share information between the Superintendent of Schools and the Department of Police regarding reportable criminal offenses when safety issues are of concern.

In addition, pupil services field staff have responsibilities related to students receiving home instruction, student transfers, and case management support for adolescents placed in alternative programs, such as the Phoenix programs, Journey, Gateway, New School, and the Other Way. Pupil services staff also support implementation of federal, state, and MCPS policies and regulations related to suspected child abuse and neglect, and follow up on truancy and residency issues.

School Community Health Nurses work closely with Pupil Services staff on management of student attentional problems (ADD/ADHD). With an increasing workload related to the development and plans for services of accommodation for students who qualify under Section 504, the respective roles of the school nurse, school psychologist, and school counselor are currently in the process of review and possible change.

CHAPTER VIII. FEEDBACK

During the course of conducting this study, OLO listened to many different people who are involved with various aspects of School Health Services and related activities. Through a combination of focus groups and individual interviews, OLO spoke with many DHHS staff including:

- School Community Health Nurses;
- Health Room Technicians;
- Nurse Managers;
- Nurse Administrators; and
- Other DHHS management, budget, and program staff.

OLO also spoke with many MCPS staff including:

- Principals and assistant principals (elementary, middle, and high);
- Office of Comprehensive Pupil Services staff;
- Office of School Administration staff;
- Office of Instruction and Program Development staff;
- Office of Facilities Management staff;
- Office of Food and Nutrition Services staff; and
- Other MCPS management, budget, and program staff.

In addition, OLO met separately with the Medical Advisory Committee to the Board of Education and several representatives from the Chair of the County's Commission on Health.

This chapter presents the key themes that emerged from our many conversations. The themes represent the most commonly held views and observations shared by those interviewed. *Readers should be aware that OLO did not use a formal survey instrument and the views presented do not represent the official "agency" views of the Department of Health and Human Services or the Montgomery County Public Schools.*

Theme #1: The health-related needs of MCPS students have increased.

Perhaps the most common observation shared by those interviewed is that the health-related needs of MCPS students have increased in recent years. In particular, those interviewed cited more prescribed medications, substance abuse, teen pregnancies, and students suffering from mental illness and emotional stress. Another frequently mentioned factor is that an increasing number of students with special health needs (e.g., need for medical treatments or assistance with activities of daily living) are attending their neighborhood schools as opposed to special schools.

Theme #2: Students in all schools require health-related services during the school day, but the specific types of need vary from school to school.

The general consensus among those interviewed is that students in every school have health-related needs throughout the school day, but the specific types of need vary from school to school. The variables most often cited as explaining the different health-related needs are:

- the level of the school, i.e., elementary, middle, or high;
- the total number of students enrolled;
- the socio-economic characteristics of the student population; and
- the existence of special programs in the school, i.e., Head Start, Intensity 4 and 5 special education classes.

The different health needs and the number of students in the school influence the level of activity in the health room and the nature of the School Community Health Nurses' and Health Room Technicians' jobs.

Theme #3: The provision of health-related services to students receiving special education services varies from school to school.

In many cases, the students who have more severe health needs during the school day are receiving some level of special education services. As enrollment in special education services increases and more students receiving these services attend their neighborhood schools, the demands on the health room staff in these schools also increase. How individual schools handle the increasing number and complexity of health needs varies from school to school, especially in terms of the division of responsibility between School Health and Special Education staff.

In some schools, figuring out who will meet the health-related needs of students during the school day has become a source of tension. The extent to which MCPS staff consult with School Health staff before placing a student with complex health needs seems to vary. Both school nurses and nurse managers expressed concerns about MCPS' placement process and how difficult it can be to obtain back-up services from MCPS staff. Similarly, MCPS staff expressed concerns about the availability of health room staff to provide needed support to children with special health requirements.

Theme # 4: School Health staff have “heavy workloads.”

A majority of DHHS and MCPS staff interviewed observed that most School Health staff have “heavy workloads.” Those interviewed described “heavy workload” in different ways, with the most common description simply being more tasks to be done than could reasonably be accomplished during the work day. A commonly shared view was that School Community Health Nurses are assigned to supervise “too many schools,” with the result being greater reliance on the Health Room Technicians, especially in elementary schools. Some individuals also noted that being “overworked” was nothing new for School Health staff; in other words, being a school nurse or technician has always been a demanding job.

Theme #5: Hearing and vision screening worked better the “old” way.

Before the 1996-97 school year, a special team of Health Room Technicians traveled from school to school to perform the required hearing and vision screening tests. The Department eliminated the special team of hearing/vision technicians in FY 97. Under current practice, all nurses and technicians receive training in hearing and vision screening and conduct the testing in their home schools. The major criticism of the current system is that it is perceived as an “inefficient” use of staff time to train everyone to perform a specialty service. Many observed that it took substantially less time for everyone involved when a special team, who conducted the screening all the time, performed this function.

Theme #6: The working relationship between School Health Services staff and individual principals varies from school to school.

Many of those interviewed commented on how atypical it is to have personnel working in a school, who do not report to the principal. In practice, it appears that the working relationship between School Health staff and individual principals varies considerably from school to school.

In most schools, there is a close, collegial working relationship. Many principals complimented the hard working School Health staff members for their long hours and dedication to the students. More than one principal confessed, “I don’t know what I would do without my nurse or technician.”

In some schools, however, the fact that the School Health staff do not report directly to the principal results in scheduling and health room coverage problems. Some of those interviewed voiced the concern that it was more difficult for a principal to resolve problems with staff who do not work in his/her agency. On the other hand, others cited advantages to having a School Community Health Nurse able to operate independently from the school administration.

Other common observations shared by those interviewed included:

- Health rooms in all schools should be staffed for the entire school day including during before-school and after-school activities.
- The data collected by DHHS under-report health room activity because School Health Staff do not have the time to consistently track all visits to the health room.
- DHHS' reorganization and reduction of senior manager positions in School Health Services impacted the workload at the management level more than at the school level.
- A common perception shared by principals was that School Health changes the nurses' and technicians' school assignments "too often," which makes it more difficult to establish good working relationships.
- The current system for providing health room coverage when a nurse or technician is absent is inadequate.

IX. FINDINGS AND RECOMMENDATIONS

A. Summary of Findings

State law assigns the County Government and Montgomery County Public Schools (MCPS) shared responsibility for providing health services to students. The County's Department of Health and Human Services (DHHS) funds and staffs the program titled "School Health Services."

In partnership with other County and MCPS staff, School Health program staff provide an important set of services to students, staff members, parents, and other members of the school community. Many of those interviewed throughout the course of this study affirmed OLO's observations that School Community Health Nurses and Health Room Technicians perform a demanding, front-line job that is essential to the daily operations of the County's schools.

The first part of this chapter presents key findings from the report. OLO's recommendations begin on page 58.

Overview of School Health Services (Chapter III)

1. Across the country, schools have become an important place for coordinating efforts to achieve health and education goals. While most people believe that health and education are inextricably linked, there is little empirical evidence to document the link between school-based health services and educational outcomes.
2. Maryland law includes a general requirement that each county board of education, with the assistance of the county health department, provide a school health program. State regulations mandate specific components of a school health program, with varying degrees of guidance on the level of services provided.
3. School Health Services is an atypical County program in that most of the program staff are employees of one agency (County Government, DHHS), who work routinely in buildings staffed and managed by another agency (MCPS).
4. Other DHHS and MCPS programs share many of the goals adopted by School Health Services. School Health Services must work collaboratively with these related programs to accomplish its mission.

Health-Related Needs of the County's Children (Chapter IV)

1. The County's Public Health Officer reports that asthma is the leading reason in the County for hospitalizing children under the age of ten. Other major causes of hospital admissions for children include injuries, dehydration, and appendicitis. For adolescents age 15-17, the most frequent reasons for hospitalization are drug and alcohol abuse, depression, and other emotional disorders.

2. The Public Health Officer identified six activities as appropriate public roles for the County Government in reducing hospitalizations: health education; community measures to address substance abuse; mental health awareness and treatment; assuring access to primary care during pregnancy and childhood; advocacy to reduce injuries; and monitoring and control of communicable diseases. Many of the services provided by School Health Services staff correlate with these six activities.
3. According to research on the effects of economic hardship, the relationship between low income and poor health is well established. Between 1975 and 1998, the percent of MCPS students eligible to participate in the Free and Reduced-priced Meals program increased from six to 23 percent of total enrollment. DHHS estimates that approximately 26,000 County children below the age of 18 do not have medical insurance.
4. A recent School Health Services' survey shows that asthma, attention disorders (ADD/ADHD), and allergies are the most prevalent health conditions affecting MCPS students. Other health conditions reportedly each affecting at least 500 students are: anaphylaxis, cardiac problems, headaches, and problems with hearing or vision.

Program Data (Chapter V)

1. Data on MCPS enrollment and facilities show that:
 - * Between FY 91 and FY 98, MCPS enrollment increased 21 percent from 103,700 to more than 125,000 students. By the year 2004, MCPS expects to enroll an additional 8,400 students.
 - * For the 1997-98 school year, 6,589 students (5% of total enrollment) receive Intensity 4 or 5 special education services. MCPS' goal is for 90 percent of all students who qualify for Intensity 4 and 5 services to receive those services in their home cluster.
 - * This year, MCPS students attend 123 elementary schools, 32 middle schools, 21 high schools, seven special schools, and one career center. Over the next two fiscal years, MCPS plans to open at least one new elementary school, three middle schools, and two high schools.
2. Services provided by School Health staff to all MCPS students include: emergency care for injury and illness; health assessment and appraisal; communicable disease prevention and control; and health education.
3. For a subset of MCPS students with special needs, School Health staff: administer medications; perform prescribed treatments; provide assistance with activities of daily living; provide individual or group counseling; and facilitate access to primary health care.

