Children's Hospital of Philadelphia PolicyLab

BMI Screenings in Schools – A Failing Report Card?

Behavioral Health

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Editor's Note: This post is part of a series to explore how we can utilize research, clinical experience, and policy levers to prevent and enhance treatment of eating disorders in children and teens at a time when behavioral health concerns, including eating disorders, in youth are demanding attention and resources.



Every year, in several U.S. states and cities, school districts are required to screen each student's weight and height. This information is used to calculate body mass index (BMI), which is then plotted on a sex-specific growth chart to identify those who may be at risk of weight-related health issues. Schools then either report this data to state agencies or send the screening results to parents in a letter. Letters, often referred to as "BMI report cards," include basic explanations and recommended follow-up actions, hoping to educate parents about healthy lifestyle changes and, if necessary, seek further evaluation from medical care providers.

As a public health approach to prevent and reduce childhood obesity, BMI screening has been widely adopted in schools in 25 states over the past two decades. At least 13 states have specific legislation to ensure the implementation of the inexpensive and easy-to-use measurement tool. The implicit goal of these screening programs is to identify youth who are above a certain weight threshold (and therefore assumed to be unhealthy or at risk for a number of health conditions) so that they and their families can take steps to facilitate weight loss.

However, controversies around assessment and screening of BMI in schools have arisen over the years. Public health experts have raised concerns about the effectiveness and the unintended consequences of the screening program, indicating that it may be time to reconsider or de-implement these policies altogether.

Potential harms of BMI screening programs

One of the major criticisms of school-based BMI screening programs is their reliance on BMI as the sole metric for assessing weight status and by default, health. BMI does not take into consideration body composition, muscle mass, or individual differences in growth and development. Relying only on BMI can lead to inaccurate assumptions about a child's or teen's health status and potentially stigmatize children who may be healthy and who have higher BMI .

Research indicates that students who are labeled as “overweight” are more likely to experience school-based bullying and teasing from their peers . They are at greater risk of being isolated and marginalized by their friends, and are more likely to develop disordered eating behaviors, feelings of despair, worry, low self-esteem and anxiety.

Furthermore, the effectiveness of BMI screening programs remains unclear. In a recent study in California, researchers found no significant difference in weight status after two years of follow-up between students whose BMI information was reported to parents and those who weren't. However, students whose weight and height were assessed had increased body dissatisfaction compared to those without BMI screening or reporting. This suggests that BMI reporting alone does not improve weight status and can negatively affect students' weight perception and satisfaction.

Aside from issues of efficacy, BMI screening may have negative unintended consequences that should be considered by policymakers as they look to improve child health outcomes. The weight-centric screening approach could easily overstate the importance of thinness or a BMI within the “normal” range, causing concerns for parents about their children’s body size, even though their child may be following their typical growth curve.

There have been reports of parents adopting calorie-restricted diets to help their child lose weight because of BMI screening and this advice is often reinforced by health care professionals who emphasize the importance of a “normal” BMI. However, for youth who have not yet reached puberty, restricting calorie intake is dangerous and can seriously affect their normal growth. For example, girls may experience delayed menstruation when put on restrictive diets.

When parents lack the correct guidance, it is hard for them to take safe, meaningful action.

Time for a change

Almost 20 years after implementation, the ability of BMI screening programs to prevent and reduce childhood obesity has yet to be fully demonstrated. Instead, the potential harms of this program—including problematic weight control behaviors, body dissatisfaction, weight stigmatization, and lowered self-esteem among children and adolescents in higher weight bodies—have been widely reported.

As children’s weight remains a topic of major discourse in the country, it is crucial that we incorporate more evidence-based approaches to health policy. Extensive evidence suggests that interventions to improve children’s health outcomes should focus on changing social, socioeconomic and environmental factors while addressing health inequalities, as all these factors wield huge influence over the development of chronic health conditions.

To achieve this, policymakers should ensure children’s access to high quality health care and adequate insurance coverage through public policy, increasing the likelihood that youth will have access to necessary resources when they encounter health issues.

Furthermore, educators, school boards, superintendents, principals, and policymakers are uniquely positioned to educate students about nutrition and physical activity from a non-stigmatizing perspective. An inclusive approach that considers size diversity and emphasizes body respect and acceptance for children of all weights is necessary for promoting children’s health. By reconsidering the use of BMI screening in our nation’s schools, we may have the ability to reduce weight stigma and create a supportive environment for children to develop healthy habits and improve their health outcomes.

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