The Louisiana Task-Force on Obesity Care, Cost and Value

Annual Report Prepared in Response to Senate Resolution 94 of the 2024 Louisiana Legislative Regular Session

Prepared by:

Senator Royce Duplessis, Chairman, Senate State of Louisiana

Senator Kirk Talbot, Chairman, Senate State of Louisiana

Dr. Peter Katzmarzyk, Associate Director of Population and Public Health Sciences, Pennington
Biomedical Research Center

Dr. Katie Queen, Pediatrician in Obesity Medicine, Louisiana Obesity Society

Dr. Catherine Hudson, Director of Obesity Medicine, LSU Health Science Center New Orleans

Dr. Shauna Levy, Chief Division of MIS/Bariatric, Louisiana State Medical Society

Kolynda Parker, MHS, MLS (ASCP) CM, CPHQ, CLSSBB, Medicaid Deputy Director Louisiana Department of Health

Heath Williams, Chief Executive Officer, Office of Group Benefits

Frank Opelka, Deputy Commissioner Office of Health, Life & Annuity, Louisiana Department of Insurance

Taylor Reine, Chronic Disease Division Manager, Louisiana Department of Health

Breanna Taylor, Administrative Program Specialist, Louisiana Department of Health

March 2025



Contents

Report Summary	3
Report Provisions	4
Section 1 – Causes and Factors of Obesity	5
Subsection 1.1 - Definitions	5
Subsection 1.2 - Contributing Factors	7
Section 2 – Louisiana's Obesity Burden	8
Subsection 2.1 – Obesity and Chronic Disease	9
Subsection 2.2 – Physical Activity, Healthful Diets, and Breastfeeding	12
Section 3 – Impact of Obesity on Health	13
Section 4 – Impact of Obesity on Louisiana's Economy	18
Subsection 4.1 – Cost of Obesity to Louisiana Medicaid	19
Section 5 – Diagnosis and Treatment of Obesity	27
Subsection 5.1 – Intensive Health and Lifestyle Behavior Therapy	29
Subsection 5.2 – Treatment with Obesity Medications	30
Subsection 5.3 – Treatment of Obesity with Bariatric Surgery	33
Subsection 5.4 – Bariatric Endoscopy	36
Section 6 – Access to Anti-Obesity Medication & Cost Coverage	37
Subsection 6.1 – Insurance Coverage of Obesity Medication	39
Subsection 6.2 – Medicaid's Estimated Obesity Medication Cost	41
Subsection 6.3 – Office of Group Benefits Estimated Obesity Medication Cost	47
Section 7 – Promoting the Use of the Data to Influence Decision Making	48
Subsection 7.1 – Targeted Data Driven Interventions	49
Section 8 – Barriers and Facilitators in Obesity Management	50
Section 9 – Conclusions and Recommendations	51
Subsection 9.1 – Obesity Prevention and Management Recommendations	51
Subsection 9.2 – Comprehensive Obesity Treatment Suggested Policy Solutions	53
Subsection 9.3 – Final Task Force Goals and Recommendations	55
Appendices	56
Bibliography	101

Report Summary

This report is submitted pursuant **Senate Resolution NO. 94** (**SR 94**) of the 2024 Legislative Session, which was authored by Senator Royce Duplessis. SR 94 requests that Louisiana establishes and provides for the Task Force on Obesity Care, Cost, and Value to study the health implications of obesity and to propose recommendations by written report to the Senate, governor, and the David R. Poynter Legislative Research Library.

The report must address the following issues associated with obesity prevention and management:

- 1. The health implications of the chronic disease of obesity
- 2. The cost to Louisiana's health care system associated with the disease
- 3. The various health treatments available to reduce the epidemic caused by the disease and coverage of treatments within the state
- 4. The cost of providing access to anti-obesity medications approved by the United States Food and Drug Administration for state employees and Medicaid recipients
- 5. How to promote the use of the data to influence decision making to better understand the cost savings for prevention and treatment of the chronic disease of obesit

Report Provisions

Task-Force Committee:

The Task-Force Committee must be comprised of the following members and sector representation:

- 1) Two members of the Senate, one of whom shall serve as the chair of the Task-Force, appointed by the president of the Senate
- 2) One member who is a licensed certified gastroenterologist and board-certified obesity medicine specialist appointed by the Louisiana State University Health Sciences Center New Orleans
- 3) One member who is an obesity expert appointed by the Pennington Biomedical Research Center
- 4) One member who is a licensed certified pediatrician and board certified in obesity medicine appointed by the Louisiana Obesity Society
- 5) The commissioner of insurance or his designee
- 6) One member who is a primary care physician certified by the American Board of Obesity Medicine appointed by the Louisiana State Medical Society
- 7) The chief executive officer of the Office of Group Benefits or his designee
- 8) The secretary of the Louisiana Department of Health or his designee

SR 94 Provisions:

- 1) The Task-Force Committee shall convene for its first meeting no later than **September 1, 2024**, at the call of the chairman appointed by the Senate president.
- Study obesity impacts to Louisiana by written report to the Senate, governor, and the David R. Poynter Legislative Research Library as required by R.S. 24:771 and 772, no later than January 15, 2025.
- 3) Majority of the task force shall constitute a quorum for the transaction of business. All official actions of the task force shall require the affirmative vote of a majority of the members.
- 4) Members of the task force shall serve without compensation, except per diem or expenses reimbursement to which they may be individually entitled as members of their respective organization.

Section 1 - Causes and Factors of Obesity

The Centers for Disease Control and Prevention (CDC) defines overweight and obesity as a weight higher than the recommended healthy weight for a given height. Body Mass Index (BMI) is used as a screening tool for overweight or obesity. Obesity in adults is defined as having an excessive amount of body fat that can increase the risk of various health problems, such as heart disease, diabetes, and certain cancers. The primary measure used to assess obesity in adults is BMI, which is calculated by dividing a person's weight in kilograms by the square of their height in meters.

Subsection 1.1- Definitions

The CDC defines obesity in adults as having a BMI of:

• 30 or higher

BMI categories for adults:

• Underweight: BMI < 18.5

Normal weight: BMI 18.5 – 24.9
 Overweight: BMI 25 – 29.9

• **Obesity**: BMI ≥ 30

Obesity is further classified into:

Class 1 (Moderate obesity): BMI 30 – 34.9
 Class 2 (Severe obesity): BMI 35 – 39.9

• Class 3 (Very severe or morbid obesity): BMI ≥ 40

While BMI is widely used to categorize obesity, it is important to remember that it does not directly measure body fat or account for muscle mass, so other factors like waist circumference, body composition, and health conditions are taken into consideration. **Error! Bookmark not defined.**

For children and adolescents < 18 years old, growth chart percentiles define BMI. Obesity in children is defined as having an excessive amount of body fat that may negatively affect health. It is typically determined using BMI, which is a measure of a child's weight relative to their height. For children and adolescents, BMI percentiles are used to assess whether they fall into a healthy weight range compared to others of the same age and sex.

The CDC defines overweight and obesity in children as: i

- Overweight: BMI between the 85th–94th percentile
- Obesity (Class 1): BMI ≥ 95th percentile
- Severe Obesity (Class 2): BMI ≥ 120% of the 95th percentile or BMI ≥ 35 or >99th%
- Very Severe Obesity (Class 3): BMI ≥ 140% of the 95th percentile or BMI ≥ 40

It is important to note that BMI is just a screening tool and does not directly measure body fat, so other factors like family history, diet, physical activity, and overall health are considered when diagnosing and managing childhood obesity. ⁱ

Obesity Definition (Lancet)

The new Lancet definition of obesity, proposed by the **Global BMI Mortality Collaboration**, and the introduction of **pre-clinical obesity** are part of efforts to refine how we understand and approach obesity, especially in terms of prevention and early intervention. ¹

In 2025, The Lancet published a revised definition of obesity, moving away from the traditional emphasis solely on BMI and recognizing obesity as a **chronic**, **relapsing disease** that affects multiple organ systems. The new framework reflects a more comprehensive understanding of obesity that includes its **pathophysiological** and **metabolic** aspects.

Preclinical obesity **Clinical obesity** A condition of excess body fat associated with A chronic disease due to obesity alone, and characterised by variable level of health risk, but no ongoing illness signs and symptoms of ongoing organ dysfunction and/or reduced ability to conduct daily activities People living with predinical obesity: People living with clinical obesity have reduced Have no evidence of Are generally at a higher tissue or organ function due to obesity, such as risk of developing reduced organ or those function due to obesity diseases, such as: Bwathlesness caused A cluster of metabolic by effects of obesity on abnormalities. · Clinical obesity Can complete the heart or longs. Cardiovascular disease day-to-day activities. Dysfunction of other . Some cancers unhindered Knee or hip gain organs including with joint stifness kidneys, upperainways, * Type 2 diabetes and reduced range nervous, urinary, and of motion reproductive systems. Full datails of these new ontogonies can be found in the Commission report.

Figure 1
Diagnosing Obesity

Source: Diagnosing Clinical Obesity, 2025

This shift in definitions and understanding helps healthcare providers focus on **prevention**, **early diagnosis**, and **targeted treatments** for people before obesity and its health consequences fully develop.

Subsection 1.2- Contributing Factors

According to the CDC, obesity is a complex health issue to be addressed. Obesity results from a combination of causes and contributing factors, including individual factors, such as behavior and genetics. ^{II} Behaviors can include dietary patterns, physical activity, inactivity, medication use, and other exposures. ^{II} Additional contributing factors in our society include the food and physical activity environment, education and skills, and food marketing and promotion. ^{II} Obesity is a serious concern because it is associated with poor mental health outcomes, reduced quality of life, and the leading causes of death in the United States (U.S.) and worldwide, including diabetes, heart disease, stroke and some types of cancer. ^{II}

Genetic changes within the human population occur too slowly to be responsible for the obesity epidemic. Nevertheless, the variation in how people respond to the environment that promotes physical inactivity and intake of high-calorie foods suggests that both genetics and epigenetics may play a role in the development of obesity. Genes give the body instructions for responding to changes in its environment. "The genes that a person inherits from his or her parents can determine many things, like what a person will look like and whether the person might have certain diseases. Studies have identified variants in several genes that may contribute to obesity by increasing hunger and food intake. "Rarely, a clear pattern of inherited obesity within a family is caused by a specific variant of a single gene (monogenic obesity). "Most obesity, however, probably results from complex interactions among multiple genes and environmental factors that remain poorly understood (multifactorial obesity).

Health care practitioners routinely screen and collect family health history to help identify patients at risk for obesity-related diseases such as diabetes, cardiovascular diseases, and some forms of cancer. A history of family health issues may reflect shared genetics and environmental or living conditions among close relatives. Genetics cannot be changed, however, lifestyle, behaviors, and environmental factors to encourage healthy eating habits and physical activity can be controlled. These changes can improve the health of family members and improve the health of the next generation. ⁱⁱ

Section 2 -Louisiana's Obesity Burden

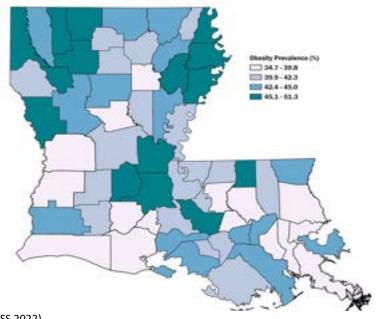
Louisiana has the 2nd highest rate of adult obesity in our nation. According to the annual Louisiana Behavioral Risk Factor Surveillance System (BRFSS), the prevalence of obesity in Louisiana has soared in the past three decades from 12.3% in 1990 to 40% in 2023. "Despite some variation, the high rate of obesity exists across all socio demographic populations. One significant disparity is in racial/ethnic identity where the prevalence of obesity among non-Hispanic black adults (49.4%) is significantly higher than among non-Hispanic white adults (35.8%). iii Louisiana adults with less educational attainment and a household income less than \$15,000 per year are also more likely to experience obesity compared to adults who graduated college.ⁱⁱⁱ Louisiana's obesity rate is a significant and concerning public health problem given that it can lead to early mortality, increased susceptibility to other diseases, and have an immense impact on the overall quality of lifeiv. More specifically, obesity is a major contributor to other chronic health conditions in children and adults, including Type 2 diabetes, cardiovascular disease, cancer and more. III Louisiana ranks 50th for overall health due to factors consisting of health behaviors, community and environment, policy, and clinical care. III Louisiana has the 3rd highest rate of childhood obesity in our nation. According to the 2022-2023 National Survey of Children's Health, approximately 23.1% of Louisianan children have obesity. iii Similar to adults, childhood obesity affects marginalized racial/ethnic groups more than others as demonstrated by the high obesity prevalence among non-Hispanic Black children (32.6%) and Hispanic children (26.8%) compared to non-Hispanic White (16.3%) children. iii

Obesity Prevalence (%) 60 49.4 50 46.2 45.9 45.6 43 41.8 41.5 40.7 39.9 39.1 38 40 36.1 35.8 35 9 30 26.6 20 10 Less than High School High Stood Graduate white tour Hepaine Racelethnicky College Graduate Backnorthiebanic SomeCollege

Table 1
Louisiana's Obesity Prevalence by Demographic

Source: (Louisiana BRFSS, 2023)

Figure 2
Louisiana's Obesity Prevalence by Parish



Source: (CDC PLACES, BRFSS 2022)

Subsection 2.1 – Obesity and Chronic Disease

In Louisiana, chronic diseases pose a significant burden on public health and the overall well-being of the population. Several chronic conditions are prevalent in the state, contributing to increased healthcare costs, reduced quality of life, and premature deaths. **Error! Bookmark not defined.**

Louisiana Ranks (America's Health):

- 43rd highest state in the nation for cardiovascular disease among adults (11.5%)
- 44th highest state in the nation for diabetes among adults (14.7%)
- 49th highest state in the nation for **obesity** among adults (40.1%)

Certain factors can increase the risk of heart disease and diabetes, although many of these factors are preventable. They include High Blood Pressure (HBP), High Cholesterol (HBC), Physical Activity, and Obesity. ¹

Louisiana Ranks (America's Health):

- **40**th highest in the nation for **HBC** among adults (37.7%)
- **45**th highest in the nation for **HBP** among adults (40.2%)
- 45th highest in the nation for physically inactivity among adults (28.3%)
- 49th highest in the nation for **obesity** among adults (40.1%)

Table 2
Prevalence of Heart Disease, Diabetes and Stroke in Louisiana

Over the last 10 years, the prevalence of Heart Disease in Louisiana has fluctuated,
Diabetes and Stroke have increased over time.



Source: (Louisiana BRFSS 2014-2023)

Table 3
Louisiana's Variations in Chronic Disease Risk Factors

Over the last 10 years, the prevalence of **Obesity in Louisiana has increased**. High Cholestrol, Hypertension, and Physical Activity has had no statiscally significant changes.



Source: (Louisiana BRFSS 2014-2023)

Obesity and Cancer:

Not only is obesity a risk factor for heart disease, the leading cause of death in Louisiana, it is also a risk factor for cancer, the second leading cause of death. In addition to increasing one's risk for cancer incidence, obesity decreases cancer survival rates. Cancer patients with one or more comorbid conditions caused by obesity such as Type 2 diabetes, stroke, hypertension, liver disease, kidney disease, Alzheimer's disease, dementia, respiratory condition and osteoarthritis can experience treatment disruptions or discontinuation in order to stabilize another condition. According to the U.S. Cancer Statistics, cancer is the **second** leading cause of death in the U.S., exceeded only by heart disease, One of every **five** deaths in the U.S. is due to cancer. For every **100,000** people, **180** people died of cancer in Louisiana and more than **684,000** obesity-associated cancers occur in the U.S. each year.

Subsection 2.2 – Physical Activity, Healthful Diets, and Breastfeeding

Physical activity, healthful diets, and breastfeeding are significant modifiable risk factors of obesity. Many factors can contribute to a person developing obesity. Although lifestyle change such as diet and exercise are effective ways of addressing obesity, many communities in Louisiana have poor access to fresh fruits and vegetables or safe places to get physical activity. According to the CDC, **40%** of all US households do not live within **1 mile** of healthier food retailers. Physical activity in children and adolescents can yield many benefits including, strong bones and muscles; reduction in body fat, healthy body weight etc.

According to the CDC, children with obesity are more likely to experience obesity as adults. Making healthy changes in early care and education settings can improve childhood development and can provide protection against chronic diseases in adulthood. About **1 in 5** children and adolescents in the U.S. have obesity. VII

Implementing evidence-based policies, practices, and environments in early childhood can directly influence children's food/drink consumption and daily activity, such as reducing screen time and supporting breastfeeding to build a foundation for healthy behaviors. Vii Poor breastfeeding rates can contribute to the likelihood of developing obesity in adulthood. In Louisiana, only **19.6%** of babies are breastfed for the recommended first 6 months of life. Viii According to Women, Infants, and Children Participant and Program Characteristics, **13.7%** of children ages 2-4 years old have obesity. Adopting healthy behaviors in early care and education settings can significantly improve childhood development and provide protection against developing chronic diseases in adulthood.

Section 3 - Impact of Obesity on Health

Obesity is a condition of excess adiposity which is associated with several comorbidities and increases the risk of developing other chronic diseases. In 2013, the American Medical Association (AMA) recognized obesity as a chronic disease that requires medical attention and treatment. In 2009, the annual economic cost of obesity in Louisiana was estimated to be \$2.4 billion, with 42.5% of the costs being financed by Medicare and Medicaid.

The Medical Complications of Obesity image (**Figure 3**) below provides an overview of the diseases and conditions that have been associated with obesity. Each of these diseases and conditions has been shown in scientific studies to be more prevalent in individuals with obesity, and in most cases, there is sufficient evidence to causally link them to obesity.

MEDICAL COMPLICATIONS OF OBESITY POOR MENTAL CATARACTS SLEEP APNEA HIGH BLOOD LIPIDS LUNG DISEASE 10 INFLAMMATION PREMATURE X CO DIABETES CANCER BLOOD RREAST COLON (COLORECTAL)
ESOPHAGUS
GALLBLADDER CLOTS LIVER BONE/ JOINT OVARIES PANCREAS THYROID UPPER STOMACH UNHEALTHY UTERUS SUSCEPTIBILITY TO INFECTION

Figure 3
Medical Complications of Obesity

Obesity is associated with several metabolic abnormalities such as high blood lipids and hypertension which lead to the development of cardiometabolic diseases such as heart disease, stroke, diabetes, gallbladder disease, and gout. For example, in a prospective study of 2.9 million adults followed for a median of 11.4 years, the RRs [95% CI] of developing dyslipidemia were 1.83 [1.91-1.84], 2.15 [2.13-

2.18] and 2.45 [2.41-2.49] for obesity class I (BMI 30-39.9 kg/m²), obesity Class II (BMI 35 – 39.9 kg/m²) and obesity class III (BMI 40-44.9 kg/m²), respectively, compared to the normal weight group. xiv Further, in a meta-analysis of four studies, the pooled RR [95% CI] for hypertension associated with obesity was 1.56 [1.15-2.11] and 2.42 [1.59–3.67] for men and women, respectively. xv Obesity is also associated with chronic inflammation. In a meta-analysis of 51 cross-sectional studies reported a Pearson correlation (r) for BMI and In (CRP) of 0.36 (95% CI: 0.30–0.42) in adults. xvi

In a meta-analysis of eleven studies, the pooled RRs [95% CI] for heart disease associated with obesity were 1.72 [1.51–1.96] and 3.10 [2.81–3.43] for men and women, respectively. In a meta-analysis of seven studies, the pooled RRs [95% CI] for stroke associated with obesity were 1.51 [1.33–1.72] and 1.49 [1.27–1.74] for men and women, respectively. xv

In a meta-analysis of nine studies, the pooled RRs [95% CI] for type 2 diabetes associated with obesity were 6.74 [5.55–8.19] and 12.41 [9.03–17.06] for men and women, respectively. *V* In a meta-analysis of three studies, the pooled RRs [95% CI] for gallbladder disease associated with obesity were 1.43 [1.04–1.96] and 2.32 [1.17–4.57] for men and women, respectively. *V* In a meta-analysis of two studies, the pooled RR [95% CI] for unprovoked venous thromboembolism associated with obesity was 1.56 [1.15-2.11].*V** In a meta-analysis of ten studies, the pooled RR [95% CI] for acute pancreatitis associated with each additional 5 kg/m² of BMI was 1.18 [1.03-1.35]. *V** In a meta-analysis of 10 studies the pooled RRs for gout were 2.67 [2.16-3.30], 3.62 [2.95-4.46], and 4.64 [3.49-6.18] for adults with a BMI of 30, 35 and 40 kg/m², respectively, compared to adults with a BMI of 20 kg/m².**

Cancer:

An expert panel of the International Agency for Research on Cancer (IARC) identified 13 cancers which are linked with obesity. The 13 obesity-related cancers include renal cell kidney, colon and rectum, gastric cardia, esophageal adenocarcinoma, pancreas, gallbladder, liver, postmenopausal breast, uterine, ovarian, thyroid, meningioma, and multiple myeloma.** As noted above, cancer is the 2nd leading cause of death in Louisiana.

