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# Health Care Providers' Perceived Role in Changing Environments to Promote Healthy Eating and Physical Activity: Baseline Findings From Health Care Providers Participating in the Healthy Eating, Active Communities Program

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## ABSTRACT

**BACKGROUND.** The California Endowment's Healthy Eating, Active Communities program was designed to reduce disparities in the incidence of obesity by improving food and physical-activity environments for low-income children. It was recognized at the outset that to succeed, the program needed support from community advocates. Health care providers can be effective advocates to mobilize community members and influence policy makers.

**OBJECTIVE.** This study was conducted to describe how health care providers address obesity prevention in clinical practice and to assess health care providers' level of readiness to advocate for policies to prevent childhood obesity.

**METHODS.** The study included two data-collection methods, (1) a self-administered survey of health care providers (physicians, dietitians, nurses, nurse practitioners, medical assistants, and community health workers) and (2) stakeholder interviews with health care facility administrators, health department staff, and health insurance organization representatives. Two-hundred and forty-eight health care providers participated in the provider survey and the health care stakeholder interviews were conducted with 56 respondents.

**RESULTS.** The majority (65%) of health care providers usually or always discussed the importance of physical-activity, reducing soda consumption, and breastfeeding (as appropriate) during clinical pediatric visits. More than 90% of the providers perceived home or neighborhood environments and parental resistance as barriers to their efforts to prevent childhood obesity in clinical practice. More than 75% of providers reported not having engaged in any policy/advocacy activities related to obesity-prevention. Most (88%) of the stakeholders surveyed thought that health care professionals should advocate for policies to reduce obesity, especially around insurance coverage for obesity-prevention.

**CONCLUSIONS.** Providers perceived that changing the food and physical-activity environments in neighborhoods and schools was likely to be the most effective way to support their clinical obesity-prevention efforts. Health care providers need time, training, resources, and institutional support to improve their ability to communicate obesity-prevention messages in both clinical practice and as community policy advocates. *Pediatrics* 2009;123:S293-S300

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### Key Words

pediatric obesity prevention, health care providers, policy, advocacy, nutrition, physical activity, environmental change

### Abbreviation

HEAC—Healthy Eating, Active Communities

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**T**HERE IS A growing epidemic of childhood obesity in the United States and around the world. The prevalence of overweight among children in the United States has more than tripled over the past 25 years,<sup>1</sup> and there are growing disparities in obesity rates between white children and children of color.<sup>2</sup> Obese children are also more likely to have health problems in childhood, including type 2 diabetes, high blood pressure, and depression.<sup>3</sup> These health problems are strongly associated with long-term health consequences,<sup>4</sup> the economic costs of which are enormous. In 2004, it was estimated that the total health care costs related to obesity and overweight in adults was more than \$100 billion.<sup>5</sup> Unfortunately, treatments to help children lose weight have had only limited success.<sup>6</sup>

For all of these reasons, prevention has become a key strategy in efforts to reduce the impact of childhood obesity. Better understanding of the factors that promote obesity has led to a new type of childhood obesity-prevention initiative that seeks to prevent childhood obesity by creating environments that promote healthy eating and physical activity. The environments in which people live, work, play, receive health care, and attend school have an effect on their ability to obtain healthful foods and access to opportunities for physical activity. These environments can

support or hinder attempts to prevent obesity through changing individual eating and activity behavioral patterns.<sup>7</sup> Strategies that focus on environmental interventions are relatively new. There have been insufficient data to permit a judgment as yet about the efficacy of this approach; however, early results of community-based environmental-change interventions have been encouraging.<sup>7</sup>

## **THE ROLE OF HEALTH CARE PROVIDERS IN CHILDHOOD OBESITY PREVENTION**

Although there is no clear consensus on the most effective strategies for preventing obesity, there is consensus that health care providers and health care institutions play a critical role. Lifestyle-change counseling conducted by health care providers, particularly physicians, has been shown to help patients lose excess weight, be physically active, and maintain desired weight loss.<sup>8,9</sup> However, health care systems often do not encourage their health care providers to engage in lifestyle-change counseling because of the lack of reimbursement or insurance coverage for visits to physicians, nurses, health educators, dietitians, and other health care providers for prevention or management of obesity.<sup>10-12</sup> Many health care providers have reported insufficient time during routine clinical visits to address obesity prevention. They also have reported a lack of obesity-prevention services and resources to which they can refer patients.<sup>11,12</sup>

