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Policy Brief

Strategies for Improving Access to Comprehensive Obesity Prevention and Treatment Services for Medicaid-Enrolled Children

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Executive Summary

This policy brief builds on our prior work for the Robert Wood Johnson Foundation. In 2005, The George Washington University School of Public Health and Health Services (GW) evaluated the role of public and private insurance in financing preventive care and treatment for at-risk and obese children. One of the key findings from that report was that Medicaid's existing Early and Periodic Screening Diagnostic and Treatment (EPSDT) coverage standards provide for comprehensive, obesity-related pediatric health care interventions. Using data drawn from state Medicaid programs, this report examines the extent to which state programs use the Medicaid EPSDT benefit to address and finance obesity-related services that advance best-practice standards in obesity prevention, treatment and management in children.

Key Findings

- A review of the evidence on pediatric practice suggests that where childhood obesity is concerned, the current standard of care includes the following critical elements: (1) an assessment incorporating a comprehensive family and social history, a physical exam that includes assessment of Body Mass Index (BMI) and other measurements, nutritional assessment and identification of common symptom, syndromes, or co-morbidities, and laboratory tests as appropriate; (2) treatment, consisting of combination of systematic, age-specific professional health interventions aimed at transforming a child's environment through health education, nutritional counseling, and patient support that includes setting goals and fostering a positive, reward-oriented environment for a child. These health services and activities fall virtually

entirely within the classes and categories of screening, diagnostic, and treatment services covered under the EPSDT benefit, which specifically covers nutritional assessment and health interventions to "ameliorate" physical and mental conditions in children.

- Existing state EPSDT coverage and payment policies suggest that state EPSDT operational standards generally do not focus on obesity as a specific focus of pediatric intervention activities to be encouraged and supported. State provider manuals and other sources of information tend to be limited to a relatively brief overview of EPSDT without specific reference to the nutritional assessment or nutritional counseling component of the program and the procedures that will be covered under this program component.

- A review of available Medicaid managed care contracts suggests that contractual requirements generally do not highlight obesity prevention and treatment strategies in reference to EPSDT standards or performance measurement requirements. Managed care contracts tend to refer to back to either existing EPSDT guidelines found in the state's Medicaid guidance or general preventive guidelines for pediatric care.

- Several states have taken important steps to use EPSDT coverage standards to incentivize best practices among pediatric health professionals and providers. Nebraska and Arizona, in particular, have developed specific approaches to

using EPSDT to improve obesity-related pediatric practice through assessment, counseling, and clinical treatment.

- A review of state EPSDT billing, coding, and payment practices underscores that existing billing codes permit coverage of all procedures and interventions essential to high quality obesity-prevention pediatric practice. At the same time, because states have not emphasized this aspect of EPSDT coverage, it is not clear that state programs are specifically recognizing, compensating, or rewarding providers whose practices emphasize appropriate obesity interventions. Indeed, some states may create hurdles by restricting the number of visits for which payment will be made, using extensive prior authorization requirements even where a condition is clearly diagnosed and a plan of care created, excluding coverage based on "excessive" coded services for same day visits, and instituting prohibitions against billing for certain procedures. The impact of these practices may be exacerbated by low payment rates.

Recommendations

Overall, Medicaid is well-equipped to tackle the rising obesity problem. The coverage is available, yet significant obstacles exist. In order to reduce these barriers, states should take several steps:

1. **Clarify the application of obesity prevention and treatment guidelines as part of the EPSDT benefit for children and adolescents.** In order to promote best practices states could disseminate to all managed care plans, participating health professionals, and other Medicaid-participating health providers existing professional guidelines on obesity management and treatment. In other words, to ensure that covered services are translated into best practices, state agencies could take the extra step of disseminating and ensuring use of practice guidelines. Information relating to obesity-services could be included in fee-for-service guidance as well as managed care contracts.
2. **Clarify proper coding and payment procedures for obesity prevention and treatment services.** In order to remove confusion regarding payment for the cluster of services and procedures that constitute obesity treatment and prevention, states could develop billing guidelines that support appropriate billing coding and could examine other payment standards and limitations that may need to be adjusted in cases involving obesity treatment and prevention. For example, where daily encounter maximum limits or visit duration rules create barriers to appropriate practice and payment, these limits and rules could be modified to strengthen performance. It may be that even with improved coding instruction and the elimination of payment barriers to appropriate care, payment rates remain too low. Practice guidelines are effective when tied to specific incentivization. One option would be to tie higher reimbursement rates to providers' ability to engage in and document

adherence to best practices through a pay-for-performance program. As a way to promote adherence to best practices, states may consider adding obesity specific performance measures to their managed care contracts.

3. **Bundle obesity prevention and treatment services into a single package following a disease management model.** One comprehensive approach might be to bundle already-covered Medicaid services into an obesity prevention and treatment payment system, much as might be done in certain "disease management" coverage and payment arrangements. A few states either have adopted or are considering adopting this approach. Arizona is the furthest along at this time, with a comprehensive obesity program currently being tested on a pilot basis. The program should include guidelines about care, clear instructions about billing and coding, and the appropriate level of reimbursement.

Introduction

This Policy Brief, prepared for the Robert Wood Johnson Foundation, builds on our earlier work for the foundation, which concluded that through its Early and Periodic Screening Diagnostic and Treatment (EPSDT) benefit, Medicaid offers the nation's most comprehensive insurance coverage for children. EPSDT coverage is broad and its principles and standards emphasize prevention and sustained intervention to a far greater degree than conventional insurance.[4] As a result, EPSDT allows for comprehensive pediatric interventions for Medicaid-enrolled children and adolescents under age 21 who are at-risk for obesity or currently overweight.[5] Our prior analysis, *Reducing Obesity Risks During Childhood: The Role of Public and Private Health Insurance*, reviewed the prevalence and health implications of obesity risk in children and the role of public and private health insurance in financing preventive care and treatments. [6] This earlier analysis contained several key findings:

- Children who are overweight experience a host of physical and emotional problems in both the short and long run. Excess weight is linked to a number of serious conditions and diseases that occur during childhood. In addition, children who are overweight are more likely to become overweight or obese as adults and suffer additional physical and mental problems in their later years. Low income children are at greater risk for obesity and its lifelong consequences.

[4] Rosenbaum S, *Defined Contribution Plans and Limited-Benefit Arrangements: Implications for Medicaid Beneficiaries*, Geiger Gibson Program in Community Health Policy and America's Health Insurance Plans (2006), available at http://www.gwumc.edu/sphhs/healthpolicy/chsrp/downloads/Rosenbaum_AHIP_FNL_091306.pdf.

[5] As discussed below, the Body Mass Index used to measure children's height/weight ratio does not indicate when a child is obese. Instead it refers to various levels of overweight. For this reason, we use the terms overweight and obesity interchangeably in this report.

[6] Rosenbaum S, Wilensky S, Cox M. *Reducing Obesity Risks During Childhood: The Role of Public and Private Health Insurance* The Robert Wood Johnson Foundation (2005), Available at www.rwjf.org.

Providing anticipatory guidance and preventive health intervention for children who are at-risk for becoming overweight is an effective approach in reducing risk.

- While some private health insurance carriers extend some level of coverage for adults diagnosed with morbid obesity, there is virtually no evidence suggesting the existence of coverage policies to promote clinical preventive interventions for children at-risk. Even so, some procedures that are intrinsic to the treatment of obesity risk in children (routine health exams, body mass measurements, etc.) may already be covered through well-child visits and other services.

  In contrast, nutritional assessment and treatment of health risk factors are elements of the Medicaid Early Periodic Screening Diagnosis and Testing services (EPSDT) benefit for children. Federal guidelines clarify that assessment of nutritional status is part of the EPSDT comprehensive assessment, and provision of follow-up clinical and other health interventions covered treatment would also be covered.

This initial analysis led to this follow-up in-depth research to examine current Medicaid coverage and payment policies related to clinical interventions to identify and treat childhood obesity and obesity risk.

This Policy Brief begins with an assessment of what is known about the treatment and prevention of childhood obesity and with a description of the clinical guidelines that represent the current standard for obesity prevention and treatment practice in pediatrics. These guidelines are then used to conduct a closer examination of existing Medicaid coverage and payment policies for children and adolescents. The payment policies here represent policies adopted by states in their fee-for-service programs. Because fee-for-service coverage and payment rules for required services such as EPSDT form the basis of managed care policy development, they serve as an essential starting point for understanding existing state policy, even in state that utilize managed care contracts involving either limited service or comprehensive managed care organizations. However, we also reviewed contracts with full service managed care organizations (MCOs) to

determine the extent to which states are using their managed care systems to make childhood obesity prevention and treatment a formal expectation of their managed care providers.

Methodology

The research methods used for this study entailed a comparison of current professional standards of care for obesity prevention and treatment against a nationwide, point-in-time assessment of state coverage and payment principles under EPSDT.

