Childhood Obesity: The Role of Health Policy

Report to the Second National Childhood Obesity Congress, Miami, Florida, 2008



National Initiative for Children's Healthcare Quality



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> Lisa Simpson, MB, BCh, MPH, FAAP Cynthia Alendy, MD, MPH Julie Cooper, MPA Christina Gunther Murphy In collaboration with the Policy Sub-Committee of the Childhood Obesity Action Network

Contact Information

Lisa Simpson, MB, BCh, MPH, FAAP National Director, Child Health Policy National Initiative for Children's Healthcare Quality Director, Child Policy Research Center Cincinnati Children's Hospital Medical Center Professor Department of Pediatrics University of Cincinnati 3333 Burnet Avenue, MLC 7014 Cincinnati, OH 45229-3039 email: lisa.simpson@cchmc.org Ph: 513-636-2781 Fax: 513-636-0171

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Table of Contents

- 1 I. Background
- 1 II. What is the Role of Healthcare Policy?
- 2 III. Methods
- 3 IV. Findings
- 3 Finding 1
- 10 Finding 2
- 13 Finding 3
- 16 Finding 4
- **18** V: Proposed Goals and Strategies
- 18 Overarching Recommendation
- 19 Goal 1
- 23 Goal 2
- 24 Goal 3
- 26 Goal 4
- 27 Summary by Stakeholder
- 34 Appendix A: Institute of Medicine Reports
- 36 Appendix B: List of Organizations
- 37 Appendix C: Policy Advisory Sub-Committee
- 38 Appendix D: State Overweight Prevalence Ranking and Report Card Grade for Childhood Obesity-related Activities
- 38 Reference List

I. Background

In the last five years, childhood obesity has emerged as a leading public health threat, rivaling smoking in its potential long term impact on the American population and its toll on childhood, adolescent and adult morbidity and mortality. Since the 1960s, the prevalence of obesity has more than quadrupled for children and adolescents, increasing to 17.1% (over 12 -and -a -half million) in 2003-2004 (Ogden et al., 2006). This rapid growing epidemic of overweight in America's children and adolescents is threatening the child health gains made over the past four decades. Childhood obesity and its health consequences throughout life have been well documented (Daniels, 2006). The impact of childhood obesity is being felt across all sectors of children's health and welfare. It is also having a significant economic impact on the health care system. Annual hospital costs related to childhood and adolescent obesity were \$127 million in 1997-1999, nearly four times the amount in 1979-1981 (Preventing Overweight and Chronic Diseases Through Good Nutrition and Physical Activity, National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP)). However, the burden of obesity does not fall evenly across this country: low income, less-educated, African-American, and/or Hispanic children and adolescents are disproportionately affected by obesity (Ogden et al., 2002). In the United States, this problem has captured health professionals and public attention, resulting in regular features on this topic in the media, educational magazines, and professional literature and national action at multiple levels.

II. What is the Role of Healthcare Policy?

In the face of this epidemic, the last decade has seen tremendous growth in the number of initiatives and approaches developed within the healthcare sector to prevent, identify and manage childhood obesity (Tully, 1995; Paxson et al., 2006; Forrest & Riley, 2004; Koplan, Liverman & Kraak, 2005; National Institute for Health Care Management (NIHCM), 2005).¹ Numerous federal agencies and private organizations have issued guidelines & reports advising Americans on strategies to and address obesity (Nestle & Jacobson, 2000; Towey & Fleming, 2004). Most of these tend to focus on interventions and actions for individuals and the evidence supporting the recommendations is either not clear or highly variable. At the same time, there has been an exponential growth in the attention that this condition has received from policymakers at the state and federal levels and some have called for substantial involvement by government at all levels and across multiple sectors (Nestle & Jacobson, 2000; Hearne et al., 2004; Glendening et al., 2005; Koplan, Liverman & Kraak, 2005; Levi et al., 2006; Levi et al, 2007).

The multisectoral and multifaceted nature of the obesity epidemic and its attendant response is evident in the far-reaching and comprehensive recommendations made by the Institute of Medicine's (IOM) report, Preventing Childhood Obesity: Health in the Balance (and its follow-up report 18 months later, Progress in Preventing Childhood Obesity: How Do We Measure Up? (Appendix A) Despite this activity, reports from the Trust for America's Health Issues issued in the last five years declare that obesity policies are "failing America" (Hearne et al., 2004; Glendening et al., 2005; Levi et al., 2006; Levi et al., 2007). Part of the reason may be that policymakers have had limited – though growing - information or research available to them about which programs or policies are most likely to be successful in halting the epidemic of childhood obesity. At a time of constrained state and federal budgets, it is important to learn from this policy innovation to identify and spread those programs and policies that are effective and can be implemented at reasonable cost.

1 For the remainder of this report, childhood obesity is meant to encompass both overweight and obesity, unless specifically noted.

"I absolutely believe that the health care system has an important role in solving this epidemic, but that medical efforts must be coupled with changes in the environment outside the clinic walls."

William H. Dietz, MD, MPH Centers for Disease Control and Prevention A review of the activities of leading policy organizations focused at the state or national level and/or active in childhood obesity reveals that most of the related policy attention in childhood obesity is focused on sectors other than health care. Notably, school policies are a common target of state legislative or executive branch activities (Winterfeld, 2006). In addition, strategies directed at the built environment (e.g., the accessibility of recreational

facilities, bike and walking trails, and safe neighborhoods) have grown as a focus of public policy (Koplan & Dietz, 1999; Koplan, Liverman & Kraak, 2005; Cotten, 2006; Powell et al., 2007a & 2007b).

Yet, healthcare policy can support or hinder the ability of the healthcare system to address the obesity challenge and be an active partner in multifaceted interventions (Homer & Simpson, 2007). While an obvious example is in the area of reimbursement for health care services, many other aspects of healthcare policy should be addressed, including, at least: 1) research and demonstration funding and priorities needed to identify effective prevention and treatment approaches; 2) training and competency of healthcare professionals in preventing, identifying and treating affected children and families; 3) inclusion of obesity-related services in benefit coverage; 4) incentives for providers and health plans to address the issue; 5) support of innovations, including quality improvement; and 6) the role of health information technology (e.g. decision-support systems and obesity registries). This report serves to lay a foundation for the response by the healthcare system to the challenge of childhood obesity and guide the activities of the Childhood Obesity Action Network (COAN).

III. Methods

This report is the result of a two-year effort conducted in three phases: pre-Summit and Congress (discovery and design), Summit and Congress, and post-Summit and Congress (dissemination and development of an ongoing learning network within the National Initiative for Children's Healthcare Quality (NICHQ)). Our discovery and design phase was conducted from January, 2006 - September, 2006 and consisted of five components: 1) an expert advisory committee that provided guidance and input throughout our work; 2) a review of relevant recent reports and literature identified by us and/or members of one of the four committees impaneled for this initiative; 3) a review of the policy or position statements of 30 leading healthcare organizations (see Appendix B) to identify similar themes and recommendations; 4) key informant interviews with representatives of leading organizations engaged in childhood obesity using a semi-structured format adapted from a Robert Wood Johnson Foundation (RWJF)-funded initiative (McPhillips-Tangum et al., 2007); and 5) information gathering from various natural groupings of stakeholders, including Medicaid Medical Directors and state chapters of the American Academy of Pediatrics (AAP). Our work was guided by an oversight Steering committee, consisting of nationally-recognized experts on pediatric overweight, with strategic subcommittees in place (see Appendix C). These included a Policy Subcommittee and a Clinical Subcommittee for identification and assessment of existing innovations.

In the second phase, the Policy Subcommittee provided the 2006 NICHQ Summit and Congress attendees with a proposed set of policy goals and strategies, as well as promising approaches to improve healthcare-related management of pediatric obesity. The goal of the Summit was to bring the leaders of major healthcare stakeholders together who have the potential to support continuing work to combat pediatric obesity in order to create a large group of healthcare professionals to collaborate, share learning, and be more effective at changing the current management of childhood obesity by the healthcare system. In both plenary and smaller discussion groups, input on the scope, tone and content of the policy recommendations was received.

In the third phase (November, 2006 – March, 2008), input from the 2006 meeting was synthesized and the report revised accordingly. During this phase, NICHQ's Childhood Obesity Action Network was officially launched in May 2007, the Policy Subcommittee was expanded to include additional members (see complete list in Appendix C), additional input was obtained from the committee and other stakeholders during various presentations around the country, and a final review of these recommendations was conducted in February, 2008 by the Policy Subcommittee.

IV. Findings

Finding 1. Widespread innovation is emerging among frontline caregivers who, often partner with communities and/or health plans², but their success and/or spread is still limited.

Innovations in health care approaches to childhood obesity were identified throughout our review detailed in the methods above. Several of the reports reviewed included specific examples of innovations at the state, community, provider or health plan level. In addition, working in tandem with the NICHQ Childhood Obesity Policy Subcommittee, a Clinical Subcommittee developed a call for nominations of innovative healthcare programs addressing childhood obesity. Over 80 initiatives responded and revealed the depth and breadth of innovation that dedicated health professionals and community partners are engaging in to respond to the needs of children and families. The picture that emerges from this review is one of substantial energy, enthusiasm, dedication, partnerships and creativity, as well as of often similar small-scale efforts that might be duplicative or suffer from re-invention (e.g., multiple "provider toolkits"), each lacking enough reach or funding to generate good evidence of impact.

We also were able to collect more detailed information on the efforts of the AAP. As of December 2006, 54 (95%) state Chapters of the AAP had mounted or were planning on mounting some response to the epidemic of childhood obesity.³ The activities that chapters were engaged in varied widely and grew between 2003 and 2006 (Exhibit 1). Between 2003 and 2005-06, the number of AAP Chapters that reported that they, or their members, were involved in broader initiatives grew from 18 to 33 Chapters reported that they or their members were engaged in initiatives or supportive actions involving schools (e.g., Massachusetts), improving children's eating habits (e.g., Alaska), developing and distributing educational materials on how to measure body mass index (BMI), (e.g., Arizona), legislation that addressed childhood obesity (e.g., Connecticut), information about the obesity crisis (e.g., Delaware), co-sponsoring conferences on obesity (e.g., Indiana) or health fairs (e.g., Hawaii), in partnership with local provider organizations (e.g., Nebraska) or health departments and WIC programs (The Special Supplemental Nutrition Program for Women, Infants, and Children) (e.g., Louisiana). The fact that 23 Chapters are focusing on provider education strategies (CME) is not surprising; studies have documented that most pediatricians feel inadequately prepared to address childhood obesity (Trowbridge et al, 2002; Story et al., 2002; &

² Throughout this report it should be noted that health plans in many states are serving both privately (commercially) and publicly insured children.

³ Five state chapters and Puerto Rico did not submit a report or lacked current activities.

Exhibit 1: AAP Chapter Activities in 2005-06

	Торіс	No. of AAP Chapters	
1.	Focus of Interventions on Schools	22	
2.	Increased Physical Activity/Education	22	
3.	Nutrition: Vending Machines/ Healthy Foods	25	
4.	Education of Children/ Parents/Community about overweight and obesity	23	
5.	CME: Education of Physicians/ Health Workers	23	
6.	Toolkits for Health Sector	6	
7.	Legislation/ Advocacy on Overweight and obesity Policies	19	
8.	Early Prevention in Pre-school Kids/Pregnant Women Well-Child Check-up/Visits	4	
9.	Coverage/ Insurance of Overweight and obesity Management	1	
10.	Media Campaigns	2	
11.	Lack of Funding for Implementation Program	2	

O'Brien, Holubkov, & Reis, 2004). Apart from having to strengthen their knowledge and skills in managing obesity-related conditions that until recently had been seen almost exclusively by adult providers, pediatric providers are having to learn to identify, prevent and address the underlying causes of obesity.

Of note is that 19 Chapters reported either helping to introduce or planning to introduce legislation on the topic. State chapters were also active within their membership, as 13 had established taskforces or other committees to develop, implement, or support programs in the battle against childhood obesity. These included CME toolkits (e.g., Georgia), and guidelines (e.g., Arkansas) for physicians, websites adoption of hot topic area on obesity (e.g., Kentucky), pilot project on primary prevention of childhood obesity (Maine), parent education (Maryland), messages for well- child visits (Massachusetts), surveys and screening tools (New York), formulating statewide recommendations (North Carolina), and production of an educational CD video (West Virginia). Finally, some states were more recent in their focus on childhood obesity, as six Chapters were just starting to consider the issue and two chapters reported conducting needs assessment/research activities on the topic in their state.