In addition, various socioeconomic factors act as barriers to obesity prevention for health care providers, including children's exposure to an environment that promotes obesity, such as the ubiquitous availability of low-cost, high-calorie foods from neighborhood fast-food outlets, cultural practices, and the cost of referrals for nutrition and physical-activity services.<sup>13-15</sup>

Many health care institutions or facilities feature environments that discourage healthy eating and physical activity. A survey of the top 16 hospitals in the country found that 6 of them host dining facilities operated by national fast-food chains on the hospital grounds, and 4 of these contract with 2 fast-food chains simultaneously.<sup>16</sup> Unfortunately, there are all too many opportunities at these hospitals for patients, staff, and visitors to obtain inexpensive, high-calorie, nutrient-poor foods and beverages. The ready availability of these foods creates an unhealthy environment in the hospitals and health care settings that undermines their efforts to promote health.<sup>16-18</sup> Moreover, these same facilities offer few opportunities for safe physical activity.<sup>17</sup>

As leaders in the community, health care providers have an opportunity to influence nutrition and physical-activity policies by engaging in advocacy efforts.<sup>12,19,20</sup> Community members view health care providers as a trusted source of information related to obesity prevention. A survey of parents revealed that they are more likely to have communicated with health care providers about obesity prevention than school officials, grocery store or restaurant owners, or other government officials (Field Research Corporation, unpublished data, 2006). Despite the potential influence health care providers

may have as advocates, providers often lack the time, skills and support from their workplaces to actually conduct advocacy work.

Although there are currently several health care institutions that are attempting to address barriers to obesity prevention in the health care setting, more needs to be done.<sup>21</sup> In this article, we discuss the obesity-prevention role that health care providers are carrying out and can carry out in their clinical practice as well as in advocacy and policy development. We address this role from the viewpoint of the providers and other stakeholders located in the California Endowment's Healthy Eating, Active Communities (HEAC) program sites. The purpose of the study was to provide baseline data describing how health care providers were addressing obesity prevention and nutrition and physical-activity promotion in their clinical practices and to assess how members of the health care sector could be engaged in advocacy activities to change the community environment to prevent childhood obesity and promote healthier eating and physical activity.

## **THE HEAC PROGRAM**

The HEAC Program is a 4-year program of the California Endowment, focusing on reducing disparities in obesity and diabetes by improving food and physical-activity environments for school-aged children. The program concentrates on 5 sectors: schools, after-school programs, neighborhoods, health care facilities, and marketing and advertising. The most prominent feature of HEAC is a community demonstration component that provides grants to highly motivated schools, community organizations, and local public health departments in 6 communities throughout California. The 6 selected HEAC demonstration collaboratives are located in predominantly low-income areas. Three of the communities are considered to be urban areas, 2 suburban, and 1 rural. The populations of the 6 communities range from 43 224 to 146 235, and the majority of the communities have a high percentage of Latino, black, or Asian/Pacific Islander residents.

Each HEAC collaborative includes an active health care sector. An initiative-wide logic model was developed to guide the interventions in each of the 5 sectors across all 6 grantee communities. In the HEAC health care sector, grantees are required to work in several areas as described in the logic model. These areas include training providers to record BMI, providing obesity-prevention messages during well-child pediatric clinic visits, engaging providers as advocates to support policy change for obesity prevention, and changing nutrition and physical-activity environments in health care and public health settings.

## **METHODS**

Two data-collection methods were used as part of the baseline evaluation of the health care sector involved in the HEAC initiative: a confidential self-administered survey of health care providers and telephone or in-person stakeholder interviews with public health and health care administrators, program managers, public health profes-

sionals, and medical officers. The survey of health care providers included 9 questions about clinical practices related to obesity prevention, 6 questions about the providers' attitudes toward and experience with engaging in advocacy, and 3 demographic questions. The stakeholder survey addressed broader questions related to the role of health care providers in policy and advocacy work for obesity prevention.

