

## **A Pilot Project: Pediatric Resident and Medical Student Training Rotation in School-Based Health Clinics**

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**I**n 1993, the American Academy of Pediatrics recommended that pediatric residency training programs include components on school health.<sup>1</sup> Between 1990 and 2000 the number of US children receiving care through school-based health clinics increased from 137,000 to 1,100,000.<sup>2</sup> Unfortunately, school health remains a neglected area in physician training.

During the 2002-2003 school year, the Columbia University College of Physicians and Surgeons, Columbia University Mailman School of Public Health, and New York-Presbyterian Hospital added a school-based health clinic training component to a traditional medical student and resident pediatric training program. The project's first year goals involved developing the relationship between the medical school training program and the school staff and clinics, operating a pilot-project practicum, and conducting qualitative evaluation. The first year evaluation produced unanticipated results, and altered the program's second year.

Fourteen pediatric interns, four first-year medical students, five third-year medical students, and five fourth-year medical students participated in the program. During their one-month rotation in adolescent health, trainees typically spent one-half day per week receiving a didactic curriculum in adolescent and school health, and one day per week on site at a northern Manhattan intermediate or high school school-based health clinic (SBHC). The didactic curriculum also included adolescent physical and psychological development, male and female reproductive health, sexually transmitted infections, adolescent mental health issues, preventive dentistry, principles of health education, legal and ethical issues in adolescent medicine and school-based health care, and cultural competence.

The five SBHC training sites annually serve nearly 7,000 low-income Latino and African American male and female students from grades 5-12. The SBHCs offer primary and preventive care, comprehensive reproductive health services, mental health assessment and short-term treatment, and health education.

The SBHC component produced benefits over traditional hospital-centered rotations in adolescent health in that trainees received experiential reinforcement for SBHC

didactic presentation material; experienced interdisciplinary service by a medical provider, social worker, and health educator, and attended interdisciplinary staff meetings; learned about the range and quality of care provided in an alternative setting for patients not well-connected to other sources of primary care; worked in situations in which minors provide consent for confidential services in reproductive and mental health; gained more time to conduct in-depth psycho-social interviews; and improved their abilities and confidence in communicating with adolescents, managing difficult patients, and asking questions about reproductive and mental health.

Trainees also participated in community-based health promotion activities such as attending small group student health education sessions; developing a group intervention curriculum to support female students to avoid at-risk behaviors; developing and providing a parent education presentation; planning and implementing educational events on diabetes and obesity; and preparing and giving classroom presentations.

Staff anticipated the program would produce two additional benefits: more student patients would receive services because of additional clinical time provided by the trainees, and trainees would receive more practice in developing adolescent-appropriate clinical skills by serving a substantial number of student patients. Neither goal was realized. The small physical size of the SBHCs, inconsistent patient flow, and the need to provide clinical teaching and close supervision limited the number of patients seen. Several trainees benefitted more from the social education aspect of time spent in schools than from clinical skill development. Trainees contrasted SBHC experiences with their work with a greater volume of male and female adolescent and young adult patients at the site of the hospital's large community-based adolescent medicine clinic.

Limited space available at SBHCs, a problem common to SBHCs nationwide, conferred the unexpected benefit that training became largely one-to-one mentoring between preceptor and trainee. Mentoring involved detailed discussions of careers that combine traditional academic or medical specialty pursuits with public health applications. Discussions focused on professional interests of the trainee, and enabled trainees to envision application for their work in schools or other community-based settings.

The project's first year suggests the most significant long-term public health benefit from the SBHC training component may not involve improving specific trainee skills in adolescent clinical care, but in inspiring trainees to work in and initiate community-based pediatric and adolescent health care programs. Community-based services provide low-cost primary and preventive care to adolescents and minorities who would otherwise experience disparities in health care access and health care status. The SBHC component enables trainees to see themselves creating a major impact in providing services for potential recipients of community-based health care programs. In

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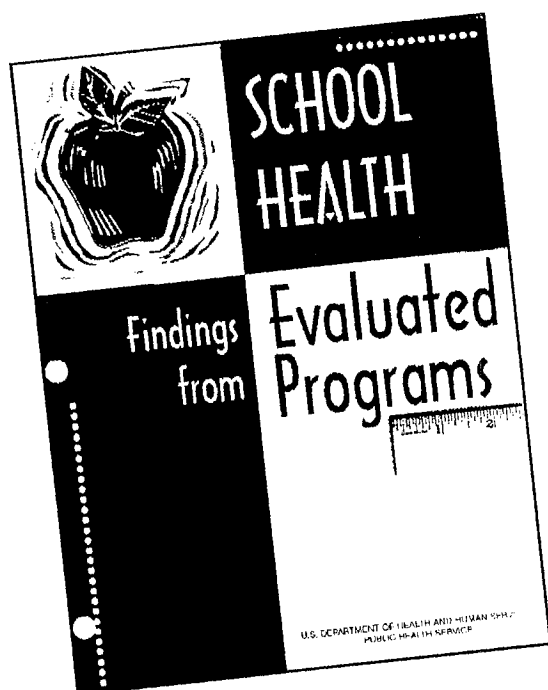
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response to school and trainee requests, 2003-2004 school year trainees are spending more time in classrooms providing science and health education presentations about medical applications of science, preventive education, and careers in health care. After the start-up period, staff estimates the per year cost of the SBHC training component will approximate one-half the salary of the supervising physician. If just two trainees each year devote one-half of the one year of their careers to community-based health

care, the project will pay for itself over time. ■

#### References

1. American Academy of Pediatrics, Residency Training and Continuing Medical Education in School Health. *Pediatrics*. 1993;92(1):495-498.
2. The Center for Health and Health Care in Schools. *Moving Forward: Making the Grade Becomes the Center for Health and Health Care in Schools*. Available at: [healthinschools.org/pubs/access/Winter2001.asp](http://healthinschools.org/pubs/access/Winter2001.asp).



## School Health: Findings from Evaluated Programs Second Edition 137 pp., published 1998

*School Health: Findings from Evaluated Programs, 2nd edition*, reviews 51 pre-K to grade-12 school health programs. Reviews contain: 1) a program description; 2) a list of materials and services included in the program; 3) implications for practice; 4) evidence of program effectiveness; and 5) a summary critique. Program and evaluation contacts also are included. Summaries will help program planners interested in implementing a quality school health program and researchers and evaluators looking for evaluation models or unanswered questions.

Each program is designed to improve the short-term or long-term health status of children and youth in a school-based or school-linked setting. Programs reviewed offer a variety of strategies and address multiple issues in different audiences.

Program reviews include:

- Be Proud! Be Responsible!
- CATCH PE
- EAT SMART
- Florida Traffic and Bicycle Safety
- Oregon School-Based Health Centers
- Primary Mental Health Project
- Rapping with Vince and Larry
- Teen Talk

Contains reviews in these areas of a coordinated school health program:

- Health Education/Instruction
- Clinical Health Services
- Physical Education
- Psychosocial Support Services
- Healthy Environments
- School Nutrition
- Family and Community Involvement

Quick reference tables help you quickly identify areas of interest.

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