Professional Standards: Researchers reviewed the literature relating to obesity prevention and treatment to identify the current standard of care. Numerous articles and guidelines exist to assist providers in screening and treating at-risk and obese children. Four guidelines are highlighted in this report as representative of the overall findings from the literature: 1) guidelines developed by the American Academy of Pediatrics;[7] 2) the Texas Toolkit written by the Texas Pediatric Society;[8] 3) Anthem Blue Cross and Blue Shield guidelines;[9] and 4) guidelines from the United Kingdom as reported by researchers Viner and Nicholls.[10]

Medicaid Fee-For-Service Documents: State Medicaid coverage and payment standards were identified by reviewing the most recently available Medicaid provider manuals, policy guidance, codes and regulations, and fee schedules.[11] These documents were reviewed to determine (1) whether state agencies have developed formal and clearly delineated obesity-related coverage, treatment, and payment guidelines services are covered under the Medicaid program and, (2) the specific details of coverage and payment policies, regardless of whether such policies have been formally assembled into

[7] Barlow S and Dietz W, "Obesity Evaluation and Treatment: Expert Committee Recommendations," *Pediatrics* 1998; 102(3); 1-11.
[8] The Texas Pediatric Society Obesity Task Force, *TPS Obesity Toolkit*. Contact Dr. Kimberly Edwards at kcaedwards@yahoo.com for further details. *Pediatric Weight Management Guidelines*, 2005.
[9] Anthem Blue Cross Blue Shield,
[10] Viner R and Nicholls D *Arch. Dis. Child*., 2005; 90:385-390.
[11] See Appendix A for a list of these documents.

a clear protocol. The aim was to identify these coverage and payment principles – formally stated or otherwise – so that they could be compared to the treatment guidelines.

Fee-for-service coverage and payment rules serve as an essential starting point for understanding existing state policy, even in states dominated by managed care arrangements. To obtain information relating to fee-for-service care, researchers reviewed the most recently available state Medicaid provider manuals and fee schedules and national medical service billing code documents. The relevant national coding documents include information available from the Centers for Medicaid and Medicare Services relating to the Health Care Financing Administration Common Procedure Coding Systems and the Current Procedural Terminology, Fourth Edition (2006) coding system maintained by the American Medical Association.

Medicaid Managed Care Contracts: In addition, researchers examined Medicaid managed care practices. As of 2005, 43 states enroll some or most children in comprehensive coverage arrangements administered by managed care organizations (MCOs).[12] In these states, researchers analyzed the most recently available contract documents that define such arrangements in order to identify (1) contractual coverage and service specifications related to pediatric obesity prevention and treatment and (2) performance measurement approaches specifically linked to contractor performance related to obesity prevention and treatment.[13]

[12] Using categories defined by the Centers for Medicare and Medicaid Services, comprehensive managed care plans includes a Health Insuring Organization, Managed Care Organization, or Prepaid Ambulatory Health Plans. States that do not have comprehensive Medicaid managed care programs are: Alabama, Alaska, Idaho, Louisiana, Maine, Montana, Vermont, and Wyoming. Centers for Medicare and Medicaid Services, "Medicaid Managed Care Enrollment Report as of June 30, 2005," available at http://www.cms.hhs.gov/MedicaidDataSourcesGenInfo/Downloads/mmcer05.pdf.

[13] See Appendix B for a list of these documents.

Medicaid Coverage and Payment Principles Relevant to of Childhood Obesity Prevention and Treatment

Medicaid is the largest single source of health insurance for children in this country, and is particularly important for lower income children and children who are members of racial and ethnic minority groups. [14] Since obesity appears to be a concern among minority and low-income children, Medicaid's coverage is important link for them into the health care system.[15]

Medicaid provides extremely broad coverage for children up to age 21 through the Early Periodic Screening Diagnosis and Testing (EPSDT) program. Although the Deficit Reduction Act of 2005 relaxes coverage standards in states that exercise the new "alternative benefit" option,[16] EPSDT remains a required benefit for all categorically needy children under 19 (i.e., children whose characteristics and financial status place them within a mandatory or optional categorically needy classification and who do not "spend down" to financial eligibility).[17]

EPSDT's breadth is evident both in terms of the services covered and the standards used to evaluate when care is needed. Unlike private insurance which emphasizes treatment of diagnosed, acute medical conditions and contains coverage exclusions, EPSDT focuses on early intervention, preventive care, and broad coverage. These differences are critical in providing the necessary care to children who are at-risk for obesity or currently overweight.

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[14] Rosenbaum et al., *Reducing Childhood Obesity*, 25.
[15] Ibid., 5.
[16] Sara Rosenbaum and Anne Markus, *The Deficit Reduction Act of 2005: An Overview of Key Medicaid Provisions and Their Implications for Early Childhood Development Services*, The Commonwealth Fund, October 2006. Available at http://www.cmwf.org/usr_doc/Rosenbaum_DRA_Medicaid_provisions_958.pdf.
[17] Kaiser Commission on Medicaid and the Uninsured, *The Medicaid Resource Book*, Kaiser Family Foundation, July 2002 at 56.

Under EPSDT, states must provide periodic and "as needed" screening services that include an unclothed physical exam, comprehensive health and developmental history (physical and mental health), immunizations, laboratory tests, and health education. In addition, eligible children are entitled to vision, hearing, and dental services and any "other necessary" treatment to "correct or ameliorate" the effects of "physical and mental" conditions.[18] As a result, states must provide services aimed at addressing physical and mental health conditions that affect child health and development as well as services to treat acute or chronic medical illnesses and conditions.

While the Centers for Medicare and Medicaid Services (CMS), the federal agency which administers the Medicaid program for the Department of Health and Human Services, has not issued Medicaid guidance relating to the treatment of childhood obesity in particular, other useful regulations exist. Federal rules clarify that the comprehensive child health assessment in EPSDT covers the "general physical and mental health, *growth, development, and nutritional status* of infants, children, and youth."[19] In addition, CMS guidelines that interpret and explain its rules provide further details about the services to be provided when assess 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.

[18] § 1905(r) of the Soc. Sec. Act; 42 U.S.C. § 1396d(r).
[19] 42 C.F.R. § 441.56(b)(1) italics added.

- 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.

- 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.[20]

By comparing this description of covered services and the general EPSDT statutory language to the screening and treatment guidelines discussed earlier, it is clear that Medicaid should cover all of the recommended services.

Given the broad ESPDT standards, service limits that otherwise apply to adults do not apply to children, whose coverage extends to all classes of medical assistance recognized under federal law, when care is necessary to ameliorate a physical or mental health condition disclosed during an assessment. [21] For example, suppose a state limits an overweight adult to four sessions with a nutritional counselor annually. A child eligible for EPSDT benefits would be covered for as many nutritional assessments as needed to ameliorate her condition, although a state can require a treatment plan and ongoing review of progress as a means of ensuring the efficient use of coverage.

[20] CMS, State Medicaid Manual State Medicaid Manual §5123.2. Available at http://www.cms.hhs.gov/manuals/pub45/pub_45.asp.
[21] 42 U.S.C. §1396d(r)

In other words, the guiding principle in EPSDT is comprehensive coverage with careful controls, tailored to individual children's needs and utilization oversight consistent with efficient resource use. The classes of services and items covered under EPSDT are sufficiently broad to entail the full complement of identified interventions under the treatment guidelines discussed above.

Obesity Prevention and Treatment Standard of Care

The research for this analysis began by identifying, with the help of obesity experts,[22] a range of professional guidelines on childhood obesity screening and intervention. The appropriate prevention and treatment measures relating to obesity has been the subject of much debate. Our review of the pediatric obesity literature found numerous limitations the studies we examined; thus we were unable to rely on any single recommended practice.[23] Even so, clinicians with experience in treating at-risk or overweight children are in general agreement about the most appropriate screening and treatment options and this clinical consensus is evident in the guidelines themselves.[24] Assessment should include a family and social history, a physical health exam that includes the Body Mass Index (BMI)[25] and other measurements, identification of common symptoms, syndromes, or co-morbidities, and laboratory testing as appropriate. Treatment generally involves a combination of age-specific strategies to change a child's environment and behavior through education, counseling, goal setting, and rewards, as well as treatment and management of physical and mental conditions associated with excess weight such as diabetes, early maturation, asthma, and depression.[26]

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[22] We would like to thank Dr. Victoria Rogers and Dr. Lisa Letourneau for their invaluable help throughout this project.

[23] Anjali Jain, "What Works for Obesity? A summary of the research behind obesity interventions" (London: BMJ Publishing Group; 2004), 6.

[24] Dietz, W and Robinson T. "Overweight Children and Adolescents," *NEJM* 2005; 352(20):2100-2109, 2102.

[25] While the adult BMI tables distinguish between overweight and obesity, the index used for children does not. The BMI for children and adolescents is a sex- and age- specific index linked to the Centers for Disease Control and Prevention childhood growth charts. Children whose size place them between 85th and 95th percentiles are considered at-risk for being overweight and children above the 95th percentile are considered to be overweight. 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

[26] Dietz and Robinson, "Overweight Children and Adolescents." 2101-2104.

Of course, the exact diagnostic and treatment approach will vary depending on a child's individual circumstances. At the same time, we identified several treatment guidelines:

- The American Academy of Pediatrics (AAP) guidelines represent an expert consensus among a panel of clinicians and researchers who specialize in childhood obesity.[27]
- The Obesity Task Force of the Texas Pediatric Society developed a comprehensive Obesity Toolkit to assist pediatric professionals who treat at-risk or obese patients.
- Guidelines used by Anthem Blue Cross Blue Shield, illustrating one private health insurer's approach.
- Viner and Nicholls' efforts the United Kingdom to develop guidelines derived from AAP guidance.

Tables 1-5 present these guidelines to illustrate similarities and differences, especially in terms of the number assessment visits and the depth of the assessment itself.