Lung and Breathing Problems:

In a meta-analysis of four studies, the pooled RRs [95% CI] for asthma associated with obesity were 1.43 [1.04–1.96] and 2.32 [1.17–4.57] for men and women, respectively. $^{\text{xv}}$ In a prospective study of 2.9 million adults followed for a median of 11.4 years, the RRs [95% CI] of developing sleep apnea were 5.1 [4.9-5.3], 10.5 [10.1-11.0] and 19.8 [18.9-20.8] for obesity class I (BMI 30-39.9 kg/m²), obesity Class II (BMI 35 – 39.9 kg/m²) and obesity class III (BMI 40-44.9 kg/m²), respectively, compared to the normal weight group. $^{\text{xiv}}$

Mental Health Problems and Dementia:

In a meta-analysis of 8 Mendelian randomization studies, the pooled OR [95% CI) for depression associated with obesity was 1.33 [1.19-1.48). xxi Results of a meta-analysis of 23 studies of adults showed that the frequency of anxiety in obesity had a pooled OR [95% CI] of 1.32 [1.21–1.44]. xxii In a meta-analysis of 15 studies, the pooled RRs [95% CI] for Alzheimer's Disease and Any Dementia associated with mid-life obesity were 2.04 [1.59-2.62] and 1.64 [1.34–2.00], respectively, compared to those with mid-life normal weight. xxiii

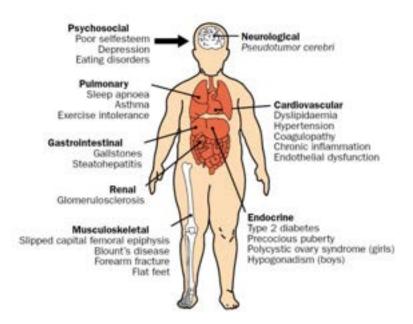
Other Health Problems:

In addition to the conditions and diseases described above, obesity is also linked to several other health problems, such as infertility; in a meta-analysis of 18 studies of women, the pooled OR for infertility associated with preconception overweight/obesity was 1.60 [1.31-1.94]. xxiv In a meta-analysis of 63 studies, the pooled OR for polycystic ovary syndrome (PCOS) associated with obesity in women was 4.99 [3.74 – 6.67]. xxv Among men, a meta-analysis of 35 studies demonstrated significantly lower semen volume when comparing men with obesity to normal weight men. xxvi In addition, obesity is associated with bone/joint problems. In a meta-analysis of three studies, the pooled RRs [95% CI] for osteoarthritis (risk of joint replacement) associated with obesity were 4.20 [2.76-6.41] and 1.96 [1.88-2.04] for men and women, respectively. *V In a meta-analysis of nine studies, the pooled OR [95% CI] for cellulitis associated with obesity was 2.67 [1.91–3.71]. xxvii Obesity is also implicated in a large number of other dermatologic diseases such as acanthosis nigricans, acrochordons, keratosis pilaris, hyperandrogenism and hirsutism, striae distensae, adiposis dolorosa, and fat redistribution, lymphedema, chronic venous insufficiency, plantar hyperkeratosis, skin infections, hidradenitis suppurativa, psoriasis, insulin resistance syndrome, and tophaceous gout. xxviiiCataracts are another issue. In a meta-analysis of six studies, the pooled RRs [95% CI] indicated an increased obesity-related risk for nuclear cataracts (1.12 [1.01-1.25]), cortical cataracts (1.34 [1.07-1.66]), and posterior subcapsular cataracts (1.52 [1.31-1.77]). xxixIn a meta-analysis of 54 studies, the pooled ORs [95% CI) for susceptibility to COVID-19 and COVID-19 severity associated with obesity were 2.42 [1.58-3.70) and 1.62 [1.48-1.76], respectively. xxx In a metaanalysis of 25 studies, the pooled RR [95% CI) for influenza-related pneumonia associated with obesity was 1.31 [1.05-1.63].xxxi

A Special Note about Children and Adolescents:

Children and adolescents typically do not experience severe cardiovascular complications like heart disease and stroke; however, pediatric obesity is related to a number of significant health concerns that affect major organ systems (see **Figure 4**).**xxiii

Figure 4
Complications of Pediatric Obesity



Childhood obesity also tends to "track" into adulthood. For example, meta-analysis of 15 prospective cohort studies including over 200,000 participants revealed that children and adolescents with obesity were about **five times more likely** to have obesity in adulthood compared to those without obesity, and that approximately **80% of adolescents with obesity will still have obesity as an adult.****xxxiii

Burden of Obesity in Louisiana:

Given the association between obesity and several chronic diseases, it is not surprising that obesity has a significant public health burden in the state of Louisiana, which currently has one of the highest prevalences of obesity in the U.S.**

Table 4 presents the relative risks (RR) associated with obesity for several prominent chronic diseases. For example, a RR of 1.51 for stroke in men is interpreted as a 51% elevated risk of developing stroke in men with obesity compared to men without obesity. As is evident from the tables the RRs associated with obesity are substantial, and vary from condition to condition, and also differ among men and women. Table 4 also presents the population attributable fractions (PAF%) for obesity for these diseases. The PAF% is a reflection of the public health burden associated with obesity, and takes into account the population prevalence of obesity as well as the RR associated with the disease. The PAF% values for these diseases range from 5.2% for breast cancer to 82.9% for diabetes in women, and from 7% for esophageal cancer to 68.3% for diabetes in men.

The PAF% is interpreted as the proportion of a given disease in the population that is directly attributable to obesity. For example, 68.3% and 82.9% of the cases of diabetes in men and women, respectively are attributable to obesity. **Theoretically, if obesity was eliminated, then 68.3% of the diabetes cases in men, and 82.9% of the diabetes cases in women would disappear.**

Table 4
Population attributable Fractions for Chronic Diseases Associated with Obesity in Louisiana

	Me	n	Wom	nen
	RR	P A F%	RR	PAF%
Stroke	1.51	16.1	1.49	17.2
Heart Di sease	1.72	21.3	3.1	47.2
Diabetes	6.74	68.3	12.41	82.9
Gallbladder Disease	1.43	13.9	2.32	35.9
High Blood Pressure	1.56	17.4	2.42	37.6
Asthma	1.43	13.9	2.32	35.9
Colorectal Cancer	1.95	26.3	1.66	21.9
Esophageal Cancer	1.2	7.0	1.21	8.2
Kidney Cancer	1.82	23.6	2.64	41.1
Pancreatic Cancer	2.29	32.7	1.6	20.3
Breast Cancer	-	-	1.13	5.2
Endometrial Cancer	-	_	3.22	48.5
Ovarian Cancer	-	-	1.28	10.6

Section 4 -Impact of Obesity on Louisiana's Economy

Not only is the health impact of obesity on individuals in Louisiana staggering, the estimated annual cost to the state of Louisiana is \$13 billion per year. **xxv* Obesity significantly impacts the economy due to increased healthcare costs associated with chronic diseases like diabetes, heart disease, and cancer, which are often linked to obesity.**xxxv*i

Medical costs associated with overweight and obesity may involve direct and indirect costs. Direct medical costs may include preventive, diagnostic and treatment services related to obesity. **xxvi* Indirect costs relate to morbidity and mortality costs including productivity. Productivity measures include absenteeism (costs due to employees being absent from work for obesity-related health reasons) and pre-absenteeism (decreased productivity of employees while at work) as well as premature mortality and disability. **xxvi*

Obesity's impacts to Louisiana's economy in fiscal year 2023 (July 1 2022-June 30 2023) include: xxxv

• Economic impact

- o Reduced overall economic activity by \$6.9 billion
- o \$2.5 billion in higher healthcare, absenteeism, and disability costs to employers
- o \$823 million detrimental state budget impact

• Individual impact

- Obesity-attributed early mortality- **9,100** premature deaths occur annually
- Higher medical costs- \$462 million spending per household
- o Reduced labor force participation- 52,300 fewer adults with obesity working
- Reduced earnings for employed women- women with obesity earn 9% less than women with healthy weight

• Workforce impact

- \$696 million in higher healthcare costs to employers
- \$1.8 billion in health-related lost workdays and disability
- 2.2% reduction in Louisiana's Gross Domestic Product

• State and local government impact

- \$384 million in reduced tax revenues from lost economic activity
- o \$249 million higher Medicaid spending
- \$168 million for employee healthcare coverage
- o \$22 million in public assistance program costs
- \$439 million increased state and local government spending

Overall, 5%-25% weight loss among adults with obesity age <65 over 10 years has the potential to <u>save</u> \$2.8 billion-\$13.7 billion in Louisiana's medical costs due to obesity.

XXXV

Subsection 4.1 – Cost of Obesity to Louisiana Medicaid

The figures listed below illustrate Medicaid's obesity related claims and associated expenditures. Medicaid's cost analysis is reflective of the **calendar year 2022**. Figures are limited to paid and adjusted claims, capitation claims were excluded. Members with evidence of dual/Third Party Liability (TPL) eligibility at any point during the year were also excluded.

Pharmacy expenditures, all pharmacy claims (regardless of reason(s) for use for the identified recipients were included in the calculation of total (all-cause) expenditures. For disease-specific expenditures, only

pharmacy claims for medications indicated for the diseases/conditions of interest were included, except for prediabetes and insulin resistance where medications commonly used in treatment were included. The 'Medication Identifiers' tab lists the specific medications utilized for this request. Of note, this cost analysis does not consider the impact of any potential medication manufacturer rebates or federal-state share (match) reimbursement methodologies.

Table 5 Louisiana Medicaid Obesity Cost Analysis Based on data from 2022

See Appendix A for Diagnosis Code Identifiers and Appendix B for Medication Identifiers

	Obesity									
	All Caus	e (Includes All Clair	ns)		Disease (Limited to O					
Common Claim Categories	Unduplicated Count of Members Receiving Services	Total Expenditures	Total Expenditures per Member		Unduplicated Count of Members Receiving Services	Total Expenditure s	Total Expenditures per Member			
Inpatient	14,645	\$161,540,452	\$11,030		5,760	\$49,497,872	\$8,593			
Long Term Care	153	\$5,205,141	\$34,021							
Outpatient	92,999	\$195,518,787	\$2,102		32,470	\$22,327,295	\$688			
Professional	114,975	\$275,475,861	\$2,396		99,983	\$27,138,240	\$271			
Rehab	3,260	\$1,483,211	\$455		1,059	\$129,651	\$122			
Home Health Outpatient	1,104	\$1,695,905	\$1,536		71	\$46,703	\$658			
Transportation	15,496	\$16,860,690	\$1,088		2	\$281	\$141			
Durable Medical Equipment	12,924	\$13,400,342	\$1,037		236	\$57,506	\$244			
Pharmacy	108,873	\$397,204,137	\$3,648		39	\$90,698	\$2,326			
Other	34,646	\$11,201,116	\$323		470	\$78,785	\$168			
Total	115,176	\$1,079,585,641	\$9,373		115,176	\$99,367,031	\$863			

Notes: Limited to paid and adjusted claims. Capitation claims were excluded. Members with evidence of dual/TPL eligibility at any point during the year were excluded. Obesity Assignment Rule: If an individual had at least one claim for severe obesity during the measurement year, they were placed in the severe obesity group. Their disease-specific claims included claims with a diagnosis of obesity or severe obesity and also includes medications used in the treatment of chronic obesity. Diabetes Assignment Rule: If ever Type 1, then Type 1; of the remaining members, if ever type II then type II; of the remaining members, if ever prediabetes, then prediabetes; of the remaining members, members with a diagnosis of insulin resistance are categorized as insulin resistant. 'Treatment Categories' were derived from the Medicaid claim type. The 'Other' treatment category included claim types such as transportation, Medicare cross-over, long term care, and dental. Diagnoses/Conditions were identified in any diagnosis position. The 'Diagnosis Code Identifiers' tab includes the ICD-10 CM diagnosis codes used in this request. Ancillary claims were excluded when identifying disease states/conditions of interest. For pharmacy expenditures, all pharmacy claims (regardless of reason(s) for use) for the identified recipients were included in the calculation of total (all-cause) expenditures. For disease-specific expenditures, only pharmacy claims for medications indicated for the diseases/conditions of interest were included, except for prediabetes and insulin resistance where medications commonly used in treatment were included. The 'Medication Identifiers' tab lists the specific medications utilized for this request. This analysis does not consider the impact of any potential medication rebates or federal-state share (match) reimbursement methodologies.

In summary, about 9% of total claims for patients with obesity are directly related to their obesity by claims data.

Table 6
Severe Obesity Cost Analysis

Se	Severe Obesity (BMI 35 kg/m2 or higher or >99th% or ≥120th% of the 95th% in children)									
				Disease Specific Claims						
All Cause (Includes All Clair	ns)		Severe O	besity-Related C	laims)				
Unduplicated Count of		Total								
Members Receiving	Total	Expenditures		Unduplicated Count of	Total	Total Expenditures per				
Services	Expenditures	per Member		Members Receiving Services	Expenditures	Member				
13,956	\$179,067,821	\$12,831		8,818	\$101,383,490	\$11,497				
190	\$5,934,042	\$31,232		11	\$203,905	\$18,537				
74,712	\$188,352,786	\$2,521		38,627	\$34,804,460	\$901				
84,671	\$244,387,149	\$2,886		73,716	\$25,132,915	\$341				
2,051	\$1,326,502	\$647		149	\$25,039	\$168				
1,649	\$2,671,752	\$1,620		196	\$170,231	\$869				
14,377	\$17,777,354	\$1,237		15	\$24,601	\$1,640				
17,381	\$20,222,945	\$1,164		687	\$1,318,706	\$1,920				
82,181	\$423,728,531	\$5,156		88	\$219,571	\$2,495				
21,145	\$6,751,875	\$319		537	\$130,092	\$242				
84,820	\$1,090,220,75 7	\$12,853		84,820	\$163,413,010	\$1,927				

Notes: Limited to paid and adjusted claims. Capitation claims were excluded. Members with evidence of dual/TPL eligibility at any point during the year were excluded. Obesity Assignment Rule: If an individual had at least one claim for severe obesity during the measurement year, they were placed in the severe obesity group. Their disease-specific claims included claims with a diagnosis of obesity or severe obesity and also includes medications used in the treatment of chronic obesity. Diabetes Assignment Rule: If ever Type 1, then Type 1; of the remaining members, if ever type II then type II; of the remaining members, if ever prediabetes, then prediabetes; of the remaining members, members with a diagnosis of insulin resistance are categorized as insulin resistant. 'Treatment Categories' were derived from the Medicaid claim type. The 'Other' treatment category included claim types such as transportation, Medicare cross-over, long term care, and dental. Diagnoses/Conditions were identified in any diagnosis position. The 'Diagnosis Code Identifiers' tab includes the ICD-10 CM diagnosis codes used in this request. Ancillary claims were excluded when identifying disease states/conditions of interest. For pharmacy expenditures, all pharmacy claims (regardless of reason(s) for use) for the identified recipients were included in the calculation of total (all-cause) expenditures. For disease-specific expenditures, only pharmacy claims for medications indicated for the diseases/conditions of interest were included, except for prediabetes and insulin resistance where medications commonly used in treatment were included. The 'Medication Identifiers' tab lists the specific medications utilized for this request. This analysis does not consider the impact of any potential medication rebates or federal-state share (match) reimbursement methodologies.

Table 7
Louisiana Medicaid Type 1 Diabetes Cost Analysis

	Type I Diabetes								
	All Cause	(Includes All Cla	ims)		Disease Specific Claims (Limited to Obesity-Related Claims)				
Common Claim Categories	Unduplicated Count of Members Receiving Services	Total Expenditures	Total Expenditures per Member		Unduplicated Count of Members Receiving Services	Total Expenditures	Total Expenditures per Member		
Inpatient	2,519	\$46,677,296	\$18,530		1,453	\$18,824,059	\$12,955		
Long Term Care	50	\$1,507,377	\$30,148		7	\$241,767	\$34,538		
Outpatient	6,954	\$26,898,527	\$3,868		4,580	\$5,683,856	\$1,241		
Professional	7,722	\$31,773,964	\$4,115		6,913	\$5,911,407	\$855		
Rehab	178	\$90,688	\$509		21	\$2,851	\$136		
Home Health Outpatient	321	\$762,773	\$2,376		77	\$198,140	\$2,573		
Transportation	2,416	\$4,042,357	\$1,673		90	\$106,462	\$1,183		
Durable Medical Equipment	3,454	\$14,814,095	\$4,289		2,269	\$12,011,790	\$5,294		
Pharmacy	7,626	\$72,713,248	\$9,535		7,209	\$39,756,915	\$5,515		
Other	2,154	\$890,242	\$413		81	\$44,126	\$545		
Total	7,755	\$200,170,567	\$25,812		7,755	\$82,781,371	\$10,675		

Notes: Limited to paid and adjusted claims. Capitation claims were excluded. Members with evidence of dual/TPL eligibility at any point during the year were excluded. Obesity Assignment Rule: If an individual had at least one claim for severe obesity during the measurement year, they were placed in the severe obesity group. Their disease-specific claims included claims with a diagnosis of obesity or severe obesity and also includes medications used in the treatment of chronic obesity. Diabetes Assignment Rule: If ever Type 1, then Type 1; of the remaining members, if ever type II then type II; of the remaining members, if ever prediabetes, then prediabetes; of the remaining members, members with a diagnosis of insulin resistance are categorized as insulin resistant. 'Treatment Categories' were derived from the Medicaid claim type. The 'Other' treatment category included claim types such as transportation, Medicare cross-over, Long term care, and dental. Diagnoses/Conditions were identified in any diagnosis position. The 'Diagnosis Code Identifiers' tab includes the ICD-10 CM diagnosis codes used in this request. Ancillary claims were excluded when identifying disease states/conditions of interest. For pharmacy expenditures, all pharmacy claims (regardless of reason(s) for use) for the identified recipients were included in the calculation of total (all-cause) expenditures. For disease-specific expenditures, only pharmacy claims for medications indicated for the diseases/conditions of interest were included, except for prediabetes and insulin resistance where medications commonly used in treatment were included. The 'Medication Identifiers' tab lists the specific medications utilized for this request. This analysis does not consider the impact of any potential medication rebates or federal-state share (match) reimbursement methodologies.

Table 8

Type 2 Diabetes Cost Analysis Related to Obesity or Severe Obesity

	Type II Diabetes								
All Cause	e (Includes All Clain	ns)		Disea (Limited to Obesity C	se Specific Claims Or Severe Obesity-R	elated Claims)			
Unduplicated Count of Members Receiving Services	Total Expenditures	Total Expenditures per Member		Unduplicated Count of Members Receiving Services	Total Expenditures	Total Expenditures per Member			
13,337	\$228,016,261	\$17,097		10,686	\$159,612,941	\$14,937			
424	\$14,409,313	\$33,984		95	\$2,576,005	\$27,116			
72,707	\$216,325,368	\$2,975		53,997	\$86,674,622	\$1,605			
82,718	\$265,247,189	\$3,207		75,348	\$49,030,001	\$651			
1,880	\$1,339,556	\$713		98	\$45,417	\$463			
2,282	\$3,759,468	\$1,647		1,684	\$2,529,097	\$1,502			
17,333	\$22,886,344	\$1,320		494	\$219,050	\$443			
17,194	\$22,266,162	\$1,295		3,677	\$4,944,380	\$1,345			
81,275	\$608,595,496	\$7,488		65,810	\$275,217,450	\$4,182			
18,259	\$6,363,669	\$349		1,838	\$527,619	\$287			
83,088	\$1,389,208,825	\$16,720		83,088	\$581,376,582	\$6,997			

Notes: Limited to paid and adjusted claims. Capitation claims were excluded. Members with evidence of dual/TPL eligibility at any point during the year were excluded. Obesity Assignment Rule: If an individual had at least one claim for severe obesity during the measurement year, they were placed in the severe obesity group. Their disease-specific claims included claims with a diagnosis of obesity or severe obesity and also includes medications used in the treatment of chronic obesity. Diabetes Assignment Rule: If ever Type 1, then Type 1; of the remaining members, if ever type II then type II; of the remaining members, if ever prediabetes, then prediabetes; of the remaining members, members with a diagnosis of insulin resistance are categorized as insulin resistant. 'Treatment Categories' were derived from the Medicaid claim type. The 'Other' treatment category included claim types such as transportation, Medicare cross-over, Long term care, and dental. Diagnoses/Conditions were identified in any diagnosis position. The 'Diagnosis Code Identifiers' tab includes the ICD-10 CM diagnosis codes used in this request. Ancillary claims were excluded when identifying disease states/conditions of interest. For pharmacy expenditures, all pharmacy claims (regardless of reason(s) for use) for the identified recipients were included in the calculation of total (all-cause) expenditures. For disease-specific expenditures, only pharmacy claims for medications indicated for the diseases/conditions of interest were included, except for prediabetes and insulin resistance where medications commonly used in treatment were included. The 'Medication Identifiers' tab lists the specific medications utilized for this request. This analysis does not consider the impact of any potential medication rebates or federal-state share (match) reimbursement methodologies.