For both surveys, original survey instruments were developed to collect data from survey respondents. Survey questions were developed and finalized on the basis of interventions described in the health care sector of the initiative-wide logic model, along with input from members of the evaluation team, the California Endowment, the health care sector technical assistance provider, and HEAC site coordinators.

### Health Care Provider Survey

A convenience sample of 248 health care providers was surveyed across all 6 HEAC in April and May 2006. Survey respondents included a wide range of clinical providers including health care providers, physicians, nurses, registered dietitians, health care provider assistants, and community health workers who were working with the HEAC initiative in the health care sector. A majority of respondents worked in community health centers and private or group practices.

The survey consisted of an 18-item questionnaire and was self-administered, either at provider trainings or meetings or electronically via e-mail. The provider survey was pilot-tested with several health care providers before the survey administration to validate questions. Item wording was changed for several questions to improve clarity in light of the feedback received from the pilot-test respondents.

Once the surveys were completed, descriptive data were weighted to provide overall estimates as if all sites had each included 77 respondents by using Stata's (Stata Corp, College Station, TX) frequency-weighted survey procedures so that responses from no one site dominated the results. The actual range of sample sizes was 29 to 77 respondents per community. Open-ended responses were content-analyzed, with only the most frequently mentioned categories typically reported in histograms.

### Stakeholder Survey

The purpose of the stakeholder survey was to provide a baseline description at the beginning of the HEAC program as to how a variety of members of the health care sector could be engaged in community environment activities designed to prevent childhood obesity by promoting healthy eating and physical activity. The survey covered the following topics: opportunities and challenges to health care sector participation in efforts to change the community environment; issues surrounding insurance coverage for obesity-prevention activities; and the resources needed by the health care sector to enable its participation in environmental-change efforts.

HEAC site coordinators in each of the 6 HEAC sites nominated potential health care stakeholders to be in-

terviewed, relying on their familiarity with the local HEAC program. Telephone interviews were conducted by masters-level, trained evaluation staff with 56 health care stakeholders across all of the HEAC sites from December 2005 to June 2006. The types of stakeholders included health care administrators, medical directors, health program coordinators, health educators, and public health professionals. Interviews lasted between 30 minutes and 1 hour, typically at the respondent's work place. Data collected were entered into a Microsoft (Redmond, WA) Access database for content analysis and identification of common themes.

The results combine findings from both surveys to summarize the obesity-prevention practices, policies, and programs reported by HEAC providers and community stakeholders during baseline data collection.

## RESULTS

### Obesity-Prevention Prioritization

Sixty percent of the respondents thought that promoting childhood obesity prevention should be a high priority for health care providers. The main reasons stated for this level of priority were residence in a county with the highest levels of childhood obesity in the state; high prevalence of childhood overweight and diabetes in their community; a large Latino population at risk; and high incidence rates of type 2 diabetes in adults and children.

Nearly half of the survey participants reported that working to change environments to promote improved nutrition and/or physical activity was a low priority for health care providers in their region. The most common response was that focusing on changing the environment to improve obesity risks was something with which public health personnel are familiar and are accustomed to implementing but was something relatively new for health care providers, given that their primary function is to treat acute medical conditions.

### Obesity-Prevention Messages

Figure 1 shows that the majority (65%) of HEAC health care providers either usually or always discussed the importance of daily physical activity, eliminating or reducing soda consumption, and breastfeeding (when appropriate) during clinical pediatric visits. Less-frequently discussed were limiting television time (50%) or regularly measuring and tracking the child's BMI (43%) (Fig 1).