One critical issue is whether obesity assessment and treatment is explicitly divided into several visits - an initial assessment followed by additional visits for further assessment and treatment. In general, the AAP, Texas Toolkit, and Viner and Nicholls guidelines all recommend a screening process that includes an initial assessment, to be followed by more detailed diagnostic testing and evaluation when indicated. For

[27] Medicaid programs that refer to a specific periodicity schedule usually refer to either the AAP or Bright Futures guidelines. Original funding for the Bright Futures project came from the Maternal and Child Health Bureau to develop comprehensive health supervision guidelines for providers serving children. Since its inception, it has partnered with the AAP, and its basic guidelines include the AAP's periodicity schedule that is referred to in Tables 1-5. In addition to the AAP periodicity schedule, Bright includes detailed discussions about anticipatory guidance and parent-child-physician interaction and communication, including information on nutrition and weight management.

example, the AAP recommendations and Texas Toolkit guidelines explicitly distinguish between services needed during an initial assessment and a subsequent second-level assessment. The rational for this multi-stated approach is to allow for a rapid initial exam followed by a more in-depth diagnostic encounter. The initial screen uses the BMI (which is part of a periodic EPSDT health exam)[28] to determine whether a child is either currently overweight or at-risk for being overweight. When the screen reveals the presence of risk, a subsequent and longer diagnostic intervention is recommended, during which time tests may be conducted and thorough physical, mental and developmental assessment conducted in order to delve into the child's family, social, and medical history. Although the Viner and Nicholls guidelines are not explicitly separated into initial and secondary screenings, the authors indicate that assessment and treatment decisions vary by level of obesity and presence of insulin resistance syndrome. The Anthem guidelines, on the other hand, do not indicate whether multiple visits are expected.

Tables 1-5 illustrate the services involved in diagnosing and treating obesity. These tables highlight four diagnostic areas - physical exam, general symptoms, family and social history, and laboratory tests – and several treatment options. Providers may also rely on indicators of co-morbidities such as cardiovascular problems, endocrine problems, dermatologic problems, and other physical or mental conditions when determining which interventions are necessary. While there is significant overlap among the guidelines, the AAP and Texas Toolkit appear to offer the most comprehensive approaches.

[28] 42 C.F.R. § 441.56(b)(1).

Table 1. Diagnosis - Physical Exam				
	AAP	**Texas Toolkit**	**Anthem**	**Viner & Nicholls**
Skinfold thickness	X			X
BMI percent for age/gender	X	X	X	X
Abdominal circumference				X
Blood Pressure	X	X	X	X
Acanthosis Nigracans	X	X		X
Hirsuitism	X	X		
Papilledema		X		
Tonsillar size	X	X		
Thyromegaly		X		
Hepatomegaly		X		
Truncal obesity	X			
Dysmorphic features	X			
Violaceous striae	X			
Optic disks	X			
Abdominal tenderness	X			
Undescended testicles	X			
Limited hip range of motion	X			
Lower leg bowing	X			
Signs of Hypothyroidism				X

The guidelines indicate that providers should conduct an assessment to determine whether the child is at-risk for obesity or currently overweight or obese. As shown in Table 1, all of the guidelines recommend BMI and blood pressure testing at this time. Under the AAP and Texas Toolkit guidelines, it is clear that the initial screen is based on the BMI. For children with a BMI above the 85th percentile, a second-level screen is indicated. This screen includes a review of the family and social history for children

above the 85th percentile; children above 95th percentile or those above the 85th percentile who have additional factors, such as large change in BMI or family history of obesity also receive an in-depth medical assessment. Viner and Nicholls use the United Kingdom BMI charts and a 99th percentile cut-off to identify obesity and include the additional evaluation requirements based on a five-tired system of risk using a combination of a finding of obesity and signs of insulin resistant syndrome.

Table 2. Diagnosis - General Symptoms

	AAP	Texas Toolkit	Anthem	Viner & Nicholls
Hyperpigmentation		X		
Wheezing		X		
Snoring		X	X	X
Sleep Apnea	X	X	X	X
Daytime somnolence	X	X	X	
Gallbladder disease	X	X		
Abdominal Pain	X	X		
Heartburn		X		
Abnormal menses	X	X		
Joint Pains	X	X		
Hyperactivity		X		
Depression	X	X		
Poor Self Esteem		X		X
Developmental Delays	X			
Headaches	X			
Eating Disorder	X			X

In addition to the physical attributes detailed in Table 1, the guidelines recommend that providers assess children for a variety of symptoms associated with obesity. In the AAP and Texas Toolkit, this more extensive assessment is part of the second-level screen. These symptoms, set forth in Table 2, range from physical conditions, such as wheezing or snoring, to psychological concerns, such as depression

and low self-esteem. Again, the AAP guidelines and Texas Toolkit give providers the most detailed guidance to follow and they are in agreement on seven different symptoms to consider.

Table 3. Diagnosis – Family and Social History				
	AAP	**Texas Toolkit**	**Anthem**	**Viner & Nicholls**
Maternal diabetes			X	X
Family history of obesity	X	X	X	X
Family history of type 2 diabetes	X	X		X
Family history cardiovascular disease	X	X		X
Family history of hyper/hypotension	X	X		X
Family history of dyslipidemia	X	X		X
Family history of gall bladder disease	X			
Family history of thyroid disease		X		
Family history of eating disorders	X	X		X
Family history of mental health issues	X			X
Family history of genetic disorders	X	X	X	X
Family history of Polycystic ovarian syndrome				X
Children of lower socio-economic status			X	
Physical activity history	X	X		X
Sedentary lifestyle	X	X	X	X
Dietary history	X	X	X	X
Tobacco Use	X			
Readiness to make changes	X			X

As indicated in Table 3, all four guidelines recommend that providers conduct an in-depth review of family and social history in order to assess obesity risk factors. The social history provides insights into the conditions that may lead to obesity, such as sedentary lifestyle, tobacco use, and dietary history. There is agreement among three of the four guidelines on 10 of the topics to be covered, with the Anthem guidelines providing the least amount of detail overall. The family and social history review is part of the second-level screen in the AAP and Texas Toolkit guidelines.

In addition, the AAP and Viner and Nichols guidelines explicitly recommend that providers assess *readiness for change*. It more likely that prevention and treatment strategies will be effective if the child and family are ready to make behavior changes and the entire family and other important caregivers are involved in treatment. In fact, implementing a weight loss program before such a commitment exists may be harmful to the child and discourage future weight loss efforts.[29]

Table 4. Diagnosis - Laboratory Tests

	AAP	Texas Toolkit	Anthem	Viner and Nicholls[a]
Fasting serum lipid panel	X	X	X	X
Fasting glucose	X	X	X	X
Fasting serum insulin level	X	X	X	X
2 hour glucose tolerance test		X	X	
Oral Glucose Tolerance Test				X

[29] Barlow and Dietz, "Obesity Evaluation and Treatment,"5.

Table 4. Diagnosis - Laboratory Tests				
	AAP	**Texas Toolkit**	**Anthem**	**Viner and Nicholls[a]**
ALT (alanine aminotransferase)		X		
Spot urine microalbumin/ creatinine ratio or protein/creatinine ration if evidence of hypertension		X		
Thyroid function				X
DNA Screening for monogetic forms of obesity				X
Cortisol				X
Karyotype				X

When medically indicated for obese children, the guidelines suggest appropriate laboratory testing as shown in Table 4. While there is agreement about the need for fasting lipid, insulin and glucose testing, the guidelines otherwise vary widely in terms of the specific laboratory tests indicated. This testing occurs during the second-level visit in the AAP and Texas Toolkit guidelines.

Table 5. Treatment Options				
	AAP	**Texas Toolkit**	**Anthem**	**Viner and Nicholls**
Dietary Interventions				
Reducing caloric intake	X	X	X	X
Reducing fat intake	X	X	X	X
Surgery				
Bariatric Surgery	X	X		
Physical Activity				
Exercise Treatments	X	X	X	X
Decrease Sedentary Behavior	X	X	X	X
Prescription Medication	X	X		X
Behavior Modification				
Nutritional education	X	X		X
Family Therapy	X	X		X
Individual Therapy	X	X		X
Cease Tobacco Use	X			

A treatment plan is required once a child is identified as at-risk or currently overweight. Variations in treatment plans are shown in Table 5. There is general agreement among all four guidelines about the types of interventions that are commonly used to try to achieve this goal, with a focus on behavior modification through reduced caloric intake, healthier eating, and increased physical activity. When necessary, AAP recommends tobacco cessation steps as well.

While pharmacological therapy and surgical options are included in Table 5, these strategies are reserved for children who have complications that require rapid weight loss

and are generally prescribed by providers working in pediatric obesity treatment specialty centers.[30] In addition, prescription medications have not been approved for use in young children.[31]

Although not evident from these tables, researchers recommend that intervention begin at an early age because change is more difficult to achieve as a child develops. The goal of treatment is not for the child to reach an ideal weight, but to achieve healthy dietary habits and physical activity levels. Unless a child is morbidly obese, the AAP, Texas Toolkit and Viner and Nicholls suggest that initial treatments should focus on weight maintenance while the child grows, resulting in a gradual lowering of the BMI.[32]

[30] Barlow and Dietz, "Obesity Evaluation and Treatment," 4; Texas Toolkit, 9.
[31] While Orlistat (reduces fat absorption) and Sibutramine (appetite suppression) have been approved for long-term use in obese adults, Orlistat is only approved for children 12 or older and Sibutramine is approved for children 16 or older. Weight Control Information Network, "Prescription Medications for the Treatment of Obesity," available at http://win.niddk.nih.gov/publications/prescription.htm.
[32] Barlow and Dietz, "Obesity Evaluation and Treatment," 6; Texas Toolkit, 9; Viner and Nicholls, 387.