Turning to another stakeholder in health care, health plans have also been innovating in approaches to childhood obesity. A recent report by The National Institute for Health Care Management Research and Educational Foundation (NIHCM) showcased 11 health plans who are acting as "pragmatic partners" the fight against obesity (see Exhibit 2 excerpted from NIHCM, 2005). Many of the innovations described in this report addressed obesity in children. It is too soon for most of the programs highlighted to have yielded results, however several categories of action and themes emerge as to the roles that health plans can and should play in this challenge.

"The urgent need to prevent and reduce obesity is leading health plans to rethink old strategies [...] shifting from acute treatments [...] to chronic care management, weight management programs, and partnerships with the community."

Jason Lee, NIHCM, 2005

When tackling childhood obesity, health plans are:

- Educating providers about screening for obesity in children;
- Creating incentives for plan members to participate in weight-loss programs (e.g., through discounted family memberships in health clubs, etc)⁴;
- Creating and funding community-based weight management programs;
- Collecting data and evaluating the effectiveness of the services provided;
- Encouraging physical activity in schools; and
- Engaging federal and state policymakers to develop solutions and shape public policy approaches.

Themes of Success

As part of the review of these initiatives, several themes of successful programs emerged. Other publications (National Governors' Association, 2002; Rosenthal & Chang, 2004) have focused on the characteristics of successful programs. Here we build on and adapt those to specifically address the health care sector.

Creating Successful Partnerships

Coalitions that bring clinical experts together with state and local health department leadership, schools, health plans and others are most successful at articulating the urgency of the issue to policymakers and putting forward a coordinated, coherent action proposal for them. In many states, representatives of the AAP Chapter are serving on gubernatorial commissions and task forces. Collaborations across state agencies and across programs within a single state agency (e.g., within state health departments), help to coordinate approaches, and in some cases pool resources, to support comprehensive approaches. In some instances, health plans (e.g., Kaiser Permanente Northern California) are going beyond implementing a range of interventions for their members (e.g. Kaiser Permanente Northern California (KPNC)), to mounting comprehensive approaches with both clinical and communi-

The **Iowa Chapter** president is part of the Iowa City School District Wellness Committee, charged with developing and implementing policy decisions with respect to school lunches and ala carte, concession and vending machine selections.

The **New Mexico Chapter** is involved in the Envision project that aims to address childhood overweight with a multi-pronged approach by providing training for healthcare providers in prevention and medical management of pediatric overweight, fostering collaboration in communities, providing Facilitating Change (Motivational Interviewing) training to all project participants, as well as all pediatric residents, and providing educational materials for providers and families on pediatric overweight. Envision is also developing a tele-health component to provide specialty consultation for rural primary healthcare providers.

The **Ohio Chapter** co-sponsored a two-day obesity conference with the local chapter of the American Heart Association and served as a fiscal agent for this conference. The chapter also disseminated information on healthy lifestyles through an Open Forum topic, and developed an Ounce of Prevention toolkit through the Chapter's Healthy Lifestyles Committee and Healthy Kids coalition, which is available on the chapter website.

A **West Virginia Chapter** member received a Chapter Mini-grant for his "Let's Get Moving" quality project. His team conducted 20 Health Fairs in Cabell County. 5th graders with BMI > 85% were randomized into two groups. Both groups received standard information every two weeks on nutrition and exercise. One group received an "exercise coach" (a medical student, resident or YMCA trainer).

⁴ It is not clear if this type of incentive/benefit would benefit all populations equally if basic membership is cost-prohibitive.

ty/policy components (e.g., working with farmers markets). By partnering with local communities, health plans have been able to combine their resources and broaden their impact. Clinicians and health care programs that have reached out to work proactively with the schools are another promising avenue for action. Coordinating resources across public and private sectors (e.g., health departments and health plans) can also serve to communicate more effectively the impact of obesity on children and their families by developing collaborative educational activities (NICHM, 2005).

Exhibit 2:

- Aetna
- Affinity Health Plan (NY City)
- Blue Cross Blue Shield of Massachusetts
- Blue Cross Blue Shield of North Carolina
- Empire Blue Cross Blue Shield (New York state)
- HealthPartners (Minnesota)

- Highmark, Inc. (New Jersey)
- Horizon Blue Cross Blue Shield
- Kaiser Permanente (California)
- Premera Blue Cross (Washington)
- WellPoint Health Networks (California)

Raising Public and Policymaker Awareness

For coalitions to be successful in advancing policy proposals to address childhood obesity, they must not only raise the awareness of the issue with the public and policymakers, they must also help to reframe the issue from one of solely personal responsibility to one that acknowledges the role of government in helping to support healthy choices on the part of individuals. Indeed, we are confronting the need for a dramatic cultural shift in this country's view of obesity and our deeply rooted beliefs about the meaning of food to family and success (Katz, 2005). In this capacity, clinicians play a key role as they serve as trusted sources of scientific and credible information for the lay public. As difficult as it is to engage clinicians in the public policy process, it is-perhaps-even more challenging to do so in childhood obesity, given the complex mix of factors that contribute to the problem and the many policy dimensions beyond health policy that need to be addressed. Tackling childhood obesity policy will require health professional engagement in discussions and debates about familiar topics such as coverage and reimbursement for obesity-related services, as well as perhaps less familiar issues such as school nutrition and physical activity requirements, food supplement programs (e.g., WIC, food stamps, etc), the design of healthy communities, the availability of healthy food choices, particularly among low- income communities, and advertising to children. Recently developed resources are, however, available to assist clinicians in this role, including a 2006 report from the Future of Children, advocacy materials from the AAP, and reports such as those referenced in this review. Health plans can also serve as a funder and convener of policy-focused discussions. For example, in New Jersey, Horizon Blue Cross Blue Shield sponsors an annual Health Policy Forum to discuss obesity.

Identifying and Developing Champions

From this review, it is clear that, regardless of the level or type of health care stakeholder (state, employer, health plan, community or professional association) the ability to focus effectively on childhood obesity is often driven by the passion, charisma and personal relationships of one or more key leaders. The role of individual champions in quality improvement and community mobilization has been well recognized (Mastal et al., 2007; Wang et al., 2004; Wang et al., 2006), however, few efforts that we identified in childhood obesity include a specific focus on developing or nurturing the skills of such champions. In particular, ensuring that the champions are culturally relevant to the populations disproportionately affected by obesity, including Latino and African American champions. One, perhaps, unique dimension of champions in the obesity challenge is that champions often use the power of role modeling to craft a persuasive message. Governor Mike Huckabee's personal journey to lose over 100 lbs after his diagnosis of Diabetes Mellitus is a clear example of this (Huckabee, 2007). However, role modeling may be even more important for providers, as researchers found that those pediatricians who

"Emphasize that there is a role for everyone – no one gets off the hook on this"

Nancy Krebs, MD, FAAP.

were themselves overweight reported less self-efficacy in identifying and managing obesity in their patients (Trowbridge, Sofka, Holt, & Barlow, 2002). The American Association of Family Physicians (AAFP) has recently challenged all of its members to improve their own health serve as role models for their patients by increasing their levels of physical activity (Lapp, 2003).

Increasing Access, Availability, and Quality of Obesity Management

Programs that build the care system's capacity to prevent, identify, and treat childhood obesity help to expand access for children and families. These programs use a variety of methods, including focused training of providers in the knowledge and skills necessary to work with obese children (e.g., motivational interviewing), aggressive efforts to collect BMI as a vital sign (e.g., Kaiser Permanente), quality improvement programs⁵ to continually support providers' efforts (e.g., Maine Health Department, Blue Cross Blue Shield of Massachusetts), increasing the number of facilities offering family-based weight management programs, diversifying the ways in which family interventions are offered (e.g., through self -care materials, web-based programs, and single or multiple- session program), and establishing or enhancing coverage and reimbursement for obesity- related services. A critical component of these programs is that of those physician champions who are authorities in their community and to whom practitioners turn for advice and training. In addition, some states (e.g., New Mexico; http://www.envisionnm.org/ gme home.html) have developed statewide improvement partnership approaches that connect provider-specific interventions with efforts to connect providers to community resources. Increasingly, these state and local activities are being knitted together through the national Childhood Obesity Action Network (COAN).

With the release in late 2007 of the updated American Medical Association (AMA) recommendations on the prevention and management of childhood obesity, the COAN developed a set of tools to support implementation of the recommendations (<u>www.nichq.org/obesityactionnetwork</u>). This should allow providers to focus their innovation on strategies to deliver recommended services, rather than deciding what to do.

Applying Health Information Technology

The role of health information technology (HIT) as a key tool for improving health care, including electronic health records, handheld devices (e.g., PDAs), registries and health information exchange, has emerged as a current focus of many health policy discussions and public and private sector funding. The role that HIT should play in mounting effective healthcare approaches to childhood obesity is only beginning to be examined. For example, Blue Cross Blue Shield of Massachusetts has worked with NICHQ on a pilot obesity collaborative and the data fields from that are available on the NICHQ web-

5 including office systems improvement, training for physicians and staff, and performance measurement and feedback

site (www.nichq.org). The Public Health Informatics Institute has been assessing stakeholders' information needs in this area as a first step toward developing a blueprint for action (McPhillips-Tangum, Torghele, Saarlas, Renahan-White, 2006). Clearly, addressing the obesity epidemic requires a new model of care that emphasizes chronic care and uses HIT for better care management and to empower individuals and families to manage their own health. Such a system also emphasizes the interoperability of systems so that information can be exchanged between public health, schools and other community settings and healthcare providers. Unfortunately, physicians who care for children are behind most others in the adoption of electronic health records (Kemper, 2005; Menachemi et al., 2006). Registries could also be useful in identifying and tracking obese children, however, few of these exist and most have not focused on the issue of childhood obesity to date.

Demonstrating Program Effectiveness and Sustainability

Healthcare approaches to pediatric obesity are challenged to demonstrate their impact as the research and evaluations are still emerging. The United States Preventive Services Task Force (USPSTF) concluded in 2005 that "the evidence is insufficient to recommend for or against routine screening for overweight in children and adolescents as a means to prevent adverse health outcomes." The recommendations from this national expert panel are used extensively by health plans and others to determine coverage policy and many do not presently cover for screening or counseling to prevent childhood obesity. In addition, coverage for treatment of obese children is highly variable. Many of the programs identified by NICHQ have worked hard to demonstrate their effectiveness to public and private funding sources. However, there is wide variation in how effectiveness is defined and measured and little ability to compare across programs and initiatives. The 2005 IOM report made a distinction between "best possible" evidence and "best available" evidence, acknowledging that the absence of "best possible" evidence should not preclude action on the part of providers and systems. In this area, some health plans have decided to go beyond relying on the USPSTF recommendations or other sources of "best possible" evidence-based recommendations to develop and/or sponsor an array of interventions. They are also adding to the evidence base on effective interventions by evaluating weight management

programs that they have either sponsored (e.g., Highmark, Inc.), or developed (e.g., Blue Cross Blue Shield of North Carolina, Empire Blue Cross, or HealthPartners). Most recently, in late 2007, the AMA released their updated recommendations on the prevention and management of childhood obesity, recognizing — once again — the need for health care practitioners to act on the best available evidence given the magnitude of the epidemic. However, still lacking is evidence on how to take these recommendations and implement them in a sustained fashion in various primary care settings.

"We can't just keep harping on physicians to change their behavior. Gathering data on which practice based interventions make a difference is critical...but it is a catch-22. You can't run programs on thin air; if resources are so limited, you can't generate data which will help you be more effective."

Nancy Krebs, MD, FAAP.

Barriers and Challenges

Numerous barriers to the appropriate prevention, identification and management of childhood obesity were identified in our review of current activities and previous reports. These barriers include individual-level factors (e.g., family history, cultural issues, awareness and understanding of overweight as a health challenge), organizational factors (e.g., training and education of health professionals, availability of nutritional services, adoption of electronic health records), financing issues (e.g., inclusion in benefit coverage, adequate reimbursement for covered services), community issues (e.g., availability of safe options for physical activity), and public and policymaker perception.

