Reducing Obesity Risks During Childhood: The Role of Public and Private Health Insurance

Sara Rosenbaum
Sara Wilensky
Marisa Cox
D. Brad Wright

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Introduction

In a widely publicized decision issued in 2004, the United States Department of Health and Human Services removed language from the Medicare Coverage Issues Manual which stated that obesity is not an illness,[1] a pronouncement that paves the way for Medicare coverage of evidence-based obesity treatments. This determination by HHS also has important implications for public and private insurance coverage of health care services and interventions that have the potential to reduce the risk of lifelong obesity in children.

This Report assesses the implications of the 2004 HHS obesity ruling into the context of public and private health insurance for children. It begins with an overview of what is known about obesity risk in childhood, as well as its short-term and long-term health consequences and then reviews the evidence of effective health interventions for children at risk. The Report then considers the implications of the 2004 decision for private health insurance coverage for children, followed by a more extended discussion of its implications for children covered under Medicaid and the State Children's Health Insurance Program (SCHIP). The Report concludes with a discussion of strategies for engaging both public and private insurers in a systematic effort to increase investment in preventive health services for children at risk of obesity.

[1] U.S. Department of Health and Human Services. HHS Announces Revised Medicare Obesity Coverage Policy. News Release, July 15, 2004.Available at. http://www.hhs.gov/news/press/2004pres/20040715.html

The Prevalence and Health Implications of Obesity Risk in Children

In adults, health is associated with the absence of illness and disabling conditions. In the case of children however, the concept of health is broader than simply not being sick. Fortunately most children are healthy and face a low likelihood of serious illness, disability, and risk. At the same time however, childhood is a time of intense and rapid growth and development; for this reason, any consideration of child health interventions necessarily must focus on medical and health conditions that even at an early stage, can affect the proper development of children.[2]

Excess weight is a condition associated with serious short-term and long-term risks for child health and development. In the short run, children who are overweight experience a host of physical and emotional problems as a result of being overweight; in the long run, the evidence suggests that many of the seeds of lifelong adult obesity may be sewn during childhood, and with adult obesity come the significant risk of sickness, disability, and death. The impact of obesity is thus evident in both its long-term medical consequences, as well as in its more immediate physical and mental impact during childhood and adolescence.

While the concept of obesity risk is an important health consideration during childhood, public health experts focus on children who are overweight. Indeed, there is no medically recognized definition of when a child is obese. A modified version of the Body Mass Index (BMI), a weight-for-height index used to identify obesity in adults, also is used to measure weight development in children. But while a BMI score is used to measure obesity in persons

[2] Sheila Leatherman and Douglas McCarthy, Quality of Health Care for Children and Adolescents, A Chartbook. Commonwealth Fund, New York, NY; 2004. Available at http://www.cmwf.org/publications/publications_show.htm?doc_id=225395.

ages 20 and older,[3] the BMI index for children and adolescents is a sex- and age-specific index linked to Centers for Disease Control and Prevention (CDC) childhood growth charts.[4] The scale for children and adolescents is based on percentiles: children whose size places them under 5th percentile for all children of their age and sex are considered underweight, while children falling between 85th and 95th percentiles are considered at-risk for being overweight. Children above the 95th percentile are considered overweight.[5] Unlike the case with adults, the scale for children and adolescents does not distinguish between overweight and obese.[6]

This approach to evaluating children's weight carries important implications for shaping pediatric preventive health services. Because the technical concept of obesity does not specifically exist in a pediatric context, the focus necessarily must be on the presence or risk of overweight, especially given the association between overweight during childhood and obesity during adulthood. In other words, in children, unlike adults, the triggering point for a health intervention would be the presence of a weight risk factor, not only morbid obesity, the most extreme version of the condition.

The predictive power of childhood overweight for adult obesity is considerable. Overweight children are more likely to become overweight or obese adults. Furthermore, if overweight is allowed to persist untreated throughout childhood, the risk of adult obesity grows:

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[3] Centers for Disease Control. BMI -Body Mass Index : BMI For Adults. Available at http://www.cdc.gov/nccdphp/dnpa/bmi/bmi-adult.htm . For adults, the BMI score ranges from under 18.5 which indicates one is underweight to 30 and above which indicates one is obese.

[4] Office of the Surgeon General, U.S. Department of Health and Human Services. "The Surgeon General's Call to Action to Prevent Disease and Decrease Overweight and Obesity." 2001. [Surgeon General's Call]

[5] Centers for Disease Control. BMI -Body Mass Index: BMI for Children and Teens. Available at http://www.cdc.gov/nccdphp/dnpa/bmi/bmi-for-age.htm

[6] Ogden, L. et al. "Prevalence and Trends in Overweight Among U.S. Children and Adolescents, 1999-2000." JAMA Vol. 288 No. 14. October 9, 2002.

an overweight 4-year-old has a 20 percent chance of becoming an obese adult, while an overweight adolescent has an 80 percent chance of doing so.[7]

However, the reasons to intervene with preventive health services during childhood are not limited to the long-term adult consequences of childhood overweight. A child's excess weight is linked to number of serious conditions and diseases whose onset can begin in childhood.[8] These conditions include Type 2 diabetes, cardiovascular disease, certain cancers, depression, early maturation, sleep apnea, asthma, and orthopedic problems.[9]

In addition, overweight carries important emotional health risks in children and adolescents. Children who are overweight often report stigma and social discrimination as the most immediate consequence, which in turn is linked to poor self-esteem and depression.[10] Self-esteem problems are the most significant among children who believe they are responsible for being overweight, and they view weight as the cause of a lack of friends and exclusion from games and sports activities[11]

Weight problems in children are increasing, in parallel with the rapid growth seen in the incidence in adult overweight and obesity. Figure 1 shows that since 1970, the prevalence of childhood overweight has increased exponentially. From a level of 4 percent during the 1963-1970 time-period, childhood overweight rates have quadrupled, now affecting 16 percent of all children ages 6 to 11. Similar dramatic growth can be seen in the case of children ages 12-19.

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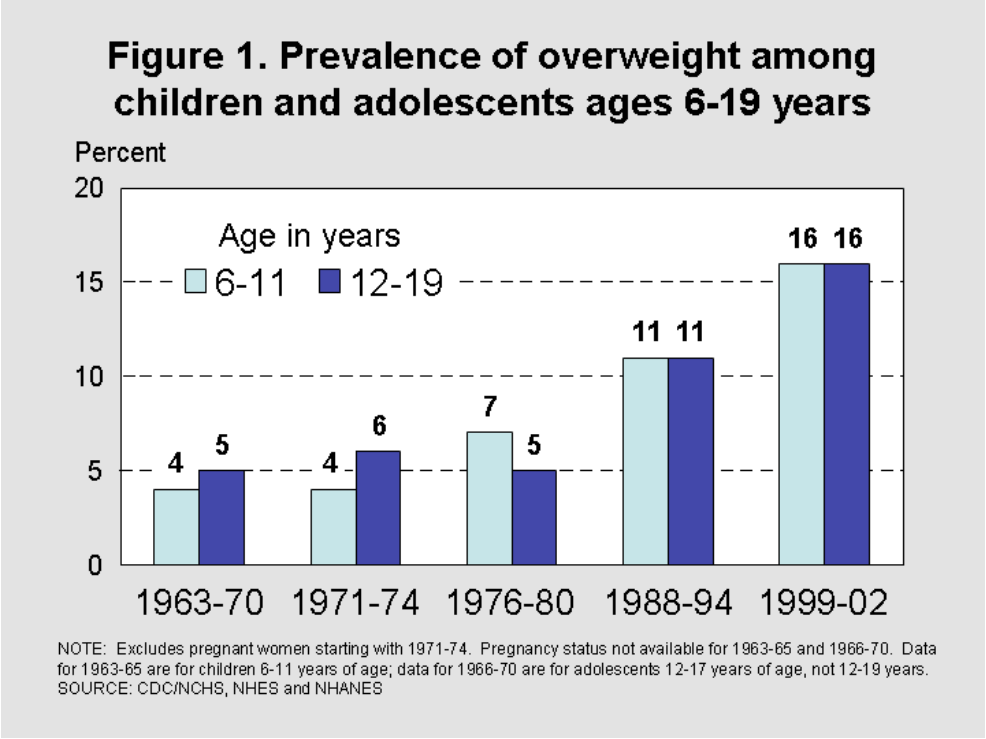
[7] American Academy of Pediatrics. Prevention of Pediatric Overweight and Obesity. *Pediatrics* August 2004; 112(2): 424-430. [AAP, Prevention of Pediatric Overweight and Obesity]

[8] Surgeon General's Call at 8, supra.

[9] St-Onge, M. et al. "Changes in childhood food consumption patterns: a cause for concern in light of increasing body weights." American Journal of Clinical Nutrition. Vol. 78:1068-73. American Society for Clinical Nutrition 2003.

[10] United States Department of Health and Human Services. "The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity." 2001.

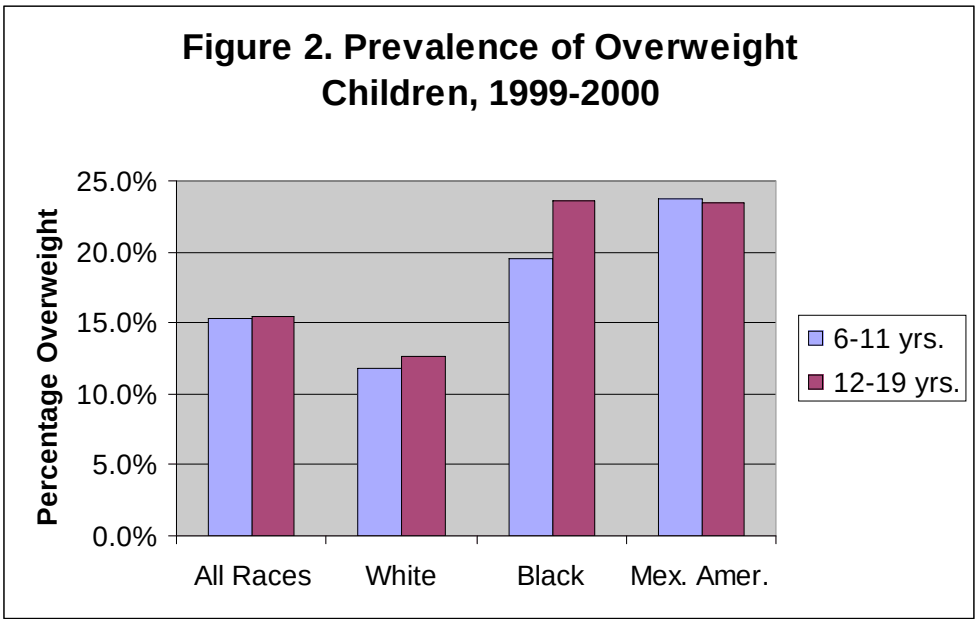
[11] Puhl, R. and Brownell, K. "Bias, Discrimination, and Obesity." Obesity Research Vol. 9 No. 12. Dec. 2001.