4. School Health Services staff and MCPS Department of Special Education staff jointly meet the health-related needs of students receiving special education services. During the current school year, MCPS will spend an estimated \$1.97 million for special education instructional assistants to provide individual support to 148 students, who require constant individualized supervision or assistance during the school day. This is almost three times the amount spent in FY 95 to provide this type of assistance. According to MCPS staff, the increasing costs of providing individualized supervision results from a larger number of students with disabilities and the re-authorization of federal legislation (IDEA), which requires a greater number of students with disabilities be educated within the regular classroom.
5. School Health Services staff also provide the health-related component of the following inter-agency programs: Linkages to Learning (including two School Based Health Centers); Head Start; Infants and Toddlers Program; and Child Find/Developmental Evaluation Services for Children.
6. Currently, School Health Services primarily collects health room activity data, which are recorded manually. These data track the volume of work, but do not measure the quality of the services performed, the amount of time spent, or the eventual outcome. As a result of data collection problems and the volume of data, School Health staff report finding it difficult to fully and effectively analyze the data collected.
7. As of this writing, School Health staff are in the process of re-designing their data system. The goals cited for the new system include electronic data collection from all health rooms; and integration with other service units within DHHS.

Funding and Staffing (Chapter VI)

1. The School Health Services' FY 98 operating budget of \$8.9 million represents almost 9 percent of DHHS' total General Fund budget of \$101.6 million. Personnel expenses account for 95 percent of the School Health Services program budget. The FY 98 budget supports 163 workyears of school-based staff and 12 workyears of management/administrative staff.
2. The School Health Services budget increased 20 percent between FY 96 and FY 98. The increase reflected compensation adjustments for an existing complement of school nurses and technicians, and increases in grant funds. School Health uses grant funds to contract for health-related services provided to the Head Start program and Linkages to Learning/School Based Health Centers program.
3. Compensation increases between FY 96 and FY 98 were offset by a lower program budget for administrative/management staff. Consistent with DHHS' department-wide goals to flatten the organization and reduce management positions, DHHS reduced the number of management/administrative workyears in School Health Services from 17 to 12.

4. Between FY 96 and FY 98, the technician to student ratio in the County remained essentially the same with one technician for every 700 students. During this same time, the school nurse to student ratio in the County increased 3.5 percent from one nurse for every 1,854 students to one nurse for every 1,920 students.
5. In January 1996, DHHS staff designed a quantitative model to measure the health-related needs of each school and to allocate health room staff. OLO found minimal quantitative support for the point values assigned to different variables in the model. Over the past two years, little progress has been made to refine the model.
6. This school year, approximately half of the nurses supervise three schools; 20 percent supervise two schools; and another 20 percent supervise four schools. Less than 10 percent of the nurses supervise one school.
7. Technicians are assigned to six hours a day in 153 (84%) of 183 MCPS schools. This includes:
 - * all 21 high schools;
 - * all 32 middle schools;
 - * 94 out of 123 elementary schools; and
 - * 6 out of 7 special schools (School Health does not assign staff to RICA).
8. This year, of the 29 elementary schools with fewer than six hours a day of technician coverage:
 - * 8 schools have five hour coverage;
 - * 5 schools have four hour coverage; and
 - * 16 schools have three hour coverage.
9. MCPS provides in-kind support to School Health Services by providing space in the schools, and routine health room and first aid supplies. MCPS' Office of Procurement reports that the school system will spend an estimated \$153,700 on these supplies during the 1997-98 school year.
10. 78 (43%) of MCPS' 183 schools include health rooms built consistent with the current education specifications for health suites, which were most recently updated in 1984. Comprehensive data on the size and characteristics of the health room facilities in the other 105 schools are not readily available.

Matrix of Related Programs and Services (Chapter VII)

To accomplish its mission, School Health Services works collaboratively with related County Government and MCPS programs, as well as private and non-profit organizations.

1. **Integration of School Health and Community Health.** According to DHHS staff, the integration of Community and School Health Services continues to be a high priority of DHHS. School Health and Community Health staff report progress on many of the service integration initiatives identified in 1996.
2. **Meeting the State Mandate for Health Education.** MCPS' Division of Aesthetic, Health, and Physical Education implements the State requirement for comprehensive health education in conjunction with other public and private agencies. The school nurses and technicians provide health education and promote wellness to members of the school community as part of their daily jobs.
3. **School Health Services and Special Education Services.** Federal law mandates a free and appropriate education (FAPE) for students with disabilities in the least restrictive environment (LRE) to meet the students' needs. The law requires the provision of "related services" to students with disabilities, including "school health services."

A combination of School Health Services staff and Special Education staff meet the special health needs of these students. There is no formal agreement between the two agencies outlining the division of responsibilities for meeting health-related needs of students receiving special education services. At present, the Department of Special Education hires staff to provide individual support to students who need constant individualized supervision or assistance during the school day.

4. **School Health Services and Comprehensive Pupil Services.** State regulations require each school system to provide a coordinated program of "pupil services" for all students, including guidance, pupil personnel, school psychology, and health services. The school nurse serves on various pupil services teams to consult on health-related issues.

Feedback (Chapter VIII)

This chapter presented some of the themes that emerged from the many interviews held throughout the study period. The views presented do not represent the formal "agency" views of DHHS or MCPS. The major themes are listed below.

1. **The health-related needs of MCPS students have increased.** In particular, those interviewed noted increased number of prescribed medications, higher rates of substance abuse, increased numbers of teen pregnancies, increased numbers of students suffering from mental illness and emotional stress; and larger numbers of students with special health needs.
2. **Students in all schools require health-related services during the school day, but the specific needs vary from school to school.** Health-related needs vary depending on the level of the school (i.e., elementary, middle, or high); the total number of students enrolled; the socio-economic characteristics of the student population; and the existence of special programs in the school, such as Head Start or Intensity 4 and 5 special education classes.
3. **The provision of health-related services to students receiving special education services varies from school to school.** How individual schools handle the increasing number and complexity of health needs varies from school to school, especially in terms of the division of responsibility between School Health and Special Education staff. This is a source of tension in some schools.
4. **School Health Services staff have "heavy workloads."** Those interviewed described "heavy workloads" in different ways, with the most common description simply being more tasks to be done than could reasonably be accomplished during the work day. Some individuals noted that this observation was not a recent development, that is, being a school nurse or technician has always been a demanding job.
5. **Hearing and vision screening worked better the "old" way.** Before the 1997-98 school year, a special team of technicians traveled from school to school to perform the required hearing and vision screening tests. The Department eliminated the special team of hearing/vision technicians in FY 97. All nurses and technicians are now trained to conduct the screenings in their home schools.
6. **The working relationship between School Health Services staff and individual principals varies from school to school.** In most schools, there is a collegial working relationship between principals and school health staff. Many principals complimented the hard working School Health staff members for their long hours and dedication to students. In some schools, however, the fact that School Health staff do not report directly to the principal results in scheduling and health room coverage problems.

B. Recommendations

Recommendation #1: The County Government and MCPS should develop an inter-agency memorandum of understanding that addresses School Health Services.

In many respects, School Health Services is an inter-agency program. The State law mandate for a school health program assigns joint responsibility to each county board of education and county health department to provide: adequate school health services; instruction in health education; and a healthful school environment.

In Montgomery County, the County Government funds and manages the School Health Services program. School Community Health Nurses and Health Room Technicians, employed by the Department of Health and Human Services (DHHS), work in health rooms located in buildings staffed and managed by Montgomery County Public Schools (MCPS). School Health staff, in partnership with other DHHS and MCPS staff, provide a broad range of health-related services to students, parents, school staff, and other DHHS and MCPS programs.

OLO's interviews with DHHS and MCPS staff found many similar views but some legitimate differences of opinion about School Health Services' purpose and priorities. At present, there is no institutionalized inter-agency process for coordinating activities or resolving conflicts about the delivery of school health services in the schools, including personnel or scheduling issues.

Recognizing the inter-agency nature of the School Health Services program, OLO recommends that the County Council ask the County Government and MCPS to develop an inter-agency memorandum of understanding that:

- identifies the respective roles of DHHS and MCPS staff in providing health-related services in MCPS facilities; and
- establishes an ongoing inter-agency process for airing and resolving issues between the two agencies related to School Health Services.

OLO recommends that the Chief Administrative Officer and the Superintendent of Schools appoint an inter-agency staff group to discuss these issues and draft a memorandum of understanding. Reaching inter-agency consensus on respective agency roles should help both DHHS and MCPS make decisions about resource and time allocations.

Examples of issues concerning School Health Services that require an ongoing inter-agency forum for discussion and resolution include:

- What is the most cost-effective way to meet the health-related needs of students receiving special education services, especially students who need routine assistance with activities of daily living and students who need constant individualized supervision or assistance during the school day?
- How can DHHS and MCPS best work together to plan School Community Health Nurse and Health Room Technician assignments?
- What process should DHHS and MCPS follow when a school experiences a problem related to health room coverage?
- How can DHHS and MCPS staff most effectively work together to fulfill State mandates for health-related recordkeeping, especially those requirements related to the Maryland State Department of Education audit of enrollment reports, e.g., immunization records?
- How can DHHS and MCPS staff most effectively work together to maximize State reimbursement of health-related services provided to eligible students?
- Who is responsible for meeting the health-related needs of students on field trips?
- How is the work of MCPS' Safe and Drug Free Schools Project integrated with the work of DHHS' Substance Abuse Prevention Unit?
- How can the County's Commission on Health and the Board of Education's Medical Advisory Board develop a coordinated approach to discussing school health issues?

Recommendation #2: To enable the Council to make more informed budget decisions about School Health Services, the Council should receive an improved package of information about the needs, funding, and performance of the program.

The School Health Services program represents a significant annual investment of County funds, almost \$9 million in FY 98. This fiscal year, the School Health Services budget accounts for approximately nine percent of the Department of Health and Human Services' total General Fund appropriation, and more than 13% of DHHS' total staff.