Though not a comprehensive summary of barriers at all levels, this review found that certain barriers were cited more often. At the individual level, child/family attrition from obesity-related programs and services is a major challenge. At the organizational level, the poor uptake of electronic health records among most pediatric providers is limiting the ability to aggressively move forward on even "simple" strategies such as making BMI a vital sign, or participating in improvement collaboratives. At the healthcare policy level, lack of financing emerges as the most frequently cited barriers to providers taking up the challenge and addressing the epidemic. Finally, at the level of public and policymaker perception, several interviewees mentioned that one of the biggest barriers to policy action on obesity – whether in adults or children - was the current dominant framing of the issue as one of personal responsibility. In other words, that individuals and families are personally responsible for making healthier choices, such as good nutrition and increasing physical activity.

Lack of reimbursement for the prevention, identification and treatment of childhood obesity is cited by the AAP policy statement as a significant disincentive for both physicians and families to address the issue (Krebs et al., 2003). In addition, 11 of the 30 organizations included in our review of policy/position statements and initiatives highlighted the importance of funding and coverage by health insurers of the costs that accompany prevention/treatment of obesity and obesity-related conditions. However, two distinct issues are often confused in discussions of financing: coverage and reimbursement of obesityrelated healthcare services. First, coverage is necessary so that there is the possibility of an insurer providing reimbursement. Second, adequate financing must be in place to support reimbursement levels such that practitioners will actually provide the services. Within the public sector, the availability of coverage and financing varies between Medicaid and the State Child Health Insurance Program (SCHIP). Coverage should be already available in Medicaid, based either on statute or provisions in the Medicaid manual. A study by researchers at George Washington University in 2005 evaluated the role of public and private insurance in financing preventive care and treatment for at-risk and obese children (Rosenbaum, Wilensky, Cox, and Wright, 2005). One of the key findings from their report was that Medicaid's existing rules on child health coverage allow for comprehensive pediatric interventions for atrisk and overweight Medicaid-enrolled children and adolescents under age 21. Despite this finding, lack of clarity about what is covered and the level of reimbursement that is available is widespread, with some practices effectively mounting programs to work with obese children and families and finding them financially sustainable, while most others experience an inability to secure adequate payments. Thus, Medicaid programs are inconsistent in their coverage and reimbursement of obesity-related services (Wilensky, Whittington and Rosenbaum, 2006). Another report by these same researchers, released at the Summit, took a closer look at how state Medicaid programs address and finance childhood obesityrelated services by looking at what is the current accepted standard of care for obesity prevention and reduction, comparing that standard to how Medicaid programs provide adequate information and coverage for these services, and reviewing coding and billing strategies to improve access to comprehensive obesity prevention and treatment services for children enrolled in Medicaid (Wilensky, 2006). For SCHIP, the coverage is much less clear because of the nature of state flexibility, the absence of the types of guarantees in Medicaid, and the variations in coverage and program structure decisions that individual states have made. Of note is the fact that the recent SCHIP reauthorization, which remains in Congress due to two Presidential vetoes, contains a significant obesity demonstration program.

Turning from the public to the private sector, both issues – coverage and reimbursement – also need to be addressed. When Medicare defined adult obesity as a disease, it cleared the way for health plan reimbursement of numerous obesity-related services for Medicare beneficiaries. Thus, state legislatures have the opportunity to also push both public and private plans to cover treatment of obesity. Indeed, some states have introduced or passed legislation to require private health insurers to cover obesity-related services (Levi et al., 2006 & 2007). However, health plans need not wait for legislative or regulatory action and several plans are beginning to cover obesity-related services.⁶

Finally, some progress has been made in recent years in educating policymakers and their staff that, while individual choice is important, urgent attention is needed to create environments that facilitate and support those choices. As this perception has taken hold, support for public policy action has grown (Nall Bales, 1999). This was certainly the case in tobacco policy. In commenting on this early shift in policymaker perception, one of the interviewees pointed to the growing understanding of obesity's impact on Medicare and Medicaid budgets and the willingness to consider that measures taken today to address obesity through those programs could result in savings or averted costs in the future.

Finding 2. Leading healthcare stakeholder organizations are variable in the extent to which they have identified childhood obesity as a priority.

Two prior reviews of policies on obesity have been conducted. The first, by Nestle and Jacobson in 2000, was on obesity overall (i.e., not limited to children) and covered 36 reports and guidelines pub-

lished between 1952 and 1999. This report concluded that "overall, the nearly half century history of such banal recommendations is notable for addressing both physical activity and dietary patterns, but also for lack of creativity, a focus on individual behavior change and ineffectiveness. Only rarely did such guidelines deal with factors in society and the environment that might contribute to obesi*ty*" (Nestle & Jacobson, 2000). Specific policies in the health care sector were noted by the authors who found that, as early as 1977, calls to make *"make nutrition counseling available under* Medicare" and "recognize obesity as a disease and include [...] benefits coverage for the treatment of it" were included. Sadly, these recommendations, as well as others in the National Institutes of Health (NIH) report, were ignored. In addition, while Healthy People 2010 includes a focus on childhood overweight, little guidance as to how to achieve the objectives is provided in the report.

Exhibit 3:

- Education
- Food labeling and advertising
- Food assistance programs
- Health care and training
- Transportation and urban development
- Taxes
- Policy development

Exhibit 4:

- American Academy of Family Physicians
- American Academy of Pediatric Dentistry
- American Academy of Pediatrics
- American College of Obstetricians and Gynecologists
- American College of Preventive Medicine
- American Dietetic Association
- American Osteopathic Association
- National Association of School Nurses
- · Society for Adolescent Medicine

⁶ A companion report explores this issue in more depth: Cooper J & Simpson LA. Childhood Obesity: Patterns of Coverage and Reimbursement. National Initiative for Children's Healthcare Quality: Boston, MA. June 2008.

The report by Nestle & Jacobson identified seven domains for policy action (see Exhibit 3 and health care was included. Four health care recommendations were noted; two calling for health professional training approaches, one calling for the development and funding of a research agenda on the causes of, and treatments for, obesity, and one to revise Medicaid and Medicare to provide incentives for provider-based nutrition and obesity counseling and other related services.

The second review was conducted under the auspices of the Partners in Program Planning for Adolescent Health (PIPPAH) initiative partners and published in 2004.⁷ This review summarized the existing policies of 10 organizations who are members of the National Coalition on Adolescent Health or PIPPAH partners (see Exhibit 4). Policies covering both healthcare aspects (e.g., reimbursement for treatment and screening, evaluation and treatment), as well as broader issues (e.g., food labeling and school nutrition), were mentioned by one or more of these organizations.

The most common domain included in these organizations' statements was physical activity and sports; 49 recommendations were identified, of which 16 were targeted at clinical interventions with individual patients and 33 were focused on the scope, content and nature of physical activity programs, often within the school setting (see Exhibit 5). Only two organizations had a position on reimbursement for treatment of obesity. A content analysis⁸ of those recommendations revealed that the recommendations revealed that they focused about equally on clinician actions at the individual patient level (92 recommendations) versus calling for broader policy actions on the part of clinicians, schools, or other stakeholders (111 recommendations). However, nearly 70% of these broad policy recommendations statements focused exclusively on the school's role in nutrition, food labeling or advertising, or physical activity. These two types of recommendations were often woven together in linked statements, e.g., *"Pediatric dentists should provide dietary counseling in conjunction with other preventive services for their patients. School health education programs and food services should promote balanced, low caries-risk diets."*

In our own review of the policies or initiatives of 30 organizations, we found that only 14 had a formal position or policy on childhood obesity (see Appendix B for complete list of organizations). Many more had programs or initiatives or were in the process of developing a statement. For those organizations with a formal policy/statement, several common themes related to health care emerged:

Domain	Organizations (N)	Recommendations	Target	
		(N)	Patient	Policy
Diet & Nutrition: general	7	27	19	8
Education & Training	6	29	15	14
School Nutrition	6	27	1	26
Physical Activity & Sports	5	49	16	33
General Statements	4	11	2	9
Special Populations	4	14	12	2
Screening, Evaluation & Treatment	3	26	25	1
Food labeling & Advertising	3	14	1	13
Health insurance & reimbursement for treatment	2	4	_	4
Total	7	201	92	111

Exhibit 5: Domain & Target of Policy Recommendations Included in Statements

Individually-Focused Themes:

- More engagement of health care providers/clinicians in the prevention, diagnosis and treatment of childhood overweight (10 of 30 organizations; AAP, Society of Pediatric Nurses (SPN), IOM, AMA, IOM, AMA, America's Health Insurance Plans (AHIP), Association of State and Territorial Health Officers (ASTHO), National Academy for State Health Policy (NASHP), National Association of School Nurses (NASN), North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN), North American Association for the Study of Obesity (NAASO)).
- Regular BMI measurement and weight management of children, with monitoring and accessible counseling/interventions to lower it, if necessary. Measurements should be performed by trained health workers. (13 of 30; AAP, IOM, (American Dental Association ADA), AMA, AHIP, ASTHO, NASBHC, NIHCM, NASHP, National Association of County and City Health Officials (NACCHO), NASN, NASPGHAN, NAASO)
- Identification and management of risk factors such as genetics, obesity-related chronic disease, ethnic disparities, poverty and other socioeconomic factors in under-privileged communities (eight of 30; AAP, Society of Pediatric Nurses (SPN), ASTHO, NIHCM, NACCHO, NASN, NASPGHAN, and NAASO).
- Early start of prevention of overweight is essential (six of 30; AAP, NIHCM, NACCHO, National Association of Pediatric Nurse Practitioners (NAPNAP), NASN, NASPGHAN).

Broader Policy Themes:

- Inclusion of physical activity and healthy nutrition in curricula of educational institutions of health care professionals and schools (12 of 30; AAP, Centers for Disease Control Task Force on Community Preventive Prevention Services, IOM, ADA, AMA, AHIP, ASTHO, NIHCM, NASHP, NACCHO, NAPNAP, NAASO)
- Association of low physical activity and poor nutrition with overweight/obesity should be addressed (and managed through counseling and referrals) in schools and to parents or caregivers in the community (13 of 30; National Assembly on School-Based Health Care (NASBHC), AAP, ADA, AMA, AHIP, ASTHO, NIHCM, NASHP, NACCHO, NAPNAP, NASN, NASPGHAN, NAASO)
- Reinstatement of (mandatory) quality physical education by the government for kindergarten through 12th grade at the minimum (three, at least (2 of 30; AAP, ADA))
- Coverage of obesity prevention and treatment by health care insurers and providers (9 of 30; AAFP, AAP, IOM, NIHCM, AMA, AHIP, ASTHO, NASHP, NAASO)

Making funding available through collaborative efforts to promote healthy life-styles, and for research to combat overweight (10 of 30; SPN, IOM, NIHCM, AMA, AHIP, ASTHO, NASHP, NACCHO, NASN, NAASO).

A final aspect of health care organizations' role, and indeed individual health professionals' role, that has not been well examined is that of role model.⁹ Individually, as a profession, or as employers, physicians, other health professionals, and leaders in health care organizations can embody a message of

⁷ PIPPAH is a project organized by the American Medical Association and funded by the Maternal and Child Health Bureau in 1996.

⁸ Any statement that called for a specific and discrete action counted as a discrete recommendation (e.g., should provide education). Additional statements that described the action in more detail did not contribute to the totals (e.g., the education should include...).

⁹ This section is in large part adapted from a presentation by Dr. Brian McCrindle at the December 2007 AHA Obesity Research Summit.

healthy living. However, we know that health professionals are not spared the problems of obesity. The physicians' health study found that 38% had BMI >25 and 6% had BMIs over 30, while two studies using physician self-reports found BMI rates above 25 for over 50% of male physicians and less than 30% of female physicians (Ajani et al., 2004; Perrin et al., 2005; Trowbridge et al., 2002). Research has also shown that physicians' own weight, their nutritional history (e.g., being a vegetarian) or a history of obesity was associated with whether they provided nutritional and weight counseling or had self-efficacy in counseling patients on these topics (Frank et al., 2002). In fact, physicians with health promoting personal health habits counseled a broader range of patients and did so more aggressively (Wells et al., 1984). In one interesting study that used health education videos about diet and exercise, patients who saw a video showing a physician revealing their personal healthy dietary and exercise practices, and had a bike helmet and apple visible on the desk felt that the physician was more believable and motivating (Frank et al., 2000).