Although studies of obesity risk in children are more limited, the risk of obesity appears to be of particular concern among children who are members of racial and ethnic minorities or who come from lower income families.[12] While the overall prevalence of obesity risk in children has grown rapidly overall, the rate of growth has been particularly high for African American girls between six and 11 years of age.[13] Health and nutrition studies also show elevated risk rates among African American and Mexican American boys. Furthermore, in the 38 states that reported data to the CDC in 2003, 14.3 percent of low-income children ages 2-5 were overweight, and obesity rates among low-income adolescents was about twice as high as those from middle and high

[12] Surgeon General's Call at 11, supra.
[13] Strategic Plan for NIH Obesity Research: A Report of the NIH Obesity Research Task Force." U.S. Department of Health and Human Services, National Institutes of Health. NIH Publication No. 04-5493. Bethesda, MD; August 2004; pages 1 & 10.

income homes. [14] In 31 reporting states in 2003, 11 percent of all high school students were overweight and another 14.5 percent were at-risk for becoming overweight.[15]



Source: National Health and Nutrition Examination Survey 1999-2000, reported in Ogden, et al, Prevalence and trends in overweight among US children and adolescents, 1999-2000. *JAMA* 2002; 288(14): 1728-1732.

The increased proportion of children who are overweight has been linked to the interaction of the environment with social, economic, and behavioral factors as well as genetic susceptibility to obesity risk, since obesity tends to run in families. Genetic conditions that may increase obesity risk include Prader-Willi syndrome, Bardet-Biedl syndrome, and Cohen syndrome. [16]

Marked sedentariness among Americans generally is thought to be an underlying factor in causing overweight in children, especially in the case of children from poorer backgrounds

[14] Trust for America's Health at 11; Healthy People 2010: Leading Health Indicators. Available at http://www.healthypoeple.gov/document/html/uih/uih_4.htm
[15] Trust for America's Health. F as in Fat: How obesity policies are failing America. Washington DC; October 2004.
[16] AAP, Prevention of Pediatric Overweight and Obesity, supra.

whose neighborhoods and school may inhibit physical outdoor recreation.[17] While family income appears to have some relationship to obesity risk in children, the study results are not consistent and there is relatively little research specifically examining the link between weight and children by socioeconomic status. [18] Heavy advertising of unhealthy foods aimed at children is also thought to play a role.[19]

In addition to contributing to the physical and emotional toll of adult obesity, allowing overweight in children to go untreated may contribute to the enormous costs associated with adult obesity[20] and also may carry financial consequences of its own. Medicare and Medicaid financed about half of the nearly $80 billion spent in 1998 on obesity related medical expenditures;[21] adjusted for inflation, the Medicare/ Medicaid share of obesity related costs approached $130 billion in 2004.[22] At the state level, medical costs related to obesity were projected to reach $75 billion in 2003, with $21 billion financed through state Medicaid expenditures.[23] If medical costs related to childhood overweight are considered alone, studies suggest that expenditures quadrupled over the 1979-1999 time period.[24]

The notion of early intervention in the case of children, before indicators of an emerging problem degenerate into a serious and measurable adult medical condition, is hardly limited to concerns about childhood overweight. Indeed, early intervention to ameliorate developing health

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[17] AAP, Prevention of Pediatric Overweight and Obesity, supra; U.S. Department of Health and Human Services. *Healthy People 2010*. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000.
[18] AAP, Prevention of Pediatric Overweight and Obesity, supra **;** Surgeon General's Call at 13, supra.
[19] AAP, Prevention of Pediatric Overweight and Obesity, supra.
[20] Thorpe K, Florence C, Howard D, Joski P. The Impact of Obesity on Rising Medical Spending. *Health Affairs* Oct. 2004 (Web Exclusive): 480-486.
[21] National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. "Overweight and Obesity: Economic Consequences." Available at www.cdc.gov/nccdphp/dnpa/obesity/economic_consequences.htm.
[22] Institute of Medicine of the National Academies. "Overview of the IOM's Childhood Obesity Prevention Study." 2004. Drawn from Preventing Childhood Obesity: Health in the Balance. Institute of Medicine 2005.
[23] Trust for America's Health at 15, supra.
[24] Id.

conditions and promote health is a hallmark of high quality pediatric health care.[25] Experts note that children are not little adults; their health is expressed and measured in a unique way, and to be of good quality, health care services need to address not merely diagnosed acute illnesses and conditions, but also health conditions that pose risks to proper child growth and development.[26] Thus, with interventions aimed at addressing weight problems in childhood as with pediatric interventions generally, quality health care would incorporate the earliest possible identification of health conditions as well as health and supportive interventions whose aim is to mitigating their effects.

[25] Neal Halfon, Michael Regalado, Kathryn Taffe McLearn, and Alice Kuo, Building a Bride From Birth to School: Improving Developmental and Behavioral Services for Young Children (Commonwealth Fund, NY, NY 2003). Available at www. http://www.cmwf.org/usr_doc/halfon_bridge_564.pdf

[26] Id.; Leatherman & McCarthy, supra;

The Effectiveness of Health Interventions for Children At Risk

As with health services research generally, research relating to the effectiveness of early interventions on childhood obesity risk is limited. But a number of studies suggest that providing anticipatory guidance and preventive health interventions in the case of children at risk is more successful than delaying treatment until after the onset of obesity.[27] The American Academy of Pediatrics Committee on Obesity Evaluation and Treatment has issued a series of recommendations related to preventive health services for at risk children.[28] These recommendations are based on clinical consensus regarding health care for children and adolescents,[29] and they reflect a belief on the part of experts that obesity risk in children is a symptom of a chronic, lifelong medical condition whose effective treatment involves a range of health and nutrition interventions, links to other key services, and continuous monitoring and reinforcement.

Key elements of the model intervention recommended by the AAP are shown in Figure 3. The foundation of the intervention is a routine assessment of weight in accordance with CDC guidelines as part of well-child care. This periodic routine weight assessment would be supplemented by a more intensive, integrated set of diagnostic and ongoing preventive treatment interventions in the case of children who are found upon initial assessment to be at risk.

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[27] Barlow, S. & Dietz, W. "Obesity Evaluation and Treatment: Expert Committee Recommendations." Pediatrics Vol. 102, No. 3. Sept. 1998; Gordon-Larsen, P. et. al. "Five-year obesity incidence in the transition period between adolescence and adulthood: the National Longitudinal Study of Adolescent Health." American Journal of Clinical Nutrition 80:569-75. American Society for Clinical Nutrition. 2004.; The Institute of Medicine. "The Health-Care Sector and Providers Can Play a Role in Preventing Childhood Obesity." Fact Sheet. September 2004. Drawn from Preventing Childhood Obesity: Health in the Balance, 2005. ; NIH Obesity Research Task Force. "Strategic Plan for NIH Obesity Research."

[28] Barlow & Dietz, supra.

[29] Id.

Figure 3: Recommended Preventive Health Interventions Addressing Weight Problems in Children

1. Comprehensive assessments as part of routine preventive health care (all children)

- BMI tool for a clinical assessment of obesity, using the 95th percentile as the appropriate cut-off for initiating an in-depth medical assessment for follow-up diagnostic and ongoing intervention purposes.

2. Anticipatory Guidance (all children)

- Counseling for all families on weight monitoring in children, diet and nutrition, using objective and non-accusatory language.

3. Further Assessment and Intervention for Children with Identified Risk

- Secondary assessment, treatment and case management interventions for children whose examinations indicate a risk of obesity (BMI between 85th and 95th percentiles or children with rapid weight changes over time).
- An in-depth medical assessment that is structured to: identify exogenous causes of obesity (physical and mental); assess the degree of overweight and identify existing complications from obesity; assess the need for specialty referrals; evaluate the child's and family's readiness to make change; establish a dietary and physical activity history.
- Therapy with established goals in the areas of health behavior (eating and physical activity), medical goals to improve and resolve complications, and weight goals.
- Training in parenting skills linked to changing child and family behavior
- Links to sources of increased physical activity.
- A reduction in calorie intake and nutritional evaluation and counseling
- Counseling on cessation of tobacco use.
- Regular and ongoing assessments to measure progress and challenges

Source: Barlow S, Dietz W. Obesity Evaluation and Treatment: Expert Committee Recommendation. Pediatrics; Sept. 1998 (102).

In sum, although much still is not known about the causes, consequences, and effectiveness of treatments for obesity risk in children, the expert clinical consensus points to a

recommended set of interventions. These interventions consist of early identification of risk, further in-depth assessment and follow-up where risks are found, and health interventions aimed at addressing the immediate and related physical and mental health problems associated with obesity risk in children, monitoring for longer term risk, altering the conditions that elevate risk including changes in diet and exercise, and management and referral for related services, in particular, sources of organizes physical activity. This set of services can be thought of as an "obesity risk prevention" intervention for children at risk for long-term adult obesity, which addresses both the short-term health conditions associated with childhood weight problems as well as the long-term risk for adult obesity.