To enable the Council to make more informed budget decisions, an improved package of information should accompany the Council's review of the School Health Services' budget. In sum, the Council should receive meaningful budget, workload, and performance data about School Health Services and related DHHS and MCPS activities.

Ideally, the Council should receive this information annually. However, recognizing the staff effort required to compile and analyze budget and program data, a compromise approach would be for the Council to receive some data every year and more enhanced data every two or three years.

General Measures of Need for School Health Services

OLO recommends the annual budget review of School Health Services begin with an overview of data that measure the current and future health-related needs of MCPS students, and the resulting demands on School Health Services staff. Data should be provided for the most recent three years with projections for the future 3-5 years, if available. An example of a readily available data set would be:

- MCPS enrollment;
- Number of MCPS facilities that require health room coverage;
- Summary data on health conditions of MCPS students; and
- Number of students eligible to participate in the Free and Reduced-priced Meals (FARMS) program.

Enrollment, facility, and health conditions data directly relate to the potential demand for services from health room staff, including routine services (e.g., care for illness or injury) and demands for specialty care (e.g., treatments, assistance with activities of daily living). FARMS data serves as a reasonable surrogate variable for the number of MCPS students who may need assistance with gaining access to primary medical care.

Budget Data

OLO recommends DHHS provide the following budget data on a regular basis to the Council. In order to monitor trends, OLO recommends three years of data as a general rule.

Budgeted and actual expenditures of School Health Services. For ease of review, OLO recommends providing macro-budget data for School Health in the two broad categories of personnel and operating expenses. Due to the large number of part-time positions, level of effort should be tracked in terms of workyears and not positions. The information should include explanation of any significant discrepancy between the program budget and actual program expenditures. Cost data should include all DHHS personnel that work for School Health Services, including those budgeted in other service areas. It should also include data on the cost of health room supplies provided by MCPS.

Budget data on related DHHS and MCPS programs/activities. School Health Services works in partnership with multiple other County and MCPS programs. To place the School Health budget in context of other public expenditures, the Council's review of the School Health budget should include information about other programs that directly relate to the work of School Health Services. For example, relevant information should be provided from other DHHS service units such as Community Health and Health Promotion; and from MCPS' Department of Special Education and Department of Aesthetic, Health, and Physical Education.

Program Activity Data

OLO recommends the Council also examine activity data that reflect and track over time the workload of the School Health Services program. While activity data should not be confused with "outcome" or results data, activity data remain a valid tool for monitoring resource levels and communicating examples of what program staff are doing.

A recommended set of activity data are described below. OLO recommends DHHS report these data by school level (elementary, middle, high), and that DHHS report data for MCPS' special schools separately.

- *Health Room Coverage:* Data on hours of health room coverage do not measure the quality of services delivered, but do provide a valid measure of when school health rooms are open and staffed. Coverage can be reported either by the number of hours covered and/or the number of hours uncovered. The Department should collect data on actual coverage, not budgeted coverage.
- *Health room staff to student ratios.* Student to school nurse and student to technician ratios are easy to calculate and provide general measures of resource levels. They are also useful for benchmarking against similar data compiled by other jurisdictions.
- *Health room visits and disposition.* School Health Services' current Health Room Log data provide a reasonable proxy for the number of visits to the health room for first aid or illness. The visit disposition data also indicate whether health room staff sent students back to class, sent them home, or called 911.
- *Number of medical treatments and ADL services provided in regular vs. special schools.* These activity measures, already collected by School Health Services, track services provided by health room staff to a subset of students with special health needs during the school day. As increasing numbers of students with special health needs attend schools in their home clusters, the demand for these services is likely to increase in regular schools.

- *School Health Nurse caseload data.* Data on the number and types of cases that School Community Health Nurses handle measure an activity that consume a significant portion of staff time. In addition, these data (which are already collected) provide insight into the range of health-related conditions of MCPS students, e.g., substance abuse, eating disorders, pregnancy, depression.

Outcome and Program Measures

The Department of Health and Human Services, along with other County Government departments, is in the process of developing a results-oriented system of outcome and program measures. The Executive Branch defines the following terms:

“Outcome” is a condition of well-being for children, adults, families or communities.

“Indicator” is a measure, for which data is available which helps quantify the achievement of a result.

“Program Measure” is a measure of how well agency or program service delivery is working. This measure addresses matters of timelines, cost-effectiveness, and compliance with standards.

For this year, the Executive selected the outcome titled “Young People Making Smart Choices” as the focus for a comprehensive outcome effort among multiple departments. DHHS is one of the participating departments.

Possible program measures for DHHS to consider that relate more directly to the performance of School Health Services are outlined below. Similar to most outcomes, the School Health Services program alone should not be held accountable for these results.

- *Number and percent of “healthy” students.* Much of what School Health Services does is aimed at improving the general physical and mental health of MCPS students. While acknowledging this is a difficult outcome to quantify, progress could be measured by a decline in selected indicators, such as the number of absences due to illness; number of student injuries at school; and number of students identified with specific health problems such as substance abuse or eating disorders.
- *Number and percent of students with access to primary medical care.* This number should increase as School Health staff identify students without health insurance and facilitate the connections of families to programs that can provide care. While School Health staff alone certainly cannot accomplish this objective, they certainly play a front line role.

- *Level of customer satisfaction with School Health Services.* School Health Services serves a complex set of customers, including students, MCPS staff, parents, and other program staff. This measure would require development of a survey instrument to measure the level of customers' satisfaction over time.

Finally, OLO recommends that the County Government and MCPS jointly take a leadership role in the national research effort to measure the educational outcomes of school health programs, including school based health centers. As reviewed earlier in the report, there is little empirical evidence to prove a correlation between health-related interventions and educational outcomes, such as:

- higher standardized test scores;
- fewer absences, days late, classes cut;
- fewer suspensions and other disciplinary actions; and
- improved attitudes toward school.

As budget decisions become more results driven, it will become more important to document the correlation between health-related services and educational outcomes. In part, this depends on DHHS' data collection system (see following recommendation).

Recommendation #3: The Council should support DHHS' initiative to re-design the data collection system for School Health Services.

Currently, the School Health Services program primarily collects health room activity data. School-based staff (school nurses and technicians) submit hand-recorded data on a regular basis to School Health management staff. As time permits, School Health administrative staff enter the information into an automated data base.

Consistently reported, activity data can provide a reasonably good measure of the volume of work performed, but do not measure the quality of the services delivered nor the eventual outcome of those services. Other criticisms of the current data system are: inadequate technology, incomplete data collection; inconsistent reporting, and data entry errors. In addition, School Health staff report it has been difficult for the program managers to find the time to fully analyze the data collected.

As of this writing, School Health staff are initiating redesign of the program's data systems. The first phase, to assess the current system, is in progress. School Health staff, working with the Automation Team and Community Health staff cite the following goals for the new data collection system:

- a system that provides for electronic data collection from all health room and Linkages to Learning sites;

- a system that allows for integrated School Health/Community Health case management; and
- a system that links School Health to the Service Eligibility Unit and other Public Health Services.

OLO recommends that the Council support the Department's effort to re-design the data collection system for School Health. OLO also recommends the Department think through the staff resources needed to analyze the data collected. If adequately trained staff are not available to make sense of data collected, then investments in data system can be a waste of resources.

The need for the technology to provide for electronic data collection from all health rooms is an essential first step. OLO encourages the Department to identify all of the data that need to be collected for different purposes (e.g., State reporting, internal management, budget review, tracking program measures/outcomes) and, to the extent possible, consolidate the various data needs into a single data collection instrument.

Given the information already compiled for each school's Health Conditions lists, School Health Services is in a unique position to provide valuable data on the health of the County's children. The Council should encourage School Health Services to ensure that staff compile and report health conditions data in a way that is useful to the Public Health Officer as well as to the Department's efforts to measure the community-wide outcome of "healthy" families.

With respect to collecting and reporting information about the health-related needs of students receiving special education services, OLO recommends the Department coordinate its data collection efforts with those of MCPS. There may be opportunities for sharing information that avoids a duplication of effort.

Recommendation #4: The Council should discuss the following issues related to School Health Services with DHHS staff.

(a) Decision to eliminate the special team to conduct hearing/vision screening tests. In FY 96, the Department eliminated seven technician positions that were dedicated to conducting hearing/vision screening. Under current practice, all school nurses and technicians are trained to conduct hearing/vision screenings in their home schools.

Criticism of the Department's decision to eliminate the specialty team continues today, with the most common observation being the "old way" was a much more efficient use of staff time. Given the continuing complaints, OLO recommends that the Council ask the Department to provide a self-assessment of how well the current approach is working.

(b) Health room space in older schools. During the course of conducting this study, OLO heard complaints that health room space in some schools not constructed or modernized since 1984 is "inadequate." The most frequent complaints heard from DHHS staff were that the space allocated for the health room in older schools is too small and does not allow sufficient privacy for staff or students.

As reviewed in the report, 78 (43%) of MCPS' 183 schools include health suites consistent with the current education specifications for health rooms, which were most recently updated in 1984. Comprehensive data on the specifications of the health rooms in the other 105 (57%) schools were not available.

Until more information is available on the health room facilities in schools not constructed or modernized since 1984, it is premature to make any findings or recommendations about the adequacy of these facilities. OLO recommends the Council gain some greater understanding from DHHS whether complaints about health room facilities in older schools deserve additional investigation.

(c) Strategic plan for future of School Health Services and Linkages to Learning. School Health Services staff currently provide general health services at all Linkages to Learning sites. In addition, School Health Services contracts for the primary medical care provided at the two Linkages/School Based Health Centers. Funds to provide for the primary health services currently come from a four-year Robert Wood Johnson Foundation grant.

OLO recommends that strategic plans for the future of the Linkages to Learning program include explicit discussion of the services to be provided by School Health staff. In particular, the future funding of specialty services, such as the primary health care at School Based Health Centers, needs to be addressed.