"Do as I say, not as I do"

Clean up your own house. Make sure that your practice setting promotes a healthy lifestyle. Eliminate less nutritional food and drinks. Make taking the stairs a preferred option. Decorate clinical areas with motivational and health images. Offer reading materials that promote heart health. Institute health and fitness incentives and programs among staff.

Physician, heal thyself. Many physicians, particularly younger physicians, provide their own health care, which is a questionable practice. Get a routine checkup that includes an assessment of cardiovascular risk factors, as well as monitoring of adiposity. If you are overover weight, take steps to adopt a healthier lifestyle that can lead to weight loss based on best available evidence.

Blow your own horn. Make your personal healthy life style achievements evident to your patients. Share your own story about weight challenges. Display your own participation medals from recent running events.

Reprinted with permission, Brian McCrindle, Canadian Family Physician, 2006

Whether in hospitals, community clinics, health plans or practices, health care stakeholders also employ millions of Americans and have the potential to play an important role in helping individuals achieve and maintain a healthy weight. Recently, McDonald et al., published the results of a survey of children's hospitals in the US and Canada and the degree to which these hospitals offered appropriate, or healthful, nutritional and exercise environments. The findings are sobering, though perhaps not surprising. First, snack and beverage vending machines were found in 100 of 104 responding hospitals, with the number varying widely (and as high as 235) per hospital. Nutritious foods were infrequently available in hospital cafeterias. For example, low-fat desserts or baked goods were present in only 34% and 46% of hospitals, respectively. Less nutritious food choices were far more prevalent, with nearly all (over 90%) selling chocolates, candy and potato chips and over three quarters (79%) selling other dessert items. Overall, 29 fast food franchise outlets were found in 24 hospitals. Hospitals can also offer their employees and dependents fitness or healthy lifestyle programs. However, McDonald et al., found that this was the exception and not the rule. Obesity or exercise programs for staff existed in 45 hospitals, but only 13 hospitals also had these for children and 19 hospitals had neither type of program.

Finding 3. State governments are leading the way in systematic interventions and health-related policies to address childhood obesity.

A number of policy organizations have turned their attention to states' activities in obesity, in general, as well as childhood obesity. For example, the National Governors' Association (NGA), the National Conference of State Legislatures (NCSL), and the National Academy for State Health Policy (NASHP)

have issued several reports on these topics in just the last three years. States have an important role to play in addressing childhood obesity, especially given the fact that 4 million obese children are Medicaid beneficiaries (*The Obesity Epidemic – How States Can Trim the "Fat"*, 2002). Local governments are in a key position to address childhood obesity given their jurisdiction over schools, parks and recreation, transportation, and local health care resources.

For four years, Trust for America's Health (TFAH)¹⁰ has also published a report on obesity policies, with an assessment of specific state actions and progress. TFAH's latest report was released in August 2007 and included results from a survey of state Chronic Disease Directors, a timeline of recent federal obesity policies and actions, an overview of leverage points to spur the development of future strategies and a set of recommendations for future action. The six leverage points selected are shown in Exhibit 6 and include collab-

Exhibit 6:

- American Academy of Family Physicians
- American Academy of Pediatric Dentistry
- American Academy of Pediatrics
- American College of Obstetricians and Gynecologists
- American College of Preventive Medicine
- American Dietetic Association
- American Osteopathic Association
- National Association of School Nurses
- Society for Adolescent Medicine

orations with medical care providers. The recommendations for future action included four broad recommendations as well as 20 specific recommendations linked to key stakeholders, including four recommendations for local governments (including schools) and two for Governors, legislators and state health departments (Levi et al., 2006).

States have a particular interest in this topic due to the significant costs stemming from obesity: from \$174 to \$660 per person in medical costs alone related to obesity (Hearne et al., 2004). In addition, annual obesity-attributable US medical expenses were estimated at \$75 billion for 2003, with taxpayers paying about half of this through Medicare and Medicaid (Finkelstein et al., 2004). State-level estimates, that include adults and children, varied from \$87 million for Wyoming to \$7.7 billion for California. Recent data from the National Survey of Children's Health demonstrate the wide variability by state in the prevalence of overweight, as well as related risk factors. While both TFAH reports focus heavily on state action and legislation (e.g., state school and tax policies), as well as related federal policies, beginning with the 2005 report, this organization's report also includes a section on health insurance and the promising emergence of at least some level of coverage for a subset of obesity-related services.

According to the TFAH 2007 report, 27 states enacted one or more new obesity-related standards or legislation affecting schools between 2006 and 2007. This included: nutritional standards for school meals (eight states); nutritional standards for competitive foods (eight states); limited access to competitive foods (six states); BMI or health information collection (12 states); physical education requirements (one state); and health education requirements (three states). Twelve states now have mandatory BMI monitoring and an additional six have voluntary BMI monitoring in the schools. This growing trend makes it all the more important to have clinicians caring for children equipped to counsel families on the meaning of the BMI result and prepared to provide or refer for appropriate services, if obesity is identified.

The University of Baltimore has developed a *State Obesity Report Card*[™] (Cotten, 2007) that grades state efforts to control obesity (in all populations and for childhood obesity). Six states, California, Illinois,

¹⁰ Trust for America's Health is a non-profit, non-partisan organization "dedicated to savings lives by protecting the health of every community and working to make disease prevention a national priority."

Oklahoma, Pennsylvania, South Carolina, and Tennessee, received an "A" in the 2006 report for their efforts to control childhood obesity, up from zero states in 2004, while 21 states received a "B", 15 states received a "C", six states received a "D", and 3 states received an "F" (see Appendix D for a map of states). This compares to 18 states receiving an "F" just two years earlier.

The 2003 Governors' NGA report mentioned several possibilities for states to fight obesity in school children. These included development and enforcement of policies and physical-activity requirements and programs; implementation of nutrition policies and education programs; encouragement of schooland community-based partnerships to promote regular physical activity and healthy eatand engaging families in these ing, promotions; and the creation of public awareness and education campaigns. An earlier NGA report recommended that governors partner with community-based organizations and use their executive power to combat this epidemic through executive orders, proclamations, support of their Councils on Physical Fitness and on Food Policy, and through formation of state representatives to monitor their state strategy (National Governors'

Exhibit 7:

Wellness Where We Live

- Educate the public about existing community resources and raise awareness of services and opportunities
- Partner with community organizations to communicate health information and encourage healthy lifestyles
- Promote civic and personal responsibility for better health
- Improve access to healthy options in disadvantaged communities
- Publicly share efforts by the governor's family to get and stay healthy

Wellness Where We Work

- Implement a yearly health- risk assessment for all state employees
- Improve the "health" of state workplaces
- Provide access to health coaching and other preventive services for state employees and retirees
- Raise employer awareness of and employee participation in worksite wellness programs
- Form coalitions and advisory groups across the public and private sectors.

Wellness Where We Learn

- Encourage parental engagement in student health
- Conduct yearly assessments of individual student wellness
- Promote regular physical activity during the school day
- Support local school districts in efforts to develop healthy food policies
- Use local chefs and farmers to offer attractive, healthier food options to students

Association, 2002). More recently, under the leadership of Governor Huckabee's chairmanship of the NGA, the Healthy America initiative was launched (*Healthy America. Creating Healthy States: Actions for Governors*, 2006). This agenda identifies three areas for gubernatorial action, and five actions within each (see Exhibit 7). While health care services are not mentioned, health care organizations should be clearly engaged in many of these.

Finally, health-related obesity services go well beyond individual clinicians or practices and, thus, states are using a variety of funding streams to support their obesity-related activities, including tobacco settlement funds, other state revenues, private foundation support and federal grants (Rosenthal & Chang, 2004). A popular approach includes small/nominal taxes on several widely used products that are likely to contribute to obesity (e.g., soft drinks, televisions, video equipment, and motor vehicles) and using the revenues to promote nutrition and physical activity.¹¹ Some states (e.g., Nebraska and

¹¹ Seventeen states and two cities, including New York, California, and Chicago, already tax soft drinks or snack foods (Center for Science in the Public Interest, 2000).

Texas) have actively considered legislation to tax foods and beverages of minimal nutritional value (e.g., sodas). Interestingly, a national survey in 1999 (before concern about childhood obesity reached its current fevered pitch) found that nearly 50% of adults would support a one-cent tax on products such as a pound of potato chips, a can of soft drink, or a pound of butter (Bruskin-Goldring, 1999). In addition to securing funding for obesity-related programming, the fact that states also need the ability to combine resources in order to effectively address the multiple facets of childhood obesity was noted by several reports and key informant interviews.

Any discussion of state government roles in childhood obesity raises the question of federal policies and actions. In their 2007 report, TFAH provides an excellent summary of federal actions across multiple agencies and characterizes these as falling into one of three categories: 1) Public education campaigns targeted at individual behaviors; 2) treatment of obesity-related diseases; and 3) initial steps toward developing community active living incentives (Levy, 2007). They also conclude that "while many departments and agencies work on obesity-related issues, there is no federal government wide approach or coordination of these efforts." In the area of health policy and the Department of Health and Human Services (HHS), the TFAH report notes that over 300 obesity-related programs nationwide are sponsored and involve almost all of the HHS agencies. Since the time of the TFAH report, the acting U.S. Surgeon General of the United States formed a Childhood Overweight and Obesity Prevention Council which includes every agency within HHS that conducts activities related to overweight and obesity prevention for children. The Council is charged with developing an action plan to optimize the benefits and impact of programs that prevent childhood overweight and obesity. This plan will help synergize HHS-related childhood overweight and obesity prevention efforts, including program interventions and evaluation, community outreach and services, education and research. HHS activities include funding for state and community programs, research funding through multiple agencies, payment for over half of all obesity-related costs through Medicare and Medicaid, food labeling requirements and public education campaigns.

Of note is the fact that the Center for Medicaid and State Operations is increasing its focus on obesity and providing information to states on promising practices across states in recognition that CMS provides health care coverage for more than 36 million children through its Medicaid and SCHIP Programs. Children covered by Medicaid are nearly six times more likely than children covered by private insurance to be treated for obesity. In addition, the treatment of obesity in children covered by Medicaid is nearly twice as expensive than the treatment of obesity for children covered by private insurance (Thomson Medstat, 2006). The CMS Medicaid and SCHIP Division of Quality, Evaluation and Health Outcomes is working with states to provide technical assistance on coverage related issues as well as to provide promising practices on the Medicaid and SCHIP Quality Website located at <u>www.cms.hhs.gov/</u><u>MedicaidSCHIPQualPrac/MSPPDL/list.asp#TopOfPage</u>.

Finding 4. Healthcare approaches are only beginning to address the disproportionate toll of childhood obesity on low socioeconomic families, including low-income and minority families and communities

The impact of obesity on low-income children and children of color must be addressed. While numerous research publications have highlighted this issue, recent data from the National Survey on Children's Health are presented in a companion NICHQ report¹², that drive home the fact that disparities by income, race, ethnicity, education and geography are widespread across and within states.

12 This report will be released in May 2008.

Understanding and addressing the patterns and causes of prevailing disparities in childhood obesity is a prerequisite step to effectively addressing them.¹³ While 17% of older US children (6-19 years) are obese, and an additional 18% are overweight, with similar overall national prevalence among boys and girls, these overall numbers obscure significant variations by age, gender, race/ethnicity and socioeconomic status (SES) (Wang and Beydoun, 2007). Among 6-19 year olds, Mexican -American children are the most likely to be obese or overweight (39.9%), followed by non-Hispanic Black children (35.4%) and non-Hispanic White children (28.2%). Mexican-American boys ages 6-11 years and non-Hispanic, Black girls ages 12-19 years had the highest prevalence (43.9% and 41.9%, respectively). Fewer studies include Asian or Pacific Islander populations. The health consequences of childhood obesity throughout life have been well documented and it results in numerous co-morbidities (Daniels, 2006). Thus, the fact that obesity occurs disproportionately among children and communities of color further compounds the existing disparities in health and health care in this country.