Table 9
Prediabetes Cost Analysis Related to Obesity or Severe Obesity

	Prediabetes								
	All Cause ((Includes All Cla	ims)			se Specific Clai Obesity-Relate			
Common Claim Categories	Unduplicated Count of Members Receiving Services	Total Expenditures	Total Expenditures per Member		Unduplicated Count of Members Receiving Services	Total Expenditure s	Total Expenditures per Member		
Inpatient	2,120	\$23,480,290	\$11,076		608	\$5,096,633	\$8,383		
Long Term Care	17	\$513,287	\$30,193						
Outpatient	20,411	\$38,309,730	\$1,877		9,027	\$2,945,151	\$326		
Professional	24,197	\$56,974,657	\$2,355		22,411	\$4,931,448	\$220		
Rehab	625	\$371,020	\$594		29	\$3,164	\$109		
Home Health Outpatient	177	\$239,462	\$1,353		14	\$33,853	\$2,418		
Transportation	3,075	\$2,709,044	\$881						
Durable Medical Equipment	2,962	\$2,498,820	\$844		14	\$1,762	\$126		
Pharmacy	23,517	\$81,978,768	\$3,486		5,898	\$4,852,865	\$823		
Other	6,788	\$2,017,508	\$297		158	\$10,657	\$67		
Total	24,254	\$209,092,587	\$8,621		24,254	\$17,875,533	\$737		

Notes: Limited to paid and adjusted claims. Capitation claims were excluded. Members with evidence of dual/TPL eligibility at any point during the year were excluded. Obesity Assignment Rule: If an individual had at least one claim for severe obesity during the measurement year, they were placed in the severe obesity group. Their disease-specific claims included claims with a diagnosis of obesity or severe obesity and also includes medications used in the treatment of chronic obesity. Diabetes Assignment Rule: If ever Type 1, then Type 1; of the remaining members, if ever type II then type II; of the remaining members, if ever prediabetes, then prediabetes; of the remaining members, members with a diagnosis of insulin resistance are categorized as insulin resistant. 'Treatment Categories' were derived from the Medicaid claim type. The 'Other' treatment category included claim types such as transportation, Medicare cross-over, long term care, and dental. Diagnoses/Conditions were identified in any diagnosis position. The 'Diagnosis Code Identifiers' tab includes the ICD-10 CM diagnosis codes used in this request. Ancillary claims were excluded when identifying disease states/conditions of interest. For pharmacy expenditures, all pharmacy claims (regardless of reason(s) for use) for the identified recipients were included in the calculation of total (all-cause) expenditures. For disease-specific expenditures, only pharmacy claims for medications indicated for the diseases/conditions of interest were included, except for prediabetes and insulin resistance where medications commonly used in treatment were included. The 'Medication Identifiers' tab lists the specific medications utilized for this request. This analysis does not consider the impact of any potential medication rebates or federal-state share (match) reimbursement methodologies.

Table 10
Insulin Resistance Cost Analysis Related to Obesity and Severe Obesity

Insulin Resistance									
All Cause	e (Includes All Clair	ns)			aims sity-Related Claims)				
Unduplicated Count of Members Receiving Services	Total Expenditures	Total Expenditures per Member		Unduplicated Count of Members Receiving Services	Total Expenditures	Total Expenditures per Member			
349	\$3,336,094	\$9,559		82	\$449,746	\$5,485			
1	\$59,632	\$59,632							
3,484	\$5,302,432	\$1,522		1,269	\$384,194	\$303			
4,235	\$8,410,190	\$1,986		3,878	\$703,129	\$181			
119	\$78,400	\$659		4	\$499	\$125			
17	\$94,920	\$5,584		1	\$4,790	\$4,790			
358	\$287,792	\$804							
460	\$278,075	\$605		2	\$150	\$75			
4,121	\$15,897,272	\$3,858		2,071	\$3,674,042	\$1,774			
1,257	\$357,119	\$284		3	\$190	\$63			
4,246	\$34,101,926	\$8,032		4,246	\$5,216,741	\$1,229			

Notes: Limited to paid and adjusted claims. Capitation claims were excluded. Members with evidence of dual/TPL eligibility at any point during the year were excluded. Obesity Assignment Rule: If an individual had at least one claim for severe obesity during the measurement year, they were placed in the severe obesity group. Their disease-specific claims included claims with a diagnosis of obesity or severe obesity and also includes medications used in the treatment of chronic obesity. Diabetes Assignment Rule: If ever Type 1, then Type 1; of the remaining members, if ever type II then type II; of the remaining members, if ever type II then type II; of the remaining members, if ever prediabetes, then prediabetes; of the remaining members, members with a diagnosis of insulin resistance are categorized as insulin resistant. 'Treatment Categories' were derived from the Medicaid claim type. The 'Other' treatment category included claim types such as transportation, Medicare cross-over, long term care, and dental. Diagnoses/Conditions were identified in any diagnosis position. The 'Diagnosis Code Identifiers' tab includes the ICD-10 CM diagnosis codes used in this request. Ancillary claims were excluded when identifying disease states/conditions of interest. For pharmacy expenditures, all pharmacy claims (regardless of reason(s) for use) for the identified recipients were included in the calculation of total (all-cause) expenditures. For disease-specific expenditures, only pharmacy claims for medications indicated for the diseases/conditions of interest were included, except for prediabetes and insulin resistance where medications commonly used in treatment were included. The 'Medication Identifiers' tab lists the specific medications utilized for this request. This analysis does not consider the impact of any potential medication rebates or federal-state share (match) reimbursement methodologies.

Table 11
Cost of Major Obesity Related Comorbidities to Louisiana Medicaid

			Total	
	Unduplicated	Total Expenditures	(All-Cause)	
Obesity and Selected Comorbid Chronic	Count of Members	(All-Cause Expenditures	Expenditures per	
Conditions	Receiving Services	Includes All claims)	Member	
Obesity or Severe Obesity & Diabetes	46,097	\$909,107,942	\$19,722	
(Type I or Type II)	40,097	\$303,107,342	\$19,722	
Obesity or Severe Obesity &				
Cardiovascular Disease (Including	104,656	\$1,588,232,898	\$15,176	
Hypertension)				
Obesity or Severe Obesity & Cancer	5,278	\$193,158,590	\$36,597	
Obesity or Severe Obesity & Depression	54,107	\$947,154,417	\$17,505	
Obesity or Severe Obesity & NASH	762	\$22,032,519	\$28,914	
Total		\$3,659,686,366	\$117,914	

Notes: Limited to paid and adjusted claims. Capitation claims were excluded. Members with evidence of dual/TPL eligibility at any point during the year were excluded. Diagnoses/Conditions were identified in any diagnosis position. The 'Diagnosis Code Identifiers' tab includes the ICD-10 CM diagnosis codes used in this request. Ancillary claims were excluded when identifying disease states/conditions of interest. This analysis does not consider the impact of any potential medication rebates or federal-state share (match) reimbursement methodologies. The Comorbidities table is limited to paid and adjusted claims. Capitation claims were excluded. Members with evidence of dual/TPL eligibility at any point during the year were also excluded. Diagnoses/Conditions were identified in any diagnosis position. The 'Diagnosis Code Identifiers' tab includes the ICD-10 CM diagnosis codes used in this request. Ancillary claims were excluded when identifying disease states/conditions of interest. This analysis does not consider the impact of any potential medication rebates or federal-state share (match) reimbursement methodologies.

Section 5 - Diagnosis and Treatment of Obesity

Obesity is a complex, multifactorial, serious, relapsing, and costly chronic disease that is a major risk factor for developing conditions such as heart disease, stroke, type 2 diabetes, renal disease, metabolic steatohepatitis, and 13 types of cancer (which make up 40 percent of all cancers diagnosed). Therefore, comprehensive treatment of obesity must also be multifactorial and personalized for each patient.

In 2008, The Obesity Society published its first position statement on obesity as a disease, which was updated in 2018. Since 2013, when the AMA adopted a formal policy declaring **obesity as a complex and chronic disease** and supporting patient access to the full continuum of evidence-based obesity care, numerous federal and state policy organizations have echoed the AMA's position. The American Diabetes Association 2024 Standards of Care further underscore that "obesity is a chronic and often progressive disease with numerous medical, physical, and psychosocial complications, including a substantially increased risk for type 2 diabetes."

Similarly, the National Council of Insurance Legislators, National Lieutenant Governors Association, National Hispanic Caucus of State Legislators, the National Black Caucus of State Legislators, the VHA, Department of Defense, and the Federal Office of Personnel Management (OPM) have all recognized obesity as a chronic disease and echoed support for addressing this epidemic.

Despite this widespread recognition of obesity as a disease, some health care programs and policymakers have outdated views that do not align with medical and scientific agreement that the pathology of the disease of obesity is complex. Science has shown that obesity is not only a disease, but that its causes are more complicated than lifestyle and nutrition choice alone.

Obesity can be caused by genetic, psychosocial, environmental, and metabolic imbalances between the hunger, satiety, and energy metabolism pathways in the human body. Many still cling to the outdated and biased misconceptions that obesity is a lifestyle choice or a personal failing. Others acknowledge that obesity is a chronic and complex disease, but they believe that it can be addressed solely with lifestyle and behavior change alone. These perceptions and attitudes, coupled with bias and stigma, have resulted in health insurance plans taking vastly different approaches in determining what and how obesity treatment services are covered for their members.

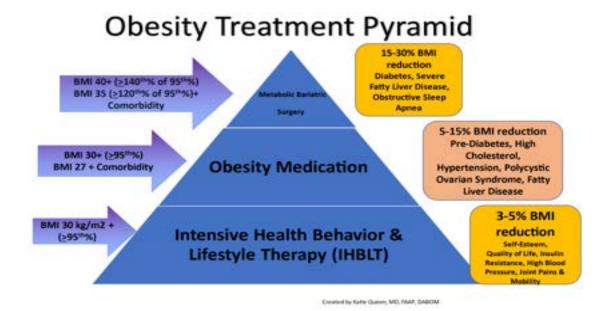
Many would not be surprised that obesity does not affect all races and ethnicities equally. Coverage and access to comprehensive obesity treatment services presents an important issue of health equity. If the largest percentage of patients with obesity in Louisiana are in the African American (47%) and Hispanic (37%) populations, along with lower income populations (45% of patients with incomes \$25,000 to \$39,999), then it would make sense that these are the populations who should have the greatest access.

Effective obesity treatment requires a personalized approach that provides access to obesity care across the continuum of medical care including intensive behavioral therapy, pharmacological treatment, and metabolic surgery.

Figure 5
Adult Comprehensive Obesity Treatment Pyramid

	Indications	Efficacy
Surgery	BMI ≥ 35 or ≥ 30 with a comorbidity	20-35% TBWL
Bariatric Endoscopy	BMI ≥ 30 or ≥ 27 with a comorbidity	10-20% TBWL
Pharmacotherapy	BMI ≥ 30 or ≥ 27 with a comorbidity	5-15% TBWL
	Any BMI	3-5% TBWL
Lifestyle Modifications		

Figure 6
Pediatric Obesity Treatment Pyramid



Health and Financial Benefits of Obesity Treatment & BMI Reduction:

The health benefits of BMI reduction have been extensively and consistently documented. The American Diabetes Association's (ADA) 2023 Standards of Care reviewed the evidence and demonstrated that obesity management can delay the progression from prediabetes to type 2 diabetes and is highly beneficial in treating type 2 diabetes. In people with type 2 diabetes and have overweight or obesity, modest weight loss clinically improves health including glycemia as well as reduces the need for glucose-lowering medications. Larger weight loss substantially reduces A1C and fasting glucose and has been shown to promote sustained diabetes remission through at least 2 years. Additionally, with greater than 10 percent BMI reduction other significant health benefits can be achieved including reducing osteoarthritis, cardiovascular disease, steatohepatitis and GERD.

The financial benefits of BMI reduction were demonstrated in the Veterans Health Administration's (VHA's) experience providing access to a comprehensive medical benefit for obesity. In this study, they demonstrated that the future health cost-savings that can occur if obesity is treated adequately. The VHA compared the health and total medical cost differences over 6, 12 and 24 months for veterans who participated in its intensive behavioral therapy program (MOVE!) compared to the MOVE! and obesity medication. Veterans treated with obesity medication while participating in the MOVE! Program had better cardiometabolic indices, greater weight, and BMI reductions, and lower Healthcare Resource Utilization and medical costs compared with participants without obesity medication treatment. Cardiometabolic endpoints were significantly improved with reduction in systolic and diastolic blood pressure. Similarly, other risk factors including total cholesterol, low-density lipoprotein (LDL) cholesterol, and hemoglobin A1C were also documented over 12 and 24 months. Total medical costs were significantly lower in the obesity medication+MOVE! Cohort (\$18,182 vs. \$20,075); weighted mean annual cost difference: -\$1893 driven primarily by lower inpatient costs. Emergency room costs were also lower for the MOVE! plus obesity medication cohort.

Subsection 5.1 – Intensive Health and Lifestyle Behavior Therapy

<u>Scientific Evidence for Intensive Health and Lifestyle Behavior Therapy (IHBLT) in Children and Adolescents:</u>

According to the United States Preventive Services Task Force (USPSTF), clinicians should provide or refer all patients age 6 yrs. and older with a body mass index (BMI) ≥95th% for age and sex to comprehensive, intensive, behavioral interventions. Current evidence on IHBLT in children and adolescents with obesity suggest that interventions that offer 26 or more contact hours of health behavior and lifestyle counseling performed over 3-12 months can lead to an average of 0.7 to 1.4 reduction in absolute BMI, along with a mild improvement in quality of life and potentially lower blood pressure and fasting plasma glucose. Effective evidence-based interventions should consist of multiple components, including both individual and family sessions, provide health education on balanced nutrition, safe exercise, reading food labels, incorporating behavior change techniques such as problem solving, monitoring diet and physical activity, and goal setting .

These types of interventions should be delivered by multidisciplinary teams, including physicians, dietitians or nutritionists, psychologists or social workers, exercise physiologists or physical therapists, or other behavioral specialists. In Louisiana, there is currently not any such intensive behavioral interventions to refer a patient to. When these programs are available in Louisiana, these programs must be covered by all health plans according to the Affordable Care Act (ACA), which requires coverage without copay or coinsurance for all preventive care services for children and adolescents.

Scientific Evidence for IHBLT for Adults with Obesity:

The USPSTF's September 18, 2018 Final Recommendation Statement entitled, <u>"Weight Loss to Prevent Obesity-Related Morbidity and Mortality in Adults: Behavioral Interventions,"</u> recommends that adults diagnosed with obesity (BMI ≥30) should "be offered or referred to intensive, multicomponent behavioral interventions.

The evidence report defines both the frequency and intensity of these interventions as:

- Group and individual sessions of high intensity (12 to 26 sessions in a year)
- Behavioral management activities, such as weight-loss goals
- Improving diet or nutrition and increasing physical activity
- Addressing barriers to change
- Self-monitoring
- Strategizing how to maintain lifestyle changes

Subsection 5.2 – Treatment with Obesity Medications

Research in populations with diabetes, hypertension, and cardiovascular diseases has shown that just a 5% decrease in weight or a 0.2 kg/m2 reduction in absolute BMI results in clinically significant improvements in these obesity-related comorbid conditions. All of the U.S. Food and Drug Administration (FDA) approved OM result in at least a 5% weight loss, with newer approved drugs approaching a 20% weight loss. Timely management of obesity can be cost effective, lower health risks, and prevent disease progression. The landscape of pharmaceuticals available to treat obesity continues to evolve and there are currently a variety of FDA approved medications available with different mechanisms of action. The FDA indications for OMs reinforce that nutrition and physical activity regimens should accompany drug treatment of obesity.

At the time of this report, there are 6 medications that are approved by the FDA to treat the disease of obesity: liraglutide injection (Saxenda®), naltrexone/bupropion tablets (Contrave®), phentermine/topiramate capsules (Qsymia®), semaglutide injection (Wegovy®), phentermine (Adipex® or other names at other doses), and tirzepatide injection (Zepbound®), Orlistat (Xenical®).

Three of these medications (Liraglutide, Semaglutide, Phentermine/Topiramate) are FDA indicated for adolescents with obesity age 12 yrs and up.

Scientific Evidence for Pharmacotherapy Treatment in Adolescents with Obesity:

- Pharmacotherapy was associated with larger mean BMI reductions as compared to placebo in most trials in adolescents.
 - A systematic review conducted in support of the Endocrine Society pediatric obesity treatment clinical practice guideline concluded that a BMI reduction of at least 1.6 kg/m2 could be considered clinically meaningful.
- **Liraglutide** was shown to be more effective than placebo in a randomized controlled trial of adolescents with obesity age 12 yrs. and up (NEJM 2020).
 - -5.01 kg (-7.63 to -2.39) relative change in body weight as compared to placebo (95% confidence interval)
 - −1.58 (−2.47 to −0.69) relative change in absolute BMI as compared to placebo (95% confidence interval)
- Semaglutide Among adolescents with obesity in a randomized controlled trial, once-weekly
 treatment with a 2.4-mg dose of semaglutide plus lifestyle intervention resulted in a greater
 reduction in BMI than lifestyle intervention alone.
 - −17.7 kg (−21.1 to −13.7) relative change in body weight as compared to placebo (95% confidence interval with P<0.001)
 - -16.7 relative reduction in absolute BMI from baseline to week 68 (95% confidence interval [CI], -20.3 to -13.2; P<0.001). Reductions in body weight and improvement with respect to cardiometabolic risk factors (waist circumference and levels of glycated hemoglobin, lipids [except high-density lipoprotein cholesterol], and alanine aminotransferase) were greater with semaglutide than with placebo.
- Phentermine/Topiramate: In a randomized controlled trial in adolescents with obesity, at both
 the mid and top doses offered a statistically significant reduction in BMI and favorably impacted
 triglyceride and HDL-C levels in adolescents with obesity.
 - -12.06 kg (-15.55 to -8.58) relative reduction in weight for lower dose and -15.80 (-18.82 to -12.77) relative reduction in weight (kg) for higher dose as compared to placebo.
 - -8.11 Reduction in absolute BMI (-11.92 to -4.31) in the lower dose Phen/Top group as compared to placebo and -10.44 (-13.89 to -6.99) greater reduction in the higher dose Phen/Top as compared to placebo.
 - This medication also showed a reduction in blood pressure at the higher dose level and an 8% increase in HDL cholesterol, which is cardio protective.