### Barriers That Confront Providers in Making Progress in Preventing Obesity

More than 90% of the providers reported that family or neighborhood environments and parental resistance were either substantial or moderate barriers for providers in working to prevent childhood obesity in their clinical practices (Fig 2). More than 70% of the respondents felt that a lack of time, a lack of adequate referral networks (such as nutrition counseling or places to engage in physical activity), and insufficient reimbursement for obesity-prevention services were either sub-

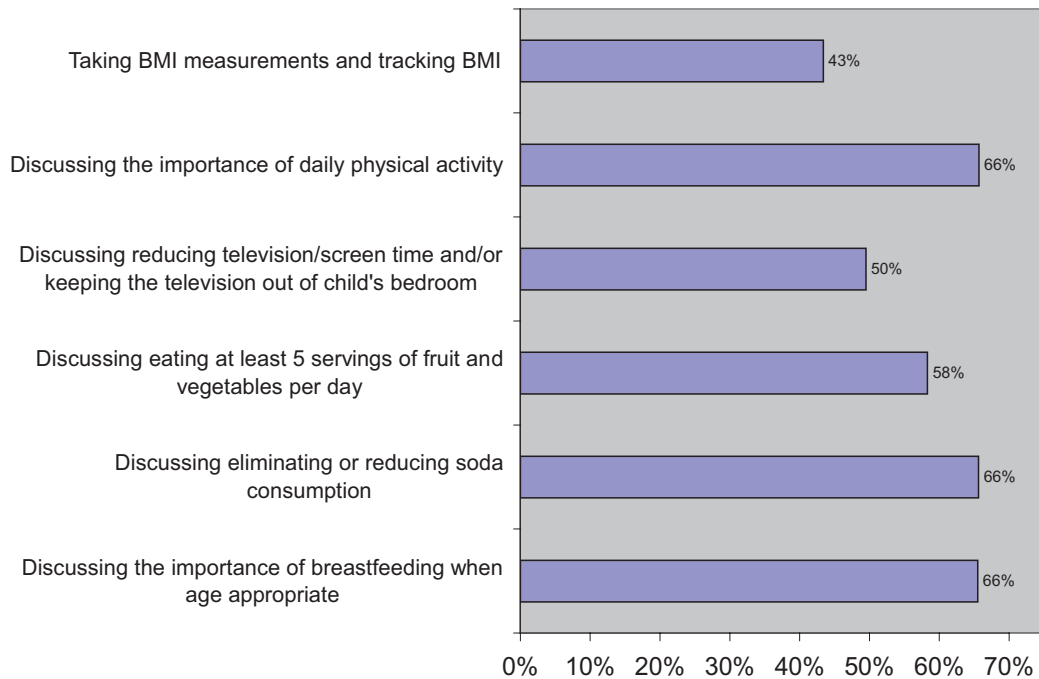


FIGURE 1  
Frequency of obesity-prevention messages and measures during pediatric visits.

stantial or moderate barriers to addressing obesity prevention in clinical practices (Fig 2).

### What Providers Need to Make Better Progress in Preventing Childhood Obesity

*Structural Changes That Would Support Obesity Prevention*  
Providers reported that there were a number of strategies that could be used to encourage their workplace or

home communities to offer healthier eating and physical-activity environments (Fig 3). These strategies included advocating for healthier foods and physical-activity environments in schools, establishing partnerships with community groups to promote good food and physical activity, and encouraging continuing medical education providers to include discussion of concrete strategies for promoting policy change related to healthier nutrition and physical-activity environments.