Significant inequities are also seen by SES, but the patterns vary by race/ethnicity (Ogden et al., 2006; Wang & Beydoun, 2007; Freedman et al., 2006). Overall, the prevalence of childhood obesity increases as family SES decreases among both children and adults (Drewnowski & Specter, 2004). However, the picture becomes more complex when looking at different domains so socioeconomic status (such as parental education or perceived social status) (Goodman et al., 2007; Goodman et al., 2005; Goodman et al., 2003) and how these domains intersect with race/ethnicity and gender. The socioeconomic status gradient in childhood obesity is most clear among non-Hispanic Whites (Wang & Beydoun, 2007). However, no consistent relationship exists between family income and overweight for adolescent boys, whereas non-Hispanic adolescent girls from lower- income families were much more likely to be overweight. Among other racial/ethnic groups, the relationship between SES and overweight is less clear. This may be due, in part, to the fact that race/ethnicity and socioeconomic status are often tightly linked, which makes it difficult for studies to show SES differences within minority racial/ethnic groups. In contrast, high SES Black adolescent girls are at increased risk compared to their low SES counterparts (38% vs. 18.7% respectively). Thus the disparity between Black and White girls increases as SES increases (Wang & Shang, 2006). In addition, other dimensions of SES are associated with significant variations in obesity rates, including social inequalities, education and subjective social status (Goodman et al, 2007; Goodman et al, 2005; Goodman et al, 2003).

Another dimension of disparity and variation that exists, and is examined in our companion report, is the significant variation that exists across states among subgroups, such as poor children in each state, as well as important within state variation, such as when comparing the poorest to the highest- income children in a given state. For example, children living in the lowest income families (<100% Federal Poverty Level) had obesity prevalence rates ranging from 36.6% in Louisiana to 54.3% in Delaware. Meanwhile, in Wisconsin, children in the poorest families were almost three times more likely than children in the highest income families to be overweight. Thus, in obesity, as in so many other areas of child health and health care, geography may be destiny.

A final dimension of the disparities in childhood obesity is issue of non- or limited English proficiency families, predominantly Spanish language populations, and the variation in the availability of language access services. If health care providers are going to be effective in engaging non- or limited English proficiency families to change their lifestyle they are going to have to be able to communicate effectively in a linguistically and culturally competent manner. One component of the solution is ensuring the availability of appropriate interpreter services.

¹³ Most studies report primarily on rates of obesity only (BMI >95th percentile), but some do include overweight children and this is appropriately noted below.

In the face of these differences, some healthcare stakeholders have begun to develop programs and initiatives to directly address them. Pediatricians in the Texas and District of Columbia chapters of the AAP have led the development of Spanish-language educational information for practitioners to use with their families. Similarly, some health plans (e.g., Wellpoint) have developed bilingual patient educational materials or partnered with community groups (e.g., Boys and Girls Clubs) to improve health literacy among teens, with an emphasis on weight management. In its review of innovative programs, NASHP identified integrating a focus on disparities as a key theme for success. Programs that are designed with explicit attention to the diversity of the families served are better able to engage and retain those families. Culturally and linguistically competent health care providers are important not only to the delivery of appropriate services but also in articulating to policymakers the disproportionate impact of this epidemic on low- income, minority, and limited-English-proficiency children and families and the types of interventions that will be effective in communities of color. These and other aspects of the challenge were discussed in two audio calls sponsored by the Childhood Obesity Action Network. Health care providers and organizations have a responsibility to focus their collective energies, skills and resources on reaching and successfully engaging low-income children and their families, as well as racial/ethnic minority children. Policy strategies for addressing these issues are explored in more depth in the companion report.

V: Proposed Goals and Strategies

Today, we have an opportunity to build on the significant momentum that has emerged at the community, state and national levels in addressing childhood obesity. It is time for health care stakeholders to fully engage in responding to the epidemic and to do so in partnership with other important policy players. We propose an overarching recommendation and four goals, followed by specific strategies and actions that healthcare stakeholder groups in childhood obesity could take, and indeed should take, to make progress toward these goals. The goals are not presented in any priority order – they are all equally important to addressing the epidemic. A second listing of these same recommendations is provided, sorted by stakeholder, to make it easier to identify the actions being called for from each group. We hope that this broad set of recommendations will serve as a starting point to spur, shape and inform many more policy initiatives to address childhood obesity.

Overarching Recommendation:

Healthcare professionals should commit to halting the epidemic of childhood obesity and partner with government, industry, communities, schools, and families to mobilize the resources needed for success. This includes resources at the federal, state and local levels and in the private sector.

- Goal 1: Foster the adoption and use of best-available evidence and clinical and preventive recommendations
- Goal 2: Model and support healthy living at all levels
- Goal 3: Increase the availability of evidence, measures and data on effective healthcare approaches to address childhood obesity
- Goal 4: Enhance Healthcare Professionals' advocacy and role in the Policy Process

Goal 1: Foster the adoption and use of "best-available" evidence and clinical and preventive recommendations

With the 2007 release of updated clinical recommendations based on the "best-available" evidence and reflecting the professional consensus of medicine, we now have the opportunity for widespread dissemination and adoption. The dedication, passion, ingenuity, and expertise of individual providers working in partnership with communities have resulted in inspiring examples that can serve as models for policymakers everywhere. To spur the spread of these promising approaches and to foster the development of new approaches, particularly those targeted at low- income populations and communities of color, we suggest six specific healthcare policy strategies:

Strategy 1: Prioritize the prevention, identification and management of childhood obesity

- **Strategy 2:** Increase the knowledge and skills of clinical providers to effectively prevent, identify and manage children and families affected by obesity
- Strategy 3: Provide adequate financing for obesity-related services
- Strategy 4: Explore the role of regulatory and accreditation approaches in promoting clinician engagement

Strategy 5: Target adoption among providers who serve low-income and minority children and families.

Strategy 6: Apply health information technology

Strategy 1: Prioritize the prevention, identification and management of childhood obesity

- Parents, grandparents and caregivers should promote healthful eating behaviors and regular vigorous physical activity for their children and extended families.
- Parents, grandparents and caregivers should become educated about the nature, scope and implications of the epidemic of childhood obesity and become advocates for attention to the issue at the local, state and/or national levels.
- All clinical providers of care to children and families should engage in the prevention of childhood obesity.
- Health plans should continue and expand their efforts to target their members with educational content, tools and resources to make healthier choices.
- Health plans should make their member educational materials particularly web-based resources available for all families free of charge.
- Employers should influence their employees and their dependents by contracting with food and snack service vendors to increase healthy options; offering on-site or near-site options for physical fitness and weight management programs; creating safe, attractive opportunities for employees to walk and use stairs; and subsidizing the use of various strategies (e.g., health- risk appraisals, health club membership) to promote healthy weight); reaching out to spouses and families with worksite health education; explicitly addressing children in worksite programs on nutrition, physical activity, etc. should explicitly address children, as many adult employees are parents, grandparents or caregivers (e.g., on cafeteria posters showing appropriate portion sizes, include illustrations of appropriate child portions as well).

Strategy 2: Increase the knowledge and skills of clinical providers to effectively prevent, identify and manage children and families affected by obesity.

- All clinical providers should achieve and maintain proficiency in the prevention, identification and management of childhood obesity. At a minimum, all providers should be encouraged to measure and plot BMI as a vital sign.
- Health professional schools (e.g. medicine, nursing, dentistry, nutritionists, and public health) should work together to develop undergraduate, graduate and post-graduate core competencies (including knowledge and skills) and curricula for childhood obesity that should be used across professions and settings.
- Health professional associations should work together to build on their current educational offerings at their local, state and national member meetings to integrate these competencies into didactic, distance, and experiential learning.
- Given the demographics of the obesity epidemic, a focus on cultural and linguistic competence should be included in all health professional educational efforts to address low income, minority, low health literacy and limited English proficient families.
- Membership associations (including professional associations and industry trade groups) should, with foundation support, develop training for aspiring champions, as well as a support network to share tools and best practices among champions, including champions working at the community level, the health system or plan level, and all levels of government.
- Health plans should continue to assist their participating providers in acquiring the knowledge skills and tools they need to effectively prevent, identify, and manage childhood obesity.
- Health plans should provide incentives for providers to address childhood obesity, including incentives linked to direct measurement (e.g., BMI as a vital sign), to improvement, or to adopt EHRs that allow for BMI plotting.
- Improvement collaboratives to share knowledge and improvement approaches should be organized to bring together teams of practitioners at various levels within a community, across a state, in a region, or nationally.
- State governments, working in partnership with their state academic institutions, should sponsor and sustain long -term efforts to focus on low-income children and families, given the impact of obesity on state Medicaid budgets.

Strategy 3: Provide adequate financing for obesity-related services

- A model benefit to address the prevention, identification and treatment of childhood obesity should be designed and demonstrations sponsored within the public (i.e., Medicaid and SCHIP) and private sectors. This benefit should include alternative modes of service delivery (e.g., group counseling) and specific supportive services (e.g., case management).
- All health care payers (including public, private and self-insured employer plans) should not only cover a full range of preventive and interventional obesity-related services, but ensure that reimbursement levels are adequate to spur provider delivery of this benefit.
- All health care payers (including public, private and self-insured employer plans) should widely publicize

the coverage available, including provider education on available coding practices (including which codes to use under which circumstance and in which settings) to support obesity-related services.

- All health care payers (including public, private and self-insured employer plans) should be innovative in their coverage and reimbursement policies by providing incentives for providing obesity-related services (e.g., the % of children in the practice for whom a BMI is recorded in the medical record) or by making certain school- and community-based activities by physicians eligible for compensation or incentives (e.g., participation in school wellness councils).
- The Federal Centers for Medicare and Medicaid Services (CMS), should make clear to states which obesity-related services and activities (including disease prevention and health promotion) are eligible for Federal Financial Participation (FFP) and at what level (e.g., 50% match or greater). This includes, but is not limited to, reimbursements for clinical services provided in the clinical-, school-, or community-based setting, and the development of a data infrastructure to address obesity (e.g., obesity registries).
- Congress should appropriate funding for CMS, and if necessary clarify CMS authority, to fund demonstrations to determine the most effective approaches to addressing the epidemic.
- Employers should evaluate their benefit plan offerings and remove obstacles to the prevention and treatment of childhood overweight, e.g., by considering coverage of dietitian services and specialized treatment programs for children and teens.
- Employers should select health plans and providers that follow screening and treatment guidelines to ensure identification and management of obese children and adolescents.
- Employers should select health plans that help providers make childhood obesity prevention, identification and management a priority in all patient encounters.
- Employers should select or reward health plans that develop effective healthy weight and weight reduction programs for children and families.

Strategy 4: Leverage regulatory and accreditation approaches in promoting clinician engagement

- The American Board of Pediatrics and the American Board of Family Practice should increase the number/scope of obesity-related content in their certification and maintenance of certification (MOC) exams.
- Subspecialty boards in those disciplines seeing and treating obese children (e.g., cardiologists, endocrinologists, surgeons) should also expand their content on childhood obesity and its consequences in their certification and MOC exams.¹⁴
- State Medical and Nursing Licensing Boards should mandate that at least two hours of the states' CME/CEU licensing requirements be devoted to obesity, including childhood obesity, and how interventions vary between adult and child patients.
- Accrediting bodies (such as the National Committee for Quality Assurance (NCQA), or the Joint Commission for Accreditation of Health Care Organizations (JCAHCO) should develop and require reporting on obesity-related measures from accredited providers or plans, as well as emphasize quality improvement initiatives focused on obesity, including childhood obesity.

¹⁴ This approach is already used by a number of states for topics such as the prevention of medical errors, domestic violence and HIV/AIDS.

Strategy 5: Target adoption among providers who serve low-income and minority children and families.

- Medicaid and SCHIP programs, through their contracts with managed care organizations and external quality review organizations, should require improvement initiatives targeted at childhood obesity.
- Health professional schools and associations should develop curricula and educational offerings to improve the cultural competency of providers in caring for low-income, minority and/or limited-English-proficiency children and families affected by obesity.
- Title V programs should develop a new program to provide health professionals (including physicians, nurses, dentists, etc) with the knowledge, skills and tools needed for working with healthcare providers (including skills in quality improvement) and deploy them to states with the widest disparities in childhood obesity measures.
- Foundations should support the development of champions to work in low-income and minority communities.
- Health plans should design and test culturally effective strategies for engaging diverse children and families in obesity-related services.
- Community health centers should build on and be encouraged to do so their existing services and community governance structure to prioritize prevention activities in their communities and serve as community hubs for improved nutrition and physical activity.
- Research and demonstrations should be targeted to identify the most effective approaches for reducing disparities in childhood obesity.
- Quality improvement organizations should develop and implement (e.g., through the NCQA, or other means) quality measures that identify and track progress on disparity elimination.