RELATED ISSUE: STRUCTURAL LOCATION OF SCHOOL HEALTH SERVICES

A review of whether the School Health Services program should be a DHHS or MCPS program was beyond the scope of OLO's study and OLO does not offer a recommendation on this issue. However, because the subject came up so frequently in our various interviews, we offer the following observation that the Council may wish to consider in future discussions about School Health Services.

In approximately half of the local government jurisdictions around the country, the local health department funds and staffs the school health services program. In most other places, it is funded and staffed by the local school system. There are also hybrid situations where the funding and/or staffing is split between the health department and school system.

For example, in Maryland the local health department manages and funds School Health Services in Anne Arundel, Baltimore City, and Frederick County. However, the local school system funds and manages School Health Services in Baltimore County, Harford County, Howard County, and Prince George's County.

The advantages most often cited for keeping School Health Services in DHHS are that it:

- enables School Health Services to have a home-agency connection to other DHHS programs, and more easily target community-wide health and human services outcome objectives;
- provides the School Health staff with some independence from the rest of MCPS;
- avoids having the costs of School Health Services become part of the per student MCPS calculation for maintenance of effort; and
- avoids requiring resources for School Health Services to compete against direct classroom resources.

The disadvantages most often cited for keeping School Health Services in DHHS are that :

- the community holds the principal accountable for everything that occurs in the school, and it can cause problems for a principal to have staff operating in his/her building that are not directly under his/her supervision;
- School Health Services must compete for resources against other DHHS programs; and
- the School Health Services budget does not benefit from the MCPS maintenance of effort calculation, even though the demand for services increases with enrollment.

X. AGENCY COMMENTS ON DRAFT REPORT

OLO circulated a draft of this report in February 1998 to the Chief Administrative Officer (CAO) and Superintendent of Schools. The final report reflects the technical corrections received from DHHS and MCPS staff. The written comments received on the draft report from the CAO and the Superintendent are included in their entirety, beginning on the following page.

OLO appreciates the time taken by Executive Branch and MCPS staff to review and comment on the draft report. OLO looks forward to a continuing discussion of the issues raised as the Council reviews the report in the coming months.



OFFICES OF THE COUNTY EXECUTIVE

Douglas M. Duncan
County Executive

Bruce Romer
Chief Administrative Officer

MEMORANDUM

March 24, 1998

TO: Karen Orlansky, Director, Office of Legislative Oversight

FROM: Bruce Romer, Chief Administrative Officer

SUBJECT: Office of Legislative Oversight DRAFT Report 98-2: A Review of the School Health Services Program

Thank you for the opportunity to comment on the DRAFT OLO Report 98-2: A Review of the School Health Services Program. This report is comprehensive and an excellent reference document on school health services. This description of the legal and regulatory framework for School Health Services, review of program funding and staffing, and the information on student health needs, program activities, and space allocated for health services in schools will be useful to the Executive branch in addressing school health issues. We offer the following comments on the specific recommendations:

Recommendation #1: The County Government and MCPS should develop an interagency memorandum of understanding that addresses School Health Services.

I support a process to more clearly identify the roles of the Department of Health and Human Services (DHHS) and Montgomery County Public Schools (MCPS) in providing health-related services and to resolve interagency issues. As a first step, I will designate Charles Short, Director, DHHS, to establish an interagency staff group to draft the memorandum of understanding. We fully support further collaboration and sharing with MCPS, as well as within DHHS, to further the effectiveness and efficiency of school health services. Areas of collaboration, in addition to those mentioned in the report, include automation connectivity, policy and planning, and grants to further health education and prevention efforts, i.e., substance abuse, violence and teen pregnancy.

With regard to coordinating discussion of school health issues by the County's Commission on Health and the Board of Education's Medical Advisory Committee, we recommend that the Health Officer be an ex-officio member of the Medical Advisory Committee. The Health Officer currently is an ex-officio member of the Commission on Health. This, in addition to the current membership and support provided by staff to these groups, would provide the linkage to broad public health policy and issues which relate to school health.

Recommendation #2: To enhance the Council's understanding of DHHS' allocation of funds for School Health Services, the Council should receive an improved package of information about the needs, budget, and performance of the program.

We agree that budget and program activity data is important for Council review and for DHHS to monitor resources levels. Data on needs at both the school and the cluster level will help improve resource allocation. We also need to ensure that we continue to satisfy state, federal, and private funding and program reporting requirements. Finally, and most importantly, we need to focus on what results we want for the money spent on school health services. As referenced in OLO's draft report, the County Executive has developed a results-oriented approach to outcome and program measures and identified the first outcome, "Young People Making Smart Choices." The School Health Services Program contributes to this outcome and another more generic outcome, "healthy children."

DHHS currently collects much of the recommended data by hand. As part of DHHS' initiative to redesign the data collection system for School Health Services, DHHS will review what data is collected and why.

Recommendation #3: The Council should support DHHS' initiative to redesign the data collection system for School Health Services.

This is a technical recommendation which has a direct bearing on DHHS' ability to provide the data and reports in Recommendation #2. DHHS is in the process of redesigning its data system, including development of an automated data base to support automation of collection, reporting, and case management. As DHHS develops the data agenda for all programs and services, we will set data priorities.

Recommendation #4: The Council should discuss the following issues related to School Health Services with DHHS staff.

- (a) Decision to eliminate the special team to conduct hearing/vision screening tests.***
- (b) Health room space in older schools.***
- (c) Strategic plan for future of School Health Services and Linkages to Learning.***

DHHS is exploring alternative models to facilitate the hearing and vision screening process. We will provide further information as it becomes available.

Structural Location of School Health

We support the continued location of School Health Services within DHHS. This structure assures that students are most effectively provided health services in schools and are linked to public and private resources which meet their health needs. It provides the necessary linkages with MCPS, within the department and the community, to accomplish DHHS' mission "to foster healthy, safe, self-sufficient communities."

Karen Orlansky
March 24, 1998
Page 3

We appreciate the opportunity to comment on this draft report. We look forward to participating with the Council in its review of this report.

BR:rsd

cc: Charles Short, Director, Department of Health and Human Services
Robert Kendal, Director, Office of Management and Budget
Charles Thompson, Jr., County Attorney
Judy Covich, Administrator for School Health, DHHS
Toko Ackerman, Policy Development Officer, DHHS
Carol Garvey, Public Health Officer, DHHS
Bennett Connelly, Chief, Children, Youth, and Family Services Area, DHHS
Lynn Frank, Chief, Public Health Services Area, DHHS
Daryl Plevy, Chief, Accountability and Customer Services, DHHS
Bobbi Degnan, Office of Management and Budget
Tom Gates, Office of Management and Budget
Anise Brown, Director, East County Regional Services Center
Natalie Cantor, Director, Mid-County Regional Services Center
Gail Nachman, Director, Bethesda-Chevy Chase Regional Services Center
Steve Poteat, Director, Upcounty Regional Services Center
Doug Wrenn, Acting Director, Silver Spring Regional Services Center



850 Hungerford Drive * Rockville, Maryland * 20850-1747

Telephone (301) 279-3381

March 25, 1998

Mrs. Karen Orlansky, Director
Office of Legislative Oversight
100 Maryland Avenue
Rockville, Maryland 20850

Dear Mrs. Orlansky:

Thank you for providing me an advanced copy of your report entitled *A Review of the School Health Services Program*. I find it to be very thorough and descriptive of the interagency relationships that address the health needs of our students and families. The report and the subsequent recommendations reflect extensive investigative work.

It is important that the public understand the way schools and health services work together. I appreciate you giving staff the opportunity to comment and provide additional input prior to the report being finalized. I understand that you had a number of questions regarding special education data and that staff in the Office of the Deputy Superintendent of Schools has provided some additional information. In addition, Dr. Raymond Bryant, director of special education, is available to answer related questions. It is my hope that the outcome of this report will result in improved and cost effective services for the students in Montgomery County Public Schools (MCPS).

Thank you for including input from MCPS staff. Staff will be available to review the final report with the Education Committee and the County Council.

Sincerely,

A handwritten signature in cursive script that reads "Paul L. Vance".

Paul L. Vance
Superintendent of Schools

PLV:rlc

Copy to:

Mrs. Gemberling
Mr. Bowers
Dr. Fountain
Dr. Seleznow
Dr. Bryant

ABSTRACT

EVALUATING EDUCATIONAL OUTCOMES OF SCHOOL HEALTH PROGRAMS

Barbara Devaney, Ph.D., Peter Schochet, Ph.D., Craig Thornton, Ph.D.,
Nancy Fasciano, Ph.D., Amelia Gavin, M.A.
Mathematica Policy Research, Inc.
Princeton, NJ

This evaluation design report presents a general framework for assessing the effects of school health interventions on school performance. Health and education are inextricably linked: good health is necessary for effective learning, and education is necessary for maintaining good health. However, robust empirical evidence from well-designed evaluations of the link between health and educational outcomes for children and youth currently does not exist. This study was undertaken in order to guide efforts to gather such empirical evidence.

This report begins with an overview of eight general types of school health intervention: (1) health education; (2) health services; (3) efforts to promote a healthy school environment; (4) school food service; (5) physical education and fitness; (6) integrated school and community health promotion; (7) school counseling; and (8) health promotion for school faculty and staff.

The report then reviews types of school performance measures and primary data sources for obtaining those measures. Measures include educational achievement (e.g., graduation rates, grade promotion patterns, grades, and standardized achievement tests), student behaviors (e.g., attendance and dropout status), and student attitudes toward school and themselves (e.g., educational expectations and self-esteem). The primary data sources are school records and student surveys. The report reviews the procedures needed to collect data from each source.

The report concludes by reviewing two major evaluation design options. The first option is to exploit the data collected by the national surveys directed by the National Center for Education Statistics. The second is to conduct multischool demonstrations, either as add-ons to existing evaluations of the health outcomes of school health programs or as new efforts to test alternative health interventions.

