improving children's health:
foundations and schools

Public schools are an integral part of almost every community, enrolling nearly 50 million students across the country. The reach and influence of schools suggest that investing in the development of strong schools can significantly improve the well-being of children and their families. The links between education and health first emerged in the 19th century when states exercised the power to compel vaccination for children entering school (Hodge Jr. 2002). The power of this linkage is still seen today with immunization rates rising from 82 percent for preschoolers to over 95 percent for school-age children. (CDC 2008a; CDC 2008b).

Education and health are inextricably connected in American society. Young people who drop out of school face numerous health risks leading to increased mortality rates and higher medical costs. (Freudenberg and Ruglis 2007; Alliance for Excellent Education 2003). Conversely, poor health status can compromise academic achievement. Exposure to lead, low birth weight, and inadequate nutrition can adversely affect cognitive development, preventing children from meeting grade-level performance expectations (Grantmakers for Education 2006). Evidence suggests that children with chronic medical conditions, such as obesity, are less likely to achieve academic success than their healthy classmates.

For many health foundations interested in children's health, working with schools is a natural strategy allowing them to reach a majority of the school-aged population in an efficient, effective manner. In many communities, particularly vulnerable neighborhoods, schools are an important resource providing not only education for children, but also public information, opportunities for community building, and, in some cases, health care services. While the potential of working closely with schools is great, these initiatives are not without challenge. Schools, especially those in low-income communities, are often strapped for time and resources, which can slow momentum for innovative health improvement efforts.

TYPES OF SCHOOL-BASED PARTNERSHIPS

Funders pursue partnerships with educational systems with a variety of goals in mind: helping to improve transitions for students across developmental levels, increasing the capacity of school staff and parents to support children's healthy development, ensuring success in postsecondary education and life, and ultimately strengthening neighborhoods and entire communities (Jehl 2007). These partnerships can focus on a wide variety of interventions, including clinical health care services, wellness programs, and health promoting environmental change.

IMPROVING ACCESS TO HEALTH CARE SERVICES

For many health funders, supporting school-based health centers (SBHCs) is a logical approach to expanding children's access to health care services. SBHCs emerged in the late 1960s in Cambridge, Massachusetts, in response to the need for better health care for low-income children (Brodeur 1999). Today, over 1,700 SBHCs provide services to students for whom seeking health care advice in the school setting is both comfortable and convenient. Many centers are equipped to address a number of clinical health issues, including comprehensive primary and preventive care, oral health and mental health treatment, and health education services. Research from The Health Foundation of Greater Cincinnati indicates that SBHCs generate about two dollars in social benefits for each dollar spent on operating costs. SBHCs also increase access to health care for the most vulnerable children and keep children in school and able to learn (The Health Foundation of Greater Cincinnati 2005). Some SBHCs also provide expert medical advice to teachers and administrators to help them address broader school health concerns related

The Centers for Disease Control and Prevention's Division of Adolescent and School Health is devoted to preventing health risks among school-aged youth by conducting surveillance to monitor health issues, synthesizing and applying research, providing funds to nonprofit and educational agencies to develop HIV prevention curricula, and providing technical assistance to evaluate school health programs. Learn more about the array of programs at http://www.cdc.gov/HealthyYouth/index.htm.

to infectious disease control and positive behavioral interventions.

Understanding the connection between healthy bodies and healthy minds, The Colorado Trust awarded $1 million to expand SBHCs throughout the state. Beginning in January 2008, the funding will help existing SBHCs provide services such as primary care, immunizations, outpatient mental health and substance abuse treatment, and preventive dental health services; enroll children in Child Health Plan Plus (Colorado's version of the State Children's Health Insurance Program or SCHIP); and address other children's health concerns in the community. The funding will also allow the creation of new health centers in underserved parts of the state, and a separate grant will support a school health task force that will develop a statewide plan to strengthen the system of integrated school health.

