Coverage of Obesity Treatment: A State-by-State Analysis of Medicaid and State Insurance Laws

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SYNOPSIS

Objectives. We determined whether state Medicaid programs cover recommended treatments for adult and pediatric obesity and to what extent states regulate the treatment and coverage of obesity by private insurers.

Methods. We conducted a state-by-state document review of Medicaid manuals and private insurance laws and regulations.

Results. Eight state Medicaid programs appear to cover all recommended obesity treatment modalities for adults. Only 10 states appear to reimburse for obesity-related treatment in children. In the small-group insurance market, 35 states expressly allow obesity to be used for rate adjustments, while 10 states do so in the individual market. Two states expressly allow obesity to be used in eligibility decisions in the individual market. Five states provide for coverage of one or more treatments for obesity in both small-group and individual markets.

Conclusions. Very few states ensure coverage of recommended treatments for adult and pediatric obesity through Medicaid or private insurance. Most states allow obesity to be used to adjust rates in the small-group and individual markets and to deny coverage in the individual market.

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Obesity is one of the most challenging public health problems we face as a nation. More than 32% of American adults are obese and more than 17% of children and adolescents are overweight.[1] Obese individuals are more likely than normal-weight individuals to develop hypertension, heart disease, diabetes, and stroke, among other diseases.[2–8] The increasing prevalence of obesity and its significant health consequences are straining our health-care system. In 2000, the total cost of obesity in the United States was an estimated $117 billion—$61 billion in direct costs and $56 billion in indirect costs.[9,10]

Through Medicare and Medicaid, federal and state governments finance approximately half of direct medical expenditures attributable to overweight and obesity in the U.S.[11] Medicaid enrollees have the highest prevalence of obesity compared with those who are uninsured, privately insured, or in Medicare. As a result, 11% of U.S. adult Medicaid expenditures are spent on treating obesity-related medical conditions.[12]

In response to increasing obesity rates and the concomitant economic and health challenges these rates impose, states have responded in a variety of ways. Some have enacted tax laws that create incentives for healthy behaviors or penalize unhealthy habits.[13] Some states have targeted competitive foods in schools and created new physical education and fitness requirements. Local and state governments have utilized planning, zoning, and transportation policies to promote healthier lifestyles. But few studies have examined state policy with regard to public or private insurance coverage of health-care services for obesity itself.

Currently, there are no known statutes or regulations to preclude states from covering treatment for obesity through Medicaid or private insurance. In fact, in 2004, the Centers for Medicare and Medicaid Services (CMS) removed language from the Medicare Coverage Issues Manual stating obesity was not an illness.[14] And research has demonstrated that under Medicaid, eligible children already have coverage for comprehensive obesity services through the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) program.[15]

EPSDT program benefits include complete periodic and as-needed assessments of children's health and development from birth to age 21. The examinations include regular assessments of nutritional status, such as height and weight measurements, and questions about dietary practices.[16] For children identified with a health condition, states must arrange for all medically necessary treatments falling within federally covered service classes. Obesity assessment and treatment can be understood to fall in these covered categories. However, while eligible children are entitled to obesity assessment and treatment under EPSDT program regulations, it is not clear whether states are actually covering necessary services.

It was hoped that the 2004 CMS policy reversal would open the door to public and private coverage expansions of evidence-based obesity-related treatments. While more studies are needed to determine which therapies for obesity are most effective, treatment guidelines from the National Heart, Lung, and Blood Institute and other professional organizations concur in supporting specific multidisciplinary approaches to treatment of obesity.[17–21] Despite these recommendations, public and private insurance coverage for treatment of obesity as a primary disease still appears very limited.

Most coverage expansions thus far have focused on bariatric surgery. CMS expanded coverage of bariatric surgery for Medicare beneficiaries who are morbidly obese, but beneficiaries must have a comorbid condition, such as hypertension, coronary artery disease, osteoarthritis, or type 2 diabetes.[22] Some private insurers will also cover bariatric surgery on a limited basis.[23]

Few studies have evaluated public and private insurance coverage of primary obesity treatment, especially at the state level. In this study, we examined how states use their lawmaking and regulatory authority to respond to the problem of obesity. We conducted a state-by-state analysis of (*1*) Medicaid and EPSDT program coverage and payment practices for adult and pediatric obesity assessment and treatment, (*2*) the extent to which states prohibit or regulate insurers' medical underwriting or eligibility exclusion of obesity, and (*3*) the extent to which state insurance laws address coverage of obesity treatment. In previous studies of insurance coverage for obesity treatment, researchers utilized surveys to collect data from private insurers and state Medicaid programs. Our analysis is based on an extensive document and legal review of state laws, regulations, and provider guidance.