School Health Services

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When health services first became part of the school program at the end of the 19th century, its primary role was communicable disease control.¹ Changes in society, health care delivery, education, and the family have increased the need and demand for school health services. New paradigms are evolving for school health services as school systems develop comprehensive school health programs to address the diverse and complex health problems of today's students. Increasingly, educators recognize that physical and psychological health have a direct affect on children's ability to learn. Although the full potential of school health services has yet to be realized, its place as a critical component of the educational system is well established.

Although a universally accepted definition for the term "school health services" does not exist, school health services may be described as a coordinated system that ensures a continuum of care from school to home to community health care provider and back. Traditionally, screening activities and first aid have been part of school health services. Because the number of students with chronic health problems and the number of medically fragile students have increased,² individualized health plans, emergency care, medication administration, specialized health care procedures, implementation of human immunodeficiency virus (HIV) infection policies, and provision of health education and counseling to students and staff also are included, depending on state and local practice and mandates.

To facilitate the uniform implementation of school health services, the National Association of School Nurses (NASN) developed *School Nursing Practice Roles and Standards*,³ and the American School Health Association (ASHA) developed *Guidelines for Comprehensive School Health Programs*.⁴ These standards and guidelines describe the goals, objectives, and outcomes of school health services and provide direction for professional nursing practice and the role of the school nurse in terms of professional development, interdisciplinary collaboration, community health systems, research, and program management. In addition, in *Healthy People 2000*, two national health objectives address discrete health services for school-aged youth:⁵

- 13.12 Increase to at least 90% the proportion of all children entering school programs for the first

time who have received an oral health screening, referral, and follow-up for necessary diagnostic, preventive, and treatment services.

- 20.11 Increase immunization levels as follows: Basic immunization series among children in licensed child care facilities and kindergarten through post-secondary education institutions: at least 95%.

These objectives may be achieved through adoption of appropriate policies that address relevant record keeping, attendance restrictions, provision of school health services, and referral to health care providers in the community.

SELECTED FEDERAL SUPPORT AND RELATED RESEARCH

The federal government supports school health services through several programs. The Universal Access to Immunizations Program (UAIP), administered by the Centers for Disease Control and Prevention (CDC), provides immunizations through health care facilities and schools at a nominal cost to those children not covered by private insurance.⁶ CDC also provides assistance to all state and some local education agencies and national health and education organizations to develop HIV policies and programs for youth.⁷ As part of this effort, the National Association of State Boards of Education (NASBE) in collaboration with many other national organizations developed *Someone at School Has AIDS: A Guide to Developing Policies for Students and School Staff Members Who Are Infected with HIV* to assist state- and local-level policymakers with the difficult issues related to HIV infection and AIDS⁸ and the National School Boards Association (NSBA) established the *HIV and AIDS Resource Database* to provide assistance and sample HIV infection policies to districts.⁹ NASN also provides guidance on the content of policies on HIV-infected students and staff.¹⁰

Further, the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) Program, administered by the Health Care Financing Administration, provides Medicaid-eligible children with screening, diagnosis, and treatment services for health deficiencies.¹¹ Districts and schools that provide these services are eligible for reimbursement through this program. The Health Resources and Services Administration administers the Healthy Schools, Healthy Communities Program which provides primary and preventive health services for students attending demonstration schools¹² and the Maternal and Child Health Services Block Grant which supports school-based health centers.¹³

Two previous studies described school health services nationwide. *The National Survey of School Nurse Supervisors*, originally published in 1984, was conducted again in 1994 by the Office of School Health Programs of the University of Colorado Health Sciences Center School of Nursing.¹⁴ Local school nurse supervisors provided data about the structure and components of school health services; financial support; and problems, innovations, and

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evaluations. *School Health in America: An Assessment of State Policies to Protect and Improve the Health of Students*, fifth edition, published by ASHA most recently in 1989, provided information about state-level support for school health services.¹⁵ State directors of health services provided information about coordination of school health services; policies on student health screening, health records, and immunization; and school health services personnel. The School Health Policies and Programs Study (SHPPS) builds on this research and provides additional state-, district-, and school-level data.

METHODS AND RESPONSE RATES

SHPPS assessed school health services and HIV infection policies at the state, district, and school levels. At the state, district, and school levels, SHPPS also assessed four other components of the school health program — health education, physical education, food service, and health policies prohibiting tobacco use, alcohol and other drug use, and violence. At the classroom level, SHPPS assessed two components of the school health program — health education and physical education. Data were collected from all 50 states and the District of Columbia, a nationally representative sample of public and private districts, and a nationally representative sample of public and private middle/junior high and senior high schools.

Data Collection and Respondents. State- and district-level data collection occurred by mail from March-June 1994. The superintendent's office of each state and sampled district was contacted by telephone prior to data collection and asked to identify a contact person familiar with the overall school health program who would serve as the coordinator for SHPPS data collection. A set of five state-level questionnaires or district-level questionnaires designed for self-administration was mailed to the state or district contact person, who distributed each questionnaire to the appropriate respondent. Multiple mail and telephone follow-ups were made to gather missing data as needed.

School-level data collection, which involved site visits to each sampled school and personal interviews with school staff, occurred from February-June 1994. Prior to each site visit, the principal or other school-level contact person was read a list of health services topics such as first aid, screening, and HIV infection, and was asked to identify the person who had primary responsibility for each topic. Rarely was one individual identified as the respondent for all sections, therefore more than one respondent was interviewed — including nurses, administrators, secretaries, teachers, and counselors.

Questionnaires. The state- and district-level questionnaires assessed school health services policies and practices for grades K-12. The state- and district-level questionnaires contained items on health services requirements, organization, and facilities; health screening; medication administration; health records and reporting; universal precautions; professional preparation; and coordination and collaboration. A separate health policies questionnaire contained items on policies for HIV-infected students and staff.

The school-level questionnaire assessed school health services policies and practices in middle/junior high and senior high schools. The school-level health services questionnaire was divided into sections by topic — health services organization and facilities, student health screen-

ing, medication administration, health records and reporting, first aid and evaluation of sick students, special needs students, other health and social services, professional preparation, and coordination and collaboration — so the person most knowledgeable about each section could be interviewed. A separate health policies questionnaire contained items on policies for HIV-infected students and staff.

Response Rates. All 51 state education agencies (100%) completed all five state-level questionnaires. At the district level, 413 (82%) of the 502 sampled districts completed at least one of the five mail questionnaires. At the school level, 607 (79%) of the 766 sampled schools completed the interview for at least one of the five questionnaires.

RESULTS

Health Services at the State and District Levels

Health Services Requirements, Organization, and Facilities. Understanding the organization of school health services is critically important for understanding how the program functions within the broader school health program and the overall school environment. Three-quarters (75.5%) of all states have a person responsible for directing or coordinating school health nurse services at the state level. Among these states, 78.9% report that their school health nurse directors have other responsibilities in addition to coordinating nursing services. About half (52.9%) of all states require schools to offer school health nurse services. Nearly three-quarters (74.1%) of all districts have a person responsible for directing or coordinating school health nurse services.

More than half (59.2%) of all states fund school-based or school-linked health clinics. School-based clinics provide primary care and preventive services to students on school grounds, while school-linked clinics provide these services near school grounds. At least one school-based clinic exists in 11.5% of all districts, and at least one school-linked clinic exists in 8.2% of all districts. Overall, 11.6% of all districts have at least one school-based or school-linked clinic.

NASN recommends the following minimum standard ratios of school nurses to students: one nurse per 750 students for the general school population, one nurse per 225 mainstreamed students with special needs, and one nurse per 125 severely disabled students.³ Only 14.0% of all states have a student-to-nurse ratio requirement, although 38.0% of all states have a student-to-nurse ratio recommendation. Among those states that require or recommend a student-to-nurse ratio, 36.0% require or recommend no more than 750 students for the general school population per nurse, 66.7% set a limit of 225 mainstreamed students with special needs per nurse, and 77.8% set a limit of 125 severely disabled students per nurse.

Most (98.0%) states have a written policy regarding school attendance without proper immunization. More than one-third (36.7%) of all states allow students to attend school as long as they are properly immunized within a specific number of days, and an additional 51.0% of all states do not allow students to attend school without proper immunization. The remaining 10.2% of all states have other written requirements regarding school attendance without proper immunization.

Student Health Screening. Early detection through school-based screenings, and subsequent treatment, can prevent vision, hearing, and other health problems, such as tuberculosis, from progressing and affecting a student's health and school performance.¹⁶ Many (63.3%) states and most (95.4%) districts require screening for hearing problems in at least one grade (Table 1). Should hearing screening indicate potential problems, 78.7% of all states and 97.9% of all districts require follow-up, such as parental notification. Similarly, 61.2% of all states and 96.0% of all districts require screening for vision problems in at least one grade, and 76.6% of all states and 97.7% of all districts require follow-up for potential vision problems. Some states require screening for scoliosis (52.0%), height/weight (27.1%), oral health (21.3%), or blood pressure (16.7%), or tuberculosis skin tests (11.4%), while generally a larger percentage of districts require screening for scoliosis (88.2%), height/weight (70.6%), oral health (48.4%), or blood pressure (40.9%), or tuberculosis skin tests (36.0%). About three-quarters (76.5%) of all states monitor district and school compliance requirements for student health screening and follow-up. Similarly, 76.8% of all districts monitor school compliance with these requirements.

Medication Administration. As the number of students taking prescription and nonprescription medication at school increases, the need for state laws or other legally binding rules about medication administration in school increases.¹⁷ Many (60.8%) states and 97.2% of districts

require some documentation before medication may be given in school to students. Most districts (90.2%) require a written request from parents/guardians, and 81.7% require written instructions about the medication from a physician, or other authorized prescriber. Few districts (14.9%) allow medication to be given to students with only a written request from parents/guardians. While only 31.4% of all states have a policy regarding medicines students are permitted to carry in school, 88.5% of all districts have a policy on this issue.