Table 12 Obesity Medication Comparison

Drug Company	Brand Name	Generic Name	Gut Hormone/ Incretin	Doses	Frequency	Route	Indication
Eli Lilly	Trulicity	Dulaglutide	GLP1	0.75mg, 1.5mg, 3.0mg, 4.5mg	weekly	injection	Diabetes
Novo Nordisk	Victoza	Liraglutide	GLP1	0.6mg, 1.2mg, 1.8mg	daily	injection	Diabetes
Novo Nordisk	Saxenda	Liraglutide	GLP1	0.6mg, 1.2mg, 1.8mg, 2.4mg, 3.0mg	daily	injection	Obesity
Novo Nordisk	Ozempic	Semaglutide	GLP1	0.25mg, 0.5mg, 1.0mg, 2.0mg	weekly	injection	Diabetes
Novo Nordisk	Wegovy	Semaglutide	GLP1	0.25mg, 0.5mg, 1.0mg, 1.7mg, 2.4mg	weekly	injection	Obesity Cardiovascular Disease
Novo Nordisk	Rybelsus	Semaglutide	GLP1	3mg, 7mg, 14mg	daily	oral	Diabetes
Eli Lilly	Mounjaro	Tirzepatide	GLP1/GIP	2.5mg, 5mg, 7.5mg, 10mg, 12.5mg,	weekly	injection	Diabetes
Eli Lilly	Zepbound	Tirzepatide	GLP1/GIP	2.5mg, 5mg, 7.5mg, 10mg, 12.5mg,	weekly	Injection	Obesity OSA

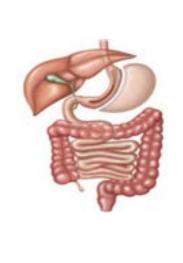
- Current areas of investigation that are likely to lead to further indications include:
 - o Chronic Kidney Disease (CKD) Metabolic Dysfunction
 - Associated Steatotic Liver Disease (MASLD)
- Other areas of interest that may lead to further indications include:
 - o Alzheimer's/Dementia
 - o Addiction

Subsection 5.3 – Treatment of Obesity with Bariatric Surgery

Metabolic and bariatric surgery is currently one of the most effective and long-lasting treatments for severe obesity, offering significant weight loss and improvements in or remission of related conditions such as type 2 diabetes, heart disease, hypertension, sleep apnea, and certain cancers. Studies indicate that bariatric surgery can reduce the risk of premature death by 30–50% and is as safe as, or safer than, common procedures like gallbladder surgery, appendectomy, and knee replacement.

Patients typically experience substantial weight loss within 1–2 years of surgery, with up to 77% of excess weight lost within the first year and 50% maintained after five years. The procedure also leads to high remission rates for obesity-related diseases, including type 2 diabetes (92%), obstructive sleep apnea (96%), hypertension (75%), and dyslipidemia (76%). While the risk of death from bariatric surgery is about 0.1% and major complications occur in roughly 4% of cases, these risks are outweighed by the dangers of severe obesity.

The Laparoscopic Sleeve Gastrectomy, commonly referred to as the "sleeve," involves removing approximately 80% of the stomach, leaving behind a smaller, banana-shaped stomach. This procedure limits the amount of food and liquid the stomach can hold, reducing calorie intake. By removing the portion of the stomach responsible for producing most of the hunger hormone, the surgery decreases hunger, increases fullness, and supports weight loss, blood sugar control, and overall metabolic health. This operation is technically simple, has a shorter surgery time, and can be performed on patients with high-risk medical conditions. It is often used as an initial step for severely obese patients or as a bridge to other procedures like gastric bypass or SADI-S. While it effectively promotes weight loss and improves obesity-related conditions, the procedure is irreversible and may cause or worsen reflux and heartburn. Additionally, its impact on metabolism is less profound compared to bypass surgeries.



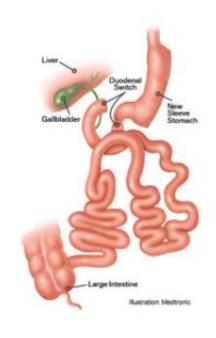
The Roux-en-Y Gastric Bypass, commonly known as the "gastric bypass," is a widely performed and effective bariatric surgery with a history of over 50 years. Using a laparoscopic approach refined since 1993, it is particularly successful in treating obesity and related diseases. The procedure involves dividing the stomach into a small pouch, about the size of an egg, while bypassing the larger stomach portion, which no longer stores or digests food. The small intestine is then restructured to connect with the new stomach pouch, creating a Y-shaped configuration that allows food to bypass a significant portion of the digestive tract. This surgery works by restricting food intake due to the smaller stomach pouch and reducing calorie absorption by bypassing the first portion of the small intestine. It also alters the gastrointestinal pathway, leading to decreased hunger, increased fullness, and hormonal changes that improve metabolic health. Many patients experience remission of adultonset diabetes and relief from reflux symptoms, sometimes even before significant weight loss occurs. However, patients must adhere to lifestyle changes, including avoiding tobacco and non-steroidal anti-inflammatory drugs (NSAIDs). The gastric bypass offers reliable and long-lasting weight loss and is effective in treating obesity-related conditions. However, it is more technically complex than other procedures like sleeve gastrectomy or gastric banding and carries risks such as vitamin and mineral deficiencies, small bowel complications, ulcers, and "dumping syndrome," a discomfort that occurs after consuming certain foods, particularly sweets.



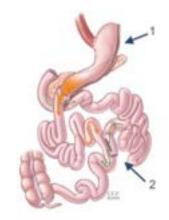
The Single Anastomosis Duodeno-Ileal Bypass with Sleeve Gastrectomy (SADI-S) is the newest bariatric procedure endorsed by the American Society for Metabolic and Bariatric Surgery. Similar to the BPD-DS, it is simpler and quicker, involving only one surgical bowel connection. The operation begins with a sleeve gastrectomy to create a smaller stomach. The first part of the small intestine is then divided, and a loop of the intestine is connected to the stomach, bypassing a portion of the digestive tract.

This procedure directs food from the stomach pouch into the latter part of the small intestine, where it mixes with digestive juices, enabling sufficient nutrient absorption while promoting weight loss. It reduces hunger, increases fullness, improves blood sugar control, and can lead to diabetes remission. The SADI-S is highly effective for long-term weight loss and type 2 diabetes management. It is simpler and faster than other procedures like gastric bypass or BPD-DS and is a good option for patients seeking further weight loss after a sleeve gastrectomy. However, it may impair nutrient absorption more than a sleeve gastrectomy or gastric banding, has limited long-term data, can worsen or cause reflux, and may result in looser and more frequent bowel movements.

https://asmbs.org/condition_procedures/single-anastomosis-duodeno-ileal-bypass-with-sleeve-gastrectomy/



The Biliopancreatic Diversion with Duodenal Switch (BPD-DS) is a bariatric surgery that combines a sleeve gastrectomy with extensive small intestine bypass. It begins with creating a tubeshaped stomach pouch, similar to the sleeve gastrectomy. The first portion of the small intestine is then separated, and a segment of the lower intestine is connected to the stomach pouch, directing food directly into the latter part of the small intestine. This procedure significantly reduces food intake due to the smaller stomach and decreases calorie and nutrient absorption by bypassing approximately 75% of the small intestine—the most of any approved bariatric procedure. The BPD-DS profoundly affects intestinal hormones, leading to reduced hunger, increased fullness, and exceptional blood sugar control, making it the most effective metabolic surgery for treating type 2 diabetes. While the BPD-DS offers excellent results in treating obesity and diabetes, it is a more complex surgery with a higher risk of complications, including malabsorption, vitamin and nutrient deficiencies, reflux, and looser, more frequent bowel movements. It also requires longer operative time and lifelong commitment to supplements and dietary adjustments.



Revisional bariatric surgery is performed on patients who have already had weight loss surgery and may need further treatment. During a revisional surgery, your original bariatric surgery may be converted to a different procedure. Patients may need a revision if they have experienced complications from their original surgery, have not lost enough weight, or if the original surgery is no longer effective. Each revision is unique and the surgical procedure will vary greatly depending on the original surgery. Revisional surgeries can be more complex than the original surgeries.

Economically, the average cost of bariatric surgery ranges from \$17,000 to \$26,000, but reductions in obesity-related conditions and healthcare expenses enable third-party payers to recover these costs within 2–4 years. Additionally, healthcare costs decrease by approximately 29% within five years post-surgery.

Subsection 5.4 – Bariatric Endoscopy

Primary Endobariatrics – endoscopic procedures performed on a native stomach to induce weight loss

- 1. "Space Occupying" includes Intragastric Balloons (IGB)
 - a. There are 2 commercially available IGBs (Orbera, Spatz)
 - "Gastric Remodeling" colloquially known as Endoscopic Sleeve Gastroplasty
 (ESG)There are 3 commercially available devices used in gastric remodeling but 1
 (Boston Scientific's Overstitch device used for ESG) is more widely available
 while the others are restricted to certain states/providers (ESG, POSE, Endomina)

Secondary Endobariatrics – endoscopic procedures performed on surgically altered anatomy (ie. patients who have already had bariatric surgery) usually to induce further weight loss or treat weight regain.

1. "Outlet Reduction" – Transoral Outlet Reduction endoscopic (TORe)

Of note, secondary Endobariatrics can include endoscopic procedures that are used to treat the complications of bariatric surgery such as leaks, strictures, or fistulas but this will not be discussed since it is not used for additional weight loss. Additionally, there are other types of Endobariatrics procedures that have come on and off the market over the years and those that are currently being tested or redesigned. Most of these are interventions targeting the small bowel but because they are not widely commercially available yet, they are not included. Section 6 –Coverage and Access to Comprehensive Obesity Treatment in Louisiana The STOP Obesity Alliance collaborated with the Obesity Action Coalition to analyze how states are covering the treatment of obesity in their Medicaid programs. The review of Medicaid coverage included the elements of comprehensive obesity care: nutrition counseling (NC), intensive behavioral therapy (IBT), obesity medications, and metabolic and bariatric surgery (MBS). See Appendix C for additional comprehensive Obesity Benefit coverage information.

Section 6 - Access to Anti-Obesity Medication & Cost Coverage

Figure 7

Coverage of Comprehensive Obesity Treatment in Louisiana

See Full Details in Appendix D Louisiana Medicaid Obesity Coverage Summary



Source: (LA State Snapshot | Medicaid Obesity Coverage, 2024)

<u>Insurance Coverage of Lifestyle and Behavioral Therapy:</u>

To comply with ACA guidelines, all public and private payers in Louisiana must cover these screening and lifestyle therapy visits, whether performed by a physician (MD, DO), advanced practice practitioner (NP, PA), or another professional trained in lifestyle therapy for weight management (RD, LCSW, LPC, PsyD, or potentially a community health worker). These visits must be covered at NO COST to the patient, according to the ACA. The primary diagnosis of obesity should be covered as part of preventive care. See **Appendix E** for an obesity billing and coding guide for suggested ICD10 and CPT codes that payors can recognize on their fee schedules as part of obesity treatment.

OPM serves as a gold standard and road map for how health plans could create policies to ensure coverage of screening and lifestyle treatment. Carrier Letter 2023-01 of the OPM states that "FEHB Carriers must cover the full scope of required preventive services recommendations as outlined in Appendix F Carrier Letter 2019-01. Specific to obesity, this means the benefit includes screening and, if referred, the multicomponent, family centered programs that are part of intensive behavioral interventions.

Figure 8
Employee Health Plan
Obesity Medication Coverage by State

SEHP AOM Coverage - July 23, 2024



Source: (Novo Nordisk, State SEHP Coverage, 2024)

Coverage based on class, not specific to NNI products

Figure 9 State Medicaid Fee for Service Obesity Medication Coverage by State

Technological

Medicaid FFS AOM Coverage - July 23, 2024



Source: (Novo Nordisk, State Medicaid FFS Coverage, 2024)

Subsection 6.1 – Insurance Coverage of Obesity Medication

There is much discussion regarding potential costs associated with obesity medication insurance coverage. The **Institute for Clinical and Economic Review (ICER)** published a comprehensive report titled "Medications for Obesity Management: Effectiveness and Value^{xxxvii} in October 2022. This report evaluates the clinical effectiveness and cost-effectiveness of various obesity medications.

Key Findings: XXXVIII

- Phentermine/Topiramate and Bupropion/Naltrexone: Both combination therapies meet commonly accepted cost-effectiveness thresholds when compared to lifestyle modification alone. They are considered cost-saving when prescribed generically.
- **Semaglutide:** While semaglutide demonstrates significant effectiveness, it does not meet typical cost-effectiveness thresholds at its current estimated net price. The health-benefit price benchmark for semaglutide is between \$7,500 and \$9,800 per year.
- **Liraglutide:** Similar to semaglutide, liraglutide shows effectiveness but does not meet cost-effectiveness thresholds at its current price. The health-benefit price benchmark for liraglutide is between \$3,800 and \$4,800 per year.

While we recognize that coverage of obesity medication can be costly, there are cost offsets which need to be considered:

- 1. Participation in Medicaid Prescription Drug rebate programs.
 - a. See additional information in **Appendix G** Understanding the Medicaid Prescription Drug Rebate Program
- 2. Federal Statutory Rebates (25-50% reduction on average if covered at full FDA label)
- 3. Supplemental Drug Manufacturer Rebates (varies)
- 4. Reduction in missed work due to obesity related health problems
- 5. Cost Offsets By covering the cost of comprehensive obesity coverage, a payer may reduce their cost of the comorbidities that may be caused by that obesity (such as diabetes, hypertension, MASLD). This may mean reduced cost of inpatient and outpatient visits, along with reduced surgeries and procedures.
- Cost Shifting By covering the cost of comprehensive obesity coverage, a payer may reduce their total cost of medications related to comorbidities that may be caused by obesity.

Obesity Medication Utilization:

Utilization refers to the number of people with obesity who will "utilize" an obesity medication. A 2022 financial report from Morgan Stanley suggests dramatic price decreases could occur in the next few years. While many payers fear widespread uptake of obesity medication if coverage is added, current trends in utilization are in the 2-5% range as reflected in the recent VHA and Mississippi Medicaid experience. Low utilization of obesity medical treatment has been consistently documented with only 3.4% of adults with obesity seeking health professional help for weight reduction. Prior authorizations are one barrier that contributes to these low numbers because they are costly and burdensome for providers to perform. Barriers to obesity care include individual perceptions of patients to side effects and effectiveness of treatment, fear of stigma and bias within the healthcare field, and lack of experience and confidence of healthcare providers in offering comprehensive obesity treatment.

In one study, of those who sought medical support for obesity, only 24% scheduled a follow-up visit to an initial weight-related conversation. Furthermore, another study highlights that the average time that individuals remain on obesity medication is 81 days. As with many types of treatment, the length of time a member/patient would require medication therapy would depend. Such factors include, type of medicine and physician/patient approach. Patients with clinically significant weight loss (5% or greater than baseline weight) who do not experience side effects that cause discontinuation may be advised by their healthcare provider to remain on medication to align to target treatment goals such as reversing organ damage and improving function, not just weight loss.

In a real work analysis of more than 26,000 patients who were newly prescribed obesity medication, less than 50% of patients remained adherent to their drug therapy at 6 months. **xxviii*Adherence rates for other chronic conditions such as diabetes and hypertension are similar, between 50%-60%. **xxiix* It is difficult to model the projected use of obesity medication in a population because they are prescribed to a small proportion of eligible pop. **xxxviii* For example, one study showed that obesity medications are prescribed to less than 3% of eligible pop. **xxxviii* Another retrospective claims study showed on 2.4% of members with obesity had evidence of obesity medication utilization. **xxiix* Common modeling for utilization should include the entire category of obesity medications used to treat obesity, including generics. According to IMS Health's Longitudinal Access and Adjudication Data (LAAD) about 20% of obesity medications prescribed in 2022 were branded. Generic obesity medications compose of about 80% of all prescriptions to treat obesity.**

OPM for Federal Employees Health Benefits (FEHB) program serves as a gold standard for guidance on obesity medication coverage. As per Carrier Letter 2023-01 and Carrier Letter 2022-03, OPM stated that "FEHB Carriers are not allowed to exclude obesity medications from coverage based on a benefit exclusion or a carve out. Carrier Letter 2022-02 outlines the requirements for Non Discriminatory Formulary Design, namely, that a non-discriminatory formulary design does not have cost or access barriers imposed by disease or condition. FEHB Carriers must have adequate coverage of FDA approved obesity medications on the formulary to meet patient needs and must make available their exception process to members. Carriers must cover at least one obesity medication from the Glucagon-like Peptide-1 (GLP-1) class for weight loss and cover at least 2 additional oral obesity medication options. As new obesity medications are approved by the FDA, OPM expects Carriers to evaluate and update their coverage of obesity medications. Carriers should provide access to a range of obesity drugs on the formulary in order to satisfy OPM's requirement in Carrier Letter 2022-02 that Carriers must ensure non-discriminatory access to safe, clinically appropriate drug therapy for members with chronic conditions. This includes drug therapies indicated for adolescents' age 12 years and older. OPM FEHB Carriers are not allowed to exclude obesity medications from coverage based on a benefit exclusion or a carve out.

Subsection 6.2–Medicaid's Estimated Obesity Medication Cost

Estimating the cost to Louisiana Medicaid for obesity medication coverage, specifically for medications like GLP-1 receptor agonists (e.g., Wegovy and Ozempic), requires several factors to be considered, including

- 1. Prevalence of Obesity in Louisiana
- 2. Population Eligible for Medicaid
- 3. Medication Utilization and Costs
- 4. Impact of Medicaid Drug Rebates
- 5. Projected Savings from Obesity Treatment

As mentioned above, medications approved by the FDA for use in chronic weight management include: liraglutide injection (Saxenda®), naltrexone/bupropion tablets (Contrave®), phentermine/topiramate capsules (Qsymia®), semaglutide injection (Wegovy®), setmelanotide capsules (Imcivree®), phentermine, and tirzepatide injection (Zepbound®), Orlistat (Xenical®). Setmelanotide capsules (Imcivree®) were not included in this analysis since its use is limited to chronic weight management in adult and pediatric patients 2 years of age and older with monogenic or syndromic obesity due to certain genetic conditions. A separate cost analysis would likely be required to address the fiscal impact of this agent on Medicaid. The current NADAC (National Average Drug Acquisition Cost) was used to estimate the annual drug cost per recipient for Saxenda®, Wegovy®, and Zepbound®. The Average Wholesale Price (AWP) was used to estimate the annual drug cost per recipient for Contrave® and Qsymia®. The 'Estimated Annual Drug Cost per Recipient' was calculated as an average cost of all drugs included in the specified groups in the tables below.

Estimated Drug Mix for Obesity Medications:

The estimated drug mix for obesity medications typically varies depending on the specific population, healthcare provider prescribing habits, and the drugs available on the market at any given time. However, as of recent years, **GLP-1 receptor agonists** have become the **dominant class of obesity medications** due to their proven efficacy in weight loss and their approval by the FDA for obesity treatment. GLP-1 receptor agonists are currently the most prescribed obesity medications in the U.S., accounting for approximately **60-70%** of the total obesity medication prescriptions, based on their recent surge in popularity and efficacy. Non-GLP-1 medications, while still widely prescribed, are less frequently used compared to GLP-1 receptor agonists. They may account for **30-40%** of obesity medication prescriptions.

Key Drivers of Prescription Trends:

- Efficacy and Weight Loss: GLP-1 agonists are more effective in achieving weight loss compared to most non-GLP-1 medications, which drives their increasing share of prescriptions. Semaglutide, for example, has shown weight loss of around 15-20% of body weight in clinical trials, a much higher degree of weight loss compared to many other medications
- **Side Effect Profiles**: GLP-1 medications have an established safety profile, although side effects like nausea can be a limiting factor for some patients. Non-GLP-1 medications like phentermine may have higher risks for side effects, including cardiovascular issues, which can limit their use in certain populations.

The 'Estimated Drug Mix Among Recipients' used in this analysis was based on the efficacy of the GLP-1 class of medications that are indicated for chronic weight management and the popularity of this class among the general public. A Kaiser Family Foundation (KFF) survey found that nearly half of adults (45%) say they would be interested in taking a prescription drug to lose weight if they heard that it was safe and effective. Additionally, according to the survey, results indicate that the share who say they are interested in taking prescription drugs for weight loss increases to two-thirds (67%) among those who have been told by a doctor or health care provider that they are overweight or obese in the past five years. In projecting costs, this analysis only considers the cost of obesity medications and does not consider any ancillary costs that may be associated with prescribing such as laboratory costs or physician office visits. For this analysis, it was assumed that the recipients received 12 months of therapy with the same agent. This analysis is based on current drug costs, Medicaid enrollment, and provider medical coding practices that existed at the time of calculation of this estimated fiscal impact. If any factors change the estimated cost would be impacted. Additional information can be found in Appendix H Diabetes and Obesity Claims Analysis and Appendix I Comorbidities Claims Analysis.