Rather than funding comprehensive school-based primary care, some health funders have elected to focus their support on targeted services that may be particularly scarce in the community such as dental care, mental health treatment, or specialty asthma management services. The opportunity for reaching children is great: nearly 80 percent of children receiving mental health services first seek services in a school setting (Burns et al. 1995). The opportunity to improve school achievement also exists as nearly 51 million school hours are lost each year to oral health problems alone (The Center for Health and Health Care in Schools 2007). Similarly, uncontrolled asthma accounts for 14 million lost school days and is the third-ranking cause of hospitalization for children under age 15 (CDC 2008c).

TEACHING HEALTHY BEHAVIORS

Another option for health funders seeking to support healthy schools is health education focused on topics such as physical activity, nutrition, and substance abuse prevention. In many cases, these health-related curricula can be broadly disseminated. For example, in 2007 the Blue Cross & Blue Shield of Rhode Island Foundation provided funding to the Chad Brown Health Center to develop Mark, Set, Go!, a culturally sensitive, school-based, healthful eating and physical activity program. The program targets over 300 fifth- and sixth-grade students from Providence and their families. The program aims to increase the physical activity, nutrition awareness, and fruit and vegetable consumption of participants by implementing a comprehensive educational curriculum. Minority high school students serve as peer health educators in the classroom to provide an eight-week workshop that uses age-appropriate educational materials focusing on healthy lifestyle choices.

In California, the Alliance Health Care Foundation and The California Endowment provided nearly $380,000 to Hoover High School to develop and pilot a school-based program that integrates health education into core academic curricula. Math lessons, for instance, might incorporate examples of healthy nutrition and activity. The program, serving 2,300 San Diego-area students, will address behavioral risk factors and link high-risk youth to existing health and social services. The project developed health modules, including teacher lesson plans and support materials on sexual health, substance use and prevention, nutrition, and healthy eating, self-esteem, and anger management. Filling the school's need for comprehensive health education, the curriculum allows students to learn about and decrease their engagement in risky health behaviors.

School officials are increasingly concerned with the behavioral health of their students. Students experiencing a behavioral health problem will have difficulty learning, and their condition may also affect the quality of education of their classmates. The American Psychiatric Foundation developed the Typical or Troubled?™ program, a school-based, mental health education program to address the gap between recognition of mental illness and appropriate diagnosis and treatment in young adults. The program was implemented by 17 nonprofit organizations, schools, and school districts in a total of 73 high schools during the 2006-2007 school year. More than 4,000 teachers and other school personnel received in-service training conducted by school mental health staff

The American Academy of Pediatrics (AAP) has developed comprehensive health guidelines for schools. *Health, Mental Health, and Safety Guidelines for Schools* was developed with input from over 300 health, education, and safety professionals from more than 30 different national organizations as well as by parents and other supporters. Acknowledging the association between good health and academic success, AAP makes a number of suggestions for schools, including developing a health and safety advisory council, evaluating school health programs, and hiring health education teachers who have appropriate qualifications for teaching health and safety classes. The guide provides a useful assessment tool for funders and their partner schools seeking to identify improvement opportunities and can be found on-line at http://www.nationalguidelines.org.

in collaboration with mental health professionals from their local communities.

PROMOTING HEALTHY SCHOOL ENVIRONMENTS

Because most children spend such a large proportion of their time in school, the very nature of their classrooms, cafeterias, school yards, and bus stops exerts a powerful environmental influence on their health and well-being. For example, many schools, particularly those in urban areas, simply do not provide a safe space for children to play. Decreased playtime during the school day has been linked to increased behavioral problems and slower increases in brain development. Expanding cafeteria choices and vending machine selections to include nutritious meals and snacks, designing safe places for physical activity, encouraging children to walk to school when possible, and reducing diesel emissions by retrofitting school bus exhaust systems are all effective strategies that schools can use to improve children's health.

Through the Robert Wood Johnson Foundation's Active Living by Design program, communities around the country have established innovative approaches to increasing physical activity in and around schools. The Albuquerque Alliance for Active Living, for example, developed a "walking school bus" program, whereby children who live within one mile of their elementary school walk there together with an adult supervisor. A team, including a National Park Service representative, a school nurse, a neighborhood association representative, and students from the University of New Mexico, developed a structured route that provides a safe, healthy way to get to and from school (Desjardins and Schwartz 2007).