METHODS

Medicaid and EPSDT program analysis

We reviewed current evidence-based guidelines for adult and pediatric obesity assessment and treatment.[17–21] We selected the following interventions for analysis of Medicaid coverage and payment practices for adults with obesity: nutritional assessment/counseling, drug therapy, and bariatric surgery. For children, based on current guidelines, we focused our search on coverage and reimbursement of nutrition and behavioral therapies.

Based on current treatment recommendations,

specific national medical service billing Current Procedural Terminology (CPT®) codes for obesity assessment and treatment were selected (Figure 1). These codes would most likely be used in billing for the nutritional, behavioral, and surgical therapies that comprise the bulk of treatment approaches for obesity.[24,25]

For each state, we reviewed Medicaid provider manuals, EPSDT program manuals, codes and regulations, and fee schedules publicly available from state websites. We limited our search to Medicaid fee-for-service documents and excluded managed care service contracts from our search.[26]

We reviewed provider manuals for (*1*) provider guidance for the assessment and treatment of obesity, (*2*) coverage and reimbursement of specific obesity-related treatments, and (*3*) explicit exclusions of obesity-related assessment or treatment. Key word searches within these documents included obesity, weight, weight gain, morbid obesity, gastric bypass, Roux-en-Y, orlistat, sibutramine, exenatide, pramlintide, rimonabant, gastroplasty, gastric adjustable band, nutrition, diet, and nutritional services.

We also searched state fee schedules for the selected CPT codes and noted which codes were associated with a reimbursement value. Results from our document review were compiled to grade each state based on whether their Medicaid documents provided strong evidence, inconclusive evidence, or specific restrictions of provider reimbursement for obesity-related treatments.

State insurance law analysis

We reviewed state laws and regulations for private insurance in both the individual and small-group

Figure 1. Selected billing codes used for obesity assessment and management

CPT/HCPCS-II code[a]	*Code description*	*Obesity-related service*
96150-96155	Health and behavior assessments (health-focused clinical interview, behavior observations, psychophysiological monitoring, health-oriented questionnaires)	Health and behavioral intervention/ counseling
99401-99404 99411-99412	Counseling and/or risk factor reduction intervention (individual or group)	Obesity prevention counseling
97802-97804 and/or S9470	Medical nutritional therapy (individual or group): nutritional assessment and intervention by non-physician provider	Nutritional counseling
98960-98962	Education and training for patient self-management, by non-physician	Counseling for individuals or groups of patients with symptoms/illnesses
99078	Miscellaneous services: physician educational services to patients in group setting	Group counseling for patients with symptoms/illnesses
S0315-S0316	Health education disease management program: initial and follow-up assessments	Health education
S9445-S9446	Patient education, not otherwise specified Non-physician provider, individual or group	Health education
S9449	Weight management class, non-physician provider	Weight management class
S9451	Exercise class, non-physician provider, per session	Exercise class
S9452	Nutrition class, non-physician provider	Nutrition class
43644-43645	Laparoscopy, surgical, gastric restrictive procedure with gastric bypass	Bariatric surgery
43770-43774	Laparoscopy, surgical, gastric restrictive procedure involving adjustable gastric band	
43842-43843	Gastric restrictive procedure, without gastric bypass, for morbid obesity	
43845	Gastric restrictive procedure with partial gastrectomy	
43846-43847	Gastric restrictive procedure, with gastric bypass, for morbid obesity	
43848	Revision, open, of gastric restrictive procedure	

[a]The CPT code set, maintained by the American Medical Association, is used by providers to bill for medical services and procedures. HCPCS Level II codes are used for products, supplies, and services not included in the CPT codes.

CPT = Current Procedural Terminology

HCPCS = Health Care Financing Administration Common Procedure Coding Systems

markets (generally three to 50 employees, though this varied by state) for (*1*) statutory provisions that expressly prohibit or regulate medical insurers' medical underwriting or eligibility exclusion practices where obesity or health status is used as an independent risk factor and (*2*) statutory provisions mandating coverage of obesity-related treatments. The 2004 CMS policy change allowed obesity to be considered a medical condition, and, thus, considered under the term "health status."[14]

We conducted a state-by-state document review of state insurance laws and regulations obtained via Internet search of the following websites: each state's Department of Insurance, National Association of Health Underwriters,[27] Georgetown University Health Policy Institute,[28] National Association of Insurance Commissioners,[29] and legal searches of state insurance codes from Westlaw and Lexis Nexis®. We searched state legislature websites for relevant enrolled legislation that had not yet been compiled into the official state code.