State Medicaid Coverage and Payment Practices for Pediatric Obesity Prevention and Management

As discussed earlier, our prior report, *Reducing Obesity Risks During Childhood: The Role of Public and Private Health Insurance*, included a detailed explanation about the extensive scope of Medicaid's coverage for childhood obesity interventions. This study evaluates actual state Medicaid coverage guidelines and payment practices, using the most recently available state Medicaid provider manuals, fee schedules, policies, administrative codes and regulations, and managed care contracts. The focus in this analysis is on the treatment of both children who are at-risk for obesity as well as those who are currently overweight.[33]

As noted earlier, this phase of our study was structured to answer 3 questions:

1. How do current coverage and payment rules reflect and support professional treatment recommendations?
2. Do states further target obesity prevention as a stated child health goal through the use of formal provider guidelines and bundled coverage and payment techniques akin to disease management?
3. Do states using comprehensive managed care systems emphasize and incentivize obesity prevention in children as a formal performance specification in their contracts and through payment incentives?

Despite the relative clarity regarding Medicaid coverage of all services and items recommended by health care professionals with expertise in pediatric obesity management, anecdotal evidence suggests that in many states there may exist barriers to

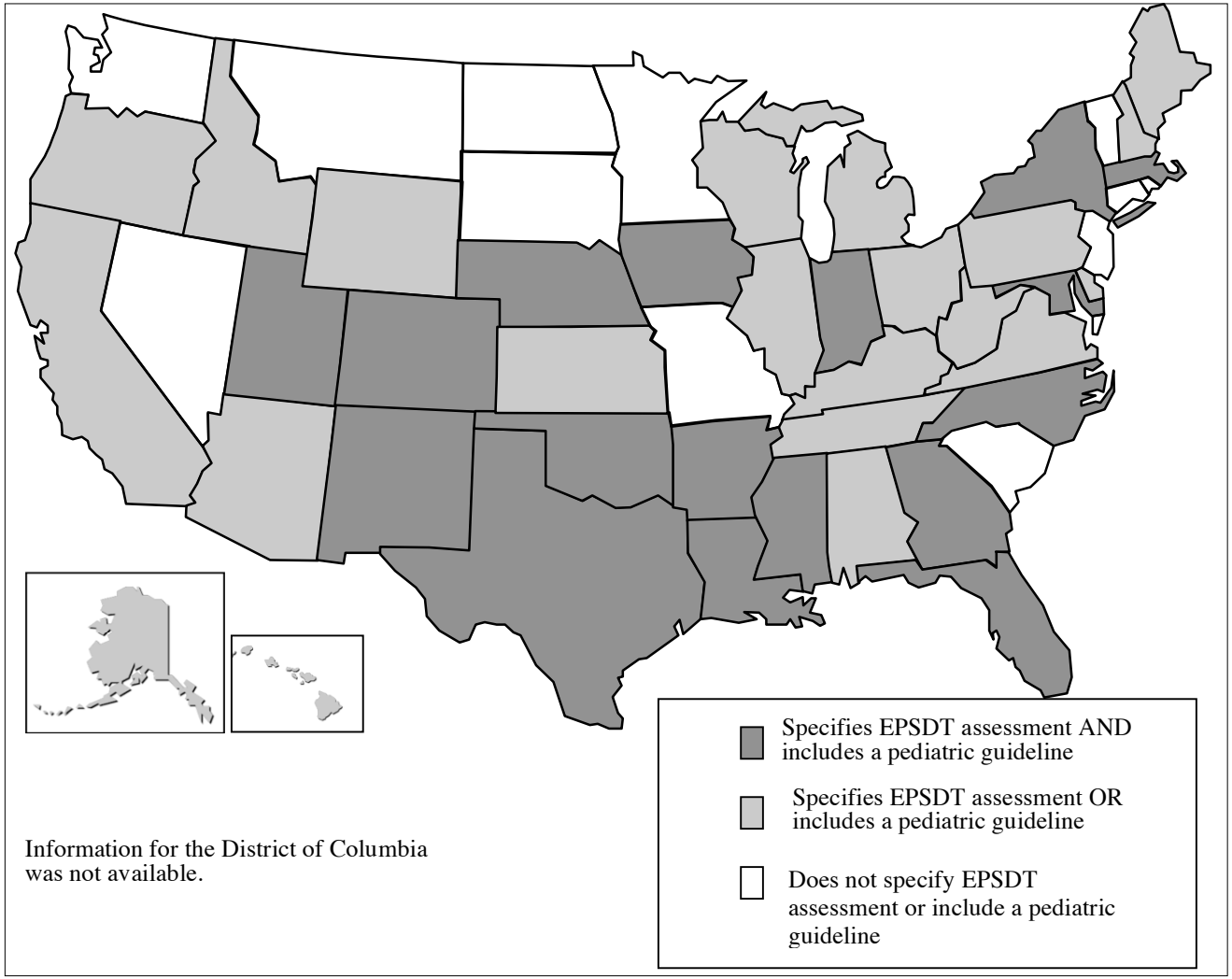
[33] The state information used is identified in Appendix A.

effective coverage. These barriers take the form of service and treatment limits as well as payment principles that compensate health professionals for less than the full range of recommended interventions, in terms of both the types of services covered and the frequency and duration of visits recognized. In order to better understand state practices, researchers examined state approaches to pediatric obesity coverage and payment.

Medicaid Fee-For-Service Information and Requirements

Most state Medicaid programs provide generalized information about effective child health practices, offering limited formal provider guidance regarding obesity prevention and treatment to providers. As shown in Figure 1, states generally provide basic information to providers. Almost every state lists at least some of the basic EPSDT assessment services. Some states simply list these services without further explanation, while others describe the components of each service. In addition, while 32 states specify the full standard of care they require pediatric professionals to follow (e.g., AAP or Bright Futures), 18 do not. These guidelines include age-appropriate intervals for several tasks that are part of obesity screening – height and weight measurement, blood pressure, metabolic screening, and nutrition counseling. Only 19 of the 32 states that require providers to follow AAP or Bright Futures standards include a copy of the complete AAP or Bright Futures chart in the Medicaid manual to assist providers. Overall, there is much room for improvement in the amount of and type of obesity-related information that state Medicaid programs give to providers.

Figure 1. Level of EPSDT Information in State Medicaid Fee-For-Service Guidance



To qualify as "specifies EPSDT assessment" a state must list all of the following services: history, physical exam, hearing, vision, dental, nutritional assessment, nutritional counseling, health education, and anticipatory guidance. See Appendix C for a detailed chart of obesity-related information identified in state Medicaid fee-for-service guidance by state.

While there is ample opportunity for many states to improve the information given to Medicaid providers about obesity prevention and treatment, several states have taken steps to address this issue directly. Arizona and Nebraska are currently using a specific bundle of services to create an obesity prevention and treatment program and Pennsylvania is in the process of developing one. Numerous other states have general obesity prevention initiatives that are not part of Medicaid specifically, but may assist Medicaid providers and beneficiaries through education and dissemination of information. Finally, nine other states discuss obesity prevention and treatment in their Medicaid manuals, but do not have a full program in place.

Arizona's program – the Childhood Obesity Chronic Care Model - is a sophisticated and comprehensive approach to fighting childhood obesity that follows the disease management concept.[34] Disease management is "an approach to patient care that emphasizes coordinated, comprehensive care along the continuum of disease and across healthcare delivery systems."[35] The goal is to reduce costs associated with a chronic illness by reducing the frequency and severity of negative effects of the disease.[36] Arizona's Childhood Obesity Chronic Care Model includes a tiered approach to treating children, consultation with and participation by a wide variety of community stakeholders and health care providers, development of self-management tools, and creation of a childhood obesity registry.

[34] The information about Arizona's program is based on a conversation with and documents provided by Dr. Kim Elliot, Administrator of Clinical Quality Management at the Arizona Health Care Cost Containment System.
[35] Diane Ritterband, "Disease Management: Old Wine in New Bottles?" 45(4) *J. Health Care Mang.*, (2000), 255-266.
[36] Peter Kongstevedt, The Managed Health Care Handbook, (Gaithersburg: Aspen Publishers, 2001), p. 402.

Initiated in March 2005, Arizona's program is currently being tested on a pilot basis in one county and reports based on initial data should be available later this year. There was extensive pre-implementation planning with stakeholders in the community, including the state medical association, health plans, state department of health services, community providers, schools, and others. After these discussions, the state established a bundle of services that can be provided in a single visit and identified the appropriate nutrition and health education codes as needed. While the covered services were always part of EPSDT, some typically would have been referred out to additional providers based on the terms of the managed care contracts used by the state. This bundle of services allows providers and families to take advantage of "one-stop shopping" which results in fewer required visits. In addition the visits were also scheduled for after working hours to facilitate participation in the program.

After reviewing the medical literature, Arizona established a four-tiered approach based on the needs of the child. Tier 1 prevention services include obesity identification through BMI calculations and parent and child education provided by a primary care provider. Children identified as at-risk for obesity are in Tier 2 and are eligible for two medical nutrition visits and two motivational/behavioral therapy visits per year. Tier 3 includes children in the 85th percentile BMI. They may receive additional medical nutrition and therapy visits, as well as exercise physiologist services and, if indicated, depression management and enrollment in the Center for Excellence Obesity Management Program. This obesity management program is a "train-the-trainer" model for providers with a family-centered approach that is based on an individualized curriculum for patients and their family. Tier 4 children are in the 95th percentile BMI or

higher and they are eligible for a greater number of medical nutrition, behavioral therapy, and exercise physiologist visits and are enrolled in the Center for Excellence Obesity Management Program if the parent and child agree to participate and complete the program.