Strategy 6: Apply health information technology (HIT)

- HIT standards development organizations (e.g., HL7 and the Certification Commission for Health Information Technology, CCHIT) should develop and widely disseminate the technical and functional specifications needed by electronic health records (EHR) and personal health records (PHR) applications to address childhood obesity.
- Health departments should work with child health providers to develop childhood obesity registries to identify and track progress.
- Current efforts to spur the adoption of EHR and PHR applications should target providers and communities with high rates of childhood obesity.
- Demonstrations should be supported by both the public and private sectors (e.g., private philanthropy, health plan community foundations) to develop and implement EHR and PHR platforms that include obesity-related functionalities (e.g., BMI plotting, decision support, links to obesity registries) and evaluate their impact on childhood obesity.
- National efforts to spur the development of regional health information organizations (RHIOs) should provide incentives for these state and local efforts to include a focus on obesity in all populations, including children.

- Health professionals who care about childhood obesity should be actively engaged in the activities of the American Health Information Community (AHIC) Population Health and Clinical Care Connections Workgroup which has a 2008 priority of developing recommendations related to health information standards for maternal and child health information exchange and electronic health records.
- National efforts to spur the development of regional health information organizations (RHIOs) should provide incentives for these state and local efforts to include a focus on obesity in all populations, including children.

Goal 2: Model and support healthy living at all levels.

Healthcare stakeholders can demonstrate their commitment to addressing this national public health priority by modeling and supporting healthy choices, as individuals, through their membership organizations, and as employers.

Strategy 1: Personal Role Models

- In addition to their roles in the clinical encounter, clinicians can serve as role models to patients, families and community by being physically active and achieving and maintaining a healthy weight.
- Decorate clinical areas with motivational and health images. Offer reading materials that promote heart health. Institute health and fitness incentives and programs among staff.
- Display your participation medals from recent running events. Put up pictures of your various activities, from scuba diving to mountain climbing. Frame press clippings lauding you for the fruit and vegetable promotion campaign you instituted in your hospital cafeteria.¹⁵

Strategy 2: Organizational Role Models

- As membership organizations, health professional associations should encourage their members to adopt a more healthful lifestyle and support their members in this goal by ensuring that all their member activities (e.g., CME conferences and workshops) are designed so that healthy food choices are available and physical activity opportunities are built into their programming.
- As employers, health professional associations, health care organizations (e.g., hospitals and health plans), states, and the federal government should use available levers to promote healthy weight in children and their families. These points of leverage include:¹⁶
 - *Influence with employees and their dependents:* by developing and implementing workplace food policies that are supportive of healthy

"All employers can play a valuable role in helping their employees adopt healthy lifestyles and promote the prevention of childhood obesity. Health care organizations, in particular, should lead rather than lag in this area."

> LuAnn Heinen National Business Group on Health

living, including contracting with food and snack service vendors to increase healthy options, offering on-site or near-site options for physical fitness and weight management programs, creating safe, attractive opportunities for employees to walk and use stairs, and subsidizing the use of various strategies (e.g., health risk appraisals, health club membership) to promote healthy weight).

Worksite health education should include outreach to spouses and families. Worksite programs on nutrition, physical activity, etc. should explicitly address children, as many adult employees are parents/grandparents/caregivers (e.g., on cafeteria posters showing appropriate portion sizes, include illustrations of appropriate child portions as well);

- *Influence with suppliers:* Employers should: select health plans and providers that follow screening and treatment guidelines to ensure identification and management of overweight and at-risk for overweight children and adolescents; select health plans that help providers make childhood obesity prevention, identification and management a priority in all patient encounters; and select or reward health plans that develop effective healthy weight and weight reduction programs for children and families;
- **Control over benefit and coverage decisions:** Employers should evaluate their benefit plan offerings and remove obstacles to the prevention and treatment of childhood overweight, e.g., by considering coverage of dietitian services and specialized treatment programs for children and teens;
- *Philanthropic resources:* Employers should consider directing their corporate foundations and community giving programs to addressing obesity in children.
- Health care organizations' national representatives, notably those of hospitals serving children (e.g., the National Association of Children's Hospitals and Related Institutions (NACHRI), the American Hospital Association (AHA)), should partner with each other and leading obesity prevention initiatives to create policy regarding:
 - Fast- food franchise outlets on site
 - food content, including the % of transfats/saturated fat/cholesterol
 - sodium levels
 - beverage types
 - childhood obesity programs
 - staff health promotion, support and treatment programs
- In all of these actions, evaluate the impact and cost-benefit of making these changes, whenever possible.

Goal 3: Increase the availability of evidence, measures and data

Effectively addressing childhood obesity will require continued investments in the development of evidence, measures and longitudinal data. The evidence needed spans all levels of the care system: evidence of the effectiveness of clinical interventions, evidence of the effectiveness of system level interventions, and evidence of the effectiveness of these interventions in the context of diverse communities.

• The Department of Health and Human Services¹⁷ (HHS) should develop a plan and report annually on childhood obesity —related research, demonstrations, and key indicators of national and state progress in addressing the epidemic.

¹⁵ These recommendations are from McCrindle, Canadian Family Physician, 2006

¹⁶ This set of actions is adapted from Helen Darling, in ibid, NIHCM, 2005.

¹⁷ Including the Agency for Healthcare Research and Quality, the Centers for Disease Control and Prevention, the Health Resources and Services Administration, the National Institutes of Health, and the Centers for Medicare and Medicaid Services.

- Public and private funders should prioritize specific areas for research and demonstrations, including:
 - addressing the gaps in evidence identified in the Clinical Recommendations and USPSTF report on childhood obesity;
 - identifying effective strategies to translate research into practice and promote clinician/system adoption of evidence as it expands from "best available" to "best possible";
 - studies of the cost effectiveness of interventions and the long-term economic impact of childhood obesity;
 - studying the conditions and populations for which pediatric bariatric surgery could be a safe and appropriate clinical option;
 - conducting research in practice-based settings through one or more of the numerous pediatric practice-based research networks; and
 - leveraging existing voluntary organizations' (e.g., AHA, ADA) infrastructure to accelerate research.
- Design and test culturally effective strategies for engaging diverse children and families in obesityrelated services.
- Quality improvement organizations should develop a quality measurement set for childhood obesity based on "best available" evidence and work through voluntary, quasi-voluntary (e.g., incentivized), and regulatory strategies to foster the collection of obesity-related data by health plans and providers.
- Provide grants to community based organizations to develop and provide innovative models for the prevention, identification and management of childhood obesity.
- Health plans serving both public and private sectors that choose to provide coverage for obesityrelated services should require that reimbursement be linked to the collection of specific data that will contribute to generating the evidence base for future program/service design (the concept of "coverage with evidence development").
- Title V programs at the national and state levels should build on the recent release of the *Childhood Overweight Chartbook* (CAHMI, www.nschdata.org) and target additional SPRANS grant funds to develop and test health care approaches to childhood obesity, especially those focused on eliminating obesity-related disparities; expand core outcome measures to include the core set of obesity-related measures mentioned above; and expand, in partnership with, at least, the CDC and AHRQ, its current investment in the dissemination of information on effective approaches to childhood obesity.
- Title V agencies should also consider supporting technical assistance for the collection of obesityrelated data and the implementation of model programs to ensure proper replication and evaluation.
- Medicaid and SCHIP programs should require reporting by participating health plans on this same core set of measures and themselves report the data to CMS so that a national picture of progress should emerge.
- The Centers for Disease Control and Prevention, working together with other healthcare stakeholders, should propose a minimum dataset for childhood obesity and ensure that this is consistently included in all existing and appropriate national and state-based data collection efforts.
- AHRQ should incorporate a specific focus on childhood obesity in their comparative effectiveness program. Congress should authorize and appropriate at least \$20 million per year for at least five years for effectiveness and comparative effectiveness research in childhood obesity. In addition, AHRQ should commission a report on the effectiveness of childhood obesity interventions every five years.

Goal 4: Enhance healthcare professionals' advocacy and role in the policy process

As there was with tobacco smoking, there is a clear need for clinician and other health professional advocacy and engagement in educating policymakers about childhood obesity. At each level of this epidemic, health professionals should be actively engaged in reversing the trend: At: at the community level through schools, day- care centers, and local boards and commissions; at the state level through government advisory boards, elected officials, voluntary and state professional associations; and at the national level, through national professional associations, voluntary organizations, and elected officials.

"Health professionals are highly respected by policy makers and politicians. They bring immense credibility to the discussion and can make a huge difference in the outcomes of advocacy and lobbying activities."

Scott Gee, MD, FAAP Kaiser Permanente - Northern California

Strategy 1: Reframe the public and policy dialogue on childhood obesity

- Healthcare stakeholders should work together (with philanthropic support and researchers) to craft a set of key messages for policymakers that make clear the role of public policy in helping individuals achieve and maintain a healthy lifestyle.
- Health professionals should make themselves available to the media as resources for expert information and local dimensions when new findings or reports on childhood obesity are released.
- State and local governments should participate with others in re-framing the issue of childhood obesity from one of solely personal responsibility to one that acknowledges the role of government in helping to support healthy choices on the parts of individuals.

Strategy 2: Be champions for comprehensive approaches

- All clinical providers should participate as full, effective partners in broader efforts to address childhood obesity.
- All clinical providers should use the power of the bully pulpit and the authority afforded clinicians to advocate for comprehensive strategies to address childhood obesity.
- Healthcare professionals should learn from existing champions and engage in more effective advocacy at the local, state and national levels and promote comprehensive- and prevention-focused approaches to childhood obesity.
- Healthcare professionals should become active with their local early-childhood providers and school governance structures (e.g., principals, boards, wellness councils) to serve as clinical experts and resources to shape healthier nutritional and activity policies.
- Health professional associations should expand the tools, resources and training available to clinicians to become effective advocates and/or work with unfamiliar sectors (e.g., schools, city councils, etc).
- Health plans should Actively join broad community and state coalitions in advocating for obesityrelated policies.

Summary by Stakeholder

This section regroups the goals and strategies described above into the relevant stakeholder groups for action.

Individual children, parents, caregivers and families should:

- Promote healthful eating behaviors and regular vigorous physical activity for their children and extended families.
- Become educated about the nature, scope and implications of the epidemic of childhood obesity and become advocates for attention to the issue at the local, state and/or national levels.

Frontline health professionals should:

- All clinical providers should achieve and maintain proficiency in the prevention, identification and management of childhood obesity. At a minimum, all providers should be encouraged to measure and plot BMI as a vital sign.
- All clinical providers of care to children and families should engage in the prevention of childhood obesity.
- In addition to their roles in the clinical encounter, serve as role models to patients, families and community by being physically active and achieving and maintaining a healthy weight.
- Display your participation medals from recent running events. Put up pictures of your various activities, from scuba diving to mountain climbing. Frame press clippings lauding you for the fruit and vegetable promotion campaign you instituted in your hospital cafeteria.
- Participate as full, effective partners in broader efforts to address childhood obesity.
- Use the power of the bully pulpit and the authority afforded clinicians to advocate for comprehensive strategies to address childhood obesity.
- Learn from existing champions and engage in more effective advocacy at the local, state and national levels and promote comprehensive and prevention-focused approaches to childhood obesity.
- Become active with their local early-childhood providers and school governance structures (e.g., principals, boards, wellness councils) to serve as clinical experts and resources to shape healthier nutritional and activity policies.
- Make themselves available to the media as resources for expert information and local dimensions when new findings or reports on childhood obesity are released.