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EFFECTIVE ENGAGEMENT

Regardless of the intervention, there are some specific strategies and tactics that funders should keep in mind when working with schools. Making sure that each party's goals and priorities are in line, building the right relationships, developing strategies to address opposition, and ensuring sustainability are all keys to successful partnerships.

- ***Aligning Goals and Priorities*** – The No Child Left Behind Act (NCLB), enacted in 2002, expanded the federal government's role in public education and created unprecedented accountability requirements for local schools. Requirements of NCLB include annual testing of students in third grade through high school; stricter degree requirements for academic teachers; surveillance of achievement gaps between racial and ethnic groups; and equal achievement goals for all students, including those with disabilities or limited English proficiency (Grantmakers for Education 2006). Though some view these requirements as simplistically rigid, others laud the introduction of national standards. Regardless of one's view regarding the merits of federal oversight, testing pressures, particularly in low-performing schools, have undoubtedly increased, and these pressures have sometimes served to strip resources away from any activity not seen as an immediate boost to test results.

  In an attempt to redirect resources, schools often cut other important programs from their budgets such as physical activity programs, art classes, programs for gifted and talented children, and school nursing services. On a broader level, schools are facing numerous educational reform issues such as the emergence of charter schools, the continuing debate on the optimum student-to-teacher ratio, and the call by some for increased school choice through the use of vouchers. With these pressing concerns, health often falls to the bottom of the list of a school's priorities. In fact, health objectives have the potential to be at odds with some educational reforms. For instance, many believe that smaller schools, not just smaller classrooms, may lead to better educational outcomes, but school-based health services typically require a critical mass of students to be financially viable. An optimally sized student body for academic purposes may not provide the ideal population for school-based health services.

  In addition to experimenting with educational reforms, teachers, administrators, and school health personnel are also grappling with the increasing number of students with special learning needs who spend time in regular classrooms. Almost 14 percent of students receive special education services because they have a disability, and approximately 75 percent of these students are educated in regular classrooms with other children for a significant part of the school day (Grantmakers for Education 2006). Students with special needs are expected to achieve test

scores equivalent to their peers, and schools may feel overwhelmed attempting to meet the health and academic needs of these disabled children. Special education programs for disabled children have been highly litigious and can command a large percentage of a district's overall budget. In some districts, health-related resources may be largely committed to this vulnerable population with limited funding remaining for more proactive health investments for the general student population.

Funders should be certain that their efforts to accelerate change complement [schools'] goals and do not burden school leaders with new, tangential strategies or piecemeal reform efforts.

Before entering into a grant agreement, foundations and schools need to ensure that their goals and processes are aligned. Health funders need to recognize that the primary mission of schools is education and that health-related activities may appear to be an additive, unwelcome distraction from that mission. Most schools acknowledge that academic achievement can be thwarted by problems found outside the classroom door and are already working toward improving the lives of their students. Funders should be certain that their efforts to accelerate change complement those goals – and do not burden school leaders with new, tangential strategies or support piecemeal reform efforts (Grantmakers for Education 2006). Health funders should not assume that the academic payoff of health-related programs is obvious. A "business case" demonstrating that the proposed intervention will lead to improved academic performance may be needed to garner the support of decisionmakers in the educational system.

- ***Building the Right Relationships*** – As with any partnership, it is critical to develop trusting relationships with the appropriate stakeholders. For both health funders and school officials, working together may be unfamiliar territory. Schools may not have experience receiving private grants, and funders historically focused on the health care system may not quite grasp the landscape of education. To maximize their impact, funders should concentrate on gaining the support of the principal; as leaders with considerable authority, principals make most of the decisions within schools, from time allotted to physical activity to what products are available in vending machines.