Louisiana Medicaid Chronic Weight Management Denied Pharmacy Claims Analysis:

Table 13
Chronic Weight Management Denied Pharmacy Claims Analysis for 12-17 Years of Age on Louisiana Medicaid

Claims with a Date of Service from January 1, 2023 to December 31, 2023

		FFS		MCO		Total FI	-S/MCO
Age Group	Drug Name	Unduplicated Recipient Count	Claim Count	Unduplicated Recipient Count	Claim Count	Unduplicated Recipient Count	Claim Count
	CONTRAVE	-	-	3	3	3	3
	ORLISTAT(ALLI,XENICAL)	-	-	5	17	5	17
12 to 17	QSYMIA	4	16	42	171	45	187
	SAXENDA	1	2	19	70	19	72
	WEGOVY	9	39	128	548	134	587
	ZEPBOUND	-	-	1	8	1	8
То	tal 12 to 17	13	57	188	817	195	874

Note: Age calculated as on the claim Date of Service

Table 14 Chronic Weight Management Denied Pharmacy Claims Analysis for 18+ Years of Age on Louisiana Medicaid

Claims with a Date of Service from January 1, 2023 to December 31, 2023

		FFS		MC	0	FFS/MCO	
Age Group	Drug Name	Unduplicated Recipient Count	Claim Count	Unduplicated Recipient Count	Claim Count	Unduplicated Recipient Count	Claim Count
	CONTRAVE	17	39	592	1,356	603	1,395
	ORLISTAT(ALLI,XENICAL)	14	94	458	2,338	470	2,432
	QSYMIA	138	281	502	1,567	629	1,848
18+	SAXENDA	8	17	245	693	253	710
	WEGOVY	171	722	4,231	15,279	4,354	16,001
	ZEPBOUND	-	-	303	973	303	973
	Total 18+	344	1,153	6,013	22,206	6,285	23,359

Note: Age calculated as on the claim Date of Service

Table 15 Chronic Weight Management Denied Pharmacy Claims Analysis for ALL Ages on Louisiana Medicaid

Claims with a Date of Service from January 1, 2023 to December 31, 2023 for ALL Ages

		FFS		MC	0	FFS/MCO	
Age Group	Drug Name	Unduplicated Recipient Count	Claim Count	Unduplicated Recipient Count	Claim Count	Unduplicated Recipient Count	Claim Count
	CONTRAVE	17	39	595	1,359	606	1,398
	ORLISTAT(ALLI,XENICAL)	14	94	463	2,355	475	2,449
	QSYMIA	142	297	542	1,738	672	2,035
ALL	SAXENDA	9	19	264	763	272	782
	WEGOVY	180	761	4,359	15,827	4,488	16,588
	ZEPBOUND	-	-	304	981	304	981
	Total ALL	357	1,210	6,199	23,023	6,478	24,233

Note: Age calculated as on the claim Date of Service

Table 16

Louisiana Medicaid Obesity Medication Projected Cost Analysis

Projected Costs for 12-17 Years of Age

Projected Costs for 18 Years of Age and up

Count of Unduplicated Recipients Ages 18 Years and up (Medicaid including TPL, excluding duals) with a Diagnosis of		Estimated	Projected Costs **See Note			
Obesity in CY2023, Excluding Recipients Diagnosed with Type 2 Diagnoses (Caution: Obesity diagnosis codes are under-reported in medical claims.)	Estimated Drug Mix Among Recipients	Annual Drug Cost per Recipient	1% Uptake	2% Uptake	3% Uptake	
******	95% GLP-1 (Saxenda*, Wegovy*, or Zepbound*)	\$13,941	\$19,709,646	\$39,419,293	\$59,128,939	
148,820	5% non-GLP-1 (Contrave*, Qsymia*, or Xenical*)	\$6,054	\$450,478	\$900,956	\$1,351,434	
- V		Total	\$20,160,125	\$40,320,249	\$60,480,374	

Table 17 Louisiana Medicaid Obesity Medication Projected Cost Analysis

Projected Costs for 18 Years of Age and Up

Projected Costs for 12-17 Years of Age

Count of Unduplicated Recipients Ages 12-17 Years (Medicald including TPL, excluding duals) with a Diagnosis of Obesity in CY2023, Excluding Recipients Diagnosed with Type 2 Diabetes (Caution: Obesity diagnosis codes are under-reported in medical claims.)		Estimated	Projected	nd 2**	
	Estimated Drug Mix Among Recipients	Annual Orug Cost per Recipient	1% Uptake	2% Uptake	3% Uptake
46.040	95% GLP-1 (Saxenda* or Wegovy*)	\$15,624	\$4,497,072	\$8,994,143	\$13,491,215
30,298	5% non-GLP-1 (Qsymia* or Xenical*)	84,582	\$69,413	\$138,825	\$208,238
		Total	\$4,566,484	\$9,132,969	\$13,699,453

Table 18 Louisiana Medicaid Obesity Medication Projected Cost Analysis

Projected Cost Summary (12 Years of Age and up)

Projected Costs Summary (12 Years of Age and up) **See Notes 1 and 2**

	Total Projected Costs
1% Uptake	\$24,726,609
2% Uptake	\$49,453,218
3% Uptake	\$74,179,826

Cost of Obesity Medication to Commercial Plans in Louisiana:

A recent analysis of the cost of obesity medication coverage by the Department of Insurance estimates a **\$200 million** per year cost in the state-regulated group market, with an additional **\$340 million** cost to provide coverage in the remaining commercial markets.

Consideration of Rebate Savings:

When obesity medications are covered with full FDA indication on a health plan, that plan may be eligible for federal statutory rebates and/or rebates from manufacturers, which can significantly reduce the cost of medications. For example, Federal Medicaid drug rebates start at **23.1%** of the Average Manufacturer Price (AMP) for most drugs, and the exact rebate for GLP-1 medications can vary and often increase as the drug remains on the market.

Louisiana Medicaid does not currently reimburse or receive rebates for obesity medications. In order for Louisiana Medicaid to reimburse and receive rebates for obesity medications, several steps would need to be taken by Louisiana Medicaid including approvals and policy amendments.

Additionally, pharmaceutical manufacturers may offer supplemental rebates to states to negotiate better pricing. Therefore, these projected costs are overinflated and do not take into account rebates. Of note, Louisiana Medicaid currently provides coverage for semaglutide injection (Wegovy®) for recipients who are at least 45 years old and who are overweight or obese, have certain comorbid conditions, and meet specified clinical criteria. Recipients who have obesity and meet all the Wegovy® criteria are included in this cost analysis. However, recipients who are overweight and meet all the Wegovy® criteria are not included in this cost analysis, as the cost analysis is limited to the cost of treating only chronic obesity.

Projected Savings from Coverage of Obesity Treatment:

Obesity medications can help reduce the long-term costs associated with obesity-related comorbidities, such as heart disease, diabetes, and hypertension. Studies suggest that for every \$1 spent on obesity treatment, there could be up to \$3 in savings from reduced healthcare utilization (hospitalizations, medications, long-term care). If obesity medications help reduce healthcare spending annually in Louisiana due to fewer hospitalizations and complications from obesity-related conditions, this would offset a significant portion of the costs of coverage.

Subsection 6.3- Office of Group Benefits Estimated Obesity Medication Cost

The Louisiana State Office of Group Benefits (OGB) expects to spend approximately **\$105 million** in 2024 for obesity medication for individuals with type 2 diabetes. This reflects approximately **16,000** members. If OGB were to cover obesity medications for weight loss, OGB currently has **36,106** members with a diagnosis of obesity that are not currently on an obesity medication. If **100%** of these members were to participate in the benefit, OGB would expect the cost to increase to an additional **\$480 million** per year. While it is not expected for all eligible members to participate, OGB would plan and prepare for the worst case scenario as a self-funded plan. Additionally, Obesity is typically under-coded, resulting in conservative cost estimates.

Section 7 - Promoting the Use of the Data to Influence Decision Making

The fight against this public health crisis has been constrained by many factors, including limited access to longitudinal data (that is, the same variables studied over time) collected in many different settings. Understanding which weight-intervention programs work for which populations requires the ability to follow children across both health and community settings over time. Every systemic and individual factor provides important obesity-related data. xli The problem is that data is collected in many different systems. Without suitable data capability, progress to provide practitioners and researchers with data needed to monitor programs and outcomes in obesity will remain slow. xxxv

Alongside healthy eating and physical activity, additional socioeconomic factors play a significant role in obesity. For example, access to healthy foods, physical activity, healthcare, and living in a safe environment. Individual-level factors directly influence children, adults, and families struggling with obesity.

Data-driven decision making in the context of obesity involves utilizing large datasets, including health records, environmental factors, and behavioral data, to analyze trends, identify high-risk populations, and inform targeted interventions aimed at preventing and managing obesity xxx, allowing for more effective policy decisions and personalized treatment plans based on individual data points, rather than relying solely on traditional methods. XXXX

Challenges in using data-driven approaches for obesity include the following:

- **Data quality**: Ensuring accurate and complete data collection, including addressing potential biases in self-reported information.
- **Privacy concerns**: Protecting sensitive health data while utilizing it for research and interventions.
- Data integration: Combining data from multiple sources to create a comprehensive picture of obesity risk factors.

Subsection 7.1 – Targeted Data Driven Interventions

Data-driven approaches in obesity management use algorithms to identify individuals at high risk of developing obesity based on their demographics, lifestyle habits, and genetic factors. XXXXV An example of data driven approaches include mobile health apps or smartphone data to track food intake, physical activity levels, and provide real-time feedback to promote behavior change. Additionally, analyzing data from community-level interventions to identify areas with high obesity rates and design tailored interventions like community gardens, walking trails, or educational campaigns.

Evidence-based data-driven approaches for obesity prevention and management include the following:

• Data collection

 Gathering diverse data sources like electronic health records (EHRs), wearable devices, dietary logs, geographic information systems (GIS), and socioeconomic data to create a comprehensive picture of obesity risk factors.

Analysis techniques

 Employing statistical methods, predictive modeling to identify patterns and associations between lifestyle factors, environmental cues, and obesity risk.

Population-level insights

 Identifying geographic "hotspots" with high obesity rates to target community-based interventions, such as improving access to healthy foods or promoting physical activity in specific areas.

Personalized interventions

 Using individual data to tailor weight management strategies, including dietary recommendations, exercise plans, and behavioral support based on an individual's unique needs and preferences

Evidence shows the ability to adequately track and link systems, community, and state level data, over time, at an individual level can drastically improve the ability to understand, prevent, and treat obesity.

Section 8 - Barriers and Facilitators in Obesity Management

Addressing the root causes of chronic disease has shown to effectively and sustainably reduce persistent prevalence rates of heart disease, diabetes, and obesity. XIII Root causes, or upstream causes, are system or environmental factors that result in significant lack of access to healthcare and resources among our residents. Lack of healthcare access is directly connected to poorer health outcomes. The majority of the existing chronic disease prevention initiatives in Louisiana focus on individual and medicalized solutions (education on lifestyle and behavior change such as healthy eating and exercise), which are also referred to as midstream approaches. XXXXV

Examples of midstream and upstream barriers include the following:

Midstream Barriers

- Healthcare staffing shortages that directly affect Louisiana's rural population access to medical providers.
 - Louisiana residents in rural areas often do not have access to medical providers who are trained in obesity medicine.
- Healthcare systems have competing and immediate health issues that they need to address.
 - Preventative medicine programs are often deprioritized.
- Lack of coordinated data systems (EHRs, state data, etc.) to assess the problem and make data-driven decisions.
- Current lifestyle programming is resource (money and time) intensive.
- High program staff turnover additionally contributes to the resource intensiveness.
- Complexities of healthcare reimbursement for lifestyle programs through insurance.
 - Without supplemental funding (usually through the program), clinics are not reimbursed or are not at a high enough rate to cover the cost of the program.
 - This makes it especially difficult for smaller and rural healthcare clinics with fewer resources to sustain lifestyle programs.

Upstream Barriers

- Health outcomes are inextricably linked to household income, minimum wage, and employment. xxxv
 - O The cost of housing, food and other necessities that determine health are rising while wages remain the same.
- Exposure to environmental hazards such as, secondhand smoke exposure, quality housing and water affect health.
- The nationwide healthcare worker shortage leads to poor patient outcomes.
- Environmental disasters such as hurricanes and tornadoes cause both immediate and long-term health impacts caused by displacement, lost wages, and shift in funding priority.

Section 9 - Conclusions and Recommendations

The factors contributing to chronic disease are multi-faceted, making the efforts to find the most effective solutions complex. *** The solutions to improve health behaviors, health conditions, and other health determinants is largely influenced by the capacity to support prevention and deliver comprehensive health promotion strategies that target a wide range of people, places, and behaviors. Fully addressing the chronic disease burden will require public health, health care, and many other disciplines to integrate approaches that bring together strategies and interventions to address many risk factors and conditions simultaneously. *** This will leverage public-private partnerships and stakeholder involvement to create population-wide changes, target the population subgroups most affected, and deploy the efforts across multiple sectors. ***

Subsection 9.1 – Obesity Prevention and Management Recommendations

Evidence-based approaches to effectively combat obesity and reduce the prevalence of obesity include the following: xxxv

I. Increased funding and sustainability for chronic disease prevention and self-management efforts

a. Identifying new funding streams and diversifying sources of funding through key stakeholders and partners.

II. Increased health systems capacity

a. Align efforts and funding to increase resources for activities that support incentivizing practicing in targeted healthcare settings.

III. Prioritizing prevention

- a. Provide technical assistance and support clinics to help them address barriers to providing preventative medicine.
- b. Support implementation of evidence-based processes and systems at clinic sites to sustain technical assistance provided.

IV. Established community and clinical linkages

- a. Align programmatic efforts, funding, and staffing to expand community-based outreach and resources in targeted regions.
- b. Expanded clinical quality improvement strategies to align clinical care with social services and resources in target regions throughout the state.

V. Coordinated programmatic evaluation and clinical data collection systems (EHR, State data collection, etc.)

- a. Educate on the benefits of data driven decision making and evaluation outcomes to key stakeholders and partners.
- b. Collaborate with partners and clinic sites to create solutions on decreasing the workload required to sustain data systems.

VI. Comprehensive insurance coverage/reimbursement

 a. Identify opportunities to collaborate with public and private health insurance plans to develop systems for disease management reimbursement and/or expand prevention lifestyle change programs.

VII. Strategic partnership coordination

 Ensure alignment of statewide obesity prevention and management initiatives through an established coalition of state, local, and national partners (The Louisiana Chronic Disease Collective).

Policy, Systems, and Environmental Change:

"Policy, systems, and environmental change" (PSE change) refers to a strategy for improving community health by modifying the environment to make healthy choices more readily available and accessible to everyone. Examples of evidence-based **PSE policies** that can be implemented on the organization, local, or state-level to impact Louisiana's obesity burden include the following: xli

Community design laws

- Community design laws aimed at increasing physical activity typically focus on creating "activity-friendly routes" by connecting everyday destinations and encouraging people to walk, bike, or use public transportation more often instead of driving.
- Complete Street policies prioritize pedestrian and cyclist safety, zoning regulations promoting mixed-use development, and standards for park access and quality within neighborhoods.

Healthy food access laws

- O Growing local, regional, and statewide food economies within which low-income populations have access to fresh, affordable, and healthy food by connecting agricultural producers to federal food assistance programs.
- Healthy food incentive program for supplemental nutrition assistance program (SNAP) recipients.
- Expanding the use of the Women, Infants, Children Supplemental Food Program (WIC) at farmers' markets.
- Providing and/or schools residents of food desert communities with access to fresh and affordable produce.

Improving nutrition, physical activity, and breastfeeding in early child care and education programs

- Establishing policies and activities that implement, spread, and sustain Family Healthy Weight Programs.
- o Implementing policies and activities that achieve continuity of care for breastfeeding

• Strengthening food service and nutrition guidelines

O Strengthened guidelines can be implemented in worksites, food pantries, schools and faith-based organizations.

Increased funding

 Expanding or enhancing existing evidence-based obesity prevention and intensive lifestyle and behavior management programs and community interventions.

Subsection 9.2 – Comprehensive Obesity Treatment Suggested Policy Solutions

Covering comprehensive obesity care including obesity medication under Louisiana health plans should be strongly considered. *Obesity is costing our state billions of dollars every year.* As highlighted in Section 4: Obesity's impacts to Louisiana's economy in fiscal year 2023 (July, 1 2022-June, 30 2023) include: XXXV

Economic impact

- Reduced overall economic activity by \$6.9 billion
- \$2.5 billion in higher healthcare, absenteeism, and disability costs to employers
- \$823 million detrimental state budget impact

• Individual impact

- o Obesity-attributed early mortality- 9,100 premature deaths occur annually
- Higher medical costs- \$462 million spending per household
- o Reduced labor force participation- 52,300 fewer adults with obesity working
- Reduced earnings for employed women- women with obesity earn 9% less than women with healthy weight

Workforce impact

- \$696 million in higher healthcare costs to employers
- \$1.8 billion in health-related lost workdays and disability
- o 2.2% reduction in Louisiana's Gross Domestic Product

• State and local government impact

- \$384 million in reduced tax revenues from lost economic activity
- o \$249 million higher Medicaid spending
- \$168 million for employee healthcare coverage
- \$22 million in public assistance program costs
- o \$439 million increased state and local government spending
- As highlighted in our report under Section 4, obesity is costing Louisiana Medicaid approximately \$3.6 billion dollars annually.
- As calculated in our report under Section 6, obesity is costing LA commercial plans approximately **\$540** million per year.
- One Analysis estimated that coverage of comprehensive obesity treatment by LA health plans could lead to 5%-40% weight loss among adults with obesity age <65 over a 10 year period, which could have the potential to save Louisiana \$2.8 billion-\$13.7 billion in Louisiana's medical costs due to obesity.

Although the data is complex, the math is simple. ECONOMIC COST OF OBESITY TO OUR STATE= **BILLIONS**

- + ECONOMIC COST OF OBESITY TO LA MEDICAID= **BILLIONS**
- + ECONOMIC COST OF OBESITY TO COMMERCIAL PLAN= BILLIONS
- THE COST OF TREATING OBESITY IS IN THE **MILLIONS**
- = THE SAVINGS TO LOUISIANA AND LA HEALTH PLANS WOULD BE IN THE BILLIONS

COVERING COMPREHENSIVE OBESITY TREATMENT IN LOUISIANA WOULD BE A SMART INVESTMENT INTO THE ECONOMY, HEALTH, AND PEOPLE OF LOUISIANA. Research indicates that for every \$1 spent on obesity treatment, healthcare savings can reach up to \$3 in reduced medical costs for managing chronic diseases.

Obesity-related conditions such as heart disease, diabetes, and hypertension place a substantial financial burden on our nation's healthcare systems, with direct medical costs estimated to exceed **\$170 billion** annually in the U.S. alone.

Studies have shown that the use of obesity medications can lead to substantial weight loss, improving or even reversing many obesity-related conditions. Furthermore, when patients lose weight and experience improvements in comorbidities, there is a notable decrease in hospitalizations, medication use, and long-term care, ultimately reducing the overall financial strain on health plans. Therefore, covering comprehensive obesity treatment not only aligns with improving health outcomes but also presents a clear opportunity for cost-effective healthcare management.

Covering obesity medications under health plans in Louisiana would offer significant cost savings and improve health outcomes for residents. In Louisiana, obesity is a major public health issue, with nearly 40% of adults affected, contributing to high rates of obesity-related conditions such as heart disease, diabetes, and hypertension. These conditions result in substantial healthcare costs, with estimates suggesting that obesity-related medical expenses in the state of Louisiana exceed \$4 billion annually. In summary, estimates on the cost of obesity medications for Louisiana Medicaid recipients diagnosed with obesity are upwards of \$370,899,132. Additionally, OGB estimates the cost of obesity medications for individuals diagnosed with obesity would increase in cost by additional \$480 million per year. An analysis of the cost of obesity medication coverage by the Department of Insurance estimates a \$200 million per year cost in the state-regulated group market, with an additional \$340 million cost to provide coverage in the remaining commercial markets.

An ALTERNATIVE solution to health plans having to pay full price is to think outside of the box.

Given the high costs of traditional coverage of these medications, the state should consider measures to encourage alternative funding mechanisms and payment designs, either to subsidize coverage costs, to encourage non-utilization-based purchasing, or both. For example, volume-delinked, subscription-style payments, often known as "Netflix models" have shown some promise in breaking deadlocks in cases where medications provide high-value outcomes but are not covered due to cost. Under a Netflix model agreement, the payer agrees to make fixed, periodic payments to a drug manufacturer in exchange for a specified supply of a medication. Louisiana Medicaid has used this model in the past to arrange the purchase of a highly effective hepatitis C regimen from Asegua Therapeutics. In the case of obesity medications, the state should encourage Louisiana Medicaid, state and local governmental plans, and the state's commercial insurance carriers to evaluate whether there is an opportunity for a similar arrangement to negotiate a payment structure that will allow for coverage of obesity medications at a cost that will not place additional burden on taxpayers and ratepayers.