Health Records and Reporting. Maintaining accurate student health records is important for ensuring coordinated health care for children. State requirements for district and school health records vary by type of record (Table 2). Most states (90.2%) and districts (99.7%) require schools to keep immunization records on file for each student. Many districts also require schools to keep medical emergency forms (84.1%) and medical information cards (81.7%) on file. Fewer states and districts require schools to keep other types of student health records on file, such as first aid records or referral records.

In addition to setting requirements for maintaining student health records, states and districts provide guidance to schools on managing these records. Many states (60.8%) and districts (72.7%) have policies to protect the confidentiality of student health information. Similarly, 58.8% of all states and 66.9% of all districts have policies regarding the transfer of school health records when a student enrolls in a new school. However, only 47.1% of all states and 39.9% of all districts have policies on how to dispose of school health records when a student graduates or drops out of school.

Most (94.1%) states take actions to increase the likelihood that cases of physical and sexual abuse will be detected and reported by school staff. Many (60.8%) states require schools to submit all suspected abuse reports to the district or state. In addition, 58.8% of all states provide periodic in-service training on recognizing and reporting abuse to district or school staff and 62.7% of all states distribute guidelines to districts and schools on this issue.

Universal Precautions. Universal Precautions Guidelines were developed by CDC to prevent the spread of infectious disease.¹⁸ Most (94.1%) states and districts (92.4%) take some type of action to increase the likelihood that these guidelines are followed. About two-thirds (68.6%) of all states provide to school staff training on following the guidelines, 86.3% distribute the guidelines to school staff, and 72.5% provide a copy of the guidelines to each district. Three-quarters (75.8%) of all districts provide to school staff training on following the guidelines and 69.2% distribute the guidelines to school staff. Only 9.8% of all states distribute the supplies necessary for following the guidelines, but 81.5% of all districts assume this responsibility. Compliance with the guidelines is monitored in 48% of all states and 55.5% of all districts.

HIV Infection Policies. Ideally, HIV infection policies specify that HIV-infected students and staff whose health permits are allowed to attend or work in schools without discrimination, provide guidance to administrators on evaluating HIV-infected students or staff to ensure the safety of persons in the school and support the HIV-infected person, protect the confidentiality of HIV-infected students or staff, and prevent routine testing of students and staff.⁸

Table 1
Percentage of All States and Districts
Requiring Student Screenings
and Follow-up, by Type of Screening,
School Health Policies and Programs Study, 1994

Type of screening	State		District	
	% requiring screening in at least one grade	% requiring follow-up	% requiring screening in at least one grade	% requiring follow-up
Hearing	63.3	78.7	95.4	97.9
Vision	61.2	76.6	96.0	97.7
Scoliosis	52.0	72.3	88.2	94.7
Height/weight	27.1	46.9	70.6	69.9
Oral health	21.3	51.4	48.4	74.1
Blood pressure	16.7	48.5	40.9	74.7
Tuberculosis	11.4	46.9	36.0	72.0

Table 2
Percentage of All States and Districts
Requiring Student Health Records Be Kept On File,
by Type of Health Record,
School Health Policies and Programs Study, 1994

Type of health record	% of all states requiring health record be kept on file	% of all districts requiring health record be kept on file
First aid	5.9	29.3
Immunization	90.2	99.7
Medical administration directions	21.6	69.0
Medical emergency forms	33.3	84.1
Medical information cards	25.5	81.7
Physical examination report	43.1	54.3
Referral	7.8	44.8
Screening	37.3	63.2
Tuberculosis skin test	25.5	34.2

Three of five (58.8%) states require districts or schools to have a policy on HIV infection. The policy must apply to students in 56.9% of all states and to school staff in 52.9% of all states. Many states recommend that district policies include procedures for maintaining the confidentiality of HIV-infected persons (90.2%), support for HIV prevention education for students (80.4%), support for HIV prevention education for staff (78.4%), and procedures to protect HIV-infected students and school staff from discrimination (78.4%) (Table 3). Only 33.3% of all states recommend including a statement about the inappropriateness of routine testing for HIV infection among students and staff. About two-thirds of all states provide model policies on HIV-infected students (68.6%) or staff (64.7%).

About three-quarters (74.7%) of all districts have written policy on HIV infection. In 71.7% of all districts, written policies specify that HIV-infected students whose health permits are allowed to attend school and in 63.9% of all districts, written policies specify that HIV-infected staff whose health permits are allowed to work. More than half of all districts include in a policy procedures for maintaining confidentiality (70.1%), procedures to protect HIV-infected students and staff from discrimination (59.9%), support for HIV prevention education for students (59.3%), and support for HIV prevention education for staff (57.8%) (Table 3). Few (15.1%) districts include a statement about the inappropriateness of routine testing for HIV infection among students and staff.

Ideally, HIV infection policies should be developed collaboratively with a diverse group of community members.⁸ Among the 74.7% of districts with an HIV infection policy, many individuals were involved in the development of the policy including school administrators (82.0%), school board members (75.9%), school nurses (51.7%), attorneys (44.8%), local health department staff (33.9%), parents (32.0%), and students (12.0%).

Professional Preparation. The NASN *School Nursing Practice Roles and Standards* highlight the importance of having adequately trained and certified health services professionals working in schools.³ While only 7.8% of all states require school nurses to be certified through the American Nurses Association (ANA) or the NASN, 62% of all states offer their own certification for school nurses. Of those states that offer their own certification, 65.6% require it for employment as a school nurse. Health aides are employed in 76.0% of all states. However, only 7.9% of these states require prior technical training for health aides.

The percentage of all states and all districts offering training and materials to health services staff varies by topic (Table 4). More states offer training and materials on HIV prevention and on alcohol and other drug use than on other topics. About half of all districts offer training and/or materials on cardiopulmonary resuscitation (CPR), HIV prevention, and alcohol and other drug use prevention.

Coordination and Collaboration. The NASN *School Nursing Practice Roles and Standards*³ and the ASHA *Guidelines for Comprehensive School Health Programs*⁴ underscore the importance of collaboration in assessing, planning, implementing, and evaluating school health services as well as other components of the school health program. During the past two years, staff responsible for

school health services in 85.7% of all states and 69.6% of all districts were involved in joint activities or projects with staff responsible for other school health program components such as health education or food service (Table 5). Among the states reporting joint activities, more than half report that health services staff were involved with staff in health education (83.3%), community agencies/organizations (66.7%), and school food service (52.4%). Among the districts that report joint activities, more than half report that health services staff were involved with staff in health education (69.1%) and school counseling/psychology (54.2%).

Table 3
Percentage of All States Recommending
and All Districts Including Specific Statements
or Procedures in HIV Infection Policies,
School Health Policies and Programs Study, 1994

Statement or procedure	% of all states recommending	% of all districts including
Procedures for communicating the policy to students, staff, and parents/guardians	60.8	46.2
Procedures for evaluating the health status of HIV-infected students and staff	60.8	47.0
Procedures for implementing the policy	58.8	43.8
Procedures for maintaining confidentiality	90.2	70.1
Procedures to protect HIV-infected students and staff from discrimination	78.4	59.9
Statement about the inappropriateness of routine testing of students and staff for HIV infection	33.3	15.1
Support for HIV prevention education for staff	78.4	57.8
Support for HIV prevention education for students	80.4	59.3

Table 4
Percentage of All States and Districts
Offering Health Services-Related Training
and Materials To School Staff
During the Past Two Years, by Topic,
School Health Policies and Programs Study, 1994

Topic	State		District	
	% offering training	% offering materials	% offering training	% offering materials
Alcohol and other drug use prevention	72.5	63.3	39.2	52.1
Cardiopulmonary resuscitation	33.3	22.4	63.8	54.9
First aid	31.4	34.7	44.9	47.7
HIV prevention	82.4	81.6	58.7	66.6
Managing HIV-infected students	56.9	57.1	22.0	30.0
Managing students with chronic conditions	56.9	55.1	33.1	36.6
Managing technology-supported students	37.3	44.9	11.0	15.4
Pregnancy prevention	45.1	44.9	18.7	26.5
Regulations of the Nurse Practice Act	37.3	36.7	9.5	11.1
Suicide prevention	49.0	38.8	24.9	30.3
Tobacco use prevention	62.7	55.1	26.1	41.2
Violence prevention	62.7	53.1	23.9	23.9

Health Services at the School Level

Health Services Organization and Facilities. School health services are defined not only by the specific services provided, but also by staff providing the services, available health services facilities, and how services are provided. Many (85.8%) middle/junior high and senior high schools provide some type of school health services such as first aid, screening, or medication administration.

Health services facilities are not available in 32.3% of all middle/junior high and senior high schools. Among the 65.8% of middle/junior high schools with health services facilities, 88.7% have a health room, 8.3% have a school-based clinic, 8.2% have a school-linked clinic, and 6.3% have a school wellness center. Among the 68.9% of senior high schools with health services facilities, 91.8% have a health room, 8.4% have a school-based clinic, 6.0% have a school wellness center, and 2.3% have a school-linked clinic.

More than half (57.3%) of all middle/junior high and senior high schools have at least one registered nurse (RN), 12.0% have at least one health aide, and 7.7% have at least one licensed practical nurse (LPN) providing school health services. Aside from RNs, LPNs, and health aides, 77.9% of all middle/junior high and senior high schools have other health professionals providing services to students including hearing technicians (56.0%), vision technicians (39.1%), occupational therapists (35.2%), and physicians (31.3%).

Student Health Screening. Student health screening activities are conducted in 79.8% of all middle/junior high

and senior high schools. Vision and hearing screening programs are the most commonly conducted types of screening. Vision screening programs are conducted in 73.2% of all middle/junior high and senior high schools and hearing screening programs are conducted in 68.0%. Schools conduct student health screening programs in seventh grade more than in any other grade (Table 6).