In this regard, the HHS reclassification of obesity from lifestyle behavior to medical condition underscores the importance of this health intervention. Because HHS removed language from the Medicare Coverage Issues Manual which stated that obesity is not an illness, health services for children determined to be at risk for obesity would appear to be intrinsic to quality health care, especially in the case of children who as a result of broader disparities in health and health care, stand to be particularly affected by risks for any single condition. In other words, because lower income children experience broader health risks generally, the risks associated with any single condition become magnified, and interventions early in order to control these risks become more medically justified. [30]

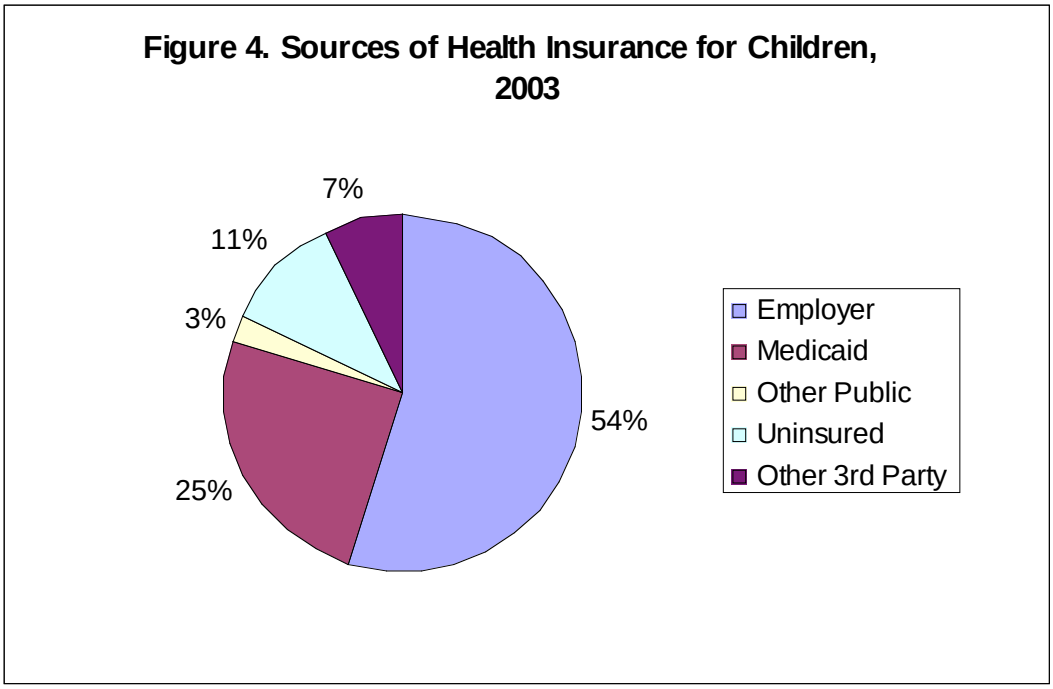
[30] Barbara Starfield, Child and adolescent health status measures *The Future of Children: U.S. Health Care for Children* 1992; 2[2]: 25-40.

The Role of Public and Private Health Insurance in Financing Comprehensive Preventive Care for Children at Risk of Obesity

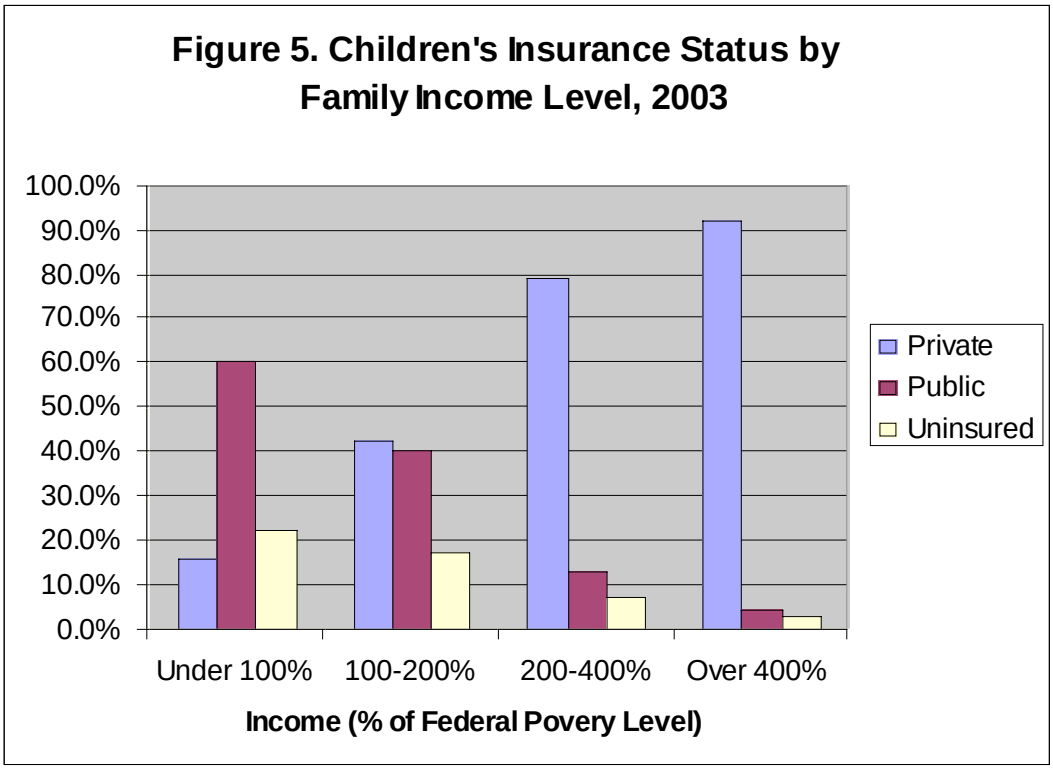
In the U.S. a discussion of health insurance is intrinsic to any effort to improve access to health care in ways that reduce health risks and optimize health. This is because of the strong association between health insurance coverage and access to health care, whether for preventive services, services to treat acute health conditions, or, as in the case of children at risk for obesity, care and services needed to address conditions which, if left untreated, can evolve into permanent and serious medical problems.[31] Because children are in good health as a group, the cost of their health care is inexpensive compared to the cost of caring for an adult population. At the same time, children's use of health care shows a high degree of sensitivity to the presence of health insurance, even where preventive services are concerned. For example**,** uninsured children are three times as likely as children with Medicaid to coverage, to have no regular source of care, a measure of health care access that correlates to access to preventive care.[32]

Where health insurance is concerned, discussions of options for reform generally focus on two areas of coverage: employer-sponsored health insurance and Medicaid/SCHIP. Figures 4-6 below show children by age, race and source of insurance coverage. These figures underscore the extent to which lower income children (who are disproportionately members of minority groups) depend on public health insurance.

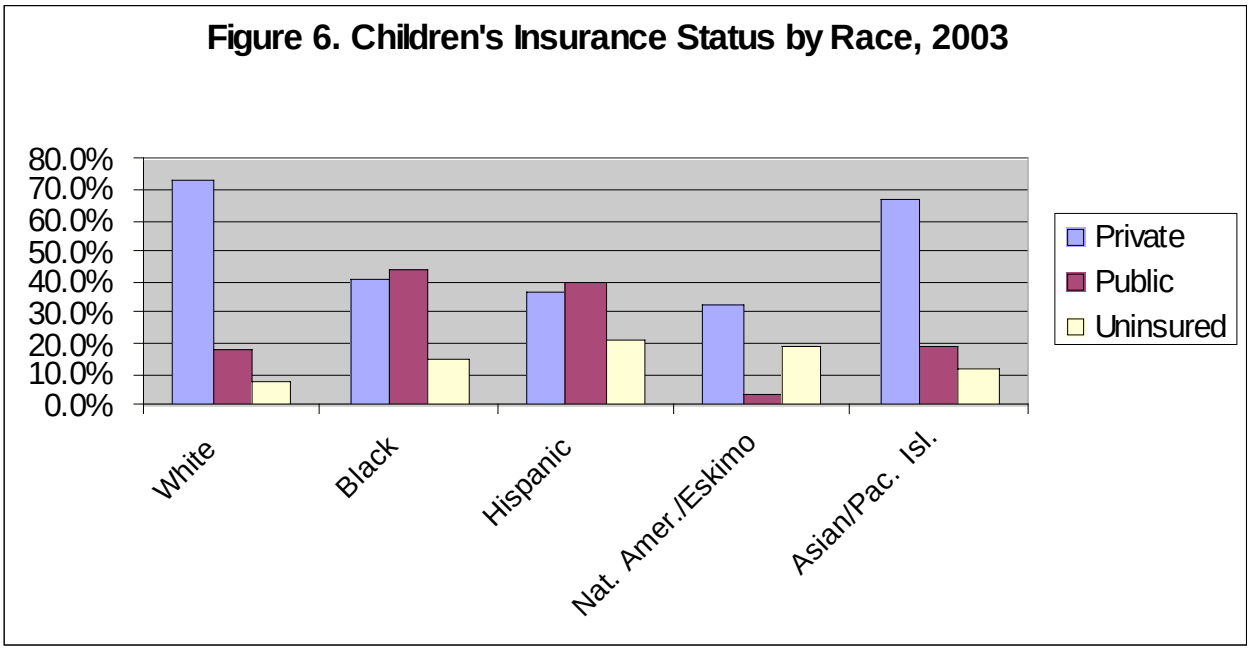
[31] Institute of Medicine. *Coverage Matters: Insurance and Health Care.* National Academy Press: Washington DC. 2001.
[32] Id. at 30.



Source: EBRI Issue Brief No. 276. Sources of Health Insurance and Characteristics of the Uninsured: Analysis of the March 2004 Current Population Survey (Dec. 2004)



Source: Kaiser Commission on Medicaid and the Uninsured. Health Insurance Coverage in America, 2003 Update (Nov. 2004).



Source: Kaiser Commission on Medicaid and the Uninsured. Health Insurance Coverage in America, 2003 Update (Nov. 2004).

As these Figures show, while both private and public insurance play essential roles in child health financing, Medicaid and SCHIP are particularly important for lower income children and children who are members of racial and ethnic minority groups. To the extent that obesity risk shows up with greater prevalence among lower income and minority children, their families' more diminished resources elevate the importance of comprehensive health interventions and family supports.

