The "State of the State" of School-Based Health Centers

Achieving Health and Educational Outcomes

Claire D. Brindis, DrPH

For more than 40 years, there has been national interest in the school-based health center (SBHC) model and its ability to create linkages between health, both physical and mental, and education systems to help ensure that students are healthy and ready to learn, achieving both health and educational milestones.[1] Although there is great variation across the country, often reflecting community need and resources, SBHCs generally share common elements, including location on or inside of school groups, the delivery of comprehensive services often provided by a nurse practitioner or physician assistant and enhanced by a multidisciplinary team, and integration with the mission and activities of the school community.[2] Though they represent a relatively small number of clinics, approximately 2,300 across the country, their growth and scope of activities have been followed closely by different stakeholders, accompanied by a high level of interest in what they accomplish, particularly in the area of prevention and early intervention. It is a "double-edged sword" that SBHCs' placement in schools has resulted in their higher burden of proof, being held to a far greater expectation that they demonstrate their effectiveness both in terms of health and educational outcomes. As a result, clinics have often been examined under a far stronger lens of accountability, as compared with traditional pediatric and primary care programs. This "high bar," given the types of resources and the complexity of providing care in often low-resourced schools, has often contributed to the ongoing struggle to effectively tell their outcome "story" as well as having sufficient resources to keep the clinic doors open.

Three unique windows of opportunity may help to significantly shift the historic trajectory of SBHCs. First, nationally there is an increasing commitment to the role of prevention and primary care, particularly as the U.S. confronts the costly impact of non-communicable diseases and the need for greater disease management tools, such as for obesity, diabetes, and mental health. Thus, as part of the Affordable Care Act, a total of $200 million was appropriated between 2010 and 2013 to support capital grants to improve and expand services at SBHCs. These funds helped to increase the capacity of programs, including modernizing or building new facilities and purchasing equipment, to care for nearly 1.2 million patients on an annual basis.[3] Related to fiscal resources is the integration of *Bright Futures Clinical Guidelines* to shape the clinical delivery of care, with a strong focus on prevention and anticipatory counseling.[4] Second, there is an increased commitment to gathering and reviewing the quality of evidence to drive policy decisions, including resource allocation. Third, there is an increased understanding and awareness of the social, economic, and educational impact of health and educational disparities. Although there has been significant research in delineating the scope of the problem and the adverse effects of poverty, as well as uneven lack of access to preventive and primary care, there have been far greater challenges in considering the question "So what can one actually do about these disparities and what would be necessary to ameliorate their impact?" SBHCs may help to begin to demonstrate the role that they can play in changing adverse outcomes.[5]

In this issue, Knopf and colleagues'[6] article, "School-Based Health Centers to Advance Health Equity: A Community Guide Systematic Review," begins to close the aforementioned gaps in both evidence and disparities. The analyses provide a comprehensive response to the long-held hypotheses that SBHCs would likely have a dual impact on both educational and health outcomes because of their location, ready accessibility, and responsiveness to their potential "clients." In fact, through their methodical and thorough review, Knopf et al. advance both the science of "what is known about the outcomes and impacts of SBHCs," along with considering the feasibility and viability of this model to play a role in

From the Philip R. Lee Institute for Health Policy Studies and Adolescent and Young Adult Health National Resource Center, University of California, San Francisco, San Francisco, California

Address correspondence to: Claire D. Brindis, DrPH, Philip R. Lee Institute for Health Policy Studies and Adolescent and Young Adult Health National Resource Center, University of California, San Francisco, 3333 California St., Suite 265, San Francisco CA 94143. E-mail: claire.brindis@ucsf.edu.

0749-3797/$36.00
http://dx.doi.org/10.1016/j.amepre.2016.03.004

decreasing social and health disparities. They offer a significant reframing and lens regarding the potential role and viability of this model as one of multiple strategies to turn the tide—the tsunami of educational and health issues that many of the nation's children face as they navigate their elementary and secondary schools, while simultaneously facing the stresses often experienced by their families, peers, and communities.