Depending on the boldness or scope of the endeavor, it may also be important to consider how the particular district operates. For example, some school boards are instrumental in setting policies and budgets. In other localities, this practice is left up to other governmental bodies. In some places, funding for school nurses is provided through a specific county tax or through the local health department, rather than as a part of the school district's budget.

Involving other partners in the community is important as well. For example, parent groups, the United Way, other child-serving agencies, and county departments of health and education all have a vested interest in children's education and health, and collaboration among these groups may assure a more holistic approach to promoting children's well-being. In fact, in some instances, foundations have chosen to fund community agencies to work with schools. Foundations can also work as neutral parties to convene medical providers and school officials.

The Blue Cross Blue Shield of Massachusetts Foundation worked with a variety of community partners to develop a program that would prevent and promote early detection of mental health concerns and provide access to resources for children and families with mental health issues. In cooperation with Boston public schools, Massachusetts General Hospital, Harvard University, the YMCA, and the Big Brother/Big Sister Association, the foundation helped implement Responsive Advocacy for Life and Learning Youth (RALLY) at Curley Middle School in the Jamaica Plain neighborhood of Boston. RALLY combines developmental theory, research, and practice to provide young people with integrated academic and emotional support; helps build students' resilience through relationships with positive adult figures; pulls supports into the classroom rather than pulling students out for specialized services; and works in collaboration with families, teachers, school administrators, community programs, mental health professionals, and others to support students' academic success. RALLY's interventions have helped students achieve better grades, and those with behavioral or conduct disorders were better able to manage their condition. As a result of its success in Boston, RALLY has been replicated in middle schools in Hawaii, New York, and Washington.

- ***Facing Oppositional Forces*** – Funders should not assume that school-based programming to improve children's health will be non-controversial and widely embraced. There are a variety of adversarial forces that schools may face when trying to integrate health into classrooms and

clinics. For example, SBHCs can face a high level of opposition ranging from parental objections regarding the provision of birth control or counseling about safe sex practices to competitive concerns from community-based health care providers that they may lose patients to the SBHC. Despite such opposition in some communities, SBHCs have flourished because of parental support and recommendations by the American Medical Association, the U.S. Public Health Service, the American Academy of Pediatrics, and other expert health groups. Compromises are often necessary, however. Many SBHCs may forgo family planning services to preserve support for primary care. In these cases, referral relationships with community-based providers are typically established to ensure comprehensive service availability.

Business interests can also undermine efforts to change the school health environment. A number of school districts believe that shifting cafeteria and vending offerings to decrease or eliminate unhealthy foods will result in significant revenue reductions. Studies show that school districts recoup one-third to over half of the revenue earned from soda sales. Some districts also receive signing bonuses, exclusive marketing right payments, and other financial incentives not tied to sales volume that can range from $55,000 to $1 million depending on the size of the district (Isaacs and Schwartz 2006).

Work by The California Endowment has helped to counteract such opposition. The endowment funded analytic studies that identified healthy options for vending machines and provided strategies for fundraising that did not involve junk food. Governor Arnold Schwarzenegger subsequently signed legislation that banned junk food and soft drinks from schools and provided funding to incorporate more fruits and vegetables in school breakfast programs. Resistant schools, and the vendors who wanted to keep their business, were forced to offer healthier options for students.

- ***Ensuring Sustainability*** – Sustainability is a critical factor in maintaining school health initiatives. Failing to identify and address sustainability concerns can lead to the discontinuation of effective programs. Can SBHCs or health-related curricula continue without foundation support? How can schools raise money or convince districts to include these programs in school budgets? In the early 1990s, SBHCs had been supported primarily by large foundations, local health departments, and block grants from the Maternal and Child Health Bureau; only seven states had allocated state funding for SBHCs. Through its Making the Grade program, the Robert Wood Johnson Foundation explored ways to open funding streams. Over the years, states have developed a variety of contractual arrangements and funding strategies to keep health centers running in schools. In the past, controversies regarding inappropriate Medicaid billing practices related to school-based health services led some school administrators and state Medicaid officials to be extremely cautious about seeking Medicaid reimbursement. Some funders have found that SBHCs led by traditional medical providers end up being more sustainable because they have developed the documentation systems necessary to support insurance claims. School officials are often not as familiar with Medicaid billing and the dizzying array of funding sources (Brodeur 1999).