Financing Obesity Risk Prevention Services for Children Through Private Health Insurance and Employee Health Benefit Plans

Evidence from studies and reports on private health insurance and obesity suggest that a number of private insurers now extend some level of coverage in the case of diagnosed adult obesity.[33] At the same time, there is little evidence at this point suggesting explicit insurer coverage of comprehensive obesity prevention interventions for children identified as at risk. For several reasons, the lack of such evidence is not surprising. First, some of the procedures intrinsic to the treatment of obesity risk in children may already be covered, in particular, routine health examinations, body mass measurement, and basic counseling for children. It will take more concerted efforts to reach children with known risks through more intensive interventions before the gap between practice and payment becomes fully clear.

Second, reclassification of obesity happened only recently. As with other cases involving the evolution of information about health conditions along with evidence of effective health interventions, knowledge diffuses slowly throughout the professional world, triggering changes in health care financing only slowly. In other words, it takes a while for evidence to alter the standard of health care, and for that alteration, in turn, to begin to affect the nature and structure

[33] Simon and Carla Rivera. Revised policy treats obesity under Medicare. *Los Angeles Times*. July 16, 2004. Available at http://www.writing.ucsb.edu/faculty/tingle/courses/W109W/Obesity%20policy.htm; Lisa Greene. For the obese, hope for health coverage at last. *St. Petersburg Times*. August 4, 2004. Available at http://www.sptimes.com/2004/08/04/news_pf/Worldandnation/For_the_obese_hope_f.shtml; Jen Haberkorn. Obesity's new status will not affect insurers. *The Washington Times*. July 16, 2004. Available at http://www.washingtontimes.com/functions/print.php?StoryID=20040715-104801-4188r; Edward Stern. Medicare may cover treatment for obesity. August/September 2004. Available at http://www.masspsy.com/columnists/stern_0408_9.htm; Rob Stein. N.C. Health insurer to offer coverage for weight problems. *The Washington Post*. October 13, 2004. Available at http://www.washingtonpost.com/ac2/wp-dyn/A28015-2004Oct12?language=printer; Jeff Sonderman. Blue Cross to cover gastric bypass. *The Scranton Times*. December 14, 2004. Available at http://www.scrantontimes.com/site/news.cfm?newsid=13549825&BRD=2185&PAG=461&dept_id=415898&rfi=6; Rick Cornejo. Cigna to tackle obesity with new programs. *BestWire*. February 4, 2005. Available at http://www.insurancenewsnet.com/print.asp?a=top_lh&lnid=256025540; About First Health. Available at http://www.firsthealth.com/about/index.html; California Healthline. CMS Committee to consider Medicare coverage

of health insurance coverage. Insurers and health care companies revise and update their benefit package and general coverage terms only periodically, and only as families and health professionals press for financing of more rigorous, evidence-based health interventions might insurers consider altering their policies.

Third, insurance covers some, but not a great deal of, preventive interventions. Common preventive coverage among insurers as a group includes routine "well-baby" and "well-child" examinations during which an initial assessment of possible obesity risk might be made, but more rigorous examination and longer term interventions to prevent onset of an adult condition and associated physical and mental health problems during childhood would not be common. Commercial health insurance focuses on protecting policyholders and plan members against the risk of high medical costs associated with diagnosed, acute medical conditions and disabilities, not what they consider to be routine preventive health outlays for conditions that pose long term elevated health risks. Indeed, even in the case of adults with diagnosed morbid obesity, the insurance response has been sporadic, and a number of insurers appear to be resistant to even unquestionably high cost and high-technology medical interventions (e.g., bariatric surgery for adults with morbid obesity and secondary health sequelae, as well as a long and documented record of weight control failure).[34]

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of bariatric surgery. Available at http://www.californiahealthline.org/index.cfm?Action=dspItem&itemID=107193; Vanessa Fuhrmans. Insurer tries to curb costs of obesity. *The Wall Street Journal.* February 2, 2005.

[34] Freudenheim; Christine Wiebe. Business of Medicine Briefing: November 1, 2004. Available at http://www.medscape.com/viewarticle/492363_print; Gastric bypass coverage dropped by insurer. Available at http://www.cnn.com/2004/HEALTH/03/03/gastric.bypass.ap ; Debra Pressey. Anti-fat surgery: Weighty dilemma some insurers pulled away from covering the RNY gastric bypass procedure. *The News-Gazette*. August 22, 2004. Available at http://clos.net/lib/insurers_stop_paying_for_rny_gastric_bypass.htm; Tresa Baldas. Insurers trim obesity policies. *The National Law Journal*. January 26, 2005. Available at http://www.law.com/jsp/article.jsp?id=1106573724122; Patrick L. Thimangu. Risk, cost affect coverage of gastric bypass procedures. *St. Louis Business Journal*. December 31, 2004. Available at http://www.bizjournals.com/stlouis/stories/2005/01/03/focus5.html?=printable; Industry must increase efforts to fight obesity, says Swiss Re. Available at http://www.uklifeinsurance.uk.com/Industrymust-increase-efforts-to-fight-obesity-says-Swiss-Re [2/8/05].

A recent report by the National Institute for Health Care Management profiled the obesity treatment measures from a cross section of 11 large health plans.[35] Their findings support the conclusion that health insurers that have obesity related programs are focused more on adult obesity than childhood obesity. Of the 11 health plans surveyed, all had some weight loss tools available to adults, ranging from informational resources to prescription drug and bariatric surgery coverage. On the other hand, the study found that only one company, Kaiser Permanente, had a full child and adolescent weight management program currently in place. In addition, one other plan, Affinity Health Plan, had a pilot program underway that is limited to children who are already obese, and two Blue Cross Blue Shield plans, Empire and North Carolina, are developing childhood obesity programs to begin in 2005 or 2006.[36] While most plans do not have childhood obesity prevention and treatment coverage as part of their benefit package, seven plans supported some type of community-based program such as a school based educational program, grants to increase physical activity among community children, and research studies. Four plans have also created clinician toolkits and Continuing Medical Education programs for providers to increase awareness of obesity prevention and treatment standards.

Blue Cross and Blue Shield of North Carolina (NC BCBS) and Kaiser Permanente are leaders in the field of obesity prevention programs among private insurers. NC BCBS has modified its standard offering to include what it considers to be a comprehensive package of

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[35] National Institute for Health Care Management. Health Plans Emerging as Pragmatic Partners in Fight Against Obesity. April 2005. Available at http://www.nihcm.org/ObesityReport.pdf

[36] Id.; June 20, 2006 telephone conversation with Cindy Brenneman, Director of Quality Improvement, North Carolina Blue Cross Blue Shield.

services, including benefits changes, related to weight loss for adult members.[37] The services have been package under the name "Healthy Lifestyle ChoicesSM" and will cover four annual physician visits for weight assessment, tests and treatment, dietician's services, FDA-approved weight loss medications when medically appropriate, a self-management program to assist members in making healthy lifestyle changes, and Centers of Excellence for morbid obesity surgery.[38] The decision to extend the benefits package and introduce these services was based on a cost-effective analysis that revealed long term savings that would offset the costs associated with obesity and weight related conditions.[39] While the childhood obesity program has not launched yet, children (and adults) participating in one of NC BCBS health management programs are entitled to nutrition counseling.[40] In addition, NC BCBS has developed a clinician's tool kit to address obesity assessment and treatment.[41]

Similarly, in 2002 Kaiser Permanente launched a Weight Management Initiative (WMI) as part of its Care Management Institute. The WMI "unites clinicians, researchers, insurers, and policymakers in a collaborative strategic effort to address the critical public health issue of obesity in the U.S."[42] Kaiser Permanent focuses on prevention and treatment of overweight and obesity in children, adolescents, and adults by providing health education, meal management, the 10,000 steps program, and tailored weight management programs for children, their parents, and adult members. Through the Culturally Competent Care Institute, Kaiser strives to provide weight management guidance while understanding the dietary preferences and weight related

[37] Blue Cross Blue Shield of North Carolina, The State of Preventive Health (September, 2004) Available at http://www.bcbsnc.com/news/press-releases/pdfs/preventive-health-report.pdf. ; June 20, 2006 telephone conversation with Cindy Brenneman, Vice President, North Carolina Blue Cross Blue Shield.
[38] Id.
[39] Rob Stein, Washington Post (2004), supra.
[40] Currently two health management programs are open to children, one for diabetes and one for heart conditions.
[41] July 7, 2005 telephone conversation with Dawn Porter, Program Manager, North Carolina Blue Cross Blue Shield.

issues of the various cultures of its members.[43] In addition, WMI provides information and new strategies to Kaiser's clinicians through regional obesity task force and development of evidence-based care guidelines.

To date, state efforts to regulate the health insurance market relating to treatment for obesity have been limited. As Table 1 shows, those states that have enacted or considered regulation of insurance plans offered in the state have confined the scope of their legislation to treatments for diagnosed cases of morbid obesity in adults.