Nebraska has a physician-supervised Weight Management Clinic for children who are clinically overweight.[37] The weight management program is tailored to the age, developmental stage, and needs of the child, must include family participation, and take into account the family's strengths and weaknesses. To be eligible, children must meet one of four criteria: 1) have a 75th percentile or higher BMI and either significant family history of obesity or a condition that reduces the child's physical activity level, 2) have a BMI score above the 95th percentile, 3) have a medical condition that creates a predisposition to obesity, or 4) have a medical condition that would be exacerbated if the child were obese.[38] The child's program consists of a moderate calorie, well-balanced diet, exercise, and behavior modification. The program does not cover weight loss drugs or dietary supplements, "novelty" diets, diets that include less than 800 calories a day, or diets based on formulas or packaged products.[39] Medicaid will reimburse provides for up to one hour of counseling, four times a year.

Pennsylvania is developing a Medicaid obesity prevention and treatment program that may be implemented in the future. This program would likely involve an initial obesity assessment and limited number of reassessments, a specified number of individual or group health and behavior assessments, and nutritional counseling. Children who are equal to or greater than the 85th BMI percentile or who are fast weight

[37] 471 NAC 33-006.
[38] Ibid.
[39] 471 NAC 33-006.02-.03.

gainers would be eligible for the program. The Medicaid program would use and reimburse providers through Health and Behavior Assessment/Intervention codes which are currently not reimbursed by the state's Medicaid program. Having codes unique to the obesity prevention and treatment package of services would simplify coding for providers and allow the state to use coding information to for tracking and evaluation purposes. While the state is discussing a model that will give providers extra reimbursement for performing these services under the Health and Behavior Assessment/Intervention codes, they have not settled on a specific reimbursement amount at this time.

In addition, several other states explicitly devote discussion to obesity prevention and intervention in their Medicaid manuals, even though they do not have a full obesity treatment and prevention program.

- Georgia's manual includes a discussion of how to assess overweight by using the BMI, brief recommendations for prevention, and useful links for calculating the BMI and learning about obesity treatment and prevention.
- Louisiana's manual includes a childhood obesity fact sheet that addresses the prevalence and fiscal impact of obesity and identifies effective strategies for treatment and prevention.
- Texas's manual includes a section on risk factors and screening for eating disorders and obesity. The manual indicates that the screen should occur during the basic examination and include an in-depth assessment for adolescents with BMIs in the 85th percentile or higher. The manual instructs

providers to include general diet and exercise counseling even if the assessment is negative for eating disorders or obesity.

- Arizona, Kentucky, Maryland, New York, and Iowa have expanded information about calculating the BMI and/or the content of nutritional assessments. Maryland also refers providers to a workgroup report on childhood overweight prevention.
- Kansas' Kan Be Healthy Registered Nurses Training Program includes detailed information about standards of practice relating to growth, including how to calculate the BMI, the importance of good nutrition and physical activity for reducing obesity, and nutrition screening questionnaires. The program instructs nurses to re-assess height-for-age measurements every three months until the problem is resolved and to refer children to a physician for assessment and counseling. However, similar information is not found in the general provider manual or in information directed to physicians.

Figure 2, below, shows the states with comprehensive or proposed obesity prevention and treatment programs as well as those that mention obesity in their Medicaid fee-for-service documents.

Figure 2. States with obesity prevention and treatment programs or obesity-related information in their Medicaid fee-for-service documents

Managed Care Specifications and Performance Measures

In addition to reviewing that state Medicaid fee-for-service documents, researchers also evaluated the available managed care contracts. We were able to obtain managed care contracts from 24 of the 43 states with comprehensive Medicaid managed care programs. While this sample is not complete, the findings are consistent among the 24 contracts reviewed. Overall, there is very little EPSDT-specific information and virtually no obesity-related information specified in the Medicaid managed care contracts.

As shown in Table 6, there is a dearth of information about obesity prevention and treatment services in the Medicaid managed care contracts we reviewed. While most Medicaid managed care contracts include a general periodicity schedule, only the District of Columbia and New Mexico refer to obesity specifically. The District of Columbia requires contractors without National Committee for Quality Assurance accreditation to conduct a quality of care study on obesity.[40] Of all of the contracts that we reviewed, only New Mexico requires obesity-related performance measures.[41] In addition, in its request-for-proposal (RFP), New Mexico requires potential contractors to describe "specific patient education programs or protocols" for patients with childhood obesity as well as the nutritional assessment and counseling approach used for at-risk populations.[42] Together, the review of available Medicaid fee-for-service documents and Medicaid

[40] The District of Columbia Healthy Families Medicaid Managed Care Contract 2004 § C.17.6.2.
[41] New Mexico Request for Proposal Issued by the New Mexico Human Services Department for Medicaid Program Initiative, November 8, 2004, *New Mexico Performance Measures Program* §2.1.2R(iv)(d). The RFP did not include the specific performance measures required.
[42] New Mexico Request for Proposal Issued by the New Mexico Human Services Department for Medicaid Program Initiative, November 8, 2004, § B8 & B10.

managed care contracts reveals that states are furnishing providers with a very limited amount of information to assist them in assessing children for overweight or obesity and treating those who are in need of services.

Table 6. Obesity Services Specified in Managed Care Contracts					
STATE	**Explains EPSDT Requirements**	**Refers to Periodicity Schedule**	**Refers to obesity**	**Obesity related Performance Measures**	**Refers to BMI***
Arizona		X			
Colorado		X			
Delaware		X			
D.C.		X	X		
Florida					
Georgia					
Illinois					
Iowa					
Kentucky	X	X			
Maryland		X			
Michigan	X	X			
Minnesota					
Missouri		X			
Nebraska					
New Jersey		X			
New Mexico		X	X	X	
New York					
North Carolina		X			
North Dakota	X	X			
Oklahoma		X			
Rhode Island	X	X			
South Carolina		X			
Tennessee		X			
Virginia		X			
Washington					

* Refers to BMI in addition to periodicity schedule.

State Fee-For-Service Payment Practices

The billing process used in the nation's health care financing system is complex. The Health Insurance Portability and Accountability Act of 1996 (HIPAA) included administrative simplification provisions that were intended to reduce administrative costs and increase the efficiency of the health care system by standardizing procedure codes for payment claims.[43] HIPAA regulations include four recognized code sets which cover inpatient services, pharmaceuticals, dental care, and outpatient services.[44] These code sets are:

1. ICD-9-CM, International Classification of Diseases, 9th edition, Clinical Modification (Vol. 3);
2. National Drug Codes;
3. Codes on Dental Procedures and Nomenclature; and
4. A combination of Health Care Financing Administration Common Procedure Coding Systems maintained by the Department of Health and Human Services and Current Procedural Terminology, Fourth edition maintained by the American Medical Association.

The fourth code set listed above includes the Health Care Financing Administration Common Procedure Coding Systems (HCPCS) and the Current Procedural Terminology (CPT-4). HCPCS are a combination of the Department of Health and Human Services (HHS) Medicare codes and additional codes developed by a variety of professional societies.[45] HCPCS Level I codes are the CPT-4 codes covering

[43] Pub. L. No. 104-191, Subtitle F – Administrative Simplification; 42 U.S.C. § 201 et seq.
[44] For an excellent overview of the HIPAA simplification rules, see Markus A. et al, *How Medical Claims Simplification Can Impeded Delivery of Child Developmental Services*, The George Washington University School of Public Health and Health Services, Prepared for the Commonwealth Fund (August 2005).
[45] Centers for Medicare and Medicaid Services, "HCPCS Background Information."

medical services and procedures billed by physicians and other health care professionals.[46] HCPCS Level II codes are HHS-developed codes for products, supplies, and services not included in the CPT codes but often covered by Medicare and other insurers. Medicaid agencies have adopted all or part of HCPCS for their own coding system and they are required to use HCPCS in the Medicaid Management Information System.[47] For providers of childhood obesity prevention and intervention services, the HCPCS Level I CPT codes are the most important, although states may occasionally use HCPCS Level II HHS codes for some relevant services.

In addition, HIPAA eliminated the use of Level III codes, also known as local codes, that states had used to bill for certain procedures and claims covered by Medicaid programs. Since Medicaid programs generally have a broader benefit package than private insurers, these additional codes were needed for services not included in the Level I and Level II code sets.[48] With the removal of Level III codes, the local codes were either replaced with existing CPT-4 or Level II codes or eliminated altogether.[49]

Based on the accepted screening and intervention services discussed earlier and identified in Tables 1-5, all the services identified in the guidelines have a CPT and/or HCPCS Level II code established that can be used to cover those services. While the elimination of local codes may have made it more difficult for providers to code for certain Medicaid services, such as developmental services, the same is not true for

[46] This code set is maintained by the American Medical Association.
[47] Markus, *Medical Claim Simplification*, 14 and n. 52.
[48] Centers for Medicare and Medicaid Services, "HCPCS Background Information," available at http://www.cms.hhs.gov/MedHCPCSGenInfo/
[49] Markus, *Medical Claim Simplification*, 17.

obesity prevention services.[50] The key available CPT and HCPCS Level II codes and their correlating obesity prevention services are shown below in Table 7.