Key words included obesity, weight loss, bariatric surgery, mandated coverage, nutritional counseling, morbid obesity, gastric bypass, underwriting, risk factors for underwriting, exclusions, and preexisting conditions.

RESULTS

Specific guidelines for obesity assessment and treatment were rarely referenced in Medicaid provider manuals. Only two state manuals referenced accepted treatment guidelines. Nebraska and South Carolina explicitly state in their provider manuals that obesity is not an illness.

State Medicaid coverage of adult obesity treatment

All state Medicaid programs covered at least one obesity treatment modality. Eight states covered all three treatment categories with various restrictions. Twenty-six states explicitly covered nutritional consultation, while 20 explicitly did not. Drug therapy was the least frequently covered and discussed treatment category; only 10 states covered it, while 33 states made no mention of it in their provider manuals. Bariatric surgery was the most frequently covered treatment (45 states); it was also the least likely to be explicitly not covered (two states). Three states explicitly excluded nutritional assessment/counseling and drug therapy, while covering bariatric surgery (Figure 2).

Figure 2. State Medicaid coverage of adult obesity treatment modalities[a]

State	*Nutritional consultation*	*Drug therapy*	*Bariatric surgery*
Alabama	−	−	+[b]
Alaska	+[b]	−	+[c]
Arizona	+	0	+
Arkansas	0	0	+[c]
California	−	0	+[c]
Colorado	−	+[c]	+[b]
Connecticut	−	0	+
Delaware	+[c]	+[c]	+[c]
District of Columbia	0	0	+[c]
Florida	−	0	+[c]
Georgia	+	−	+[c]
Hawaii	−	0	+[c]
Idaho	+[b]	0	+[b]
Illinois	−	0	+[c]
Indiana	+	+	+
Iowa	+	+[c]	+[c]
Kansas	−	−	0
Kentucky	+	0	−
Louisiana	+	+	+
Maine	+	0	+[c]
Maryland	0	0	+[c]
Massachusetts	0	0	+[b]
Michigan	+[b]	0	+[b]
Minnesota	+	+[c]	+[c]
Mississippi	+	+[c]	−
Missouri	+[b]	0	+[b]
Montana	−	0	0
Nebraska	−	0	+[b]
Nevada	+	0	+[b]
New Hampshire	−	0	+[b]
New Jersey	−	0	0
New Mexico	−	0	+[c]
New York	0	0	+[b]
North Carolina	+	0	+[b,c]
North Dakota	+[b]	0	+[c]
Ohio	−	−	+[c]
Oklahoma	+	−	+[b]
Oregon	+[b]	0	+[c]
Pennsylvania	+	0	+[c]
Rhode Island	+	0	+[c]
South Carolina	+[b]	+[c]	+[b]
South Dakota	−	0	+[b]
Tennessee	−	0	+
Texas	−	0	−
Utah	−	0	+[c]
Vermont	+	0	+[c]
Virginia	+[b]	+[c]	+[c]
Washington	+[b]	−	+
West Virginia	−	0	+[b,c]
Wisconsin	+[b]	+[c]	+[c]
Wyoming	−	−	+[c]

[a]Based on an online document review of Medicaid provider manuals and fee schedules as of July 1, 2008

[b]Various restrictions apply.

[c]Preauthorization required

+ = strong evidence for coverage

0 = not mentioned/undetermined

− = specifically excluded

EPSDT coverage of pediatric obesity treatment

Most states published EPSDT-specific provider manuals and reimbursement information. Four states included detailed treatment standards for childhood obesity in their EPSDT provider manuals. Nine states incorporated details on how to assess or screen for child obesity in their EPSDT manuals, but did not include guidelines on how to treat obesity.

We found evidence that 10 states will reimburse for nutritional and behavioral therapy in children. These states provided guidance in their provider manuals for the coverage of these services, as well as reimbursement amounts in their fee schedules for related billing codes. Ten states did not address reimbursement of nutritional assessment and treatment in their published materials and did not include relevant CPT codes in their fee schedules. In these states, these services were not likely to be covered (Figure 3).

The majority of states provided some but not conclusive evidence that they reimbursed for nutritional assessment and counseling. In general, these states either provided nonspecific guidance regarding treatment for childhood conditions without listing relevant billing codes, or they provided billing codes without any specific language directing providers to use these codes for nutritional assessment and treatment in the setting of obesity.