Among the 68.0% of middle/junior high and senior high schools conducting hearing screening, 96.6% follow-up when potential problems are indicated. The most common follow-up actions taken by the 68.0% of schools with hearing screening programs are notifying parents or guardians of the problem (96.4%) and assisting students with obtaining services (82.5%). Similarly, among the 73.2% of middle/junior high and senior high schools conducting vision screening, 96.5% of these schools notify parents or guardians and 81.4% help students obtain vision services when potential problems are indicated.

Medication Administration. In middle/junior high schools, a variety of school staff may administer prescription medications including secretaries (63.4%), school nurses (44.0%), and teachers (19.0%). In 13.7% of middle/junior high schools students self-administer prescription medications. A variety of school staff also may administer prescription medication in senior high schools including school nurses (46.9%), secretaries (46.3%), and teachers (13.8%). In 23.0% of senior high schools, students self-administer medication. In 89.4% of all middle/junior high and senior high schools written documentation is required before prescription medication may be given to students. Written requests from parents/guardians to the school administrator are required in 81.0% of all middle/junior high schools and 71.7% of all senior high schools before medication may be given to students. In addition, 74.0% of all middle/junior high schools and 68.1% of all senior high schools require written instructions from the physician or other authorized prescriber about administering the medication. About four of five (79.0%) middle/junior high and senior high schools permit students to carry medications. Many schools (62.8% of all middle/junior high schools and 72.8% of all senior high schools) permit students to carry inhalers. About one-fifth (19.3%) of all middle/junior high schools and 26.8% of all senior high schools have no restrictions on the type of medication students may carry, if permission has been provided by a physician or other authorized prescriber.

Health Records and Reporting. Most (99.7%) middle/junior high and senior high schools keep immuniza-

Table 5
Percentage of States¹ and Districts²
in Which School Health Services Staff Were Involved
in Joint Activities or Projects
with Other School Health Program Component Staff
During the Past Two Years, by Component,
School Health Policies and Programs Study, 1994

Component	% of states ¹	% of districts ²
Community agencies/organizations	66.7	43.2
Health education	83.3	69.1
Physical education	28.6	43.4
School counseling/psychology	42.9	54.2
School food service	52.4	27.8

¹ Among the 85.7% of all states in which health services staff were involved in joint state-level activities or projects.

² Among the 69.6% of all districts in which health services staff were involved in joint district-level activities or projects.

Table 6
Percentage of All Schools Conducting Student Health Screening,
by Type of Screening and Grade,
School Health Policies and Programs Study, 1994

Type of screening	Among schools in which screening is conducted in (%):							
	at least one grade	Sixth grade	Seventh grade	Eighth grade	Ninth grade	10th grade	11th grade	12th grade
Hearing	68.0	41.1	80.3	50.7	34.9	54.7	45.5	27.7
Vision	73.2	49.2	86.5	58.5	47.8	59.0	51.1	38.9
Scoliosis	52.4	59.1	78.1	72.9	44.6	34.3	23.4	16.1
Height/weight	46.2	74.4	89.5	84.9	54.8	77.9	71.2	64.3
Blood pressure	29.8	53.5	64.8	59.8	39.7	63.3	60.1	52.0
Oral health	20.0	62.2	81.2	59.2	36.2	75.5	51.9	49.9
Tuberculosis	15.5	31.5	52.5	48.9	52.0	36.2	36.1	32.7

tion records on file for each student. Many schools also keep medical information forms (88.6%), medical emergency forms (87.2%), screening records (83.3%), medication administration directions (81.2%), referral records (72.6%), physical examination reports (71.1%), tuberculosis skin test results (56.8%) and first aid records (56.9%). In only 25.7% of all middle/junior high and senior high schools are any of these health records computerized. Among schools with computerized records, the most commonly computerized records are those for immunization.

First Aid and the Evaluation of Sick Students. First aid and the evaluation of sick students are two services needed daily in most schools. First aid is provided in 98.4% of middle/junior high and senior high schools. Within these schools, a variety of staff provide first aid including secretaries (67.9%), teachers (66.2%), school nurses (59.4%), and health aides (11.7%). Among the 98.4% of schools providing first aid, 93.1% report that first aid is sometimes provided by staff other than a nurse or physician, and in 72.7% of these schools the staff providing first aid are not supervised by a nurse or physician. In 53.5% of these schools the staff who provide first aid are certified by the Red Cross or other agency.

In 48.2% of all middle/junior high and senior high schools, school nurses evaluate students who are sick to determine whether they should go home. In 25.5% the secretary evaluates students, and in 8.0% teachers evaluate students. Students who are sick, but cannot go home because no one is there, go to the health room in 53.9% of schools, to the main office in 20.8%, and back to class in 5.5% of schools.

Special Needs Students. Increasing numbers of students with special needs require school health services staff to provide or supervise the provision of specialized services. Individualized health plans are developed for students with special needs in 44.1% of all middle/junior high and senior high schools. In addition, school health services staff assist in the development of individualized education plans for these special needs students in 39.7% of middle/junior high and senior high schools. Complex nursing care, such as injections, is administered to special needs students in 40.4% of all middle/junior high and senior high schools. In about two-thirds (67.8%) of these schools, the school nurse administers the complex nursing care. However, in 29.2% of these schools, students administer the care themselves, and in 12.0% of these schools teachers administer it.

Other Services. Additional student services are available in or through 90.9% of all middle/junior high and senior high schools. Counseling is available in or through more schools than any other additional student service (Table 7). Individual counseling is available in or through 84.4% of all middle/junior high schools and 89.2% of all senior high schools. Group counseling is available in or through 61.2% of all middle/junior high schools and 58.8% of all senior high schools. Suicide prevention is provided in or through 42.4% of all middle/junior high schools and 52.3% of all senior high schools. Condoms are made available to students in or through 4.7% of all middle/junior high schools and 8.4% of all senior high schools.

Other services are provided in 52.7% of all middle/junior high and senior high schools. Youth development services are provided by 22.7% of all middle/junior

high schools and 39.8% of all senior high schools (Table 8). Fewer schools provide Medicaid enrollment, the Special Supplemental Food Program for Women, Infants, and Children (WIC), or infant care for teen-aged mothers.

HIV Infection Policies. More than three-quarters (77.2%) of all middle/junior high and senior high schools follow a written policy on HIV infection. In 64.0% of all schools, written policies specify that HIV-infected students whose health permits are allowed to attend school and in 61.5% of all schools, written policies specify that HIV-infected staff whose health permits are allowed to work.

Professional Preparation. Adequately trained health services staff are the cornerstone of school health services. In 31.4% of all middle/junior high and senior high schools the respondent describing overall school health services, in other words the person identified as most knowledgeable about these activities, was an RN. In another 32.2% of middle/junior high and senior high schools the respondent had a baccalaureate degree in an academic area other than nursing. The NASN *School Nursing Practice Roles and Standards* underscore the importance of continuous professional training.³ In 89.4% of schools, the school health services respondent had received some health-related in-service training during the past two years, although in 85.7% of schools, the respondent wanted additional train-

Table 7
Percentage of All Middle/Junior High
and Senior High Schools Providing
Other Student Services

in or Through the School, by Type of Service,
School Health Policies and Programs Study, 1994

Type of service	% of all middle/junior high schools	% of all senior high schools
Alcohol and other drug rehabilitation	39.1	48.2
Condom availability	4.7	8.4
Family counseling	46.3	45.8
Group counseling	61.2	58.8
Individual counseling	84.4	89.2
Nutrition/weight management	37.0	38.1
Pregnancy management	27.6	46.0
Pregnancy prevention/family planning	28.6	38.2
Pregnancy testing	16.6	20.9
Primary health care	18.8	21.3
Sexually transmitted disease diagnosis and treatment	15.8	19.5
Suicide prevention	42.4	52.3
Tobacco cessation	23.3	34.8

Table 8
Percentage of All Middle/Junior High
and Senior High Schools Providing Other Services
in the School, by Type of Service,
School Health Policies and Programs Study, 1994

Type of service	% of all middle/junior high schools	% of all senior high schools
Adult literacy	9.4	12.3
After school day care	13.0	12.2
Infant care for teen mothers	2.9	8.4
Medicaid enrollment	5.0	6.7
Special Supplemental Food Program for Women, Infants, and Children	4.0	5.4
Vocational rehabilitation	6.2	18.9
Youth development services (including employment development)	22.7	39.8

ing. Similarly, in 90.6% of schools, the respondent had received health-related materials during the past two years, although in 77.6% of schools the respondent wanted additional materials. Table 9 provides the percentages of respondents who received or wanted to receive training and materials on various health-related topics. More than half of all respondents had received training on only two topics — CPR (64.4%) and HIV prevention (60.6%). More than one-quarter of all respondents wanted training on managing students with chronic conditions (27.2%) and violence prevention (29.3%).

Table 9
Percentage
of All School Health Services Respondents
Who Received Training or Materials
During the Past Two Years
or Wanted Training or Materials, by Topic,
School Health Policies and Programs Study, 1994

Topic	Training		Materials	
	% who received training	% who wanted training	% who received materials	% who wanted materials
Alcohol and other drug use prevention	49.6	22.0	70.7	23.4
Cardiopulmonary resuscitation	64.4	20.4	51.6	19.5
First aid	44.6	18.8	52.2	20.8
HIV prevention	60.6	12.6	74.4	18.7
Managing HIV-infected students	33.0	17.7	43.5	19.4
Managing students with chronic conditions	40.7	27.2	48.4	27.0
Managing technology-supported students	14.2	11.4	19.3	16.1
Pregnancy prevention	24.6	20.4	53.6	19.4
Regulations of the Nurse Practice Act	17.9	11.0	22.1	10.7
Suicide prevention	29.4	24.2	51.3	23.2
Tobacco use prevention	23.5	8.8	62.2	14.3
Universal Precautions	47.4	10.7	54.4	16.7
Violence prevention	28.9	29.3	44.5	28.0

Table 10
Percentage of Schools¹
in Which School Health Services Staff
Organized Health-Related Activities or Projects
with Staff
from Other School Health Program Components
During the Past Two Years, by Component,
School Health Policies and Programs Study, 1994

Component	% of schools ¹
Health education	66.7
Other academic classes	34.2
Parent/teacher/student organizations	39.5
Physical education	46.4
School counseling/psychology	48.7
School food service	28.2

¹ Among the 61.4% of all schools in which health services staff organized health-related activities or projects.