Health professional schools and associations should:

- Work together to develop undergraduate, graduate and post-graduate core competencies (including knowledge and skills) and curricula for childhood obesity that should be used across professions and settings (including medicine, nursing, dentistry, nutritionists and public health).
- Work together to build on their current educational offerings at their local, state and national member meetings to integrate these competencies into didactic, distance, and experiential learning.
- Given the demographics of the obesity epidemic, a focus on cultural and linguistic competence should be included in all health professional educational efforts to address low income, minority, low health literacy and limited English proficient families.

- With foundation support, develop training for aspiring champions as well as a support network to share tools and best practices among champions, including champions working at the community, health system or plan level, and all levels of government.
- Expand the tools, resources and training available to clinicians to become effective advocates and/or work with unfamiliar sectors (e.g., schools, city councils, etc).
- Develop and implement (e.g. through NCQA, or other means) quality measures that identify and track progress on disparity elimination.
- As membership organizations (if applicable), encourage their members to adopt a more healthful lifestyle and support their members in this goal by ensuring that all their member activities (e.g., CME conferences and workshops) are designed so that healthy food choices are available and physical activity opportunities are built into their programming.
- Health professionals who care about childhood obesity should be actively engaged in the activities of the American Health Information Community (AHIC) Population Health and Clinical Care Connections Workgroup which has a 2008 priority of developing recommendations related to health information standards for maternal and child health information exchange and electronic health records.
- As employers, health professional associations, health care organizations (e.g., hospitals and health plans), states, and the federal government, use available levers to promote healthy weight in children and their families. These points of leverage include:¹⁸
 - Influence with employees and their dependents: contracting with food and snack service vendors to increase healthy options; offering on-site or near-site options for physical fitness and weight management programs; creating safe, attractive opportunities for employees to walk and use stairs; and subsidizing the use of various strategies (e.g. health risk appraisals, health club membership) to promote healthy weight). Worksite health education should include outreach to spouses and families. Worksite programs on nutrition, physical activity, etc. should explicitly address children, as many adult employees are parents/grandparents/caregivers (e.g., cafeteria posters showing appropriate portion sizes should include illustrations of appropriate child portions as well).
 - *Influence with suppliers:* Employers should: select health plans and providers that follow screening and treatment guidelines to ensure identification and management of overweight and at-risk for overweight children and adolescents; select health plans that help providers make childhood obesity prevention, identification and management a priority in all patient encounters; and select or reward health plans that develop effective healthy weight and weight-reduction programs for children and families.
 - **Control over benefit and coverage decisions:** Employers should evaluate their benefit plan offerings and remove obstacles to the prevention and treatment of childhood overweight, e.g., by considering coverage of dietitian services and specialized treatment programs for children and teens.
 - *Philanthropic resources:* Employers should consider directing their corporate foundations and community giving programs to addressing obesity in children.

¹⁸ This set of actions is adapted from Helen Darling, in ibid, NIHCM, 2005.

• Healthcare stakeholders should work together (with philanthropic support and researchers) to craft a set of key messages for policymakers that make clear the role of public policy in helping individuals achieve and maintain a healthy lifestyle.

Health plans should:

- Continue and expand their efforts to target their members with educational content, tools and resources to make healthier choices.
- Continue to assist their participating providers in acquiring the knowledge skills and tools they need to effectively prevent, identify, and manage childhood obesity.
- Provide incentives for providers to address childhood obesity, including incentives linked to direct measurement (e.g., BMI as a vital sign), to improvement, or to adoption of EHRs that allow for BMI plotting.
- Design and test culturally effective strategies for engaging diverse children and families in obesityrelated services.
- Either individually, or as a group, agree on the scope of a core benefit for childhood obesity and make it available to purchasers (both employers and members).
- Make their member educational materials particularly web-based resources available for all families, free of charge.
- Work together to develop a core set of measures of effectiveness for all the childhood obesity services they cover and programs they sponsor, collect the data from their own members and providers and pool the data to generate more rapid and robust estimates of impact. This would be particularly important in generating adequate evidence for subgroups of the child population and assessing whether low-income and minority children are benefiting from the interventions.
- Actively join broad community and state coalitions in advocating for obesity-related policies.
- Provide grants to community based organizations to develop and provide innovative models for the prevention, identification and management of childhood obesity.
- Design and demonstrate a model benefit to address the prevention, identification and treatment of childhood obesity within the public (i.e., Medicaid and SCHIP) and private sectors. This benefit should include alternative modes of service delivery (e.g., group counseling) and specific supportive services (e.g., case management).
- Require that reimbursement be linked to the collection of specific data that will contribute to generating the evidence base for future program/service design, if health plans choose to provide coverage for obesity-related services (the concept of "coverage with evidence development").
- All health care payers (including public, private and self-insured employer plans) should not only cover a full range of preventive and interventional obesity-related services, but ensure that reimbursement levels are adequate to spur provider delivery of this benefit.
- All health care payers (including public, private and self-insured employer plans) should widely publicize the coverage available, including provider education on available coding practices (including which codes to use under which circumstance and in which settings) to support obesity-related services.

• All health care payers (including public, private and self-insured employer plans) should be innovative in their coverage and reimbursement policies by providing incentives for providing obesity-related services (e.g., the % of children in the practice for whom a BMI is recorded in the medical record) or by making certain school- and community-based activities by physicians eligible for compensation or incentives (e.g., participation in school wellness councils).

Quality improvement and accrediting/certifying organizations should:

- Develop a quality measurement set for childhood obesity based on "best available" evidence and work through voluntary, quasi-voluntary (e.g., incentivized), and regulatory strategies to foster the collection of obesity-related data by health plans and providers.
- Increase the number/scope of obesity —related content in its certification and maintenance of certification exams.
- Develop (through such organizations as the National Committee for Quality Assurance, (NCQA), or the Joint Commission for Accreditation of Health Care Organizations, (JCAHO)) and require reporting on obesity-related measures from accredited providers or plans, as well as emphasize quality improvement initiatives focused on obesity, including childhood obesity.
- Develop and implement (e.g., through NCQA, or other means) quality measures that identify and track progress on disparity elimination.
- Subspecialty boards in those disciplines seeing and treating obese children (e.g., cardiologists, endocrinologists, surgeons) should also expand their content on childhood obesity and its consequences in their certification and MOC exams.¹⁹
- HIT standards development organizations (e.g., HL7 and the Certification Commission for Health Information Technology, CCHIT) should develop and widely disseminate the technical and functional specifications needed by electronic health records (EHR) and personal health records (PHR) applications to address childhood obesity.

All employers, public and private should:

Use available levers to promote healthy weight children. These points of leverage include:²⁰

- Influence with employees and their dependents: contracting with food and snack service vendors to increase healthy options; offering on-site or near-site options for physical fitness and weight management programs; creating safe, attractive opportunities for employees to walk and use stairs; and subsidizing the use of various strategies (e.g., health risk appraisals, health club membership) to promote healthy weight); including outreach health education to spouses and families; explicitly addressing children in worksite programs on nutrition, physical activity, etc., as many adult employees are parents/ grandparents/caregivers (e.g., on cafeteria posters showing appropriate portion sizes, include illustrations of appropriate child portions as well);
- *Influence with suppliers:* Employers should: follow screening and treatment guidelines to ensure identification and management of overweight and at-risk for overweight children and adolescents; select health plans that help providers make childhood obesity prevention, identification and

¹⁹ This approach is already used by a number of states for topics such as the prevention of medical errors, domestic violence and HIV/AIDS.

²⁰ This set of actions is adapted from Helen Darling, in ibid, NIHCM, 2005.

management a priority in all patient encounters; and select or reward health plans that develop effective healthy weight and weight reduction programs for children and families;

- **Control over benefit and coverage decisions:** Employers should evaluate their benefit plan offerings and remove obstacles to the prevention and treatment of childhood overweight, e.g., by considering coverage of dietitian services and specialized treatment programs for children and teens.
- *Philanthropic resources:* Employers should consider directing their corporate foundations and community giving programs to addressing obesity in children

States & local governments should:

- Work in partnership with their state academic institutions to sponsor and sustain long -term efforts to focus on low-income children and families, given the impact of obesity on state Medicaid budgets.
- Assist others in re-framing the issue of childhood obesity from one of solely personal responsibility to one that acknowledges the role of government in helping to support healthy choices on the parts of individuals.
- Organize and support improvement collaboratives to share knowledge and improvement approaches to bring together teams of practitioners at various levels within a community, across a state, in a region, or nationally.
- Adopt a model benefit to address the prevention, identification and treatment of childhood obesity and sponsor demonstrations within Medicaid and SCHIP. This benefit should include alternative modes of service delivery (e.g., group counseling) and specific supportive services (e.g., case management).
- Through their Medicaid, SCHIP, and state employee programs, not only cover a full range of preventive and interventional obesity- related services, but ensure that reimbursement levels are adequate to spur provider delivery of this benefit.
- Through their Medicaid, SCHIP, and state employee programs, widely publicize the coverage available, including provider education on available coding practices (including which codes to use under which circumstance and in which settings) to support obesity-related services.
- Through their Medicaid, SCHIP, and state employee programs, be innovative in their coverage and reimbursement policies by providing incentives for providing obesity-related services (e.g., the % of children in the practice for whom a BMI is recorded in the medical record) or by making certain school- and community-based activities by physicians eligible for compensation or incentives (e.g., participation in school wellness councils).
- Through their State Medical and Nursing Licensing Boards, mandate that at least two hours of the States' CME/CEU licensing requirements be devoted to obesity, including childhood obesity.²¹
- Direct their Medicaid and SCHIP programs to require improvement initiatives targeted at childhood obesity through their contracts with managed care organizations and external quality review organizations.
- Direct their public health departments to work with child health providers to develop childhood obesity registries to identify and track progress.
- 21 This approach is already used by a number of states for topics such as the prevention of medical errors, domestic violence and HIV/AIDS.

- Through Title V programs at the national and state levels, build on the recent release of the *Childhood Overweight Chartbook* (CAHMI, www.nschdata.org) and target additional SPRANS grant funds to develop and test health care approaches to childhood obesity, especially those focused on eliminating obesity-related disparities; expand its core outcome measures to include the core set of obesity-related measures mentioned above; and expand, in partnership with at least the CDC and AHRQ, its current investment in the dissemination of information on effective approaches to childhood obesity.
- Through Medicaid and SCHIP programs, require reporting by participating health plans on this same core set of measures and themselves report the data to CMS so that a national picture of progress should emerge.
- Through the CDC, and working together with other healthcare stakeholders, should propose a minimum dataset for childhood obesity and ensure that this is consistently included in all existing and appropriate national and state-based data collection efforts.

Federal government & Congress should:

- Make clear to states, through the Federal Centers for Medicare and Medicaid Services (CMS), that obesity-related services and activities (including disease prevention and health promotion) are eligible for Federal Financial Participation (FFP) and at what level (e.g., 50% match or greater). This includes, but is not limited to, reimbursements for clinical services provided in clinical-, school-, or community-based settings, and the development of a data infrastructure to address obesity (e.g., obesity registries).
- Congress should appropriate funding for CMS, and if necessary clarify CMS authority, to fund demonstrations to determine the most effective approaches to addressing the epidemic.
- Employers should evaluate their benefit plan offerings and remove obstacles to the prevention and treatment of childhood overweight, e.g., by considering coverage of dietitian services and specialized treatment programs for children and teens.
- Through the Title V programs, develop a new program to provide health professionals (including physicians, nurses, dentists, etc) with the knowledge, skills and tools needed for working with healthcare providers (including skills in quality improvement) and deploy them to states with the widest disparities in childhood obesity measures.
- Through the Bureau of Primary Health Care, community health centers should build on and be
 encouraged to do so their existing services and community governance structure to prioritize
 prevention activities in their communities and serve as community hubs for improved nutrition and
 physical activity.
- Fund demonstrations by CMS and/or private philanthropies to determine the most effective clinical approaches to addressing the epidemic.
- Support innovation coupled with robust evaluations to identify the most effective approaches to advance a model benefit strategy.
- Target research and demonstrations to identify the most effective approaches for reducing disparities in childhood obesity.
- Support demonstrations by both the public and private sectors (e.g., private philanthropy, health plan community foundations) to develop and implement EHR and PHR platforms that include obesity-related functionalities (e.g., BMI plotting, decision support, links to obesity registries) and evaluate their impact on childhood obesity.