Figure 3. State Medicaid EPSDT program coverage of recommended childhood obesity treatment[a]

Coverage of nutritional and/or behavioral therapy for obesity	*States*
Likely to be covered	Alaska, Arizona, Indiana, Iowa, Kansas, Kentucky, Montana, New Mexico, Oklahoma, Washington
Not likely to be covered	California, Colorado, Hawaii, Michigan, Missouri, New Jersey, New York, Ohio, South Dakota, Texas
Inconclusive	Alabama, Arkansas, Connecticut, Delaware, District of Columbia, Florida, Georgia, Idaho, Illinois, Louisiana, Maine, Maryland, Massachusetts, Minnesota, Mississippi, Nebraska, Nevada, New Hampshire, North Carolina, North Dakota, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Utah, Vermont, Virginia, West Virginia, Wisconsin, Wyoming

[a]Based on an online document review of Medicaid provider manuals and fee schedules as of July 1, 2008

EPSDT = Early and Periodic Screening, Diagnosis, and Testing

Regulation of private insurance market underwriting or exclusions

In the small-group market, nine states expressly prohibited the use of obesity as an independent risk factor in medical underwriting. Thirty-five states expressly allowed the use of obesity or health status in adjusting rates within the small-group market. The remaining six states and the District of Columbia were silent on this subject.

In the individual market, only five states prohibited the use of obesity in medical underwriting for both eligibility determination and for determining rates because medical underwriting was prohibited in general in these states. Oregon and Washington prohibited the use of obesity or health status in determining rates in the individual market. Oregon and California expressly allowed the use of obesity or health status in determining eligibility. Ten states allowed health status to be used as a factor in setting rates in the individual market, with only South Dakota specifically mentioning weight as an allowable rating factor. The remaining states were silent on this subject (Figure 4).

Regulation of private insurance coverage of obesity treatments

In the group market, six states required or explicitly allowed insurers to offer coverage of certain obesity treatments. The statutes did not specify group size. Only Utah expressly allowed bariatric surgery to be excluded from insurance coverage. The rest were silent.

In the individual market, five states required or explicitly allowed insurers to offer coverage of some obesity treatments. Illinois and South Dakota explicitly allowed insurers to limit or exclude obesity treatments. Utah expressly allowed the exclusion of gastric bypass from coverage in the individual market. The remaining state codes and regulations were silent (Figure 4).

DISCUSSION

The 2004 CMS revision of the *Medicare Coverage Issues Manual* opened the door for obesity to be understood as a medical condition in its own right.[14] Public health experts speculated that the revision would lead to expanded Medicare coverage of obesity-related treatments, with private and public insurers following suit. Since then, Medicare's only expansion has been to cover bariatric surgery for beneficiaries with comorbid conditions who meet specific criteria. Our research showed similar patterns at the state level.

Most states are not using their statutory or regulatory authority to expand public and private insurance coverage of obesity assessment and treatment. Our

Figure 4. State laws regarding private insurance coverage of obesity treatment and underwriting based on obesity[a,b]

Medical underwriting or exclusions based on obesity or health status as an independent risk factor		
Type of state health insurance market and restrictions	*Statute expressly allows for rate adjustments or exclusions*	*Statute expressly prohibits adjustments in rates or exclusions*
Small-group market Rate setting	Alaska, Arizona, Arkansas, California, Colorado, Delaware, Florida, Idaho, Illinois, Iowa, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, Wyoming	Connecticut, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Vermont, Washington
Individual market Eligibility	California, Oregon	Maine, Massachusetts, New Jersey, New York, Vermont
Individual market Rate setting	California, Idaho, Kentucky, Louisiana, Minnesota, Nevada, South Carolina, South Dakota, Texas, Utah	Maine, Massachusetts, New Jersey, New York, Oregon, Vermont, Washington
State laws regarding coverage of one or more obesity-related treatments		
	Statute expressly prohibits coverage of obesity-related treatment(s)	*Statute expressly allows coverage of obesity-related treatment(s)*
Small-group market[c]	Utah	Georgia, Indiana, Maryland, New Hampshire, New Jersey, Virginia
Individual market	Illinois, South Dakota, Utah	Georgia, Maryland, New Hampshire, New Jersey, Virginia

[a]As of July 1, 2008

[b]States not listed had no relevant statute.