Table 7. Available CPT and HCPCS Level II Codes for Commonly Needed Obesity Prevention Services

CPT/HCPCS-II Code	Code Description	Obesity Prevention Service
99201-99215	**Evaluation and Management: New/Established Patient Office or Other Outpatient Visit:** includes patient history, examination, medical decision making, counseling and/or coordination of care. Performed by a physician.	▪ Family and Social History ▪ Physical Exam ▪ Individual counseling (nutrition, health education, exercise, mental health)
99381-99387 and 99391-99397	**Initial/Periodic Comprehensive Preventive Medicine Evaluation and Management:** includes age and gender appropriate history, examination, counseling/anticipatory guidance/risk factor reduction intervention, immunizations, laboratory/diagnostic procedures (lab codes reported separately).	▪ Family History ▪ Physical Exam ▪ Individual counseling (nutrition, health education, exercise, mental health) ▪ Diagnostic/Laboratory services
99401-99404 and 99411-99412	**Counseling and/or Risk Factor Reduction Intervention (Individual or Group):** Addresses issues such as family problems, diet and exercise, substance abuse, injury prevention, etc. and includes diagnostic and laboratory tests. Provided in a separate encounter and not for patients with symptoms or established illness.	▪ Individual or group counseling before patient exhibits symptoms of overweight or obesity.
	Health and Behavior Assessment/Intervention: identify psychological, behavioral, emotional, cognitive, and social factors important to prevention,	▪ Individual or group counseling

[50] Markus, *Medical Claim Simplification*, 29-30.

Table 7. Available CPT and HCPCS Level II Codes for Commonly Needed Obesity Prevention Services		
CPT/HCPCS-II Code	Code Description	Obesity Prevention Service
96150-96155	treatment, or management of physical health problems. Focus is on biopsychosocial factors important to physical health problems and treatments. For patients who have primary physical illnesses, diagnoses, or symptoms. Performed by non-physician provider. Do not report on same day as Evaluation & Management codes.	(nutrition, health education, exercise, mental health) for individual or groups of patients with symptoms/illnesses.
HCPCS S0315-S0316	**Health Education** Disease management program, initial and follow-up assessments	▪ Health education, including behavior modification
98960-98962	**Education and Training for Patient Self-Management**: Educational and training service using a standardized curriculum to an individual or group for the treatment of an established illness/disease. Provided by a non-physician.	▪ Individual or group counseling (nutrition, health education, exercise) for individual or groups of patients with symptoms/illnesses.
99078	**Miscellaneous Services:** Physician educational services to patients in group settings for patients with symptoms or established illnesses.	▪ Group counseling (nutrition, health education, exercise) for a group of patients with symptoms or illnesses.
97802-97804 and/or HCPCS code S9470	**Medical Nutrition Therapy (Individual or Group):** face-to-fact nutrition therapy by a non-physician provider.	▪ Nutritional Counseling
HCPCS S9451	**Physiotherapy** Exercise classes given by a non-physician provider to enhance understanding of how to increase physical activity.	▪ Exercise education.

Table 7. Available CPT and HCPCS Level II Codes for Commonly Needed Obesity Prevention Services		
CPT/HCPCS-II Code	Code Description	Obesity Prevention Service
99354-99357	**Prolonged Physician Service with Direct (Face-to-face) Patient Contact:** When physician provides prolonged service beyond the usual service. This service is reported in addition to other services if more than 30 minutes.	▪ Extended time needed for any covered physician service.
99361-99362; 99371-99373	**Team Conferences and Telephone Calls:** conference by a physician with a multidisciplinary team of health professionals or community agencies for the purpose of coordinating patient care; telephone calls from physician to patient for consultation or from physician to other providers for medical management.	▪ Coordinate care from multiple providers

As illustrated in Table 7, there are sufficient codes currently available to bill for the recommended obesity prevention services. Which code is appropriate depends on the provider involved, the nature of the service rendered, the medical condition of the patient, and the state's Medicaid billing rules. Just because the codes are available does not mean Medicaid programs reimburse providers for using the codes. States must choose to recognize codes as reimbursable in their billing system.

Most states use the Initial and Periodic Comprehensive Preventive Medicine Evaluation and Management codes (99381-99397) for basic EPSDT screens. A few states use the Evaluation and Management: New/Established Patient Office or Other Outpatient Visit (99201-99215) instead of or in addition to the preventive medicine

codes.[51] Given the broad range of services covered by both of these code groups, they appear to be sufficient to cover most obesity prevention services, including an initial screen, health education, and anticipatory guidance. However, with the extensive services included in EPSDT screens, providers may feel that there is insufficient time to engage in adequate obesity screening and counseling for at-risk or overweight children during a standard periodic visit. Since states often disallow additional payments for treatments provided on the same days as an EPSDT screen, providers may not be able to bill for additional care separately.

In addition, follow-up education and counseling are required to prevent or reduce obesity and children may also need mental health counseling if they suffer from depression or low self-esteem due to their weight. States may place limitations on the use of these services, such as a restricted number of visits allowed annually, need for prior authorization, exclusions based on other services coded for on the same day, or the inability to bill separately for certain services. Depending on a state's Medicaid billing rules, providers may be hampered in their ability to bill for certain obesity prevention services even though appropriate codes are available and used by the state. Furthermore, Medicaid programs are often unclear about whether these kinds of restrictions are in place and which codes are the most appropriate to use, creating additional hurdles to overcome when trying to provide obesity prevention and treatment services.

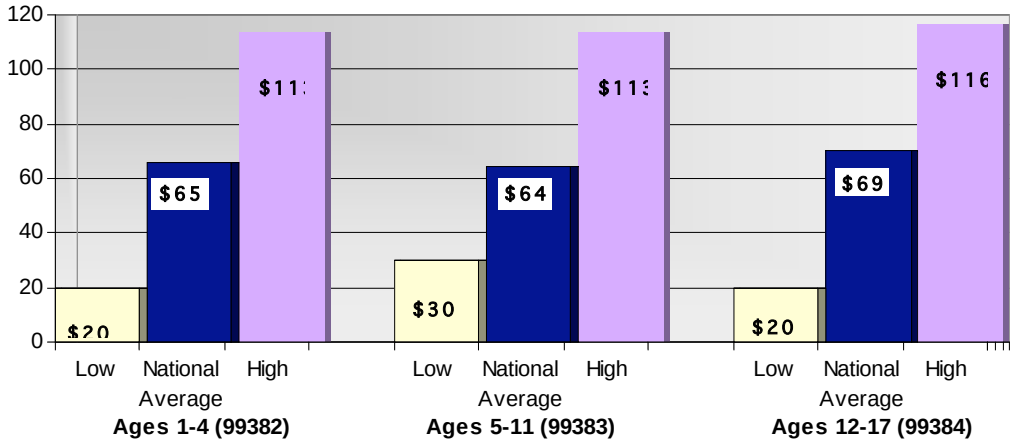
Of course, reimbursement level is also an important issue. Reimbursement varies greatly by state and procedure. For example, on average, states pay between $60 and $70 for new patient visits billed to Initial and Periodic Comprehensive Preventive Medicine

[51] Kansas and Washington use the Evaluation and Management codes while Colorado, Hawaii, Kentucky, Maine, and Oklahoma allow the use of both sets of codes. Information was not available for Louisiana, Massachusetts, Mississippi, South Dakota, and Wyoming.

Evaluation and Management codes (99382-99384), which are most commonly used for EPSDT visits.[52] Yet, one state pays $20 per visit while another reimburses $116 per visit. Although it would be useful for states to cover individual counseling (99401-99402) as part of an obesity prevention package for follow-up visits, 19 states do not cover the service at all[53] and one state bundles counseling with other services. Of the remaining states that cover individual counseling, reimbursement ranges from a high of $175 to a low of $5, with an average just under $30 for 15 minutes of counseling and just over $30 for 30 minutes of counseling.[54] Figures 3-6 show the high, low, and national average rate for select services.

[52] American Academy of Pediatrics, *Medicaid Payment for Commonly Used Pediatric Services, 2004/05*, p. 3, available at http://www.aap.org/research/medreimPDF0405/Medicaid_Reimbursement_2004-05_Interim_Report.pdf#search=%22medicaid%20payment%20for%20commonly%20used%20pediatric%20services%22.
[53] The District of Columbia and Nevada cover 15 minutes of individual counseling, but not 30 minutes.
[54] American Academy of Pediatrics, *Medicaid Payment,* p.5.