  Foundations can help schools secure sustainable funding by providing technical assistance and other resources. For example, the W.K. Kellogg Foundation, along with Blue Cross Blue Shield Michigan, has supported the School-Community Health Alliance of Michigan. The alliance will use the funds to purchase and develop a centralized third-party billing and reporting system that will enable SBHCs in the state to bill insurers for covered health services provided to students with public or private health care coverage. The new system is also expected to track health services provided to students that are not covered by private or public insurance, providing data that can help in the future design of health insurance for children. The alliance also succeeded in securing $8 million in federal funding to expand SBHCs in the state and helped create policy change that expanded the population eligible to receive services at SBHCs to children from birth to age 21.

CONCLUSION

Schools are in a unique position to improve the health of children. The educational system, however, poses its own challenges that may detract from educators' attention to health services. Support from the broader community, including providers, families, and local government, is needed to ensure that schools remain healthy places for children to learn and grow.

REFERENCES

Alliance for Excellent Education, *The Impact of Education on Health and Well-Being* (Washington, DC: November 2003).

Brodeur, Paul, "School-Based Health Clinics," in Stephen L. Isaacs and James R. Knickman, eds., *To Improve Health and Health Care 2000: The Robert Wood Johnson Anthology* (San Francisco, CA: Jossey-Bass, 1999).

Burns, Barbara J., E. Jane Costello, Adrian Angold, et al., "Children's Mental Health Service Use Across Service Sectors," *Health Affairs* (14)3: 147-159, Fall 1995.

The Center for Health and Health Care in Schools, *Children's Dental Health Needs and School-Based Services: A Fact Sheet*, <http://healthinschools.org/Health-in-Schools/Health-Services/School-Based-Dental-Health/~/media/Files/dental_cfkfacts.ashx>, accessed December 10, 2007.

Centers for Disease Control and Prevention, "Asthma's Impact on Children and Adolescents," <http://www.cdc.gov/asthma/children.htm#nacp>, accessed January 2, 2008a.

Centers for Disease Control and Prevention, *Health, United States, 2006,*< http://www.cdc.gov/nchs/data/hus/hus06.pdf#081>, accessed January 2, 2008b.

Centers for Disease Control and Prevention, "Vaccination Coverage Among Children Entering School – United States, 2003-04 School Year," *Morbidity and Mortality Weekly Report,* <http://www.cdc.gov/mmwR/preview/mmwrhtml/mm5344a4.htm>, accessed January 2, 2008c.

Desjardins, Elise and Anne L. Schwartz, "Collaborating to Combat Childhood Obesity," *Health Affairs* (26)2:567-571, March/April 2007.

Freudenberg, Nicholas and Jessica Ruglis, "Reframing School Dropout as a Public Health Issue," *Preventing Chronic Disease* (4)4, October 2007.

Grantmakers for Education, *A Primer on the U.S. Public Education System: What a Donor Needs to Know About the Biggest Challenges and Biggest Opportunities* (Portland, OR: 2006).

The Health Foundation of Greater Cincinnati, *A Prescription for Success: How SBHCs Affect Health Status and Healthcare Use and Cost – Executive Summary* (Cincinnati, OH: 2005).

Hodge Jr., James G., "School Vaccination Requirements: Legal and Social Perspectives," *NCSL State Legislative Report* 27(4), August 2002.

Isaacs, Stephen and Ava Schwartz, *Banning Junk Food and Soda Sales in the State's Schools* (Los Angeles, CA: The California Endowment, 2006).

Jehl, Jeanne, *Connecting Schools, Families, and Communities: Stories and Results from the Annie E. Casey Foundation's Education Initiative* (Baltimore, MD: The Annie E. Casey Foundation, 2007).