[c]Statutes for the six listed states allowing coverage of obesity-related treatment do not specify group size.

findings indicate only a minority of states cover all recommended therapies for obesity under Medicaid or EPSDT. In the private insurance market, few states have passed legislation requiring coverage of obesity treatments or protection against the use of obesity in medical underwriting. In fact, some states expressly exclude coverage of certain obesity treatments or expressly allow obesity to be used in determining eligibility for insurance coverage.

Medicaid coverage of recommended treatment for obesity

Forty-five state Medicaid programs cover bariatric surgery with various restrictions. This is consistent with other sources reporting that 44 states covered gastric bypass surgery.[30] We found only 10 states that explicitly covered weight-loss drugs under Medicaid; the remaining states were either silent on the issue or excluded weight-loss drugs. This is understandable because under federal law, weight-loss drugs are one of the classes of drugs that Medicaid programs can exclude from coverage.[31] However, our findings differ significantly from previous reports that found anywhere from 17 to 38 states covered at least one weight-loss drug under Medicaid.[32–34] Most likely, these variations are due to differences in methodology—one report utilized a survey of Medicaid directors, another reported data provided by pharmaceutical companies, and the last did not report the methodology used. We might expect to find fewer states with weight-loss drug coverage from our strict document review.

We found evidence that 26 state Medicaid programs covered nutritional assessment and consultation for obesity. Our findings are generally consistent with those of Tsai et al., who found that eight out of 14 surveyed state Medicaid programs offered consultation with a nutritionist or dietitian to their enrollees.[35] Almost all the programs Tsai and colleagues surveyed offered dietitian referral only if the patient had an obesity-related medical condition. Eleven of the 26 states we found included various restrictions. We also found 20 state Medicaid programs that explicitly exclude nutritional services for enrollees.

In contrast, the majority of Medicaid programs will cover bariatric surgery for their enrollees, with restrictions. Surgery is also less likely to be explicitly excluded

under Medicaid. Between 1998 and 2002, the number of bariatric surgeries covered by Medicaid increased by more than 260%. During the same time period, surgeries financed by Medicare increased by more than 280%, while those by private insurers increased by more than 480%.[36]

In covering bariatric surgery, state Medicaid programs may be following the pattern of Medicare. However, practice guidelines recommend that clinicians screen all adult patients for obesity and offer intensive counseling and behavioral intervention to promote sustained weight loss for obese adults. It is interesting to note that state Medicaid programs continue to reimburse for expensive bariatric surgery, but often do not cover less invasive and less expensive nutritional or pharmacological therapies.

Nutritional and behavioral counseling in overweight patients can decrease the incidence of future complications such as diabetes.[37] Additionally, lifestyle and behavioral therapies are just as cost-effective as bariatric surgery, and more effective than drug therapy, although cost-effectiveness varies greatly based on the risk status of the population and the type of intervention.[38,39] Despite evidence of effective primary treatments for obesity and the heavy burden of obesity-related complications on Medicaid programs, there is very limited reimbursement for assessment and primary treatment of obesity. Even after the CMS policy change, most state Medicaid programs do not appear to be treating obesity as a disease in its own right.

Medicaid coverage of childhood obesity assessment and treatment

Childhood obesity is associated with significant health problems and is an important early risk factor for much of adult morbidity and mortality. Thus, the potential future health-care costs associated with pediatric obesity and its comorbidities are immense and should not be ignored. Medicaid-eligible children are entitled to ongoing nutritional assessment and management, including obesity services, through the EPSDT program. Even when specific treatments for obesity are excluded for adults, Medicaid requires participating states to cover EPSDT benefits for all eligible children younger than age 21. In covering health treatments for children, states are expected to adhere to standards of medical necessity that reflect accepted pediatric standards of care.

Evidence-based guidelines point to the importance of regular screening and intensive behavioral and dietary intervention early in a child's life to prevent and reverse the deleterious effects of overweight and obesity. All of the recommended prevention, assessment, and treatment guidelines should be covered as part of the EPSDT benefit for eligible children. However, we found evidence that only 11 states would cover obesity-related nutritional and behavioral therapy through the EPSDT program. Even fewer states published any detailed screening or treatment guidelines for childhood obesity for their providers.

Despite the high prevalence of childhood obesity, many physicians are not providing care that is consistent with recommendations to prevent, screen, and manage childhood obesity.[40,41] Through the EPSDT program, states have the statutory directive and infrastructure to target a high-risk pediatric population and promote evidence-based guidelines. Our findings indicate that, unfortunately, states are not fully leveraging EPSDT programs to fight childhood overweight and obesity.