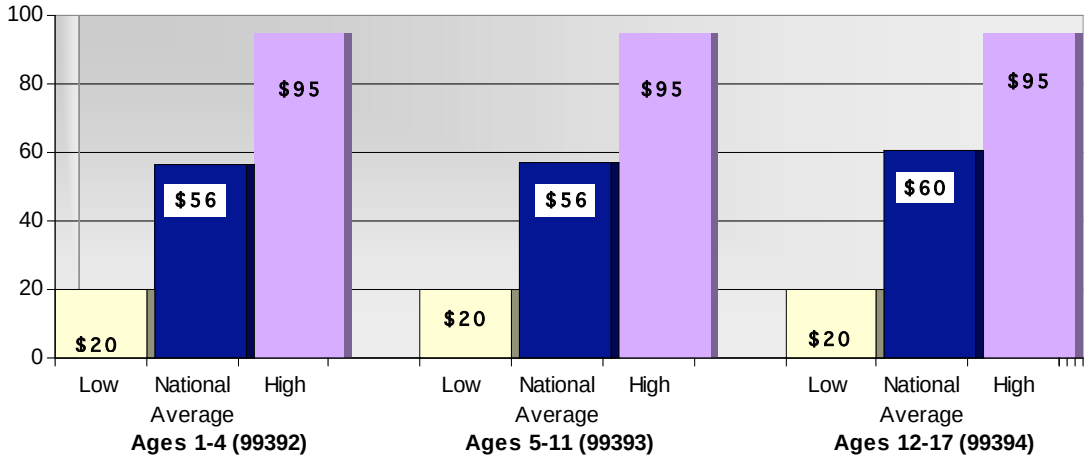
Figure 3: Medicaid Reimbursement Rates for Initial Preventive Medicine Visits (ages 1-17), Highest Rate, Lowest Rate, National Average, 2004 (in dollars)



Note: AK, DE, GA, IN, MI, TN and TX are excluded from the Natioinal Average. AK, DE, IN, and MI did not provide ra indicates the service is not covered, TN does not have a fee-for-service Medicaid program and TX indicates this ser

Source: American Academy of Pediatrics. (2005). Medicaid payment for Commonly Used Pediatric Servic

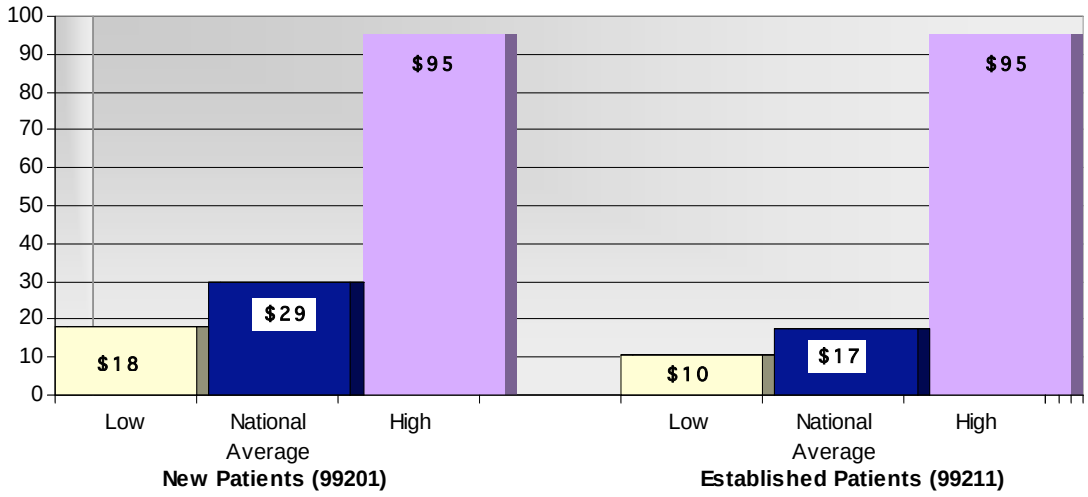
Figure 4: Medicaid Reimbursement Rates for Established Preventive Medicine Visits (ages 1-17), Highest Rate, Lowest Rate, National Average, 2004 (in dollars)



Note: AK, DE, GA, IN, MI, TN and TX are excluded from the National Average. AK, DE, IN, and MI did nto provide rates. GA in sservice is not covered. TN does not have a fee-for-service Medicaid program, TX indicates this is not applicable.

Source: American Academy of Pediatrics. (2005). Medicaid payment for Commonly Used Pediatric Services, 20(

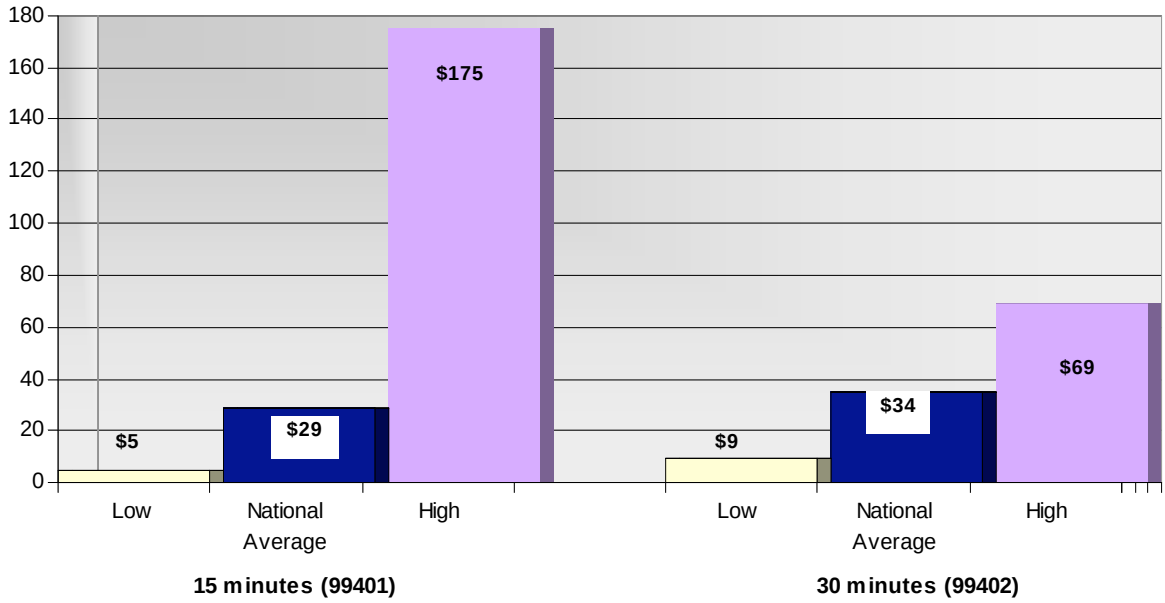
Figure 5: Medicaid Reimbursement Rates for Evaluation and Management, New and Established Patient Office Visits, Highest Rate, Lowest Rate, National Average, 2004 (in dollars)



Note: AK, DE, IN, MI, PA and TN are excluded from the National Average. AK, DE, IN, MI and PA did not provide rates. T have a fee-for-service Medicaid program.

Source: American Academy of Pediatrics. (2005). Medicaid payment for Commonly Used Pediatric Services, 20(

Figure 6: Medicaid Reimbursement Rates for Individual Counseling Preventive Medicine Visits (15 & 30 min.), Highest Rate, Lowest Rate, National Average, 2004 (in dollars)



Note: 29 states are excluded from the National Average. AK, DE, IA, IN< MI and SD did not provide rates. CA, DC, GA, KY, MO, NE, NV, NJ, NM, NY, NC, ND, OH, PA, RI and VA indicate this service is not covered. HI indicates this is bundled with other IL indicates this service is manually priced. TX indicates this service is not applicable and TN does not have a fee-for-service Medicaid program.

Source: American Academy of Pediatrics. (2005). Medicaid payment for Commonly Used Pediatric Services,

Instead of simply focusing the level of reimbursement, states may want to consider using pay-for-performance techniques that tie higher reimbursement rates to performance measures that show providers are adhering to best practices in obesity treatment and prevention. For example, increased provider rates could be tied to the overall percent of children who receive a BMI measurement or full nutritional assessment. There is great interest in pay-for-performance tools and a number of health plans have already incorporated pay-for-performance into their reimbursement schemes. All though pay-for-performance is a promising approach, there has been little published research regarding the use of these tools in health care settings.[55]

[55] Meredith Rosenthal et al., *Early Experience with Pay-for-Performance: From Concept to Practice, JAMA* 29(14); 2002: 1788-1793.

Discussion

Childhood obesity is a serious problem in this country. The level of childhood obesity has quadrupled since 1970 and there are no signs of the problem abating.[56] The risk for obesity appears to be high among children who are members of racial or ethnic minorities or who are from low-income families.[57] As noted earlier, childhood overweight or obesity can lead to a host of physical and psychological ailments both during childhood and as adults. Accordingly, Medicaid is an essential player in the fight against childhood obesity.

Medicaid is well-equipped to tackle the rising childhood obesity problem. The expansive ESPDT portion of Medicaid covers a wide array of services and has a preventive standard of care that allows states to reimburse providers for interventions to prevent childhood obesity from occurring in the first place as well as for necessary treatments once a child becomes overweight or obese. By federal law, EPSDT screens include comprehensive physical and mental exams, including a nutritional assessment. CMS regulations further clarify that assessment and follow-up care relating to obesity or other nutritional problems are covered under EPSDT.

Since it is undisputed that the Medicaid program currently covers comprehensive obesity services, states have the opportunity to take a variety of steps that could pave the way for children to access services. These steps include:

[56] Rosenbaum et al., "Reducing Obesity Risks During Childhood," p. 4.
[57] Ibid., p.5.

1. Clarify the application of obesity prevention and treatment guidelines as part of the EPSDT benefit for children and adolescents. Medicaid programs communicate to providers mainly through provider manuals, fee schedules, policy updates, administrative codes and regulations, and managed care contracts. There is a wide variety among the states in the level of detail and clarity about EPSDT requirements as they relate to obesity prevention and treatment services. Among the managed care contracts reviewed, there was very little information included about EPSDT generally or obesity prevention and treatment specifically. In order to promote best practices states could disseminate to all managed care plans, participating health professionals, and other Medicaid-participating health providers existing professional guidelines on obesity management and treatment. In other words, to ensure that covered services are translated into best practices, state agencies could need to take the extra step of disseminating and ensuring use of practice guidelines.

States should not need to invest significant resources in this change because there are numerous resources available regarding obesity prevention and treatment. Available resources include information about the health problems associated with obesity, assessment tools, and intervention strategies. Since many states already refer to the AAP guideline for general childhood prevention services, they could simply add the AAP's obesity treatment guidelines to their manuals and websites. Although more costly, states could also mail obesity prevention information directly to providers and beneficiaries.