[42] Kaiser Permanente Care Management Institute, Frequently Asked Questions. Available at http://www.kpcmi.org/weight-management/faqstopic.html

[43] Kaiser Permanente Care Management Institute. Culturally Competent Care. Available at http://www.kpcmi.org/weight-management/faqstopic.html

Table 1. State Obesity Related Insurance Laws, Spring 2005

STATE BILL/LAW	ENACTED OR PROPOSED	NATURE OF LEGAL REQUIREMENTS	CONDITIONS FOR COVERAGE
Connecticut HB 5721 (2005)	Proposed	Health insurance policies must offer coverage for gastric bypass surgery.	No information.
Georgia HB 43 (2005)	Proposed	Health insurers must offer comprehensive medical or surgical coverage for the treatment of morbidly obese patients	• Diagnosed as morbidly obese
Idaho HB 708 (2004)	Proposed	Health insurers must provide coverage for weight reduction counseling services for any morbidly obese policyholders	• Must meet definition of morbid obesity as stated in the statute
Indiana Ind. Code § 27-8-14.1	Enacted	Health insurers must cover non-experimental surgical treatment by a provider of morbid obesity	• Must meet definition of morbid obesity as stated in the statute, and • The condition has persisted for at least 5 years, and • Physician supervised non-surgical treatment has been ineffective for 18 consecutive months
Louisiana SB 409 (2004)	Proposed	Health insurers must offer an optional provision stating that benefits are payable for treatment of morbid obesity through gastric bypass surgery or other such methods recognized by NIH for long-term reversal of morbid obesity	• Must meet definition of morbid obesity as stated in the statute, and • Physician supervised non-surgical treatment has been ineffective for 18 months, and • At least two physicians concur that surgical treatment is medically necessary
Maryland Md. Code §15-839	Enacted	Health insurers must provide coverage for surgical treatment of morbid obesity that is recognized by NIH as effective for long-term reversal of morbid obesity and consistent with NIH guidelines	• Must meet definition of morbid obesity as stated in the statute,
Mississippi SB 2791 (2005)	Proposed	Health insurers shall consider offering coverage for bariatric surgery	• Must meet definition of clinically severe obesity in the statute, and • A physician deems the surgery medically necessary, based on

STATE BILL/LAW	ENACTED OR PROPOSED	NATURE OF LEGAL REQUIREMENTS	CONDITIONS FOR COVERAGE
			NIH standards and criteria • These standards may include a requirement that a physician supervised weight control program has been ineffective, whether or not the insurance policy provides coverage for weight control treatment
Missouri HB 84 (2005)	Proposed	Health insurers must offer coverage of treatment methods approved by NIH as effective for long-term reversal of morbid obesity	• Must meet definition of morbid obesity as stated in the statute, and • Physician supervised non-surgical treatment has been ineffective for 18 months, and • At least two physicians concur that surgical treatment is medically necessary
Ohio* SB 162 (2001)	Proposed	Health insurers must provide coverage for surgical treatment of morbid obesity, including necessary exams and lab tests	• Must meet definition of morbid obesity as stated in the statute, and • Must meet NIH guidelines
South Carolina HB 4414 (2001-02)	Proposed	Health insurers must offer optional rider to provide for the treatment of morbid obesity through gastric bypass surgery or other methods approved by NIH as effective for long-term reversal of morbid obesity	• Must meet definition of morbid obesity as stated in the statute
Virginia Va. Code § 38.2-3418.13	Enacted	Health insurers must offer coverage for the treatment of morbid obesity through gastric bypass surgery or other such methods approved by NIH as effective for long-term reversal of morbid obesity	• Must meet definition of morbid obesity as stated in the statute

*SB 162 also includes a section with the same requirement for the state's Medicaid program.

State efforts to regulate health insurance and employee health benefit plans encounter significant challenges even in the face of strong evidence indicating a need for change. This is

because states, which ostensibly have the power to regulate insurance under federal law, in fact do not have the legal authority to regulate health benefit coverage offered by employers that self-insure and that hire insurance companies simply to administer their plans. Furthermore, states cannot regulate health plans offered by the federal government for its employees (both civilian and military).[44] About half of all persons in the U.S. with employer-sponsored coverage receive their coverage through a self insuring employer. Although self insured plans may be identical to the plans purchased by an employer that actually pays insurance premiums, self insuring employers retain the power to cover fewer or different benefits from those they would buy were they enrolled in a state regulated insurance product. This important limit on state powers is a consequence of several federal laws governing employee health benefits, the best-known of which is the Employee Retirement and Income Security Act (ERISA).[45] With very limited exceptions, the federal government does not regulate the content of health benefit plans offered by ERISA-governed employers.

Over time, as pediatric health care practice responds with increasing aggressiveness to obesity risk in children, a more comprehensive response may begin to emerge from insurers that offer insured and administered employee health benefit plans, as well as from employers that purchase or set up coverage arrangements for their employees and their families. The concluding discussion to this Report considers ways in which this type of change may begin to come about. In addition, more important ways in which employee health benefit plans might now be used to help finance comprehensive obesity risk services in children is through health

[44] Rand Rosenblatt, Sylvia Law, and Sara Rosenbaum, *Law and the American Health Care System* (Foundation Press, NY, NY 1997). Ch. 2.
[45] Id..

benefit plans offering flexible spending accounts (FSAs), as well as plans that combine a High Deductible Health Plan (HDHP) with a health savings account (HSAs).[46]

FSAs supplement employer-sponsored health insurance and allow employees to divert pre-tax wages into an account that can be used for purposes other than payment for insured benefits. Put another way, a FSA broadens the categories of tax-favored health expenditures that families can make, and health services aimed at preventing or ameliorating the risk of obesity would qualify for payment.[47] A basic shortcoming of an FSA however, is that its existence depends on an employee's possessing sufficiently high income to divert a portion of cash wages into a special supplemental savings account. Using FSAs also can require some skill in learning what is covered and how to secure payment. At the same time, FSA's are quite popular among large employers, with 80 percent of employers with 500 or more employees offering an FSA option in 2003.[48]

An HSA resembles an FSA in its structure (i.e., it is built from withheld, pre-tax wages). However, HSAs can be used only if they accompany a High Deductible Health Plan (HDHP). As a result, a family's HSA would need to be generous enough to cover both deductible and cost sharing liabilities as well as out-of-pocket payments for health services, such as preventive interventions for children facing obesity risk. Because HDHP/HSAs are a relatively recent innovation, very few employers offer currently HSA/HDHP options, however, 27 percent of employers in one recent survey indicated interest in offering such options in future years[49] and

[46] For a comprehensive discussion of both FSAs and HDHP/HSAs, see Beth Fuchs and Julia James, Health Savings Accounts: The Fundamentals (National Health Policy Forum, 2005). Available at http://nhpf.org/pdfs_bp/BP%5FHSAs%5F04%2D11%2D05%2Epdf.
[47] Fronstein P. Health Savings Accounts and other account-based health plans. Employee Benefit Research Instituted Issue Brief 273 (Sept. 2004).
[48] Id.
[49] Kaiser/HRET, Employer Health Benefits 2004 Annual Survey, supra.

73 percent of small business owners in another study indicated they were interested in the concept.[50]

Finally, it is worth noting that a 2002 IRS ruling clarified that a patient's expenses for a weight loss program undertaken for the primary purpose of treating obesity are tax deductible.[51] However, health care costs must exceed a high threshold (7.5 percent of adjusted gross income)[52] to be considered deductible, and deductions tend to be effective only in the case of affluent families who have the disposable income to spend on health care in the first place. More affluent families also may elect to supplement their health coverage with an FSA that covers services not included in their policies.

The Role of Medicaid and SCHIP in Financing Preventive Services for Children at Risk of Obesity

As shown in Table 2, those state Medicaid programs that have acted have focused their efforts on the addition of treatment services for adults with diagnosed clinical obesity and have not yet begun to turn their attention to obesity risk in children.[53] However, Medicaid's existing rules on child health care coverage, coupled with flexibility that states have in the area of service delivery, would permit significant improvements in the availability of comprehensive pediatric interventions for Medicaid-enrolled children and adolescents under age 21 at risk for obesity. Furthermore, because Medicaid covers such a high proportion of children, the obesity prevention

[50] Fronstein P. Health Savings Accounts and other account-based health plans.
[51] IRS Rev. Rul. 2002-19.
[52] IRS Publication 502, Medical and Dental Expenses. Available at http://www.irs.gov/publications/p502/index.html
[53] Colorado recently enacted a law (HB 1066) creating a pilot program to treat obese Medicaid patients with a co-morbidity. While this pilot program extends beyond surgery and medication by including behavioral modification and self management, it is still limited to already obese beneficiaries and would not assist children at risk for obesity.

services developed for publicly insured children ultimately could serve as a basis for supporting systems of care for both privately insured and uninsured children.

Table 2. State Medicaid Obesity Coverage

State	Covers Gastric Bypass	Covers All Major Rx Weight Loss Drugs	Covers 1 or More Major Rx Weight Loss Drug (w/o co-morbidity)	Covers 1 or More Major Rx Weight Loss Drug with Co-Morbidity Diagnosis	Does Not Cover Any Rx Weight Loss Drug
Alabama	X		X		
Alaska	X			X	
Arizona**					
Arkansas	X			X	
California	X	X			
Colorado	X		X		
Connecticut	X			X	
Delaware	unknown	X			
District of Columbia	unknown				
Florida	X			X	
Georgia	X			X	
Hawaii	X	X			
Idaho	X			X	
Illinois	X				X
Indiana	X				X
Iowa	X		X		
Kansas	X		X		
Kentucky	X	X			
Louisiana	X		X		
Maine	X	X			
Maryland	X		X		
Massachusetts	X	X			
Michigan	X		X		
Minnesota	X		X		
Mississippi	X	X			
Missouri	X			X	
Montana		X			
Nebraska	X			X	
Nevada	X				X
New Hampshire	X				X
New Jersey	X		X		
New Mexico	X	X			
New York	X				X

State	Covers Gastric Bypass	Covers All Major Rx Weight Loss Drugs	Covers 1 or More Major Rx Weight Loss Drug (w/o co-morbidity)	Covers 1 or More Major Rx Weight Loss Drug with Co-Morbidity Diagnosis	Does Not Cover Any Rx Weight Loss Drug
North Carolina	X	X			
North Dakota	X			X	
Ohio					X
Oklahoma	X				X
Oregon	X			X	
Pennsylvania	X			X	
Rhode Island	X	X			
South Carolina	X		X		
South Dakota					X
Tennessee**					
Texas				X	
Utah	X			X	
Vermont		X			
Virginia	X		X		
Washington	X			X	
West Virginia	X			X	
Wisconsin	X	X			
Wyoming	X				X

*Major prescription (Rx) weight loss drugs include Xenical®, Meridia®, and Phentermine
** The Medicaid programs in Arizona and Tennessee are fully managed care and obesity related coverage decisions are made by individual managed care organizations
Sources: Jane Perkins, National Health Law Program. Coverage of Gastric Bypass Surgery. Available at http://wwww.healthlaw.org/pubs/200410.gastricbypass.pdf ; American Obesity Association. Medicaid reimbursement for prescription weight-loss drugs. Available at http://www.obesity.org/treatment/medicaid.shtml.