- Spur the development of regional health information organizations (RHIOs) and provide incentives for these state and local efforts to include, including a focus on obesity in all populations, including children.
- Design and demonstrate aa model benefit to address the prevention, identification and treatment of childhood obesity and sponsor demonstrations within the public (i.e., Medicaid and SCHIP) and private sectors. This benefit should include alternative modes of service delivery (e.g., group counseling) and specific supportive services (e.g., case management).
- Target current efforts to spur the adoption of EHR and PHR applications to providers and communities with high rates of childhood obesity.
- Through the Department of Health and Human Services,²² develop a plan and report annually on childhood obesity-related research, demonstrations, and key indicators of national and state progress in addressing the epidemic. Public and private funders should prioritize specific areas for research and demonstrations, including:
 - addressing the gaps in evidence identified in the Clinical Recommendations & USPSTF report on childhood obesity; and
 - identifying effective strategies to translate research into practice and promote clinician/system adoption of evidence as it expands from "best available" to "best possible".
- Through the Title V programs at the national and state levels, build on the recent release of the *Childhood Overweight Chartbook* (CAHMI, www.nschdata.org) and target additional SPRANS grant funds to developing and testing health care approaches to childhood obesity, especially those focused on eliminating obesity-related disparities; expand its core outcome measures to include the core set of obesity-related measures mentioned above; and expand, in partnership with, at least, the CDC and AHRQ, its current investment in the dissemination of information on effective approaches to childhood obesity.
- Ensure Medicaid and SCHIP programs require reporting by participating health plans on this same core set of measures and that —they themselves— report the data to CMS so that a national picture of progress should emerge.
- Through the CDC and, working together with other healthcare stakeholders, propose a minimum dataset for childhood obesity and ensure that this is consistently included in all existing and appropriate national and state-based data collection efforts.

Philanthropy should:

- Support innovation coupled with robust evaluations to identify the most effective approaches to advance a model benefit strategy
- Design and support aa model benefit to address the prevention, identification and treatment of childhood obesity and sponsor demonstrations within the public (i.e., Medicaid and SCHIP) and private sectors. This benefit should include alternative modes of service delivery (e.g., group counseling) and specific supportive services (e.g., case management).
- Support the development of champions to work in low-income and minority communities.
- Ensure research and demonstrations are targeted to identify the most effective approaches for reducing disparities in childhood obesity.
- 22 Including the Agency for Healthcare Research and Quality, the Centers for Disease Control and Prevention, the Health Resources and Services Administration, the National Institutes of Health, and the Centers for Medicare and Medicaid Services.

- Support demonstrations by both the public and private sectors (e.g., private philanthropy, health plan community foundations) to develop and implement EHR and PHR platforms that include obesityrelated functionalities (e.g., BMI plotting, decision support, links to obesity registries) and evaluate their impact on childhood obesity.
- Prioritize specific areas for research and demonstrations, including:
 - addressing the gaps in evidence identified in the Clinical Recommendations & USPSTF report on childhood obesity; and
 - identifying effective strategies to translate research into practice and promote clinician/system adoption of evidence as it expands from "best available" to "best possible."

Appendix A: Institute of Medicine Reports

Summary of Recommendations from the Institute of Medicine's *Preventing Childhood Obesity: Health in the Balance Report, 2005*

1: National Priority

Government at all levels should provide coordinated leadership for the prevention of obesity in children and youth. The President should request that the Secretary of HHS convene a high-level task force to ensure coordinated budgets, policies, and program requirements and to establish effective interdepartmental collaboration and priorities for action. Increased levels and sustained commitment of federal and state funds and resources are needed.

2: Industry

Industry should make obesity prevention in children and youth a priority by developing and promoting products, opportunities, and information that will encourage healthful eating behaviors and regular physical activity.

3: Nutritional Labeling

Nutritional labeling should be clear and useful so that parents and youth can make informed product comparisons and decisions to achieve and maintain energy balance at a healthy weight.

4: Advertising and Marketing

Industry should develop and strictly adhere to marketing and advertising guidelines that minimize the risk of obesity in children and youth.

5: Multimedia and Public Relations Campaign

HHS should develop and evaluate a long term national multimedia and public relations campaign focused on obesity prevention in children and youth.

6: Community Programs

Local governments, public health agencies, schools, and community organizations should collaboratively develop and promote programs that encourage healthful eating behaviors and regular physical activity, particularly for populations at high risk of childhood obesity. Community coalitions should be formed to facilitate and promote cross-cutting programs and community-wide efforts.

7: Built Environment

Local governments, private developers, and community groups should expand opportunities for physical activity, including recreational facilities, parks, playgrounds, sidewalks, bike paths, routes for walking or bicycling to school, and safe streets and neighborhoods, especially for populations at high- risk of childhood obesity.

8: Health Care

Pediatricians, family physicians, nurses, and other clinicians should engage in the prevention of childhood obesity. Health care professional organizations, insurers, and accrediting groups should support individual and population-based obesity prevention efforts.

9: Schools

Schools should provide a consistent environment that is conducive to healthful eating behaviors and regular physical activity.

10: Home

Parents should promote healthful eating behaviors and regular physical activity for their children.

Institute of Medicine Childhood Obesity: How Do We Measure Up?

RECOMMENDATIONS, 2005

1. Lead and Commit to Childhood Obesity Prevention

Government, industry, communities, schools, and families should demonstrate leadership and commitment by mobilizing the resources required to identify, implement, evaluate, and disseminate effective policies and interventions that support childhood obesity prevention goals.

2. Evaluate Policies and Programs

Policy makers, program planners, program implementers, and other interested stakeholders—within and across relevant sectors—should evaluate all childhood obesity prevention efforts, strengthen the evaluation capacity, and develop quality interventions that take into account diverse perspectives, that use culturally relevant approaches, and that meet the needs of diverse populations and contexts.

3. Monitor Progress

Government, industry, communities, schools, and families should expand or develop relevant surveillance and monitoring systems and, as applicable, should engage in research to examine the impact of childhood obesity prevention policies, interventions, and actions on relevant outcomes, paying particular attention to the unique needs of diverse groups and high-risk populations.

4. Disseminate Promising Practices

Government, industry, communities, schools, and families should foster information-sharing activities and disseminate evaluation and research findings through diverse communication channels and media to actively promote the use and scaling up of effective childhood obesity prevention policies and interventions.

Appendix B: List of Organizations

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Abbreviation	Organization		
AHRQ	Agency for Healthcare Research and Quality		
AHIP	America's Health Insurance Plans		
AAFP	American Association of Family Physicians		
ABP	American Board of Pediatrics		
АНА	American Hospital Association		
АРНА	American Public Health Association		
ASTHO	Association of State and Territorial Health Officers		
CMS	Centers for Medicare and Medicaid Services		
COAN	Childhood Obesity Action Network		
DHHS	Department of Health and Human Services (Federal)		
IOM	Institute of Medicine		
ІСАНО	Joint Commission for Accreditation of Health Care Organizations		
NASHP	National Academy for State Health Policy		
NASBHC	National Assembly on School-Based Health Care		
NACHRI	National Association of Children's Hospitals and Related Institutions		
NACCHO	National Association of County and City Health Officials		
NAPNAP	National Association of Pediatric Nurse Practitioners		
NASN	National Association of School Nurses		
NCCDPHP	National Center for Chronic Disease Prevention and Health Promotion		
NCQA	National Committee for Quality Assurance		
NCSL	National Conference of State Legislatures		
NGA	National Governors Association		
NICHQ	National Initiative for Children's Healthcare Quality		
NIHCM	National Institute for Health Care Management		
NIH	National Institutes of Health		
NAASO	North American Association for the Study of Obesity		
NASPGHAN	North American Society for Pediatric Gastroenterology, Hepatology and Nutrition		
SPN	Society of Pediatric Nurses		
SCHIP	State Child Health Insurance Program		
TFAH	Trust for America's Health		
USPSTF	United States Preventive Services Task Force		

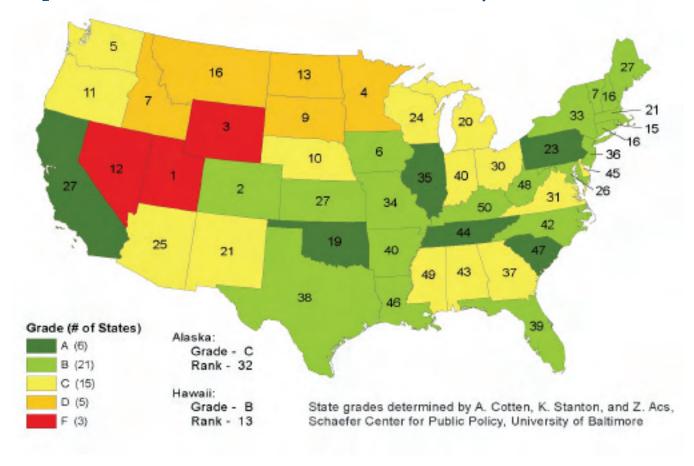
Appendix C: Policy Advisory Sub-Committee

NICHQ's Childhood Obesity Action Network Policy Sub-Committee							
Name	Title	Organization					
Bettina M. Beech, DrPH, MPH§	Associate Professor & Associate Director of Health Disparities Research	Vanderbilt University School of Medicine					
Debbie Chang, MPH	Senior Vice President & Executive Director	Nemours, Division of Health and Prevention Services					
William Cochran, MD, FAAP*	Vice Chairman, Janet Weis Children's Hospital	AAP Liaison; Department of Pediatric Gastroenterology and Nutrition at Geisinger Health Systems					
Barbara Dennison, MD FAAP	Director, Bureau of Health Risk Reduction, Division of Chronic Disease Prevention and Adult Health	New York State Health Department					
Senator Dan Foster, MD*	West Virginia State Senator (D - Kanawha)	West Virginia State Legislature					
Elizabeth Goodman, MD§ (Co-Chair)	Director, Child and Adolescent Obesity Program	Tufts New England Medical Center and the Floating Hospital for Children					
LuAnn Heinen, MPP	Director, Institute on the Costs and Health Effects of Obesity	National Business Group on Health					
Jessie Kimbrough- Sugick, MD§	Aetna/DSC Healthcare Disparities Fellow	The Disparities Solutions Center, Massachusetts General Hospital					
Madhu Mathur, M.D., MPH§	Director, Founding Member	Goldstein Children's Health Center, Stamford Hospital's Regional Medical Homes Support Center, Stamford Hospital's Childhood Obesity Task Force					
Fernando Mendoza, MD. MPH*	Professor & Chief, Division of Gen. Pediatrics and Associate Dean of Minority Advising and Programs; Board Member of the Pan American Health Education Foundation	Stanford University School of Medicine					
Jean Moody- Williams, RN, MPP	Division Director	Division of Quality, Evaluation, and Health Outcomes, Centers for Medicare and Medicaid Services					
Robert (Bob) Murray, MD	Director / Professor of Pediatrics	Columbus Children's Hospital's Center for Healthy Weight and Nutrition / The Ohio State University College of Medicine					
Kristin Saarlas/Dave Ross	Director	Public Health Informatics Institute					
Lisa Simpson, MB, BCh, MPH, FAAP (Chair)	Professor & Director, Child Policy Research Center	Cincinnati Children's Hospital Medical Center					
Sylvia Stevens- Edouard, MS	Senior Director, Children's Health Initiative, Medical Innovation & Leadership Division	Blue Cross-Blue Shield of Massachusetts					
Celeste Torio, PhD, MPH*	Program Officer, Research and Evaluation	The Robert Wood Johnson Foundation					
Joe Thompson, MD, MPH	Surgeon General, State of Arkansas Director, Arkansas Center for Health Improvement	Arkansas Department of Health and Human Services					
Maria Trent, M.D., MPH§	Assistant Professor of Pediatrics	John's Hopkins Children's Center at John's Hopkins Hospital/School of Medicine					
Gail Woodward- Lopez, MPH, RD§	Associate Director of the Center for Weight & Health	Center for Weight and Health University of California at Berkeley					

 $^{\ast}~$ These members joined the policy sub-committee in 2007

§ These members are part of the newly formed disparities sub-group and participated in the final review and comment of this report. All other members have been with the sub-committee since its initial creation in 2006.

Appendix D: State Overweight Prevalence Ranking and Report Card Grade for Childhood Obesity-related Activities



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