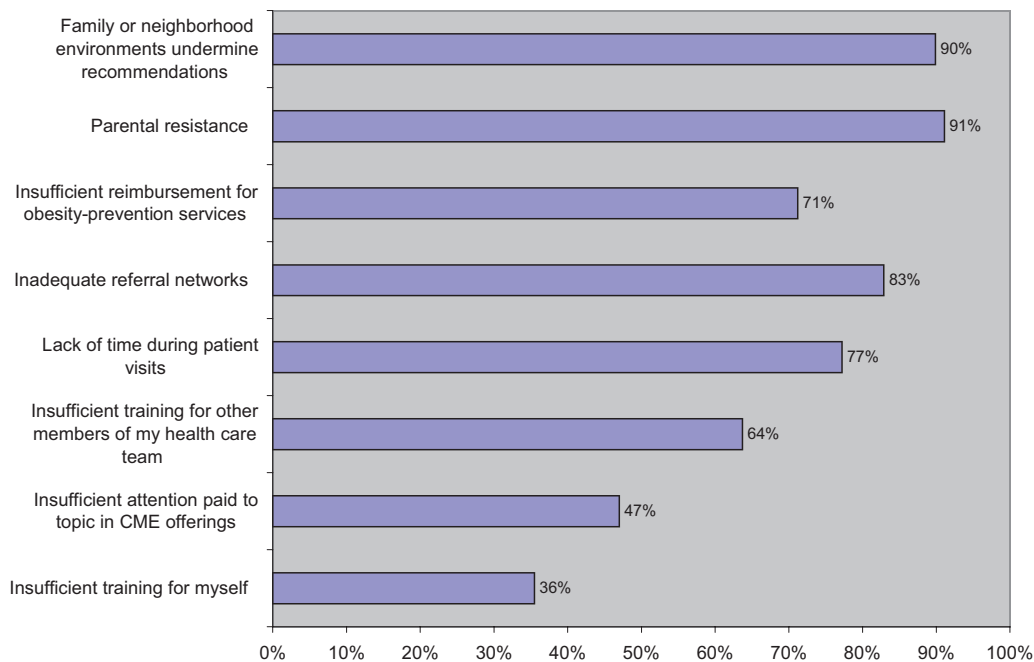


FIGURE 2  
Significant barriers to obesity prevention for health care providers. CME indicates continuing medical education.

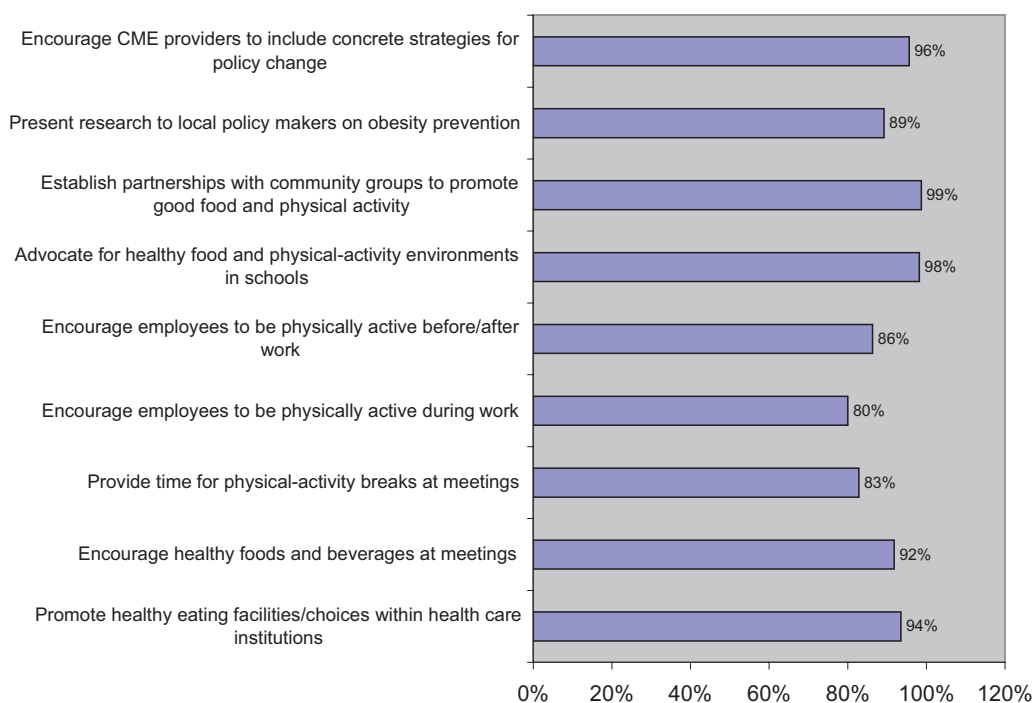


FIGURE 3 Strategies for getting workplace or home communities to offer healthier eating and physical-activity environments. CME indicates continuing medical education.

#### Health Care Reimbursement for Obesity-Prevention Services

Health care providers or health care agencies are not perceived as receiving adequate reimbursement for their obesity-prevention services. Nearly all (88%) of the stakeholder survey respondents thought that health care professionals ought to be involved in advocating for improved insurance coverage for obesity prevention. Clinical services, nutrition interventions, and physical-activity promotion are 3 categories of obesity-prevention services that they said should be provided by health insurers.