Coordination and Collaboration. The ASHA *Guidelines for Comprehensive School Health Programs* call for school health services to be coordinated with other components of the school health program and with local and state governmental and nongovernmental organizations.⁴ During the past two years, health services staff in 61.4% of all middle/junior high and senior high schools had organized health-related activities or projects with staff from other components of the school health program (Table 10). In these schools, collaboration occurred most often with staff in health education.

During the past two years, the health services staff in 58.5% of all middle/junior high and senior high schools had organized health-related activities or projects with staff from community organizations. Among these schools, 65.0% had organized health-related activities with staff from voluntary health organizations such as the American Cancer Society, 50.5% had organized activities with staff from the local health department, and 33.8% had organized activities with staff from a local hospital.

CONCLUSION

Many states and districts require schools to offer school health services and maintain immunization and other health records. Most schools provide some type of basic health services including screening students for potential hearing and vision problems, maintaining immunization and other health records, providing first aid, and offering individual counseling. More than half of all states require districts or schools to have policies for HIV-infected students and staff. While many districts have these policies, few include all of the elements recommended by NASBE.

The roles, responsibilities, and training of health services staff in schools are not as well defined as the requirements for specific services. For instance, secretaries, teachers, and students administer prescription medication in many schools and provide first aid in most schools. This situation increases the likelihood that the health services-related continuing education needs of the staff providing these services may not be recognized and limits the opportunities for specific supervision or consultation. School health services are a critical component of the school health program. However, despite the expanding role of school health services, clear consensus on the role of health professionals in the educational setting does not exist. In addition, a systematic, comprehensive process is needed to help state-, district- and school-level officials assess and then respond appropriately to the school health services needs of students in their communities. Only a long-term commitment from both the health and education professions will lead to implementation of effective school health services nationwide. ■

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Survey of School Health Staffing in Selected Maryland Jurisdictions 1997-98 School Year

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Jurisdiction	Number of Schools	Number of Students	School Health Program Managed, Staff Funded, and Staff Employed by:	Number of School Health Staff ¹	Ratio of Registered Nurses to Students ²	Ratio of School Health Staff to Students (column 5:column 3)
Anne Arundel County	115	73,363	Local Health Department	228.75	1 : 1071	1 : 321
Baltimore City	182	107,416	Local Health Department and Local School System ³	168.5 ⁴	1 : 1343	1 : 637
Baltimore County	158	104,708	Local School System	193.7	1 : 637	1 : 541
Frederick County	53	34,569	Local Health Department	70.2	1 : 2305	1 : 492
Harford County	51	38,572	Local School System	57	1 : 771	1 : 677
Howard County	64	40,215	Local School System	95	1 : 2366	1 : 423
Montgomery County	183	125,023	Local Dept. of Health and Human Services	172.8	1 : 1920	1 : 724
Prince George's County	180	128,347	Local School System	210	1 : 2252	1 : 658

¹ Includes program managers, supervisors, RNs, LPNs, health aides, nurse practitioners, and substitutes (only substitute health staff that are hired permanently.)

² Baltimore County and Garford County assign a nurse to every school.

³ Both agencies fund the positions. The local health department employs 138 of the positions and the local school system employs 6 positions.

⁴ Includes the staff in eleven the School Based Health Centers.

Source: Maryland School Health Programs, 1997-98 Staffing Survey Summary, DRAFT Report, January 1998

Nurse Monthly Report Year End Summary SY 96-97

Appendix D

New Cases				INTERVENTIONS			
15,171 New to SCHN				CONTACTS			
		referral	follow up				
125	Abortion	132	122	19,381	Student Contacts	17,395	MCPS Contacts
219	Abuse	174	168	16,925	Parent Contacts	2,759	PMD Contacts
3,375	ADD	1,457	2,477	5,357	SHS Contacts		
150	Physical Assault	101	62	2,000	MCHD Contacts	1,516	Other Contacts
53	Sexual Assault	50	69				
822	Communicable Disease	263	626				
2,171	Emotional/Behavioral	1,235	1,522	166	Home Visits		
848	Family Planning	890	482	697	MSAP		
607	Learning Disability	92	412				
10,861	Medical Conditions	2,864	4,497				
352	Pregnancy	689	695				
196	STD	239	157				
725	Substance Abuse	459	625				
342	Teen Parenting	484	816				
1,932	Other	584	610				

SUICIDES		
Threats	Attempts	Deaths
134	52	1

MEETINGS					
Principal	PTSA	Committee	Faculty	Inservice	Other
1,845	147	234	448	152	275

LICE			
Inspected	Excluded	Info Sessions	Parent Contacts
5,743	717	362	3,468

GROUPS		
Count		Students
3	not specified	23
40	Initial	459
190	Maintained	2,305

SELF CARE	
Presentations	Students
70	1,949

HEALTH PROMOTION CLUBS		
Count		Students
1	not specified	2
3	Initial	91
9	Maintained	294

HEALTH INFORMATION		
Newsletter		
PTSA	Principal	Other
870	352	455

CLASSROOM PRESENTATIONS	
Presentations	Students
231	12,669

Appendix D

PRESENTING PROBLEMS		REFERRALS		MEETINGS/COLLABORATIVE ACTIVITIES			
New Cases	Follow-up	SEU		Principal		Inservice	
Communicable Disease		HCP		PTSA/PTA		MSAP	
Medical Conditions		Mental Health		Committee		Other	
Emotional/Behavioral		Other		Faculty			
ADD		SUICIDE		IHCP		EMT/SARD	
Substance Abuse		Threats		New		Record Review	
Uninsured		Attempts		Updated		3153	
Sexuality Issues		Deaths				EMT/SARD Attendance	
Family Planning		HEALTH PROMOTION/ PREVENTION ACTIVITIES					
STD		SELF CARE				HEALTH PROMOTION CLUBS (one column per club meeting)	
Pregnancy		#Students				#Students	
Teen Parenting		Grade				*I or M	
Abuse/Neglect		HEALTH INFORMATION OUTREACH					* I - Initial M - Maintained
Physical Assault		PTSA Newsletter Y/N?					
Sexual Assault		Principal Bulletin Y/N?					
Other		Other Method (specify)					
CLASSROOM PRESENTATIONS							
Grade	#Students	Topic					

SUMMARY OF MONTH'S ACTIVITIES (Attach second page if necessary)

SCHN # &
 Signature / Date

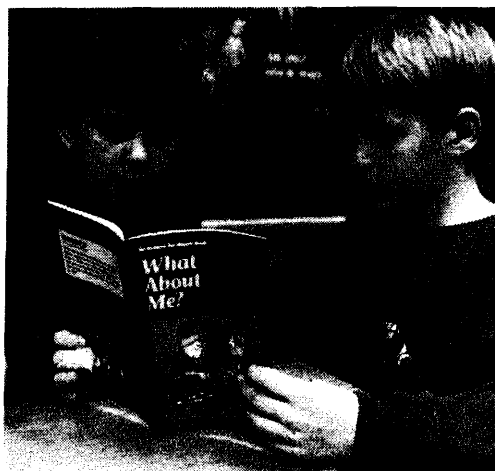
SUPERVISOR
 Signature / Date

Grade 1

By the end of Grade 1, the student should be able to:

Mental Health

- Recognize how emotions are expressed
- Use coping skills
- Role play appropriate reactions to difficult situations
- Demonstrate individual decision making skills
- Participate in group decision making
- Recognize uniqueness and individual abilities
- Identify different types of interpersonal relationships (authority, peer and family)
- Show respect for people and positive recognition of differences
- Give examples of cooperation in school and



identify benefits

Tobacco, Alcohol, and Other Drugs

- Describe basic physical needs
- Explain how human beings are dependent on food, clothing, and shelter to survive
- Identify tobacco, alcohol, and other drugs and their effects on health
- Identify the main difference between prescribed and over-the-counter drugs
- Discuss uses of prescribed drugs and cite examples
- Define drug abuse situations
- Name behaviors that support appropriate responses to drugs
- Name people who can help children stay healthy

Personal and Consumer Health

- Tell how healthy personal habits affect self and others
- Explain the importance of personal hygiene to good health
- Identify the people who provide health care service at home, at school and in the community
- Identify situations that require health care
- Identify and practice ways to keep home and neighborhood healthy places
- Explore a health care environment and identify its characteristics

Nutrition and Fitness

- Identify foods that belong in each of the food pyramid groups
- Plan a meal using each of the food pyramid groups
- Recognize food as a source of energy
- Engage in physical exercise daily

Safety and Injury Prevention

- Identify safety rules for preventing injuries
- Describe emergency situations and ways to respond
- Identify safe and basic first aid techniques
- Describe behaviors and settings that present personal risk
- Explain how health and safety personnel provide services
- Recognize community volunteers and the services they provide

Family Life and Human Sexuality

- Describe family roles and responsibilities
- Compare a variety of family units
- Tell how to be a responsible person and friend
- Use appropriate vocabulary for body parts
- Give examples of how people grow and develop (maturation)

Disease Prevention and Control

- Identify signs and symptoms, causes and treatments of common childhood health problems
- Practice behaviors which minimize communicable disease
- Describe social effects of illness and disease
- Describe differences between long term and short term illness
- Respond with sensitivity to individuals with diseases or disabilities