An Overview of Medicaid and Children

Medicaid is the nation's largest single source of health insurance for children, covering 25.8 percent of all children and 17 percent of all children under age 6 in 2003.[54] States are entitled to open-ended federal financing for services furnished to program beneficiaries. In exchange for this financing, States must meet certain minimum requirements, some of the most important of which have to do with enrollment and coverage of children.[55]

[54] Kaiser Commission on Medicaid and the Uninsured. Health Insurance Coverage in America, 2003 Update. Table 2: Health Insurance Coverage of Children, 2003. (Nov. 2004).
[55] 42 U.S.C. § 1396.

A basic condition of participation in Medicaid is coverage of "poverty-level" children under 18, who satisfy Medicaid's financial and other relevant eligibility rules (such as legal U.S. status and state residence).[56] Children who meet program eligibility requirements are legally entitled to coverage, in a manner similar to eligible children covered through their parents' employer-sponsored health plans.

Medicaid eligibility standards for children have broadened considerably over the past 20 years. Coverage is now mandatory for "poverty-level" children whose family incomes fall below 133 percent of the federal poverty level in the case of children up to age 6, and 100 percent of the federal poverty level in the case of children ages 6-18. In addition, states have the option of setting income eligibility level for children at any multiple of the federal poverty level (e.g., 200 percent or 300 percent of the federal poverty level or higher). Most states exceed the minimum Medicaid income eligibility standards for children, although very few exceed 200 percent of the federal poverty level. States also may establish a separate and distinct SCHIP program in lieu of expanded Medicaid, so that they may cover additional children without having to comply with Medicaid's stricter rules in the case of coverage and benefits for "poverty level" children.[57] Table 3 shows the highest income Medicaid eligibility level for children in each state, as well as whether the state offers expanded coverage through Medicaid and/or a separately administered SCHIP program, and the maximum income eligibility level.

[56] 42 U.S.C. § 1396(a)(10)

[57] SCHIP is not a legal entitlement while Medicaid is. Furthermore, SCHIP's minimum benefit and services rules are narrower than those applicable to Medicaid, and cost-sharing is permitted. For a complete discussion of the differences between Medicaid and SCHIP see Sara Rosenbaum, Anne Markus, and Colleen Sonosky, Public Health Insurance Design for Children: The Evolution from Medicaid to SCHIP, *Suffolk University School of Law, Journal of Health and Biomedical Law*. 1:1 March 2005.

Table 3. Maximum Income Eligibility for Children Under Medicaid and SCHIP, by State

State	Highest Income Eligibility for Children under Medicaid (2004)[a]		SCHIP Program Design^	Highest SCHIP Income Eligibility Level* (2002)[b]
	Income Level*	Ages (in years)		
Alabama	133%	0-5	ME + SS	200%
Alaska	175%**	0-19	ME	200%
Arizona	140%	0-1	SS	200%
Arkansas	200%	0-19	ME	200%
California	200%	0-1	ME + SS	250%
Colorado	133%	0-5	SS	185%
Connecticut	185%	0-19	ME +SS	300%
Delaware	200%	0-1	SS	200%
District of Columbia	200%	0-19	ME	200%
Florida	200%	0-1	ME +SS	200% (ages 1-18)
Georgia	200%	0-1	SS	235%
Hawaii	200%	0-19	ME	200%
Idaho	150%	0-19	ME	150%
Illinois	200%	0-1	ME + SS	185%
Indiana	150%	0-19	ME +SS	200%
Iowa	200%	0-1	ME +SS	200%
Kansas	150%	0-1	SS	200%
Kentucky	185%	0-1	ME +SS	200%
Louisiana	200%	0-19	ME	200%
Maine	185%	0-1	ME + SS	200%
Maryland	200%	0-19	ME + SS	300%
Massachusetts	200%	0-1	ME + SS	200% (ages 1-18)
Michigan	185%	0-1	ME + SS	200%
Minnesota	280%	0-2***	ME	280% (ages 0-2)
Mississippi	185%	0-1	ME + SS	200%
Missouri	300%	0-19	ME	300%
Montana	133%	0-1	SS	150%
Nebraska	185%	0-19	ME	185%
Nevada	133%	0-5	SS	200%
New Hampshire	300%	0-1	ME + SS	300% (ages 1-18)
New Jersey	200%	0-1	ME + SS	350%
New Mexico	235%	0-19	ME	235%
New York	200%	0-1	ME + SS	250%
North Carolina	185%	0-1	SS	200%
North Dakota	133%	0-5	ME + SS	140%

State	Highest Income Eligibility for Children under Medicaid (2004)[a]		SCHIP Program Design^	Highest SCHIP Income Eligibility Level* (2002)[b]
	Income Level*	Ages (in years)		
Ohio	200%	0-19	ME	200%
Oklahoma	185%	0-19	ME	185%
Oregon	133%	0-5	SS	170%
Pennsylvania	185%	0-1	SS	235%
Rhode Island	250%	0-19	ME	250%
South Carolina	185%	0-1	ME	150% (ages 1-18)
South Dakota	140%	0-19	ME + SS	200%
Tennessee	185%	0-1	ME	200%
Texas	185%	0-1	ME + SS	200%
Utah	133%	0-5	SS	200%
Vermont	300%	0-19	SS	300%
Virginia	133%	0-19	ME + SS	200%
Washington	200%	0-19	SS	250%
West Virginia	150%	0-1	SS	200%
Wisconsin	185%	0-19	ME	200%
Wyoming	133%	0-5	SS	133%

^ SCHIP Program Design: ME = Medicaid Expansion, SS = Separately Administered SCHIP Plan
*Income eligibility level is expressed as a percent of the federal poverty level
** Alaska's eligibility is based on 2003 poverty level
*** Minnesota covers children to age 2 in the infant category under a waiver program
[a] Kaiser Commission on Medicaid and the Uninsured. Income Eligibility Levels for Children Under Medicaid, as a Percent of Federal Poverty Level (FPL), 2004. Available at www.statehealthfacts.org
[b] Rosenbaum S, Markus A, & Sonosky C. Public Health Insurance Design for Children: The Evolution from Medicaid to SCHIP. J. Health and Biomedical Law 1 (2004): 1-47.

State Medicaid programs have considerable discretion in the area of benefits and coverage, although important requirements apply in the case of children that serve to make their coverage quite different from that of private insurance. As a result, health services linked to the prevention of adult obesity in children at risk would be recognized under Medicaid coverage principles.

Medicaid's coverage of children is broad in two respects. First, under Medicaid cost sharing is prohibited (a certain amount of cost sharing is permitted in separately administered SCHIP programs). Second, the benefits to which Medicaid entitles children under age 21 are broader than those found in any other form of health insurance in the U.S., including SCHIP,

although at their option, states can define SCHIP's "child health assistance" benefits as broadly as the "medical assistance benefits" to which Medicaid-enrolled children are entitled.[58] Medicaid's broad scope of coverage for children is the result a provision added to Medicaid in 1967, within two years of the program's original enactment; benefits and support services for children were further expanded in 1981 and again in 1989)[59]

Known as Early and Periodic Screening Diagnosis and Treatment Program (EPSDT), this special benefit for children and youth was the result of significant evidence regarding the diminished health status of low income children and adolescents.[60] EPSDT was added as a feature of both Medicaid and the Title V Maternal and Child Health and Crippled Children's Programs (which were consolidated with several other child health grant programs and renamed in 1981 as the Title V Maternal and Child Health Services Block Grant). Because the benefit was designed to address health problems affecting children's development well into adolescence, the right to EPSDT benefits extends to age 21, beyond the age at which the concept of "child" is defined for basic Medicaid eligibility purposes.

The EPSDT benefit, along with the state plan administration requirements that are also part of the service, has three basic purposes. The first is to inform families about the importance of preventive health care. States are expected to affirmatively seek out low income children in need of comprehensive health care and offer families assistance in securing care, beginning at the time of birth. The second is comprehensive preventive coverage. States must cover comprehensive examinations to determine children's overall health, growth, and development, as

[58] The Evolution from Medicaid to SCHIP, supra..
[59] Rosenbaum S, Mauery D, Shin P, & Hidalgo J. National Security and U.S. Child Policy: The Origins and Continuing Role of Medicaid and EPSDT. The George Washington School of Public Health and Health Services Policy Brief (April 2005). Available at http://www.gwumc.edu/sphhs/healthpolicy/chsrp/downloads/mil_prep042605.pdf.
[60] Id.

well as medically necessary treatment to "ameliorate" the effects of "physical and mental" conditions. The third is assistance in securing care. EPSDT requires states to ensure that children actually receive covered services by assisting in locating sources of care, as well as sources of related services that may not be covered by Medicaid but that are important to child health. States also must offer transportation and scheduling services.

The operative word in EPSDT, given its broad purpose, is *early.* Outreach and informing of families is to begin as soon as children are born. The screening exam is structured to identify physical and mental conditions that potentially affect growth and development as early as possible. Finally, the comprehensive treatment requirements are intended to ensure the earliest possible intervention before risks to health become serious medical problems. For these reasons, the concept of *medical necessity* under EPSDT (a key concept in all forms of health insurance, public and private),[61] also has historically been understood as broader than its use in the case of adult medicine. The EPSDT concept of medical necessity encompasses *early* intervention, that is, not only services needed to treat acute or chronic medical illnesses and conditions, but also services aimed at addressing physical and mental health conditions that affect child health and development.

In short, in its coverage terms, EPSDT is different from commercial insurance and is more comprehensive than the minimum coverage standards provided under SCHIP. As noted in the previous section, private health insurance tends to emphasize treatment of diagnosed, acute, medical conditions (such as adult obesity). In contrast, because the beneficiaries of EPSDT are lower income and at risk children, the program's coverage rules emphasize active and ongoing early intervention over the course of childhood that ameliorate conditions that may not have yet reached a medical diagnostic stage (such as adult obesity) but that, left untreated, pose risks to

children's health and development. Limits on coverage that would otherwise apply to adults (such as limiting the number of visits that will be covered) do not apply to children under EPSDT.