#### Improving Coverage for Obesity-Prevention Services

To improve coverage for obesity-prevention services, stakeholder survey respondents felt that communities needed to educate insurers about the obesity epidemic, build better relationships with insurers, and run a cost/benefit analysis to support the need for and effectiveness of preventive services. The cost/benefit analysis, comparing the dollars spent on obesity prevention versus the costs of obesity treatment, could influence insurance company or insurance plan decision-makers.

#### Providers and Policy/Advocacy Work Related to Obesity Prevention

Providers were asked to name 1 change in state or local government local policy that would best enable them to be more effective in helping prevent or treat childhood obesity. More than half (62) of the responses to this question focused on schools and policy changes in schools as being the venue likely to yield the greatest benefit in terms of helping health care providers to prevent or treat childhood obesity.

#### How Providers Currently Are Involved in Policy Work

More than three quarters of providers reported not having engaged in any policy/advocacy activities related to the prevention of childhood obesity. For those who did engage in policy/advocacy activities, they most frequently advocated for changes in their workplace environments (to improve access to healthful foods or physical activity) (Fig 4).

#### Barriers for Providers to Engage in Advocacy/Policy Work

Approximately 60% of the respondents felt that they had too little time to be involved in policy/advocacy work (Fig 5). More than 40% of the respondents said that a lack of training in policy/advocacy work, being unfamiliar with local policy makers, local organizations engaged in policy work, and local policy issues, and a lack of funding for policy/advocacy activities were all substantial barriers to engaging actively in this type of work (Fig 5).

#### Skills Providers Need to Better Advocate

Health care providers would like to be connected with local or state organizations involved in policy/advocacy work and to have training on how to conduct policy change and advocacy work (Fig 6). These types of resources would make it more likely that they would engage in advocacy work to prevent childhood obesity.

Stakeholders felt that health care providers would be motivated to take an active role in community advocacy efforts if they received more education about the large proportion of the population at risk of obesity, had more time and funding to devote to this work, experienced greater peer pressure to be advocates, and received introductory trainings to policy and advocacy work. Health care

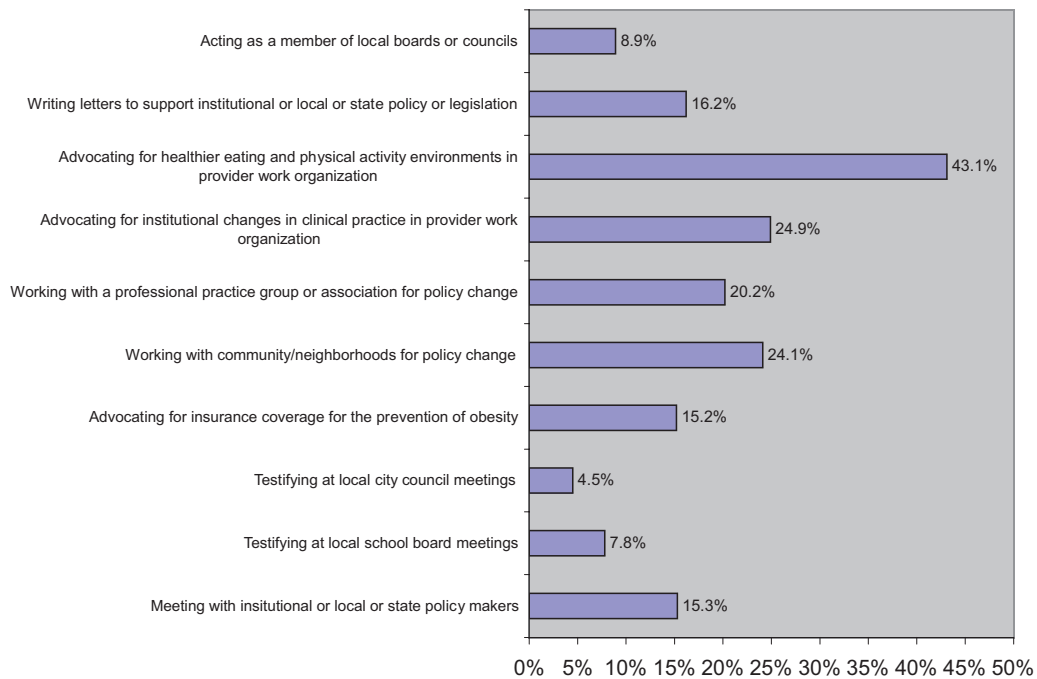


FIGURE 4  
Policy/advocacy activities engaged in according to survey respondents.

providers can help to personalize the importance of obesity prevention, appealing to the interests of policy makers.