2. Clarify proper coding and payment procedures for obesity prevention and treatment services. In order to remove confusion regarding payment for the cluster of services and procedures that constitute obesity treatment and prevention, states could

develop billing guidelines that support appropriate billing coding and could examine other payment standards and limitations that may need to be adjusted in cases involving obesity treatment and prevention. For example, where daily encounter maximum limits or visit duration rules create barriers to appropriate practice and payment, these limits and rules could be modified to strengthen performance. It may be that even with improved coding instruction and the elimination of payment barriers to appropriate care, payment rates remain too low. Practice guidelines are often effective when tied to specific incentivization. One option would be to tie higher rates to providers' ability to engage in and document adherence to best practices through a pay-for-performance program. State could consider including obesity-related performance measures in their managed care contracts as a way to encourage providers to adhere to best practice guidelines.

3. Bundle obesity prevention and treatment services into a single package following a disease management model. One comprehensive approach might be to bundle already-covered Medicaid services into an obesity prevention and treatment payment system, much as might be done in certain "disease management" coverage and payment arrangements. A few states either have adopted or are considering adopting this approach. Arizona is the furthest along at this time, with a comprehensive obesity program currently being tested on a pilot basis. The state's program includes guidelines about care, clear instructions about billing and coding, and an agreed upon level of reimbursement.

A state that is interested in developing an obesity prevention program would include guidelines about care, emphasizing treatment plans that are individualized and include the entire family, provide clear instructions about the number of allowable visit

and types of providers eligible to carry out each service, and list the appropriate codes associated with each type of visit. In addition, states should consider the appropriate reimbursement levels based on any additional care and coordination provided. States could assign currently unused codes to their obesity program which would allow for more specific evaluation and performance measurement as well as simplified coding for providers. One option is to use HCPCS disease management codes (S0315-S0316) as Arizona chose to do for the health education portion of its program. Another option would be to use the broad Health Behavior Assessment and Intervention code (96150-96155) if the state is not already using it for other purposes.

While it has been difficult to reduce childhood obesity rates, states Medicaid programs are currently well-equipped to be an important part of the obesity prevention and reduction team. All of the tools for improving state Medicaid programs' approach to childhood obesity prevention and treatment are readily available. States should work with providers and other community stakeholders to develop a comprehensive approach to preventing and reducing childhood obesity.

Appendix A – State Information Sources	
State	Date
AL	Medicaid Manual, October, 2003
AK	Medicaid Manual, August, 2003
AZ	Medicaid Manual, August, 2003
AR	Medicaid Manual, October, 2003
CA	Medicaid Manual, June, 2003
CO	Medicaid Manual, June, 2002
CT	Medicaid Manual, August, 2003
DE	Medicaid Manual, July, 2002
DC	No Information Available
FL	Medicaid Manual, October, 2003
GA	Medicaid Manual, October, 2003
HI	Medicaid Manual, October, 2002
ID	Medicaid Manual, March, 2004
IL	Medicaid Manual, April, 2002
IN	Medicaid Manual, February, 2002
IA	Medicaid Manual, July, 2003
KS	Medicaid Manual, September, 2003
KT	Medicaid Manual, March, 2004
LA	Medicaid Manual, 2005
ME	Medicaid Manual, 2004
MD	Current Administrative Code
MA	Medicaid Manual, 2004
MI	Medicaid Manual, 2006
MN	Medicaid Manual, 2004
MS	Medicaid Manual, August, 2005
MO	Medicaid Manual, 2004
MT	Medicaid Manual, 2003
NE	Medicaid Manual, October, 2003
NV	Medicaid Manual, November, 2003
NH	Medicaid Manual, 2001
NJ	Medicaid Manual, August, 2002
NM	Medicaid Manual, 1995
NY	Medicaid Manual, 2005
NC	Medicaid Manual, 2003
ND	Medicaid Manual, September, 2004
OH	Medicaid Manual, June 2003
OK	Medicaid Manual, 2002
OR	Medicaid Manual, 2003
PA	Medicaid Manual, 2006
RI	Current Administrative Code
SC	Medicaid Manual, October, 2005

SD	Current Administrative Code
T N	Medicaid Manual, June, 2003
TX	Medicaid Manual, 2002
UT	Medicaid Manual, 2004
VT	Medicaid Manual, 2002
VA	Medicaid Manual, 2003
WA	Medicaid Manual, July, 2001
WV	Medicaid Manual, September, 2003
WI	Medicaid Manual, 1995
WY	Medicaid Manual, August, 2003

Appendix B – Analysis of State Medicaid Managed Care Contracts	
State	Reviewed/Contract Unavailable/No Comprehensive Managed Care Program
AL	No comprehensive program
AK	No comprehensive program
AZ	Contract reviewed
AR	Contract unavailable
CA	Contract unavailable
CO	Contract reviewed
CT	Contract unavailable
DE	Contract reviewed
DC	Contract reviewed
FL	Contract reviewed
GA	Contract reviewed
HI	Contract unavailable
ID	No comprehensive program
IL	Contract unavailable
IN	Contract reviewed
IA	No comprehensive program
KS	Contract unavailable
KT	Contract reviewed
LA	Contract reviewed
ME	No comprehensive program
MD	Contract unavailable
MA	Contract unavailable
MI	Contract reviewed
MN	Contract reviewed
MS	Contract unavailable
MO	Contract reviewed
MT	No comprehensive program
NE	Contract reviewed
NV	Contract unavailable
NH	Contract unavailable
NJ	Contract reviewed
NM	Contract reviewed
NY	Contract reviewed
NC	Contract reviewed
ND	Contract reviewed
OH	Contract unavailable
OK	Contract reviewed
OR	Contract unavailable

PA	Contract unavailable
RI	Contract reviewed
SC	Contract reviewed
SD	Contract unavailable
T N	Contract reviewed
TX	Contract reviewed
UT	Contract unavailable
VT	No comprehensive program
VA	Contract reviewed
WA	Contract reviewed
WV	Contract unavailable
WI	Contract unavailable
WY	No comprehensive program

Appendix C. Obesity-Related Serviced Identified in State Medicaid Fee-for-Service Guidance

States	History	Physical Exam	Hearing, Vision, Dental	Nutritional Assessment	Height-Weight / BMI	Follow Bright Futures/AAP Rec.	Diabetes Test[1]	Nutritional Counseling[2]	Health Education	Anticipatory Guidance[2]
Alabama	X	X	X	X	X	AAP immunization schedule only	X	X	X	X
Alaska	X	X	X	X	X	AAP		X		
Arizona	X	X	X	X	X	AAP			X	
Arkansas	X	X	X	X	X	AAP		X	X	X
California	X	X	X	X		AAP				
Colorado	X	X	X	X	X	AAP	X	X	X	X
Connecticut	X[3]	X[3]	X							
Delaware	X	X	X	X	X	AAP immunization schedule only	X	X	X	X
Florida	X	X	X	X	X	AAP		X	X	X
Georgia	X	X	X	X	X	AAP		X	X	X
Hawaii	X	X	X		X	AAP			X	X
Idaho	X	X	X		X	AAP			X	X
Illinois	X	X	X	X	X	Recommend AAP, not required		X	X	X
Indiana	X	X	X	X	X	AAP		X	X	X
Iowa	X	X	X	X	X	Bright Futures		X	X	X
Kansas	X	X	X	X	X			X	X	X
Kentucky	X	X	X	X	X			X	X	X
Louisiana	X	X	X	X	X	AAP		X	X	X
Maine	X	X	X		X	AAP and Bright Futures				X
Maryland	X	X	X	X	X	AAP	X	X	X	X
Massachusetts	X	X	X	X	X	AAP		X	X	X
Michigan	X	X	X		X	AAP	X	X		X
Minnesota	X	X	X	X	X	Recommend AAP, not required			X	X
Mississippi	X	X	X	X	X	AAP		X	X	X
Missouri	X	X	X						X	X
Montana	X	X	X	X	X			X	X	
Nebraska	X	X	X	X		AAP		X	X	X
Nevada	X	X	X	X		Recommend AAP, not required			X	X
New Hampshire	X	X	X						X	
New Jersey	X	X	X	X					X	X
New Mexico	X	X	X	X		AAP and Bright Futures		X	X	X
New York	X	X	X	X	X	AAP	X	X	X	X
North Carolina	X	X	X	X	X	AAP		X	X	X
North Dakota	X[3]	X[3]								
Ohio	X	X	X	X	X	AAP			X	X
Oklahoma	X	X	X	X	X	AAP		X	X	X
Oregon	X	X	X	X					X	X
Pennsylvania	X	X	X	X	X	AAP		X		
Rhode Island	X	X								
South Carolina	X	X	X	X	X	AAP immunization schedule only			X	X
South Dakota	X	X	X						X	X
Tennessee	X[3]	X[3]	X			AAP				
Texas	X	X	X	X	X	AAP		X	X	X
Utah	X	X	X	X	X	AAP	X	X	X	X
Vermont	X	X	X						X	X
Virginia	X	X	X	X	X	AAP			X	X
Washington	X	X	X	X				X	X	
West Virginia	X	X	X	X		AAP				
Wisconsin	X	X	X	X	X			X	X	X
Wyoming	X	X	X	X		Bright Futures		X		X

[1] = In all instances other than those marked, states require providers to conduct "appropriate testing as necessary".

[2] = Nutrition Counseling or Anticipatory Guidance mentioned separately (not only as part of AAP recommendations)

[3] = Manual uses the term "screen" instead of history and physical exam.

= the EPSDT requriements are the same as those in the AAP guidelines, but the AAP is not mentioned by name.