The state may have several roles to play in encouraging such a model:

- The state can invest directly into such a venture to stimulate the downstream economic benefit of reduced obesity across its population;
- The state can facilitate collective negotiation power by_providing a vehicle for entities spanning the commercial coverage and government-sponsored benefits markets to collectively negotiate necessary funding arrangements and distribute access to those most in need; and
- The state can ease insurance coverage restrictions to allow commercial insurance policies to align benefit coverage and restrictions with the medication access that results from these negotiations.

The OVERARCHING goal of the Task-Force Committee is to provide the catalyst to:

- I. Reduce the incidence of obesity and chronic disease in Louisiana
- II. Increase productivity of our workforce
- III. Lower the cost of health care to our State and health plans
- IV. Improve the health and quality of life of the **1.84 million adults + 300,000 children** currently living with obesity in Louisiana.

Final Task-Force Committee Recommendations:

- I. Screen all patients for overweight and obesity, and assess health risk for developing obesity-related comorbidities
- II. Provide comprehensive obesity medical management including: visits to primary care or obesity medicine specialists, nutritional and behavioral counselling, pharmacotherapy, and bariatric surgery and procedures.
- III. Provide barrier-free access to all FDA-approved obesity medications for youth and adults with overweight and obesity.

Final Task-Force Committee Recommendations:

- Louisiana health plans, including OGB and Medicaid (given the inequity that exists in prevalence of obesity is this population) should explore opportunities to cover comprehensive obesity treatment.
 - A. Explore direct contracting with pharmaceutical manufacturers related to obesity medication cost.
 - B. Explore opportunities to tie obesity coverage through value-based contracting and/or value added benefits to incentivize healthcare providers and beneficiaries.
 - C. Explore support coverage of obesity care to state health plans through diverse state and federal funding streams, such as House Bill 1.Explore pilot programs to cover comprehensive obesity treatment for patients with the most high risk health conditions.
- II. Ensure strategic partnership coordination. Increase alignment and ensure coordination obesity prevention and management initiatives through an established network of national, state, and local partners.
 - A. Developing a stronger and well integrated public health and health care system to create greater capacity to deliver prevention-focused initiatives that support and enable healthier choices to be the easiest choice. Such as the Louisiana Chronic Disease Collective and the Senate Resolution 94 Obesity Cost, Care, and Value Task Force.
- III. The State should support a culture of prevention and use its resources to promote health and wellness in communities and organizations of all types throughout Louisiana by:
 - A. Implementing PSE approaches to increase access to healthy foods and physical activity.
 - B. Establishing community and clinical linkages to align clinical care with social services and community based resources.
 - C. Increasing health systems capacity through aligned efforts that supports incentivizing health care providers specializing in obesity treatment practicing in target healthcare settings.

Appendices

Appendix A

Louisiana Medicaid Diagnosis Code Identifiers

Diagnosis Description	Diagnosis Codes	Diagnosis Code Description
Obesity (not	E66.09	Other obesity due to excess calories
severe)	E66.1	Drug-induced obesity
	E66.811	Obesity, class 1 [BMI 30-34.9 info found elsewhere]
	Z68.30-	BMI 30.0-34.9
	Z68.34	
	E66.812	Obesity, class 2 [BMI 35-39.9 info found elsewhere]
	Z68.35- Z68.39	BMI 35.0-39.9
	E66.89	Other obesity not elsewhere classified
	E66.9	Obesity, unspecified
Severe Obesity	E66.01	Morbid (severe) obesity due to excess calories
, <u> </u>	E66.2	Morbid (severe) obesity with alveolar hypoventilation
	E66.813	Obesity, class 3 [BMI \geq 40 info found elsewhere]
	Z68.4*	BMI ≥ 40 adult
Type 1 Diabetes	E10*	Type 1 diabetes mellitus
Type I Diabetes	EIU	Type I diabetes memtus
Type 2 Diabetes	E11*	Type 2 diabetes mellitus
Prediabetes	R73.03	Prediabetes
Insulin	E88.81	Metabolic Syndrome
Resistance	E88.811	Insulin resistance syndrome, Type A
	E88.818	Other insulin resistance - Insulin resistance syndrome, Type B
	E88.819	Insulin resistance, unspecified
Cancer	C00*-C96*	Malignant neoplasms
Depression	F31.3*, F31.4, F31.5, F31.75, F31.76, F31.81, F31.9, F32.*, F33.*, F34.1	Depression

Cardiovascular		I05*-I09*	Chronic rheumatic heart diseases		
Disease -		I10* - I1A*	Hypertensive diseases		
including hypertension		I20*-I25*	Ischemic heart diseases		
		I30*-I5A	Other forms of heart disease		
		I70*-I79*	Diseases of arteries, arterioles and capillaries		
NASH (or MASH)		K75.81	Nonalcoholic steatohepatitis (NASH)		
New codes eff.					
10/1/24					
Note: This list contains current and					
historical codes.		T			
	1				

Louisiana Medicaid Medication Identifiers

Medications	TC	HICL	TC Description
Diabetes	C40		DISEASE MODIFYING AGENTS FOR TYPE 1 DIABETES
	C4		ANTIHYPERGLY. DPP-4 INHIBITORS-HMG COA RI(STAT
	Α		
	C4		ANTIHYPERGLYCEMIC-GLUCOCORTICOID RECEPTOR BLOC
	В		ANTENNADED OLVED A ENGINE INVESTIGATION DINED
	C4C		ANTIHYPERGLY,DPP-4 ENZYME INHIBTHIAZOLIDINED
	C4		ANTIHYPERGLYCEMIC-SOD/GLUC
	D C4E		COTRANSPORT2(SGLT2) ANTIHYPERGLYCEMIC-SGLT2 INHIBITOR-BIGUANIDE CO
	C4E C4F		ANTIHYPERGLYCEMIC,DPP-4 INHIBITOR-BIGUANIDE CO
	C4 G		INSULINS
	C4		ANTIHYPERGLYCEMIC, AMYLIN ANALOG-TYPE
	H		MATHITI ENGLIGENIC, MATERIA MATERIA
	C4I		ANTIHYPERGLY,INCRETIN MIMETIC(GLP-1 RECEP.AGON
	C4J		ANTIHYPERGLYCEMIC, DPP-4 INHIBITORS
	C4		ANTIHYPERGLYCEMIC, INSULIN-RELEASE STIMULANT T
	K		
	C4L		ANTIHYPERGLYCEMIC, BIGUANIDE TYPE
	C4		ANTIHYPERGLYCEMIC, ALPHA-GLUCOSIDASE INHIBITOR
	M		, and the second
	C4		ANTIHYPERGLYCEMIC,THIAZOLIDINEDIONE(PPARG AGON
	N		
	C4		ANTIHYPERGLYCEMIC, THIAZOLIDINEDIONE-SULFONYLU
	R		ANTENNA DED CAMORA MONTANA DEL EACE CONTANTANA DA CAMORA
	C4S		ANTIHYPERGLYCEMIC, INSULIN-RELEASE STIMBIGUAN
	C4T		ANTIHYPERGLYCEMIC, THIAZOLIDINEDIONE AND BIGUA
	C4 V		ANTIHYPERGLYCEMIC - DOPAMINE RECEPTOR AGONISTS
	C4 W		ANTIHYPERGLYCEMIC, SGLT-2 AND DPP-4 INHIBITOR
	C4X		ANTIHYPERGLY,INSULIN,LONG ACT-GLP-1 RECEPT.AGO
	C4Y		ANTIHYPERGLY-SGLT-2 INHIB,DPP-4 INHIB,BIGUANID
	C4Z		ANTIHYPERGLYCEMIC - INCRETIN MIMETICS COMBINAT
Medications for	D5		FAT ABSORPTION DECREASING AGENTS
Chronic Obesity	A		The state of the s
		03934	ANTI-OBESITY - ANOREXIC AGENTS (Qsymia)
	I8D	-	ANTI-OBESITY-OPIOID ANTAG-NOREPI,DOPAMINE RU I
	J8E		ANTI-OBESITY GLUCAGON-LIKE PEPTIDE-1 RECEP AGO
	J8G		ANTI-OBESITY - INCRETIN MIMETICS COMBINATION
	1,50		THE COLORS IN CONTRACT OF THE

Medications for	0	0476	METFORMIN		
Prediabetes (off-	3	;			
label)	0	2032	PIOGLITAZONE HCL		
	4				
Medication for	0	2032	PIOGLITAZONE HCL		
Insulin	4				
Resistance (off-					
label)					
TC: Therapeutic					
Class					
HICL: Hierarchical In	ngredien	t Code	List		
Note: This list contains current and historical codes.					



Developing a Comprehensive Benefit for Outcomes-based Obesity Treatment in Adults

Obesity is a complex disease with detrimental impacts on the health, wealth, and longevity of Americans. There are evidence-based treatments for people with obesity that mitigate the impacts of the disease and improve health outcomes. The present landscape of obesity care coverage is piecemeal, and providers frequently cite inconsistent and/or inadequate reimbursement for obesity-related services as barriers to delivering appropriate care.

Without guidance on how to operationalize evidence-based behavioral, nutritional, pharmacological, and surgical obesity treatment modalities as health benefits, health insurance plans have taken vastly different approaches in determining what and how obesity treatment services are covered for their members. The lack of consistent coverage is a barrier to needed care for many U.S. adults with obesity. As a first step toward standardizing the provision of obesity care across plans, we have designed a comprehensive benefit for outcomes-based obesity treatment that provides guidance on minimum acceptable coverage for medically-necessary components of obesity care and conditions under which these services and/or items ought to be covered. Development of this comprehensive benefit was informed by input from key stakeholders, including representatives from large employers, health plan administrators, payers, patients, and providers. This document is intended to:

- Identify evidence-based obesity treatment modalities that can support clinically-significant weight loss (≥5% reduction in body weight) among persons with obesity
- Provide guidance on the appropriate amount, scope, duration, and delivery of obesityrelated benefit offerings
- 3. Highlight real-world examples from plans that cover obesity treatment modalities
- Support efforts to standardize the scope and availability of obesity treatment modalities that
 are covered across plans / systems.

Although we recognize that the design and successful administration of a health benefit is a complicated process, we hope that this tool will inspire employers, payers, and others involved in benefit design and administration to reassess the adequacy of coverage for obesity treatment services in current plan offerings. Where coverage for evidence-based obesity services is absent or limited, we hope that this comprehensive benefit will provide plans with useful guidance for how they can improve obesity care for their members. Where coverage for obesity care is available, we encourage plans to include detailed guidance on what constitutes appropriate provision of obesity-related services in their provider manuals and other relevant communications.

Insurers may choose to administer elements of this obesity benefit in different ways. Although we sought and incorporated feedback from industry experts regarding the feasibility of implementing each component of the comprehensive benefit, this tool does not address expected care costs or specific processes related to benefit administration that likely differ across geographies, systems, and plan types. We limited discussion of reimbursement to suggested cost-sharing arrangements (e.g. copayment), because there were insufficient data to



determine which reimbursement mechanisms (e.g. FFS, episodic, capitation) are most likely to optimize provider participation, enrollee engagement, overall benefit usage, and health outcomes in the context of obesity care.

Real-world examples of various reimbursement and care delivery strategies currently in use can be found in the *Examples* column of each section. The examples are selected from our research on the coverage of obesity treatment across state Medicaid and State Employee Health Insurance programs. (*Obesity* 2018;26:1834)

We have also not identified particular points at which care should be intensified, because as outlined in our proposed standards of care (*Obesity* 2019; 27: 1059), the decision to escalate care should be a product of joint decision-making by the provider and patient, informed by prudent clinical judgement and specific needs of the patient. Furthermore, the various provider types mentioned throughout the benefit illustrate current care practices but are not an exhaustive list of the providers who may deliver various components of care. We encourage payers to reimburse various types of providers who can reliably and safely deliver obesity care that achieves the desired treatment outcomes, regardless of their discipline and beyond those specifically mentioned herein.

In the pages that follow, we have outlined what we consider to be the core components of an obesity benefit package that are essential for effective and evidence-based treatment of obesity. We follow this with a section of expanded components. These provide an additional option for the delivery of the core benefits. The expanded components are recommendations based on anecdotal or emerging evidence.



KEY TERMS

Beneficiary. A person and his or her dependents for which a premium has been paid to a health insurer. Also called an enrollee, subscriber, or member.

Benefit design. Rules governing the terms under which medical care items or services obtained by beneficiaries are considered covered benefits. Benefit design sets out the parameters by which enrollees can obtain medical services (e.g. provider networks, prior authorization and PCP referral requirements) and their financial liability associated with receipt of this care (e.g. deductibles, copayments, coinsurance).

Covered benefits. The medical care items or services obtained by a subscriber that a health plan agrees to pay for, under certain terms and limitations. Covered benefits and excluded services, and the terms and limitations of coverage, are defined in the health plan's coverage documents or the subscriber contract.

Health plan. An individual or group plan that provides, or pays the cost of, medical care. The role of a health plan is distinct from the role of payer. Even though an entity can be in both roles, not all health plans are payers and not all payers are health plans.

Medical necessity. Refers to tests, procedures, and treatments which may be justified as reasonable, necessary, and/or appropriate for an individual patient's circumstances, based on evidence-based clinical standards of care. Health plans typically require medical necessity as a condition of benefit coverage, and receipt of a medical care item or service does not in and of itself indicate that the item or service was medically necessary.

Out-of-pocket costs. Expenses for medical care that are not reimbursed by insurance. These include deductibles, co-insurance, and co-payments for covered services in addition to all costs for non-covered services.

Payer. Any entity that is responsible for final processing of claims, member enrollment, premium payments, and/or inquiries related to eligibility and utilization review may be considered a payer. Private payers are typically insurance companies contracted by employers, but this is not always the case. Public payers are federal or state governments.

Utilization management. The process of evaluating and determining coverage for and appropriateness of medical care services to ensure appropriate use of pooled resources.



OBESITY CARE BENEFIT DESIGN

Core Components

Treatment Type	Scope of Service 1	Amount + Duration	Delivery	Examples
revention & Screeni	ing		2000	
	All adults should be screened annually for obesity (document height, weight, waist circumference; calculate BMI), changes in weight status, and patient body weight concerns potentially indicative of an eating disorder. For adults with obesity (BMI ≥ 30 kg/m²), waist circumference > 102 cm (> 40 in) for men / > 88 cm (> 35 in) for women, or BMI 25-29 with obesity-related risk factors: - offer or refer to intensive lifestyle intervention (see IBT section) - screen for obesity-related complications: impaired glucose tolerance (FPG and HbA ₁ c), dyslipidemia (lipid panet), depression (PHQ-9), and hypertension	1 screening / year 1+ follow-up visits (for overweight) Labs / diagnostic tests - FPG - HbAre - Lipid panel - PHQ-9 If suggested by history and/or physical exam: - sleep apnea - PCOS - liver function (ALT / AST)	Screening can be conducted: by PCP during wellness visit by other trained professional at worksite, pharmacy, or community clinic (results must be reported back to PCP) PCPs should provide anticipatory guidance on nutrition and physical activity for all adults, especially after weight loss.	Mississippi Medicaid: Covers annual adult health screenings/physical exam with separate reimbursement for cardiovascular (cholesterol lipids, triglycerides) and diabetes (labs, urinalysis) screening tests if performer during the annual screening exam.



Treatment Type	Scope of Service 1	Amount + Duration	Delivery	Examples
Intensive Behavioral	Therapy (IBT)		400	
USPSTF- recommended intensive, multicomponent behavioral	Intensive behavioral therapy for obesity must include ALL three of the following:		Components of IBT must be delivered by qualified care providers / trained interventionists in outpatient clinics or commercial programs	California Medicaid: IBT (G0447, G0473) is a benefit for recipients with BMI a 30 in accordance with USPSTF guidelines;
interventions for adults with obesity (BMI > 30 kg/m²)	 Cognitive component: intervention using evidence-based educational and behavior-change techniques (e.g. CBT, Mi, 5As) to facilitate behavioral change 	26 sessions / year - additional visits PRN with prior authorization	Individual or group sessions should be delivered in-person (clinical or community setting) or virtually ³	treatment authorization request required only if >22 units/yr
	Physical activity component: physical activity plan that includes personalized recommendations for aerobic (150 min/week goal adapted for patient's capacity) and muscle strengthening activity. Nutrition component program or dietary intervention that targets intrapersonal-level factors to assist with changing energy balance behaviors.	allow unlimited lifetime attempts / repeats for structured programs ²	The physical activity plan should be developed based on clinical judgment, patient/client needs, and other components of the obesity care plan (e.g. diet, medication, comorbidities)	Exercise is Medicine Greenville® Program: Comprehensive 12-week clinical exercise program that provides exercise and health education led by qualified, credentialed
		Initial assessment + up to 14 visits / year for weight loss - continue therapy for at least 6 months	The nutrition component should be delivered by a registered dietitian, nutritionist, or PCP with expertise in nutrition. It must include a nutrition assessment, development of a dietary plan	EIMG® Professionals, lifestyle medicine interventions delivered in both clinical and community settings
			acceptable to the patient; and monitoring, evaluation, and revision of dietary strategy as needed	Wyoming Medicaid: Covers medical nutrition therapy provided by a registered dietician (up to
	NOTE: There should be low or no out- of-pocket costs to actively-engaged patients, regardless of weight loss		Very low-calorie diets (VLCD; ≤ 800 calories/day) may be prescribed if appropriate, under supervision of PCP or another trained clinician.	12 visits per year for adults); services must be ordered by PCP, but dietician can bill Medicaid directly



Treatment Type	Scope of Service 1	Amount + Duration	Delivery	Examples		
Pharmacotherapy *	NOTE: Because a generalizable hierarchica currently be scientifically justified, clinicians safe and effective individualization of approp	and beneficiaries with obe				
FDA-approved medications, prescribed in	Short-term medications: diethylpropion HCI ER,	3 months; use beyond 3 months consecutively	Prescribed as short-term adjunct to obesity management care plan. Combinations acceptable	Coverage available for all agents with BMI ≥ 30 (or BMI ≥ 27 w/ two risk factors) and prior approval, must continue participation in obesity treatment plan and meet weight loss targets for continued coverage		
conjunction with behavioral	with phentermine HCI s when	constitutes off-label use	when informed by sound clinical judgement			
interventions when acceptable to the beneficiary		[dosing varies by medication]	Prescribed as part of chronic obesity management plan; continued renewal of			
	Long-term medications:	3-months initial trial; quarterly renewals if therapeutic benefit persists (indefinitely)	prescription at quarterly check-in			
	bupropion HCl/naltrexone HCl (Contrave), liragiutide (Saxenda), semaglutide (Wegovy), orlistat (Xenical), phentermine HCl/topiramate ER (Qsymia)		with PCP if therapeutic benefit persists (maintenance of weight loss may constitute sufficient benefit)			
		[dosing varies by medication]				
	Weight-centric prescribing	(see Appendix A for suggested alternatives to commonly prescribed medications by condition type)				
	For beneficiaries with obesity, the plan should authorize coverage for an alternative medication that is not associated with weight gain when the standard formulary agent(s) used to treat a covered comorbid condition (e.g. depression, allergies) is/are weight-positive.		Prescribers should be knowledgeable about the indications and relative efficacies of weight-neutral and/or weight-negative medications that can be used to treat common conditions. - Care providers should recognize when a beneficiary with obesity has been prescribed a weight-positive medication and consult with the prescribing provider to identify an acceptable weight-neutral or weight-negative alternative. - The risks of stopping or changing medication should be balanced against the risks of obesity and related comorbidities.			



Treatment Type	Scope of Service 1	Amount • Duration	Delivery	Examples
Surgery s				
	Primary bariatric procedures: Laparoscopic sleeve gastrectomy Roux-en-Y gastric bypass Biliopancreatic diversion w/ DS	1 primary procedure	Procedure should be performed by an experienced surgeon who works as part of a multidisciplinary care team, in a	California Medicaid: Covered when BMI ≥ 40 (≥ 35 with comorbidity), documented failure of conservative treatments, a
	Revisional procedures to correct complications or when inadequate weight loss achieved despite	1+ revisional procedures	designated bariatric Center of Excellence (COE) when feasible.	comprehensive pre/post- operative treatment plan established, and no medica
	adherence to prescribed post-op treatment regimen.		 If health plan contracts with clinic outside of beneficiary's locality, costs of travel and/or remote follow-up care should be reimbursed. 	or psychiatric contraindications to the procedure.