## CONCLUSIONS

### What Providers Are Telling Us About Pediatric Obesity Prevention

Members of the health care community are very aware of the obesity epidemic, concerned about its health con-

sequences, and highly desirous of engaging in its prevention. However, the idea of preventing obesity by focusing on an environmental framework for preventing obesity is still in the beginning stages for most members of the health care sector. Providers continue to view themselves primarily as medical practitioners and not as advocates for change.

Although 65 percent of the providers surveyed did

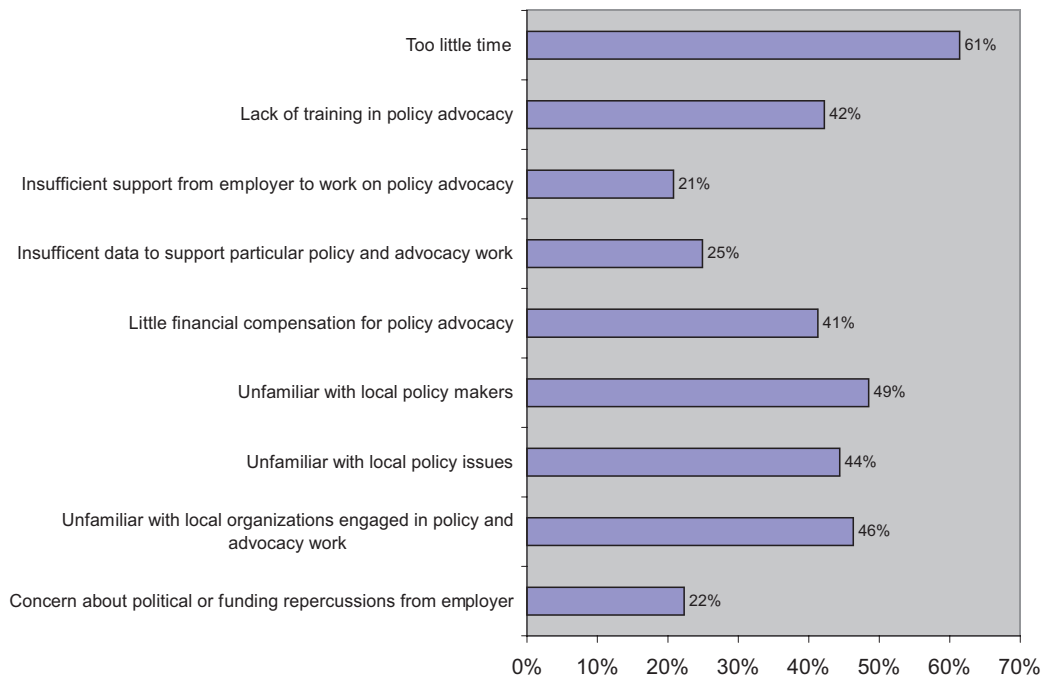
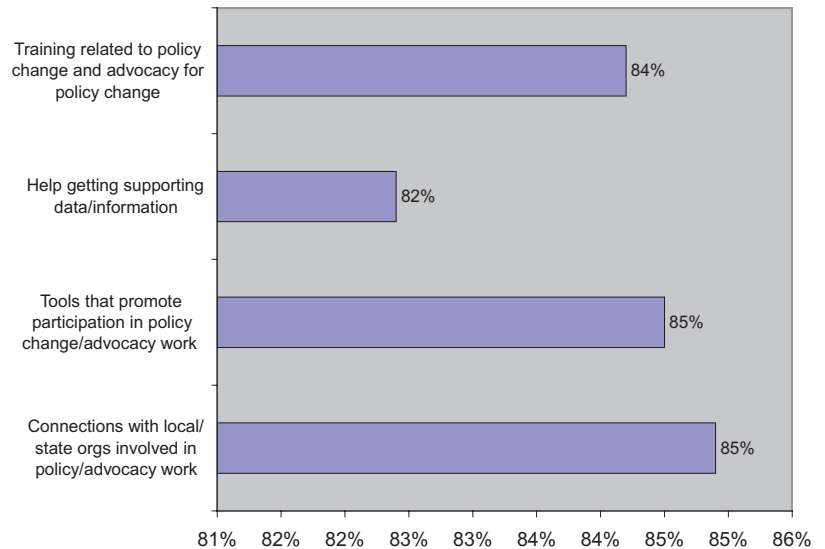