Although health and educational outcomes have been the focus of previous research efforts, Knopf et al.[6] make a unique contribution by reviewing the data and evidence pertaining to important outcome and impact questions, help in collating and linking that research to meaningful domains, and show how much progress has been made in helping to answer questions regarding SBHC's role in improving access to appropriate health care, improved educational outcomes, decreases in risk-taking behaviors that often lead or contribute to negative health outcomes, among others. Domains such as education and reproductive health have been studied extensively, whereas other outcomes have far less data available to judge whether SBHCs can and do play a role. For example, there is increasing evidence that the model impacts graduation and grade promotion, as well as contraceptive adoption and a reduction in childbirth. However, there appears to be far less evidence available in the area of substance use. Taken together as a mosaic, however, the data offer an increasingly strong set of indicators that point to the value and importance of this model.

Furthermore, adopting a disparities lens and connecting the logic model links between health status, educational readiness to learn, a supportive school climate, and specific services that respond to the developmental, educational, and health needs of individual students points to the value of an integrated SBHC model as an approach to ameliorate an array of inter-related disparities. For example, the model helps to address health-related obstacles to educational achievement, while also overcoming traditional barriers to community services such as working parents who are unable to take time off from work for preventive visits, or who lack transportation that enables their children to access care without losing too much "academic seat time." By having these elements in place, fewer children will be lost between the "cracks" of the intersection of health and education.

A challenge woven throughout the study is the variability in the model interventions that have been implemented and tested and their overall results. In other words, although there are clear outcomes that have been achieved in some sites, and tested rigorously, these same outcomes may not be consistently the same in sites that might not have the same level of resources devoted to the health domain, such as mental health services or educational outcomes. Thus, consumers of the information need to be careful to recognize that "an SBHC is not necessarily an SBHC," as there may be wide variability.

The study also points to additional research directions, as an expanded list, reflecting the "state of the state." Specifically, researchers need to ascertain how the site model contributes to outcomes—Does it matter whether available services are comprehensive beyond the provision of primary care? How does the within-model variability impact results? Are "whole" school–wide effects feasible (e.g., reduction in risk behaviors), given the potential for "spillover" on the whole student body of SBHC-driven interventions, or is the greatest impact purely at the individual client level?[6]

In addition to the proposed research agenda, other research questions remain: What is the "intervention" and how does the dosage impact student outcomes? How does the level of integration between educational and health goals contribute to improved outcomes? How can the voice of the youth consumers be further integrated in the implementation of the model? How can this research be disseminated so that existing and new SBHC programs meet the outcomes achieved by their peer programs? How does the health literacy inculcated in SBHC users help them navigate the healthcare system as they age out? How can SBHCs continue to play a role in reducing educational and health disparities?

Finally, the question remains: Will this thorough compilation of evidence be of sufficient strength and utility to be the tipping point the field has sought, particularly in ensuring greater adoption and implementation of the model across the country? Has the "time come" for this movement's broader adoption?

References

1. Keeton K, Soleimanpour S, Brindis CD. School-based health centers in an era of health care reforms: building on history. *Curr Probl Pediatr Adolesc Health Care*. 2012;42(6):132–156. http://dx.doi.org/10.1016/j.cppeds.2012.03.002.
2. 2013-2014 Digital Census Report. School-based health alliance, Washington, DC. http://censusreport.sbh4all.org/. Accessed February 27, 2016.
3. U.S. DHHS. The Affordable Care Act and the School-Based Health Center Capital Program. www.hhs.gov/healthcare/facts-and-features/fact-sheets/aca-and-the-school-based-health-center-capital-program/index.html. Posted December 8, 2011.
4. Hagan JF, Shaw JS, Duncan PM, eds. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents. 3rd ed. Elk Grove Village, IL: American Academy of Pediatrics, 2008.
5. Basch CE. Healthier students are better learners: a missing link in school reforms to close the achievement gap. *J School Health*. 2011;81(10):593–598. http://dx.doi.org/10.1111/j.1746-1561.2011.00632.x.
6. Knopf JA, Finnie RKC, Peng Y, et al. School-based health centers to advance health equity: a Community Guide systematic review. *Am J Prev Med*. 2016;51(1):114–126.