## **Guest Editorial**

## SCHOOLS AS SITES FOR HEALTH-CARE DELIVERY

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Millions of children and youth in the United States suffer the effects of being uninsured, underinsured, or unable to access health care. While debate ensues relative to health-care reform blueprints, there is virtually no argument that much must be done if all of the nation's children are to have access to quality health care. Relative to their health status, children are particularly vulnerable because they tend to be fiscally and politically dependent upon adults and social systems for support. In this context, it seems rational to consider programs and practices that successfully meet the needs of children where they spend a significant amount of time—their schools.

Schools are one of the last institutions all communities have in common and have proven to be a logical place to provide health services. Ninety percent of children in the U.S. attend publicly funded schools, and despite all other variability, they are the one place children dependably convene. Furthermore, taking into account the fluid and reciprocal relationship between health status and learning readiness, a focus on health services offered in schools is intuitively rational.<sup>1</sup> For example, children with fair to poor health status are six times more likely to have learning disabilities as their healthy counterparts and are apt to be absent 11 or more days of school per year. Seven percent of school-aged children have been diagnosed with attention deficit hyperactivity disorder (ADHD).<sup>2-4</sup> The focus of this special issue of Public Health Reports, school-based programs, supports this location for strategic interventions addressing children's health needs.

There is ample evidence of the links between health status and learning readiness, which researchers say necessitates multidisciplinary interventions.<sup>5,6</sup> In his article on school health policies and programs, Kolbe writes, "Today, more than ever, school health programs could become one of the most efficient means available to improve the health of our children and their educational achievement." Similarly, in an article concerned with school-community partnerships, Lee-Bayha and Harrison posit, "The best of teaching cannot always compete successfully with the challenges many students

face outside of school." However, a persistent barrier to a proliferation of school health partnerships in the U.S. is the unfamiliarity of the educational community with many school-based interventions and, likewise, the converse remains true. Moving from this uneasy "guest" relationship to valued partner status will require purposeful engagement of the educational community as advanced by Mandel in this issue.<sup>7</sup>

School health interventions make important contributions because they mitigate health disparities that are a function of income and, in partnership with schools, could have a profound effect on learning readiness. Stated another way, many of the predictors of poor health are also challenges to educational attainment (i.e., poverty, language, racial/ethnic minority status, and inadequate housing). As a result of the interaction among and between income, health, and cognitive development, introducing health facilities in schools holds the potential of high returns on investment for educators as well as health professionals. For example, children may demonstrate difficulty coping academically and behaviorally in traditional school settings and the cause of said adversity could be ill health. School health interventions also promote early diagnoses of preventable or treatable health dilemmas, thereby theoretically improving the quality of academic interactions.<sup>1,8</sup>

This special issue contributes to the body of literature articulating the impact of services provided, as well as how to create and sustain these valuable initiatives as contributors to the continuum of care. New approaches, conceptual models, and evaluations of existing programs are featured. Hong and colleagues describe a new approach in the evaluation of a media campaign in a school environmental tobacco prevention program. Bailit, Beazoglou, and Drozdowski identify the possibility of a large-scale school-based dental program based on their experience in Connecticut. Description of the services o

The articles contained herein demonstrate the practicality of the Ecological Systems Theory, which was first advanced by Uri Bronfenbrenner, positing a rationale for a more holistic integration of health support for children where they spend significant time—at school. Application of the Ecological Systems Theory has not heretofore been broadly employed to reinforce the benefits of coordinating health services in schools. Lohrmann's expounding upon Bronfenbrenner's work is a significant contribution in this regard. His interconnected "bubbles" demonstrate the

programs to the comprehensive well-being of children and youth.11

Mansour et al.<sup>12</sup> address one childhood disease, asthma, that is sensitive to income and that has direct and indirect effects on school performance that school health interventions have demonstrated they could mitigate. More than six million youth have been diagnosed with asthma in the U.S. When income impacts the treatment of asthma, youth are more apt to be seen in emergency rooms with severe attacks. Those who cannot control their asthma experience sleep disruption that deters attentiveness in school. Asthmatic children have higher rates of grade failure than nonasthmatics. Children with asthma have almost twice the rates of learning disabilities when compared with healthy children.<sup>13,14</sup> In addition to contributing to exorbitant health-care costs (because preventive care is far less expensive than hospital treatment), asthma also causes more than six million days of school absences annually. 15 In just this example, the protective presence of a school-based health center (SBHC) on-site would both improve health outcomes and influence learning potential.

SBHCs are the subject of many articles in this issue. SBHCs are created in collaboration with schools, a health organization, and communities. They do not take the place of a school nurse; rather, they expand the health services available to children beyond the authorized scope of school nurse duties. Models of care and the personnel on-site who deliver services are dictated by the needs and priorities of idiosyncratic communities, the school site, and the health organization supporting the enterprise. Services are age appropriate and can include, but are not limited to, primary care for acute and chronic conditions (such as asthma, diabetes, and on-site injuries), nutrition education, health education, mental and dental health services, and substance abuse services. 1,16,17

This issue also includes articles that focus on practical demonstrations of school health's role in ensuring equitable access to health care for America's children. Articles by Nystrom and Prata,18 Bailit et al.,10 and Mandel<sup>7</sup> provide practitioners involved in the creation and financial sustainability of SBHCs useful insights garnered from empirical findings. These articles address topics such as planning a center, financing dental services, and emphasizing the importance of strategic partnerships with schools. As such, each author submits elements important to building a firm operational and fiscal foundation for SBHCs.

Though engaging policy makers may not be the

most familiar activity to professionals involved with SBHCs, it is clear that failure to strategically inform decision-makers of the value they add will destine SBHCs to veritable second-class status in comprehensive health service delivery. The danger of inaction accrues not only to SBHCs, but also to the children who would in their absence have no regular site for health care. Lear et al.,19 Schlitt and colleagues,20 and Soleimanpour et al.21 discuss the role of political bodies on the fiscal sustainability and proliferation of SBHCs across the country. Using state and national survey data from SBHC state associations, the authors advance the challenges and opportunities associated with inserting SBHCs into the mainstream health-care political landscape.

Exploring the impact of SBHCs, Wade et al., 22 Guo et al.,23 and Hong and colleagues9 provide evidence that SBHCs serve as important contributors to the health safety net for children. More specifically, children in areas underserved by medical professionals, those eligible for Medicaid, the uninsured, and those suffering from chronic illnesses benefit from having a center in the schools they attend. Targeted services such as asthma programs and anti-tobacco initiatives also contribute to the spectrum of support for children and youth that extends beyond narrowly defined service delivery.

Despite the noteworthy successes of SBHCs relative to delivering preventive, primary, and mental health care to children and families, there remain two significant barriers to perpetuating success: stable funding streams and embracing strategic partners in political advocacy. Of the aforementioned challenges, the one with minimal attention in the literature is the potential value of health-education alliances to advance policies favorable for SBHCs. It was noted earlier that schools participate in the creation of SBHCs; however, the level of sustained engagement varies greatly, and collaboration with the educational community in policy advocacy is largely an untapped possibility.

It is our hope that the empirical and theoretical contributions of this special issue of Public Health Reports will aid those interested in supporting existing facilities and also encourage engagement with heretofore untapped collaborators to join in advocating for mainstream acceptance of school health interventions as part of the continuum of care children need.

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