FIGURE 5  
Substantial barriers to policy/advocacy work for health care providers.

FIGURE 6

Resources and skills that would make it easier for health care providers to engage in policy advocacy to prevent childhood obesity.



report discussing several obesity-prevention messages during pediatric clinic visits, a lower percentage (43%) reported tracking BMI as a measure of obesity or obesity prevention. Increasing the consistency and frequency of using obesity-prevention messages in clinical practices combined with tracking BMI are key clinical practices that may help providers promote the prevention of obesity rather than only the treatment and management of obesity.

#### How Providers Can Be Supported in Practice

Providers need support from their health care institutions in the form of education about the obesity epidemic, time and funding to communicate obesity-prevention messages during clinical practice, and a coordinated list of community resources to which they could refer patients for nutrition counseling and physical-activity promotion. Specific support from health care institutions and insurance plans in the form of coverage for obesity-prevention-related care (care-related efforts such as tracking BMI, offering consistent obesity-prevention messages in clinical visits, nutrition and physical-activity counseling), offering incentives for providers for obesity-prevention-related care, and monitoring charts for BMI tracking and obesity-prevention messages are ways for institutions to emphasize the importance of obesity prevention and support providers in this work.

#### How Providers Can Be Supported in Advocacy

Providers could play a role in policy/advocacy related to obesity prevention in the following areas: increasing community awareness of the obesity epidemic; advocating for adequate reimbursement for clinical obesity-prevention visits and follow-up visits; influencing the communications media by organizing the dissemination of obesity-prevention messages; and providing evidence-based testimony about the effects of obesity.

Providers have an important role to play as advocates, but they need training on how to conduct advocacy and policy work. They also need time and funding to be

advocates and a better understanding of how their advocacy work can positively affect the communities in which they live or work. They also need to understand how their advocacy work can support obesity-prevention efforts in their clinical practice. Providers need to be connected to policy and advocacy opportunities. Even when trained to be advocates, to be champions for obesity prevention, providers need to be connected to existing local or state policy and advocacy opportunities to write letters, meet with policy makers, or provide testimony. Providers could make these connections via collaboration with groups working to make changes to school, neighborhood, or health care environments to support obesity prevention or through local or state professional organizations.

#### What Policy Changes Can Be Enacted to Support Providers and Help Them to Reduce the Risk of Childhood Obesity

Policies that affect access to healthful foods and physical activity in school environments seem to be important to providers and would support any efforts in their practices to prevent obesity. In addition, any policies that change neighborhood environments to encourage families to have access to healthful foods at farmers' markets and neighborhood stores and to opportunities for physical activity would support provider messages encouraging consumption of healthful foods and physical activity.

From the foregoing, it should be apparent that HEAC health care providers acknowledge that progress in combating the obesity epidemic will require new policies in school and workplace environments and new health care reimbursement policies. Furthermore, most have indicated a personal willingness to become more active in promoting such policies if provided appropriate preparation and support. The technical assistance and support provided by HEAC should help these providers become more active in advocacy, thereby converting the recent recommendations of policy makers<sup>22</sup> and professional organizations<sup>20</sup> into reality.

Although the health care providers in this study were

limited to the HEAC sites and not selected randomly, the results may be applicable to health care providers in general, because providers throughout California and the United States face similar challenges in addressing the prevention of childhood obesity in their communities. Additional research is needed to determine how best to assist health care providers to become advocates for obesity prevention and to incorporate obesity-prevention strategies and messages into their daily clinical practices.

## ACKNOWLEDGMENTS

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