Table 4 shows all required EPSDT services, beginning with periodic and interperiodic screening exams and extending through all forms of medical and health care treatments. Medicaid-enrolled children and youth are entitled to these benefits, regardless of the service delivery system (e.g., fee-for-service, managed care, or a combination of the two) through which they receive care.

[61] *Law and the American Health Care System*, supra.

Table 4. EPSDT Services

EPSDT Services include:	Medical Assistance Services include:
• Periodic and "as needed" screening services that include: ▪ An unclothed physical examination ▪ Comprehensive health and developmental history (including assessment of both physical and mental health development) ▪ Immunizations recommended by the CDC Advisory Committee on Immunization Practices ▪ Laboratory test (including blood lead level assessment appropriate for age and risk factors) ▪ Health Education • Vision Services ▪ assessment, diagnosis, and treatment, including eyeglasses • Hearing Services ▪ assessment, diagnosis, and treatment, including hearing aids • Dental Services ▪ a minimum of relief of pain and infections, restoration of teeth, and maintenance of dental health Such necessary health care, diagnostic services, treatment, *and other measures classified as medical assistance* to correct or ameliorate defects and physical and mental health conditions discovered by screening services, whether or not such services are covered under the state medical assistance plan	• Inpatient hospital services, Outpatient hospital services, including rural health clinic and federally qualified health center Services, • Nursing facility services for individuals 21 years and older, • EPSDT services for individuals under age 21, • Family planning services, • Physician services, • Medical care, • Home health services, • Clinic services, • Dental services, • Physical therapy and related services, • Prescription drugs • Dentures, • Prosthetic devices, • Eyeglasses, • Other diagnostic, screening, preventive, and rehabilitative services, • Inpatient hospital services and nursing facility services for individuals over 65 in an institution for mental disease, • Intermediate care facility services for mentally retarded, • Inpatient psychiatric hospital services for individuals under age 21, • Nurse-midwife services, • Hospice care, • Case management and primary care case management services, • TB-related services, • Respiratory care services, • Nurse practitioner services, • Home and community care, • Community supported living arrangements, • Personal care services, • Services under the PACE program, and • Other medical care services

Source: § 1905(a) & (r) of the Soc. Sec. Act, 42 U.S.C. § 1396d(a) & (r).

Table 5 compares required Medicaid coverage levels to required SCHIP coverage levels. States that cover children through separately administered SCHIP programs have the option to extend benefits that are recognized in Medicaid but not required under SCHIP.

Table 5. Medicaid and SCHIP Compared

MEDICAID	SCHIP
Participating states must entitle eligible children to a broad range of required classes of "medical assistance". Required coverage for children is federally defined and nationally uniform in scope: • **The EPSDT benefit encompasses detailed statutory assessment procedures, vision, dental and hearing services, and all forms of treatment that fall within the federal definition of "medical assistance."** • **No distinctions are drawn between physical and mental conditions.**	**Participating states must furnish "child health assistance," which is subject to certain basic design rules but is not a legal entitlement in eligible children. States' coverage design flexibility is subject to certain rules:** • **Coverage must be "equivalent to," and must have an "aggregate actuarial value that is at least actuarially equivalent" to, a "benchmark benefit package" selected by the state** • **Required categories of "basic services" must be included in the benchmark (inpatient and outpatient hospital care, physician surgical and medical services, laboratory and x-ray services, "well baby and well child" care (undefined) and age appropriate immunizations** • **States have the option of covering prescription drugs, mental health services, vision services, hearing services, and other services recognized as "child health assistance."**
The concept of medical necessity is subject to federal rules. States must use a "preventive" standard of medical necessity in accordance with the benefit and federal standards of reasonableness and prohibitions against discrimination on the basis of condition or illness.	**There is no federal definition of medical necessity, tests of reasonableness, or non-discrimination in coverage provisions. HIPAA prohibitions against preexisting condition exclusions apply to insurance products however.**
Patient cost-sharing is prohibited for all categorically needy children.	**Cost-sharing is permitted subject to certain limits but is prohibited for well baby and well child care including immunizations,**
Children are legally entitled to a defined group of benefits. States remain directly obligated to cover all benefits that exceed limits of MCO contracts.	**Benefits are not a federal legal entitlement. States are not obligated to furnish defined benefits beyond the benchmark.**

Source: Rosenbaum et. al. Evolution of Child Health

Where childhood obesity risk is concerned, several of the listed services and benefits set forth in Table 4 are of particular note in relation to the expert clinical recommendations related to the treatment and management of obesity risk in children:

- The comprehensive health and developmental history as well as the comprehensive health exam which both are part of the periodic and interperiodic screening service, and which form the basis for the routine assessment of growth and development recommended by experts;
- Anticipatory guidance and health education, both of which are part of the basic screen, and which would permit specific counseling on obesity risk;
- Federally qualified health center services, rural health clinic services, services of other clinics (e.g., a special childhood weight clinic offered by a children's hospital), screening, preventive and rehabilitative services, and remedial care recognized under state law, furnished by licensed practitioners within the scope of their practice. All of these services are sufficiently broad service classifications to permit states to cover primary care and specialty clinics that, along with licensed health professionals, treat obesity risk in children and its physical and mental health consequences. For example, were a state's federally qualified health centers to develop an obesity health prevention program for their pediatric patients that consists of nutrition education, weight management counseling, and BMI assessments, it could be covered under ESPDT.
- Case management services, which are defined as services "which assist" Medicaid beneficiaries "in gaining access to needed medical, social, educational and other services"[62] and which allow for coverage and payment of case management to assist children at risk for obesity in securing not only needed medical and health care, but also

social and other services that are essential to weight management but are not themselves Medicaid reimbursable; and

- Transportation and scheduling assistance, which along with case management, ensures the types of support that enable families to secure health care services for their children.

To date, the Centers for Medicare and Medicaid Services (CMS), which administers the Medicaid program for HHS, has not issued guidance on using Medicaid to develop comprehensive programs for children at risk of obesity. However, Federal EPSDT regulations amplify on the meaning of the law in important ways relevant to obesity prevention management in children. First the rules clarify that the screen is a "comprehensive child health assessment" that is an evaluation of "the general physical and mental health, *growth, development, and nutritional status* of infants, children, and youth."[63]

Federal guidelines developed by CMS in order to interpret and explain its rules provide as follows with respect to the health assessment for nutritional status:

> 2. Assessment of Nutritional Status.--This is accomplished in the basic examination through:
>
> - Questions about dietary practices to identify unusual eating habits (such as pica or extended use of bottle feedings) or diets which are deficient or excessive in one or more nutrients.
> - A complete physical examination including an oral dental examination. Pay special attention to such general features as pallor, apathy and irritability.
> - Accurate measurements of height and weight, which are among the most important indices of nutritional status.
> - A laboratory test to screen for iron deficiency. HCFA and PHS recommend that the erythrocyte protoporphyrin (EP) test be utilized when possible for children ages 1-5. It is a simple, cost effective tool for screening for iron deficiency. Where the EP test is not available, use hemoglobin concentration or hematocrit.

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[62] 42 U.S.C. § 1396n(g)(2).
[63] 42 C.F.R. § 441.56(b)(1) italics added.

- If feasible, screen children over 1 year of age for serum cholesterol determination, especially those with a family history of heart disease and/or hypertension and stroke.

If information suggests dietary inadequacy, obesity or other nutritional problems, further assessment is indicated, including:

- Family, socioeconomic or any community factors.
- Determining quality and quantity of individual diets (e.g., dietary intake, food acceptance, meal patterns, methods of food preparation and preservation, and utilization of food assistance programs),
- Further physical and laboratory examinations, and
- Preventive, treatment and follow-up services, including dietary counseling and nutrition education.[64]

As the above language illustrates, the Centers for Medicare and Medicaid Services contemplates that state EPSDT services already include a comprehensive assessment of nutritional status and obesity risk, along with further assessment and preventive interventions in the event that nutritional risk is identified.

The EPSDT regulations also expand on the family support obligation of Medicaid EPSDT programs by requiring states to provide "referral assistance" (i.e., names, addresses, and telephone numbers) to families seeking services that are not Medicaid covered but relevant to the child's health.[65] Finally, the rules require states to make "appropriate use" of other state public health programs such as public health agencies, Head Start, WIC, and social services, "to ensure an effective child health program."[66]

Building Comprehensive Obesity Risk Health Care Intervention Programs for Medicaid and SCHIP-Enrolled Children

[64] CMS, State Medicaid Manual State Medicaid Manual §5123.2. Available at http://www.cms.hhs.gov/manuals/pub45/pub_45.asp.
[65] 42 C.F.R. § 441.61(a)
[66] 42 C.F.R. § 441.61(c).

Federal Medicaid policy gives states considerable flexibility in how they actually operationalize and implement coverage for children. Two basic scenarios are set forth below, one in a state that uses either a fee-for-service system or a primary care case management program under which children elect a primary care "home" which in turn receives payment on a fee-for-service or encounter basis. A typical primary care case manager might be a pediatrician or a community health center. The second scenario is meant to illustrate an approach to implementing a comprehensive obesity assessment and prevention benefit in a state that makes use of larger managed care entities that enroll beneficiaries and offer comprehensive coverage through networks of participating providers, much like HMOs in which privately insured patients enroll.

Scenario #1: Comprehensive obesity prevention programs in states using fee-for-service systems including Primary Care Case Management (PCCM) arrangements. States can operate their Medicaid programs as traditional fee-for-service manner, in which families can select from among participating providers, who in turn are paid for each covered service they furnish. In this type of situation, the family of a child whose screen reveals significant obesity risk might be assisted in securing follow-up and ongoing care from the primary care provider, a local health agency, or a primary or specialty clinic (such as an FQHC or a children's hospital clinic) offering a comprehensive obesity prevention program for children. The state could establish provider qualification standards for comprehensive obesity prevention treatment providers to ensure that services are of high quality. The state also could develop and use payment arrangements that compensate such providers either on a fee-for-service basis or on the basis of an all-inclusive case rate. Services could be certified for specific time periods, with recertification if extended care remains medically necessary.