State regulation of insurers' obesity-related practices

About 68% of Americans obtain health-care benefits through private health insurance plans, many of which are regulated at the state level.[42] Some states require insurers to offer specific health benefits or access to certain types of providers. Other state regulations affect the rating rules that insurers use to set premiums or to evaluate people for coverage through medical underwriting.

Privately insured people are overwhelmingly insured in the employer-based group market, with only 6% of insured people covered through the individual market.[43] In the small-group market, we found that 41 states and the District of Columbia either explicitly or implicitly allow insurers to use health status or obesity as an independent factor in determining rates. Only nine states require small-group health plans to use a community or an adjusted community rating, where the premiums would be based on the expected claims of the community, not the individual employer group. These findings are consistent with the consumer information available from the National Association of Health Underwriters.[27]

Thus, in most states, an employer's health insurance premiums can be affected by the weight of his or her employees. Obesity carries high health-care costs; thus, as obesity rates rise, increasing health insurance premiums may lead employers to drop health insurance coverage, increase premiums and cost-sharing for employees, or lower wages for workers.

In the individual market, medical underwriting is prevalent, and there is little regulation when it comes to determining eligibility for coverage and rate setting. For example, a survey by the Texas Office of Public Insurance Counsel in 2007 found that 100% of surveyed individual health insurance plans used body

mass index (BMI) as a basis to deny coverage, 86% used BMI to charge a higher premium, and 14% used BMI to limit benefits.[44]

We found that in 45 states and the District of Columbia, no legislation protects individuals from being denied health insurance based on obesity or health status. When it comes to rate setting, 43 states and the District of Columbia allow rates to be set based on health status or obesity. If an obese patient does manage to obtain individual health insurance, there is no guarantee that obesity-related treatment would be covered under his or her health plan. We found very few states that mandated insurance coverage of any obesity-related treatments.

The majority of state codes are silent on the coverage of obesity treatment for both the group and individual insurance markets. Those states that do require or allow insurers to offer coverage mention a range of treatments—from an annual consultation to discuss weight and nutrition in New Jersey to coverage of bariatric surgery in Maryland.[45–47] Georgia allows insurance companies to offer coverage for non-experimental forms of obesity therapy.[48]

In short, despite the change in CMS policy regarding obesity, the private insurance market remains fairly unregulated in regard to the treatment of obesity as a factor in eligibility and underwriting. Additionally, very few states have mandated private insurance coverage of obesity therapies. In fact, some states have moved in the opposite direction, expressly allowing weight to be used as a rating factor or allowing insurers to not cover bariatric surgery.

Limitations

Other researchers have relied on surveys of health plans or state Medicaid administrators to obtain coverage information. We conducted an extensive document review of current Medicaid manuals, fee schedules, state insurance codes, and regulations. Our assessment of coverage policy was based solely on this written evidentiary review. If the actual coverage policy or fee schedule for the treatment modality was misrepresented or not updated in the provider manuals at the time of our review, we may have scored the state incorrectly. Therefore, our analysis may have been more stringent than previous researchers. However, our review also reflected the actual documented information regarding obesity treatment guidelines or coverage policy that is publicly available to a provider of Medicaid or EPSDT services in the state. We find it valuable for what it reveals in this regard. Future studies comparing results of our document review with surveys of health plans or state officials may be useful.

In the adult Medicaid analysis, we limited our analysis to coverage of nutritional counseling and did not include behavioral counseling, as there were limited data on reimbursement of this service as it related specifically to obesity. We also chose not to include managed care organization (MCO) contracts in our document review. In accordance with federal law, most Medicaid MCOs offer at least the services covered under fee-for-service programs.[49] However, as Tsai et al. found, some Medicaid MCOs may offer additional services for obesity treatment that state Medicaid programs do not.[35] Thus, it is possible that Medicaid enrollees may have access to more obesity treatment services through their MCOs than we found in our study of fee-for-service programs alone.

CONCLUSIONS

Our findings suggest that most states are not ensuring recommended screening and treatment of adults and children for obesity through Medicaid, the EPSDT program, or private insurance. Additionally, most states are not regulating the insurance market with regard to use of obesity in medical underwriting. With the current economic downturn, many states are experiencing budget deficits and are unlikely to expand coverage of obesity treatments or enact coverage mandates in the near future. However, given the grave economic and health consequences of the growing obesity problem, states should recognize the need for stronger action sooner rather than later.

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