Treatment Type	Scope of Service 1	Amount + Duration	Delivery	Examples
Weight Maintenance				
Strategies to prevent and mitigate weight regain are integral to the obesity care plan.	Monitoring & Prevention: Continued tracking and documentation of weight status (waist circumference; BMI), changes in weight status (% change in body weight), and body weight concerns.	2 visits / year (minimum) - 1 with dietitian - 1 with PCP	Patients should take measures to prevent weight regain, including:* - 60-80 minutes of moderate-intensity physical activity per day	
	weight loss constitutes sufficient medical benefit to warrant coverage for ongoing services / supports. - may include continued access to pharmacological and/or behavioral therapies as appropriate - behavioral intervention - nutritional therapy - pharmacotherapy - surgery / revision of prior surgery Follow-Up & Intervention: Re-initiation or intensification of obesity treatment plan when patient:	 measure weight each week ongoing external support via peer network, structured program, or other method 		
		behavioral intervention nutritional therapy pharmacotherapy surgery / revision of	The plan should adopt and promote monitoring systems / practices that prompt intervention when regain occurs.	
			In consultation with the patient, adjust obesity care plan as necessary to halt and reverse	
	 begins to regain weight; 		weight regain and/or to resolve an emergent obesity	
	 presents with a new or worsening obesity complication; or 		complication.	
	 requests intensification of treatment (as medically appropriate) 			



OBESITY CARE BENEFIT DESIGN

Expanded Components

Treatment Type	Scope of Service ¹	Amount + Duration	Delivery.	Examples
Intensive Behavioral	Therapy (IBT)		7.0	
Cognitive	Benefit may also include:			
Component	 additional services and/or resources to meet the psychosocial needs of patients with weight management challenges 	PRN on case-by- case basis as part of an obesity care plan	Offerings and delivery vary by health system, community assets, other benefit offerings, and composition of plan	
Physical Activity Component	Benefit may also include:			
Congornia	 dinical or community-based program that includes exercise, health education, counseling and support for patient/client, 	2-3 sessions / week for at least 12 weeks - multiple lifetime attempts allowed	Reimburse with PCP referral to program; may include medical exercise classes (small-group) and/or individual personal	Fallon Health It Fits! Fitness Reimbursement Program Reimburses beneficiaries
	 specialty care needed to address functional impairments that inhibit or substantially limit a beneficiary's ability to engage in physical activity as prescribed 	PRN on case-by- case basis as part of an obesity care plan	PCPs and beneficiaries should have access to current list of plan-approved facilities, programs, and resources plan should provide clear plan should provide clear	for gym memberships, pilates and yoga classes, WW (Weight Watchers ⁴) programs, town sports programs, ski
	- facility fees / gym membership	reimbursement contingent upon engagement ^a		passes, road race fees, and some types of cardiovascular home fitness equipment
Nutrition Component	Benefit may also include: - Medically-tailored meals: consider use of home-delivered meals? and/or commercial meal replacements to optimize nutrition outcomes for certain patients with obesity	15 meals/week - initial 3-month trial; continue if therapeutic benefit persists - 4-week package ancillary to bariatric surgery	PCP or RD prescribes as component of care plan for adults with obesity and impaired glucose tolerance and/or evidence of food insecurity	Nevada State Employee Health Plan: Covers up to 50% of monthly member OOP costs for meal replacements (if enrolled in CDHP Overweight Care Management Program)



Treatment Type	Scope of Service1	Amount + Duration	Delivery	Examples
lariatric Surgery				
	Benefit may also include the following ancillary services:19			
	Pre-op psychological evaluation Pre-op surgical consultation Pre-op preparatory regimen Post-op medical / nutrition services Post-op supervised WMP	1 consultation 1+ consultation PRN PRN for ≥ 24 mos 6+ sessions / 6 mos	Pre- and post-operative services should be delivered by the surgical care team, member's PCP, and/or qualified providers in designated outpatient program	
	Travel expenses	Up to \$3,000	Beneficiary may submit for reimbursement of transportation, lodging, food for self + one companion if 50+ miles from facility	
	Nutritional supplements	Lifelong coverage for vitamins; other medications PRN	Bariatric vitamins, prescription medications for post-operative care	
	Panniculectomy	Up to \$5,000 12 months post-op	Offered if member has achieved and maintained adequate weight loss and presents with functional impairment due to excess skin, cellulitis, skin necrosis, or ulcerations	



Weight Maintenance

Benefit may also include additional products and/or services to prevent weight regain and support continued monitoring of weight-related health, such as:

- Self-monitoring devices (digital scales, fitness trackers)
- Access to gym / fitness facility (see above)
- Community programs that provide ongoing external support

PRN on case-bycase basis; appropriate services will vary by member experience The plan should adopt and promote monitoring systems / practices that prompt intervention when regain occurs.

Plan may cover services related to weight maintenance through normal claims process as preventive service, as global benefit contract directly with vendor / provider, or request that beneficiary pay out-of-pocket and submit for reimbursement



1 Indications for these procedures / medical treatments are detailed in the following clinical practice guidelines:

- 2013 AHA/ACC/TOS Guideline for the Management of Overweight and Obesity in Adults
- Managing Overweight and Obesity in Adults: Systematic Evidence Review from the Obesity Expert Panel, 2013
- AACE/ACE Comprehensive Clinical Practice Guidelines for Medical Care of Patients with Obesity
- Pharmacological Management of Obesity: An Endocrine Society Clinical Practice Guideline
- Clinical Practice Guidelines for the Perioperative Nutritional, Metabolic, and Nonsurgical Support of the Bariatric Surgery Patient
- ² Plan may impose reasonable limits on multiple program attempts within a single calendar year

Electronically-delivered components must include personalized feedback. Tauro SJ, Gold EC.

The Feasibility of Using Internet Support for the Maintenance of Weight Loss. Behav Mod 2002;26(1):103-116.

- ⁴ Minimum prescribing threshold is BMI ≥ 30 or BMI ≥ 27 with obesity-related complication(s)
- 5 Minimum threshold to refer is BMI ≥ 40 or BMI ≥ 35 with obesity-related complication(s)
- ⁶ Klem ML, Wing RR, McGuire MT, Seagle HM, Hill JO.

A descriptive study of individuals successful at long-term maintenance of substantial weight loss.

American Journal of Clinical Nutrition. 1997;66(2):239-46.

Medically-tailored meals reimbursable under Medicare (CHRONIC Act);

pilots in Commonwealth Care Alliance (MA), Medi-Cal (CA), Health Partners (PA) add more detail on Medi-Cal pilot program

- 8 The plan should consider supporting ≥ 50% the costs of ancillary services / resources needed to enable adherence to prescribed physical activity regimen for certain populations
- (e.g. beneficiaries with most severe disease, lack of access to safe spaces for physical activity,
- income within 100% FPL, and/or limited local access to needed specialty care)
- ⁹ Plan may cover through normal claims process, contract directly with vendor / provider,
- or request that beneficiary pay out-of-pocket and submit for reimbursement
- ¹⁰ Kaiser Permanente Bariatric Surgery Program provides useful reference points for acceptable OOP costs / patient engagement requirements.

³ Virtual or telephonic components can be used to supplement in-person contacts (multi-modal).

APPENDIX A: Possible Alternatives to Medications Associated with Weight Gain

The following table of medications is neither exhaustive nor authoritative. The mechanisms by which weight-positive medications contribute to weight gain vary and may include:

- stimulation of appetite
- stimulation of fat storage (lipogenesis)
- reduced energy expenditure via [a] slowed metabolism and/or [b] impaired exercise tolerance
- fluid retention

Therapeutic Class		Condition(s) Treated	W	Weight-Positive Medications		Preferred Alternatives * = weight-negative	
Anticonvulsants							
a b	GABA augmenting agents Other	Epilepsy Migraines Neuropathy Bipolar disorder BPD	a b	gabapentin, pregabalin divalproex, valproic acid		topiramate * Sodium channel blockers (zonisamide *, lamotrigine, carbamazepine) felbamate *	
An	tidepressants						
a b c d	tricyclic MAOIs SSRIs Other	Depression Bipolar disorder OCD PTSD Dysthymia Panic disorder	b c d	amitriptyline HCl, doxepin, imipramine HCl, mirtazapine, nortriptyline, trimipramine phenelzine sulfate, tranylcypromine sulfate paroxetine HCl, citalopram lithium	V V V	bupropion HCI* SSRIs (fluoxetine, sertraline) nefazodone HCI	
An	tihyperglycemics						
a b c d	Insulins Sulfonylureas Thiazolidinediones Meglitinides	Diabetes	a b c	ALL insulins glimepiride, glipizide, glyburide pioglitazone HCI, rosiglitazone maleate nateglinide, repaglinide	\ \	albiglutide, dulaglutide, liraglutide, semaglutide) *	
An	tihistamines						
b	H1-receptor antagonists H2-receptor antagonists	Allergies GERD	b	azelastine HCI, cetirizine HCI, cyproheptadine HCI, diphenhydramine HCI, fexofenadine ranitidine HCI	1	H2-receptor antagonists (loratadine) non-pharmacological methods (e.g. nasal irrigation)	
An	tihypertensives						
a b	β-blockers α-blockers	Hypertension	a b	atenolol, metoprolol, propranolol, acebutolol clonidine		ACE inhibitors (enalapril, lisinopril, captopril) * ARBs (losartan, telmisartan) *	
An	Antipsychotics						
a b c	Typical, 1 st gen. Atypical, 2 nd gen. Treatment-resistant	Schizophrenia Psychosis Nausea	a	haloperidol, perphenazine	1	ziprasidone aripiprazole	

 clozaril, olanzapine, risperidone, quetiapine fumarate
 clozapine HCI

Co	rticosteroids					
b	Glucocorticoids Mineralocorticoid	Asthma Allergies Arthritis Dermatological disorders Autoimmune diseases	a b	prednisone, prednisolone, methylprednisolone fludrocortisone	1	ibuprofen, naproxen) DMARDs (leflunomide)
Co	ntraceptives					
a	Synthetic progestins	Unwanted pregnancy PCOS Endometriosis	a	progestin-only contraceptives; medroxyprogesterone, norethindrone, levonorgestrel	1	IUDs physical barriers oral preferred to injectable

Sources:

Apovian CM, Aronne LJ, Bessesen DH et al. Pharmacologic Management of Obesity: An Endocrine Society Clinical Practice Guideline. *J Clin Endocrinol Metab* 2015; 100(2):342-62

Wharton S, Raiber L, Serodio KJ, Lee J, Christensen RA. Medications that cause weight gain and alternatives in Canada: a narrative review. *Diabetes Metab Syndr Obes* 2018;11:427.

Medicaid Obesity Coverage

State Snapshot Louisiana



Louisiana Quick Facts

LA Population: 4,573,749 Adults with obesity: 40.1%

44.2% Adults with diabetes: Medicaid coverage: 14.7%

The data used in this snapshot were extracted from state Medicaid manuals, fee schedules, statutes, regulations, preferred drug lists, and managed care coverage. Included are specific limitations and restrictions that often pose barriers to the utilization of these benefits. Visit the STOP Obesity Alliance website to download a more detailed description of the limitations and restrictions (PDF), as well as our project methodology (PDF).



Nutrition Counseling

Not Covered



Obesity Medication

Not covered

Covers only over the counter medication (Xenical).



Intensive Behavioral Therapy

Covered with limitations

IBT services not specific for obesity.



Metabolic & Bariatric Surgery

Covered with limitations and restrictions

Limitations/restrictions:

- · Qualifying comorbidities
- · Doumentation of wt loss attempt
- · Recency of wt loss attempt
- Number of wt loss attempts
- Mental health evaluation
- Wt loss program required

This space intentionally left blank.



Louisiana Contacts & Resources







2024-5 OBESITY OUTPATIENT BILLING & CODING QUICK REFERENCE GUIDE

CPT	Level of Service	TIME	Management & Decision Making (MDM)	Clinical Examples for an
Code		(min)	(must meet 2/3 bullet points)	obesity/weight management visit:
99203 99213	New Level 3 Established Level 3 LOW MDM	30-44 20-29	Problems: 2 or more self-limited or minor problems OR 1 stable chronic (>1 yr) illness OR 1 acute, uncomplicated illness or injury Data: Parent is historian OR 2/3 (reviewed external record, ordered or reviewed each unique test) Risk: Low risk of morbidity from ordering of tests or treatment	Patient with a history of obesity now normal stable BMI% <95 th % or <30 and parent is historian Patient with overweight has constipation, snoring without OSA, and parent is historian Patient with new onset abnormal or excessive weight gain and order 2 lab tests
99204 99214	New Level 4 Established Level 4 MODERATE MDM	45-59 30-39	1 Problem: 1 or more chronic illnesses w/ exacerbation, progression or side effects of treatment OR 2 or more stable chronic illness OR 1 undiagnosed new problem with uncertain prognosis OR 1 acute illness with systemic symptoms OR 1 acute complicated injury Data Categories (Need 1/3): Category 1: any 3 of the following: Independent historian, reviewed each unique test, order each unique test, reviewed external note Category 2: Independent interpretation of tests Category 3: Discussed with another provider Risk: prescription drug OR managed chronic drug OR decision to perform minor surgery with risk OR elective major surgery without risk OR dx or treatment limited by SDOH	 Patient with obesity, increasing BMI AND parent is historian AND ordered 2 unique labs Patient with obesity and new onset snoring with signs of OSA AND discussed with pulmonologist Patient with obesity and hypertension and treatment limited by food insecurity or other SDOH- Consider adding statement "Patient's care may be negatively impacted by food insecurity/SDOH." Patient with obesity and increased thirst, parent is historian & fasting glucose and HgBA1C is ordered Patient with stable obesity (BMI stable) with chronic hypertension and you refill their blood pressure medication
99205 99215	New Level 5 Established Level 5 HIGH MDM	60-74 40-54	Problems: 1 or more chronic illnesses with severe exacerbation, progression, or side effects of treatment OR Acute or chronic illness posing threat to life or bodily function Data Categories (Need 2/3): Category 1: any 3 of the following: Independent historian, reviewed each unique test, order each unique test, reviewed external note Category 2: Independent interpretation of tests Category 3: Discussed with another provider Risk: Drug therapy requiring intensive monitoring for toxicity OR Decision regarding elective major surgery with risk OR decision to perform emergency major surgery OR decision regarding hospitalization OR decision to not resuscitate or to de-escalate care because of poor prognosis	 Patient with severe obesity with BMI% above 99th% or BMI≥40 AND parent is historian AND reviewed 2 external notes AND discussed with the dietitian Patient with obesity and depression with suicidal ideation AND decision is made to hospitalize patient Patient with severe obesity AND 3 labs ordered AND independently interpreted their EKG Patient with severe obesity and discussion of risk/benefit by bariatric surgeon about bariatric surgery with patient (even if decision was made to NOT do surgery) – add statement that elective major surgery with risk (severe obesity and comorbidities) was discussed Patient with obesity and new onset hypertensive urgency and decision about hospitalization discussed (even if hospitalization did not occur)

Created by Katie Queen, MD, FAAP, FOMA, DABOM v9.13.24
Email: katiequeen3@gmail.com for Permission to Duplicate, Corrections, Clarifications, Comments, and/or Collaboration

Obesity Related ICD-10 Diagnosis Codes: Noted in Red if NEW as of 10.1.2024

*Coverage depends on individual payor and plan. This guide does not guarantee reimbursement.

ICD-10		ht Related Diagnosis Codes	Notes	
E66.81	I	ity, Endogenous by Class	~ Can be used as a primary	
Eddidle Obesity, class 1		Class 1: >95 th % BMI for age	diagnosis code under EPSDT	
 E66.812 Obesity, class 2 		or BMI <u>></u> 30 kg/m2 to less	services	
 E66.813 Obesity, class 3 		than 35 kg/m2		
		Class 2: ≥120 th % of the		
		95 th % for age or BMI <u>></u> 35		
		kg/m2 to less than 40 kg/m2		
l •		<u>Class 3</u> : ≥140 th % of the		
		95 th % for age or BMI <u>></u> 40		
E66.82		kg/m2	~ Use for hypothalamic obesity	
E66.82	I	ity, Due to Disruption in the	syndromes by POMC, LEPR, BBS,	
	IVIC4F	R pathway syndromes by POMC, LEPI PCSK1		
E66.1	Obes	ity, Drug Induced	~ Consider using if weight gain	
200.1	Obes	ity, Drug induced	was mostly caused by a	
			medication	
E66.2	Sever	e Obesity with Alveolar		
	I	ventilation		
E66.9, E66.89		ty, Unspecified	~Least specific, less preferred	
E66.09	Obesi	ty, Exogenous (due to excess	~ May contribute to obesity	
	calori	es, Nutritional)	stigma/bias as most obesity is	
E66.01	Obesi	ty, Severe, "Morbid" (due to	endogenous and not caused by	
	exces	s calories)	nutrition or extra calories alone	
		≥99 th % BMI for age or	~ recommend trying to avoid the	
		BMI <u>≥</u> 40	word "morbid" to help reduce	
			stigma/bias	
		weight: BMI 25-29 or 85 th % to	~Can use as primary code, but	
<95		% BMI for age	more likely to be paid if	
			comorbidity is used as primary	
7000			code	
Z68.3 Z68.4		BMI 30-39	• Age 20 yrs +	
268.4	Adult	BMI 40 or greater	Not a billable/primary code	
768.54	~ D - d	liatric BMI >95 th % for age and		
268.54		% of the 95 th % (Class 1)	7.800 25 7.5	
268.55		iatric BMI <u>></u> 120 th % of the 95 th %	Not a billable/primary code	
		ge and <140 th % for age (Class 2)	Code	
Z68.56		iatric BMI ≥140 th % of the 95 th %		
		ge (Class 3)		
		Other Common Weight Relat	ted ICD-10 Diagnoses	
E88.810		Metabolic Syndrome or Dysmetabolic Syndrome X		
E88.81		Insulin Resistance, Unspecified		
Q87.83		Bardet-Biedl Syndrome		
Z98.84		Status-Post Metabolic Bariatric Surgery		
Z59.41		Food Insecurity		
115.9		Hypertension, Secondary		
E78.5		Dyslipidemia aka Hyperlipidemia Unspecified (any abnormality in		
		lipids)		
E78.0		Hypercholesterolemia (elevated LDL or VLDL)		
E78.1		Elevated Fasting Triglycerides		
E78.2		Mixed hyperlipidemia aka Combined hyperlipidemia (elevated LDL, VLDL, and/or TG)		
E78.6		Lipoprotein Deficiency (low HDL)	
Constal by Vesia Oursey MD FAAD FOMA DAPOM of 12 24				

Created by Katie Queen, MD, FAAP, FOMA, DABOM v9.13.24

Email: katiequeen3@gmail.com for Permission to Duplicate, Corrections, Clarifications, Comments, and/or Collaboration

E28.2	Polycystic Ovarian Syndrome		
E55.9	Vitamin D Deficiency		
R73.09	Other abnormal glucose; (blood sugar or OGTT)		
R73.01	Impaired/Elevated Fasting Glucose		
G47.33	Obstructive Sleep Apnea		
E66.2	Obesity Hypoventilation Syndrome		
K76.0	Non-Alcoholic Fatty Liver Disease (NAFLD, MASLD)		
K21.9	Esophageal Reflux Disease		
F50.9	Eating Disorder, unspecified		
	Common Weight Related Signs/Symptoms: (choose most specific		
	code available)		
L83	Acanthosis Nigricans		
L90.6	Striae		
E65	Localized adiposity		
R03.0	Elevated blood pressure without diagnosis of hypertension		
R63.1	Polydipsia (excessive thirst)		
R35.0	Polyuria (frequent urination)		
M21.90	Varus NEC (Bow Legs)		
G47.9	Disorder of sleep		

Additional Billing Codes: *coverage depends on state, payor, and individual plan details