Services could be authorized in accordance with a written plan of treatment, using the state Medicaid agency's powers to ensure that health services that are furnished are medically necessary, i.e., are needed for a condition that is present and that creates risks to healthy growth and development. For example, the state agency might authorize an initial six-month service plan that is to be carried out in accordance with a written plan of care developed by the provider in close consultation with the family and updated semi-annually. Payment for the service might be made over a six-month time period on a "case" basis and the service would span a range of covered benefits that are consistent with the recommendations of the AAP Committee on Obesity or another source of clinical expertise. Examples of such bundled services would be ongoing comprehensive assessments, nutritional, health education, psychological care, health education for the family, case management services (including a home visit to assess the child's living arrangements and access to nutrition), and supportive services aimed at helping the family locate and enroll their child in community sports and exercise programs, summer camps, and after-school activities, and ongoing monitoring over a long term time period.

In this type of fee-for-service arrangement, a state also has the flexibility to develop provider qualification criteria to identify clinics that can participate in Medicaid for childhood weight reduction services. The state also can develop performance measures for obesity prevention providers, measuring participating clinics' performance using benchmarks of success (e.g., proportion of children showing weight stabilization or involved in athletics, proportion of families receiving training in childhood nutrition, and the like).

In developing its program, the state can retain clinical experts in childhood obesity risk to design the intervention, develop participating provider qualifications, develop success benchmarks, and oversee the quality of the service. The state also could develop benchmarks of

quality care and require participating providers to furnish process and outcome information for the children served. [67]

The federal contribution to the state's comprehensive obesity prevention program would be considerable. For each medical assistance dollar spent by the state, the federal government would contribute between 50 and 80 cents, depending on the state's "Federal Medical Assistance Percentage," a contribution rate set under federal law. The administrative costs associated with planning, designing and overseeing the program, including family outreach, provider certification and utilization management, would qualify for federal contributions of either 50 or 75 cents for each dollar spent (federal contributions rise to 75 percent where the administrative service involves the use of a skilled medical professional).

Scenario #2. Managed care and freedom of choice "waivers". Rather than using a traditional fee-for-service approach, a state Medicaid program can employ a service approach that uses managed care systems (i.e., integrated delivery systems furnishing covered services through provider networks) to deliver comprehensive obesity prevention treatment. These types of service arrangements are quite popular in Medicaid. Data from CMS indicate that as of 2003, nearly 60 percent of all Medicaid beneficiaries were members of a managed care arrangement; 68 percent of all Medicaid managed care enrollees were members of comprehensive "managed care organizations" offering a broad array of health services in exchange for a monthly "capitation" fee (i.e., a per-enrollee all-inclusive payment).[68]

[67] For an extensive list of resources in the area of childhood obesity see Knowledge Path: Overweight In Children and Adolescents, maintained by the Bureau of Maternal and Child Health, Health Resources and Services Administration, USDHHS. Available at http://mchlibrary.info/KnowledgePaths/kp_overweight.html.
[68] Center for Medicare and Medicaid Services. Managed Care Trends. Available at http://www.cms.hhs.gov/medicaid/managedcare/trends03.pdf

States that use managed care systems to cover and deliver Medicaid services typically operate their systems under special "freedom of choice" waiver authority.[69] Freedom of choice waivers permit states to condition an individual's Medicaid coverage on enrollment in one or more classes of general and specialty managed care plans. For example, a state might require Medicaid-enrolled families to select and enroll in a managed care organization for their general health care needs. The state also might maintain contracts with one or more specialty organizations offering additional and specialized services for persons who are general MCO members who develop very serious conditions such as severe emotional disturbance or mental illness and need highly specialized care.

Several different forms of managed care exist. Some states contract only with companies able to offer very comprehensive services to the entire population eligible for enrollment. The services included in a managed care contract would consist of virtually all of the services and benefits covered under the state Medicaid plan as well as almost all EPSDT benefits.[70] Other states use a combination of both comprehensive service contractors as well as limited and specialty service companies offering specific benefits for specific populations. An example of a specialized managed care arrangement would be behavioral health service plans for children and adults with severe emotional disorders and serious mental illness.

Since states that employ managed care already maintain extensive service agreements with their contractors to cover a broad array of health care services and benefits, and since EPSDT benefits are a staple of managed care,[71] it would be logical for a state to extend its

[69] § 1915(b) of the Soc. Sec. Act.; 42 U.S.C.1396n(b).
[70] Most states do not include Medicaid-covered long term institutional care for either children or adults in their managed care contracts.
[71] The George Washington University Center for Health Services Research and Policy. *Negotiating the New Health Care System: A Nationwide Study of Medicaid Managed Care Contracts*, 4th edition. Available at http://www.gwumc.edu/sphhs/healthpolicy/nnhs4/GSA/.

contracts to include comprehensive obesity prevention for children at risk. Alternatively, a state might, using freedom of choice waivers, designate a separate group of specialized obesity prevention managed care contractors that have expanded capability in pediatric obesity risk treatment and that accept referrals from general service managed care organizations in the case of children at serious risk. These specialty providers also could be paid on a per capita monthly or alternatively, on a case basis.

In this regard, CMS now actively encourages states to develop specialty "disease management" integrated care systems that specialize in the management of certain conditions.[72] The disease management model is typically associated with a severe, diagnosed condition in adults (e.g., diabetes, morbid obesity), but the basics of the model clearly could be applied to develop managed care entities specializing in obesity risk preventive health services for children. In such a system, the Medicaid payment might be combined with payment from other sources (e.g., county recreation funds, Title V MCH Block grant payments, preventive mental health grants for population-wide activities) to help finance social and support services not covered by Medicaid but important to the treatment of obesity risk in children.

In this type of service scenario, the package of services would parallel those offered in a fee-for-service or primary care case management arrangement: identification of patients and matching intervention with need; support for adherence to evidence based medical practice guidelines, including provision of medical treatment guidelines to physicians and providing supports to assist in physician monitoring; patient management enhancement services and adherence to individualized treatment plans that educate patients, monitor and remind them of

[72] Center for Medicare and Medicaid Services. Guidance on how states can cover disease management. State Medicaid Director Letter 2/25/04. Available at http://www.cms.hhs.gov/states/letters/default.asp

their care needs, and modify behavior; routine reporting and feedback; and collection and analysis of child-and-family-specific process and outcome data to measure quality.[73]

The rules on federal contributions for state expenditures in a managed care context parallel those for fee-for-service systems. Thus, just as the state would receive a 50 to 75 percent return on its medical assistance investment in fee-for-service care and on its administration expenditures (including consultation to set up and oversee the program), the same contribution rules would apply to general or specialty managed care arrangements. Payments to managed care contractors can be tied to incentives as process and outcomes benchmarks are met.

Finally, it is also important to emphasize that while SCHIP does not require obesity prevention services as does Medicaid, all services available under Medicaid can be replicated in SCHIP. Although SCHIP requirements are not as comprehensive as those found in Medicaid, SCHIP funds can be applied toward the enrollment of children in systems of health care that provide comprehensive obesity risk management and intervention services as an aspect of coverage.

[73] Id.

Conclusion

This Report has examined the problem of obesity risk in children with an eye toward translating evidence of risk and health intervention into the health care financing necessary to the development of comprehensive and effective interventions. From the evidence presented here, two important conclusions can be drawn, both of which are squarely grounded in the concept of pay for performance and the use of financing to incentivize high quality care.

First, continuous assessment for obesity risk, along with comprehensive preventive interventions are already a Medicaid coverage requirement for all children and youth up to age 21; what is needed is a strategic plan for "getting there." CMS guidelines interpreting the EPSDT program make clear that all necessary coverage exists; what is needed is a clear strategy for translating these guidelines into real service delivery action at the community level. To this end, two federal policy actions that would be of value are improved CMS dissemination of information about the importance of childhood obesity risk to state Medicaid and SCHIP programs, and augmentation of existing CMS guidelines on EPSDT with special guidelines on using managed care, integrated service delivery and disease management techniques to develop comprehensive obesity prevention programs for children at risk. Of particular value in this regard would be a partnership among CMS, the CDC, and the Health Resources and Services Administration (HRSA) whose Title V Maternal and Child Health and Community Health Centers programs play critical roles in the development and delivery of preventive care to lower income and at-risk children and families. A multi-agency initiative to prevent child obesity risk and develop high quality programs could be further coupled with a companion initiative by the Agency for Health Care Research and Quality (AHRQ) and the National Institute for Child Health and Development (NICHD) to systematically evaluate the quality and effectiveness of

Medicaid and SCHIP-supported health interventions for at-risk children and to develop performance measures of quality that specify minimum data collection sets (including data on performance by race and ethnicity).

Putting aside the value of a federal initiative, it is also evident that states have the power to act on their own where Medicaid and SCHIP coverage of obesity prevention activities are concerned. State partnerships in this area, especially partnerships undertaken with private national and community funders, are extremely important strategies for generating reforms.

Second, there is a need to stimulate the development of comprehensive obesity risk prevention in children in private health insurance and employee health benefit plans through financial incentives and performance measurements. The evidence examined in this Report suggests that insurers are beginning to respond to adult obesity with advanced treatments. There is very limited evidence, however, a strategy of using financing to stimulate preventive treatments for children. In this regard, several parallel types of strategies might be used to stimulate improvements. Leading insurers and national health care corporations could undertake special pay-for-performance and financial incentives programs aimed at upgrading the quality of childhood obesity prevention programs, working with public health, nutritional, and pediatric experts. National organizations focused on the development of quality benchmarking measures for large healthcare public and private sector health care purchasers could focus on childhood obesity prevention as an area in which specific measures of performance could be developed and used in evaluating health plans and selecting insurance and benefit products. Finally, employers offering FSAs and HDHPs could develop special materials aimed at educating families about the availability of these funds for obesity prevention health activities.

What is evident from the voluminous information on childhood obesity risk is that it is no longer possible to consider health care for children to be of good quality unless it includes comprehensive assessment of obesity risk and ongoing management of risks when they are present throughout childhood and adolescence. The challenge that lies ahead is to use the power of health care financing to achieve change and progress.