CPT/HCPCS	Description	Type of Provider
G2211	Medically Complex Care	Provider (MD, NP, PA)
	~ Add on to E&M 99202-99215 if you are seeing patient long-term for	
	their obesity or other chronic comorbid disease	
	~ Can't use with other modifier 25, 24, or 53 situations	
	~ Approved by CMS Medicare, other payors TBD	
99453,4,7,8	Remote Patient Monitoring (RPM) (e-scale, blood pressure, etc)	Provider (MD, NP, PA)
99091	Must be an established patient, collected for ≥16/30 days	
G0447	Medicare Face-to-face behavioral counseling for obesity, individual, 15	Provider (MD, NP, PA)
G0473	min	
	Medicare Face-to-face behavioral counseling for obesity, group (2-10),	
	30 min	
	Max use is 22 times in 12-month period	
97802	Medical nutrition therapy; initial assessment and intervention,	Registered Dietitian
	individual, each 15 minutes	(RD)
97803	Medical nutrition therapy; reassessment and intervention, individual,	
	each 15 minutes	
97804	Medical nutrition therapy group (2 or more individuals), each 30 min	
G0270	Medical Nutrition Therapy: Reassessment and subsequent	RDN
	intervention(s) following second referral in same year for change in	
	diagnosis, medical condition or treatment regimen, individual face-to-	
	face, each 15 min	
G0271	<u>Group</u> , face-to-face, each 15 min	
90791	Psychiatric Diagnostic Evaluation	MD, NPP, LMSW,
		LCSW, Licensed
		Psychologist, RN,
		LMHC, LMFT, LCAT
90792	Psychiatric Diagnostic Evaluation with Medical Services	MD, NPP
90832, 4, 7	Psychotherapy, 16-37 minutes, 38-52 minutes, >53 minutes	MD, PA, LCSW, LPC, or
90833, 6, 8	Psychotherapy, with E&M, 16-30 min, 31-45 min, 46-60 min (*MD only)	LAC, LMSW
90846	Family Psychotherapy (without patient present) >26 min	MD, LCSW, LMSW,
90847	Family Psychotherapy (with patient present) >26 min	LPC, LMFT, LAC
90849	Multiple Family Group Psychotherapy	

Created by Katie Queen, MD, FAAP, FOMA, DABOM v9.13.24
Email: katiequeen3@gmail.com for Permission to Duplicate, Corrections, Clarifications, Comments, and/or Collaboration

90853	Group Psychotherapy (other than multiple family groups)		
96156,8,9	96156,8,9 Health Behavior Assessment, or Re-Assessment		
96164-8	Health Behavior Intervention		
59449	Weight management classes, per session	Non-Providers	
59452	Nutrition classes, per session	Some Private Payers	
59470	Nutrition counseling, dietitian visit	RDN, some private	

- Additional Codes for SDOH/Psychosocial Screening:
 - 96127 = adolescent behavioral health screen (Ex. PHQ9, GAD7)
 - 96160/96161= social determinant of health evaluation (patient/caregiver focused)
- Time Based Billing Tips (use if NOT billing by MDM level):
 - o Includes ALL time spent on NON face-to-face + face-to-face patient care on the date of service only - Example time statement: "This encounter took X total minutes of time, including taking a thorough history, performing a physical exam, reviewing any labs and/or imaging, reviewing any prior notes, counseling the patient, coordinating care, as well as documenting in the electronic health record on the date of service."
 - Prolonged Service Codes:
 - Private Payors: 99417 x # = 15 min increments above Level 5 est pt time (55-69 min) & new patient time (75-89 min)
 - CMS: G2212 x #= 15 min increments above Level 5 est pt time (69-83 min) & new pt time (89-103 min)
- Interprofessional Telephone/Internet Consultation (non-patient facing, aka E-Consults)
 - Consider using if a primary care provider is requesting a expert/specialist consultation on a patient but they do not intend to transfer care to them within 14 days.
 - Consider using statement "More than 50% of the service time was spent in verbal and/or written communication with the consulting physician/QHP"

CPT Code	Time	Report Required	Reported by
99446	5-10 min	Verbal & Written	Consultant
99447	11-20 min	Verbal & Written	Consultant
99448	21-30 min	Verbal & Written	Consultant
99449	31+ min	Verbal & Written	Consultant
99451	5+ min	Written only	Consultant
99452	16+ min	Preparing for the consult & time spent communicating	Treating/Requesting Physician/QHP (qualified health professional)

- Physician Preventive Counseling Codes (optional to add if billing by MDM)
 - Can be used as an additional E/M code for specific time spent counseling during an obesity problem visit (cannot be reported during a preventive medicine/well visit)
 - Associate with supporting Diagnosis codes Z71.3, Z71.89
 - Example statement: "Patient was counseled on *** (diet & nutrition OR physical activity) ***
 including a discussion of current behaviors with appropriate educational material given. Patient
 was/was not referred for further education (to dietician, psychologist or physical therapist)."

CPT Code	Counseling Time	Group CPT Code	Group Time
99401	8-15 minutes	99411	15-30 min
99402	16-30 minutes	99412	30-60 min
99403	31-45 minutes		
99404	46-60 minutes		

Created by Katie Queen, MD, FAAP, FOMA, DABOM v9.13.24

Email: katiequeen3@gmail.com for Permission to Duplicate, Corrections, Clarifications, Comments, and/or Collaboration

References:

- CDC National Center for Health Statistics ICD-10-CM Search Tool, https://icd10cmtool.cdc.gov/?fy=FY2024
- CMS CR 2024 Physician Fee Schedule (PFS) https://www.cms.gov/medicare/payment/fee-schedules/physician
- 3. AAPC Blog https://www.aapc.com/blog/
- 4. AMA Billing and Coding Articles
- 5. AAP Pediatric Coding Newsletter Articles
- 6. MGMA Medical Coding Updates

FEHB Program Carrier Letter All FEHB Carriers

U.S. Office of Personnel Management Healthcare and Insurance

Letter Number 2023-01

Fee-for-service [1]

Experience-rated HMO [1]

Community-rated HMO [1]

Date: January 18, 2023

Subject: Prevention and Treatment of Obesity

Long recognized as a disease that impacts children and adults in the U.S., obesity is a complex, multifactorial, common, serious, relapsing, and costly chronic disease that serves as a major risk factor for developing conditions such as cardiovascular disease, type 2 diabetes, renal disease, non-alcoholic steatohepatitis, and certain types of cancer. Obesity disproportionally affects some ethnic and/or racial groups with non-Hispanic Black adults having the highest prevalence, followed by Hispanic adults. There are also significant psychosocial burdens experienced by those with obesity.¹

This Carrier Letter supplements and updates OPM's previous guidance on obesity treatment and coverage and supersedes guidance that was previously issued to the extent it is inconsistent with this guidance. We request that each Carrier review and update their medical policies accordingly.

Background

OPM requested that plans propose specific services to reduce the incidence of obesity in Carrier Letter 2011-05. The following year, Carrier Letter 2012-09 outlined OPM's expectation that FEHB plans offer programs to help members attain and maintain a healthy weight. Both letters focused on nutrition and exercise as primary options. In response, many plans refined wellness activities, health coaching, nutrition counseling and disease management to achieve a greater focus on obesity. Carrier Letter 2013-10

The Psychosocial Burden of Obesity

provided detailed guidance on bariatric surgery and in 2014, OPM issued Carrier Letter 2014-04 clarifying that it is not permissible to exclude weight loss drugs from FEHB coverage on the basis that obesity is a "lifestyle" condition and not a medical one or that obesity treatment is "cosmetic."

Screening and Prevention

Recognizing that obesity continues to be a significant public health problem, the United States Preventive Services Task Force (USPSTF) published updated recommendations that all adults, children and adolescents, and pregnant women be screened for risk factors associated with obesity. These recommendations are referenced in:

- Healthy Weight and Weight Gain In Pregnancy: Behavioral Counseling Interventions (2021)
- Healthy Diet and Physical Activity for Cardiovascular Disease
 Prevention in Adults With Cardiovascular Disease Risk Factors:
 Behavioral Counseling Interventions (2020)
- Weight Loss to Prevent Obesity-Related Morbidity and Mortality in Adults: Behavioral Interventions (2018).

The USPSTF reaffirmed their recommendation that adults with a body mass index of 30 kg/m² or higher be referred for intensive, multicomponent behavioral interventions such as behavior-based weight loss and weight loss maintenance interventions. The purpose of this recommendation is to prevent or mitigate the health conditions associated with obesity. USPSTF rated this recommendation as Grade B.

The USPSTF recommendation, *Obesity in Children and Adolescents:*Screening (2017), is currently under review and expected to be updated by Weight Management in Children and Adolescents: Interventions. The USPSTF recommends that clinicians screen for obesity in children and adolescents 6 years and older and offer or refer them to comprehensive, intensive behavioral interventions to promote improvements in weight status. As stated in Carrier Letter 2022-03 adolescents experienced sharp increases in their rates of weight gain during the COVID-19 pandemic, particularly

school-aged children and those who already had obesity. The focus on obesity coverage for children and adolescents is critical with more children and families needing support in achieving and maintaining optimal weight for long-term health.

As a reminder, FEHB Carriers must cover the full scope of required preventive services recommendations as outlined in Carrier Letter 2019-01. Specific to obesity, this means the benefit includes screening, and if referred, the multicomponent, family centered programs that are part of intensive behavioral interventions.

Pediatric screenings and preventive care endorsed by the American Academy of Pediatrics Bright Futures Guidelines and Women's Preventive Services recommended in guidelines issued by the Health Resources and Services Administration (HRSA) are also included in this requirement.

Treatment Options

Anti-Obesity Medications

Research in populations with diabetes, hypertension, and cardiovascular diseases has shown that a 5% decrease in weight results in clinically significant improvements in these obesity-related comorbid conditions. Many of the Food and Drug Administration (FDA) approved anti-obesity medications result in at least a 5% weight loss, with newer approved drugs approaching a 20% weight loss. Timely management of obesity can be cost effective, lower health risks, and prevent disease progression. The landscape of pharmaceuticals available to treat obesity continues to evolve and there are currently a variety of FDA approved medications available with different mechanisms of action. The FDA indications for anti-obesity medications reinforce that nutrition and physical activity regimens should accompany drug treatment of obesity.

Treatment with anti-obesity medications is highly individualized and will depend on the individual's comorbidities, their current medication regimen, and the potential for adverse effects.

Anti-obesity medications also provide an important therapy option for members who do not meet bariatric/metabolic surgery criteria (discussed below) or those for whom the surgical option is otherwise deemed inappropriate. Carriers should also support the use of anti-obesity medications in consultation with the patient when there are ineffective surgical outcomes such as insufficient weight loss or excessive weight regain post-surgery.

In Carrier Letter <u>2022-03</u>, OPM stated that FEHB Carriers are not allowed to exclude anti-obesity medications from coverage based on a benefit exclusion or a carve out. Carrier Letter <u>2022-02</u> outlines the requirements for Non-Discriminatory Formulary Design, namely, that a non-discriminatory formulary design does not have cost or access barriers imposed by disease or condition.

FEHB Carriers must have adequate coverage of FDA approved anti-obesity medications on the formulary to meet patient needs and must make available their exception process to members. Carriers must cover at least one anti-obesity drug from the GLP-1 class for weight loss and cover at least 2 additional oral anti-obesity drug options. As new anti-obesity drugs are approved by the FDA, OPM expects Carriers to evaluate and update their coverage of anti-obesity drugs. Carriers should provide access to a range of obesity drugs on the formulary in order to satisfy OPM's requirement in Carrier Letter 2022-02 that Carriers must ensure non-discriminatory access to safe, clinically appropriate drug therapy for members with chronic conditions. This includes drug therapies indicated for adolescents age 12 years and older.

In cases where utilization management edits are applied, the process and evidence-based criteria for coverage must be transparent, readily accessible, and follow OPM required turnaround timelines for standard and expedited reviews. We recognize the progress made in covering anti-obesity medications; our goal is to have all Carriers offer adequate coverage.

Bariatric/Metabolic Surgery

Surgical procedures to restrict the size of the stomach or induce malabsorption of ingested calories were first introduced to treat severe obesity in the 1950s. Currently, two of the most performed bariatric surgical procedures are Roux-en-Y gastric bypass and sleeve gastrectomy. The major effect of these surgeries is gastric restriction, causing weight loss, which is then augmented by hormonal changes and leads to improved cardiometabolic outcomes. Bariatric surgery can result in durable weight loss along with improvement of obesity related conditions such as type 2 diabetes and cardiovascular disease. These procedures are now referred to as *metabolic surgery* given the mechanism of action. Surgical techniques are now more refined, improving the safety of these procedures. Evidence now supports surgical procedures for adolescents.

Recent studies report both improved mortality and cardiovascular outcomes with metabolic surgery in individuals with type 2 diabetes and obesity (BMI>35) with suboptimal control of hyperglycemia, despite both optimal medical therapy and lifestyle intervention.² Metabolic surgery is now considered a treatment option in the 2022 guidelines³ put forth by the American Diabetes Association. OPM requests that plans promptly adjust their criteria for metabolic surgery to reflect the most current guidelines.

For questions about this Carrier Letter or other aspects of comprehensive obesity management for the FEHB Program, please e-mail your Health Insurance Specialist.

Sincerely,

Laurie Bodenheimer
Associate Director
Healthcare and Insurance

² Clinical practice quidelines for the perioperative nutrition, metabolic, and nonsurgical support of patients undergoing bariatric procedures – 2019 update

³ Obesity and Weight Management for the Prevention and Treatment of Type 2 Diabetes: Standards of Medical Care in Diabetes—2022

November 2019 | Issue Brief

Understanding the Medicaid Prescription Drug Rebate Program

Rachel Dolan

Drug prices are at the center of health policy debates at both the state and federal levels. Medicaid provides health coverage for millions of Americans, including many with substantial health needs. Prescription drug coverage is a key component of Medicaid for many beneficiaries who rely on medications for both acute problems and for managing ongoing chronic or disabling conditions. Without Medicaid, many prescription drugs would be prohibitively expensive to low-income beneficiaries. Both state and federal policymakers are undertaking efforts to control prescription drug costs, and there is renewed policy interest in the Medicaid Prescription Drug Rebate Program (MDRP) as part of these efforts. Policymakers are also currently debating significant changes to payment for prescription drugs through Medicare and commercial insurers that may also have implications for Medicaid and the MDRP as well. This brief explains the MDRP to help policymakers and others understand how Medicaid pays for drugs and any potential consequences of policy changes for the program by answering the following questions:

- What is the MDRP and how does it work?
- What is the impact of the MDRP?

organization based in San Francisco, California

- What is the role of managed care plans and pharmacy benefit managers in Medicaid rebates?
- How does the 340B program interact with the MDRP?
- What are policy proposals related to the MDRP?

What is the Medicaid drug rebate program and how does it work?

In response to rising drug prices and projected increased Medicaid spending, the Medicaid Prescription Drug Rebate Program (MDRP) was created in 1990 by the Omnibus Reconciliation Act. ^{1,2} Under the program, a manufacturer who wants its drug covered under Medicaid must enter into a rebate agreement with the Secretary of Health and Human Services stating that it will rebate a specified portion of the Medicaid payment for the drug to the states, who in turn share the rebates with the federal government. Manufacturers must also enter into agreements with other federal programs that serve

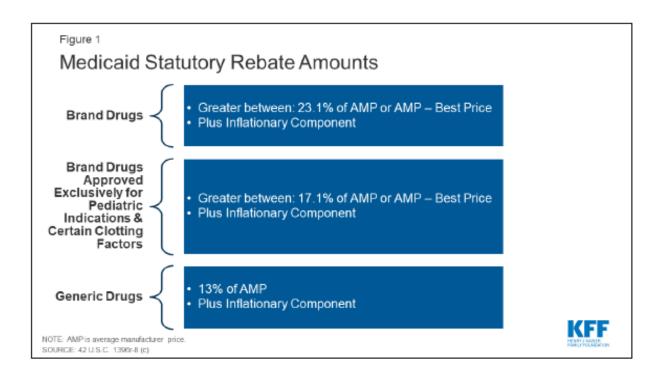


vulnerable populations. In exchange, Medicaid programs cover nearly all of the manufacturer's FDAapproved drugs, and the drugs are eligible for federal matching funds. Though the pharmacy benefit is a state option, all states cover it, but, within federal guidelines about pricing and rebates, administer pharmacy benefits in somewhat different ways.

The MDRP affects state and federal Medicaid payment for prescription drugs, while Medicaid beneficiaries' out of pocket cost for drugs is limited to nominal amounts set in statute. Due to Medicaid's role in financing coverage for high-need populations with low incomes, it is designed to provide access to prescription drugs with little cost to enrollees. Federal rules limit beneficiary cost-sharing to nominal amounts: up to \$4 for preferred drugs and \$8 for non-preferred drugs, for individuals with incomes at or below 150% of the federal poverty level (FPL) and slightly higher for those with higher incomes. Not all states impose cost-sharing for prescription drugs, and some beneficiary groups are exempt from cost-sharing requirements.

The Affordable Care Act (ACA) made significant changes to the prescription drug rebate program. The law increased the rebate amount for both brand drugs and generic drugs. It also extended rebates to outpatient drugs purchased for beneficiaries covered by Medicaid managed care organizations (MCOs). Previously only drugs purchased through Medicaid fee-for-service were eligible for rebates even though most states contract with MCOs to provide services to Medicaid beneficiaries.

The Medicaid rebate amount is set in statute and ensures that the program gets the lowest price (with some exceptions). The formula for rebates varies by type of drug: brand or generic. The rebate formula is the same regardless of whether states pay for drugs on a fee-for-service basis or through payments to managed care plans. The specific rebate on a given drug is considered proprietary. For brand name drugs, the rebate is 23.1% of Average Manufacturer Price (AMP) or the difference between AMP and "best price," whichever is greater. Certain pediatric and clotting drugs have a lower rebate amount of 17.1% (Figure 1). Best price is defined as the lowest available price to any wholesaler, retailer, or provider, excluding certain government programs, such as the health program for veterans. AMP is defined as the average price paid to drug manufacturers by wholesalers and retail pharmacies. AMP is generic drugs, the rebate amount is 13% of AMP, and there is no best price provision.



The rebate calculation also includes an additional inflationary component to account for rising drug prices over time. This rebate is calculated as the difference between the drug's current quarter AMP and its baseline AMP adjusted to the current period by the Consumer Price Index for All Urban Consumers (CPI-U).¹² In other words, if a drug's price increases faster than inflation, the manufacturer has to rebate the difference to Medicaid. The inflationary component is an increasing share of brand drug rebates, accounting for more than half of the total brand drug rebate amounts in 2012.¹³ Because of the inflationary component, the calculated rebate on a drug whose price increases quickly over time could be greater than the AMP for that drug. However, the total rebate amount currently is capped at 100% of AMP.¹⁴

In addition to federal statutory rebates, most states negotiate with manufacturers for supplemental rebates. As of June 2019, 47 states and DC had supplemental rebate agreements in place. These supplemental rebates are not subject to the best price floor. States often use placement on a preferred drug list (PDL) as leverage to negotiate supplemental rebates with manufacturers. States encourage providers to prescribe drugs on the PDL over other drugs and create incentives for them to do so if possible. For example, a state may require a prior authorization for a drug not on a preferred drug list. Often, drugs on PDLs are cheaper or include drugs for which a manufacturer has provided supplemental rebates. A few states have used their supplemental rebate authority to negotiate alternative payment models with manufacturers. States have also formed multi-state purchasing pools when negotiating supplemental Medicaid rebates to increase their negotiating power. More than half of states participate in a multi-state supplemental rebate pool. In addition, Medicaid managed care plans may negotiate their own supplemental rebate agreements with manufacturers.

Both states and the federal government play a role in administering the MDRP. Manufacturers must report AMP for all covered outpatient drugs to HHS and report their best price for brand name drugs. HHS uses this price data to calculate the unit rebate amount (URA) based on the rebate formula and inflationary component and provides the URA to states.¹⁷ States multiply the units of each drug purchased by the URA and invoice the manufacturer for that amount. Manufacturers then pay states the statutory rebate amount as well as any negotiated supplemental rebates.

Prescription drug rebates are shared between the federal and state governments. States and the federal government share in the statutory rebate amount based on the federal medical assistance percentages (FMAP), which is the share of Medicaid spending in each state paid for by the federal government. Manufacturers submit rebates directly to states. ¹⁸ The ACA increased rebate amounts from 15.1% to 23.1% for brand drugs and from 11% to 13% for generics, but the state share is only calculated off the pre-ACA rebate amount, which means the federal government now gets a bigger share of the rebates ¹⁹

What is the role of managed care plans and pharmacy benefit managers in Medicaid rebates?

As more states have enrolled additional Medicaid populations into managed care arrangements over time, managed care organizations (MCOs) have played an increasingly significant role in administering the Medicaid pharmacy benefit. More than two-thirds of Medicaid beneficiaries received their coverage through MCOs in 2017. ²⁰ States pay MCOs a monthly fee (capitation rate) to cover the cost of services provided to enrollees and any administrative expenses. States may include all Medicaid services in these contracts or they may "carve-out" certain services, like prescription drugs, from capitation rates. Managed care plans whose contracts include coverage for prescription drugs are allowed to negotiate their own rebates with manufacturers. As with supplemental rebates negotiated by states, additional rebates for managed care plans can be used to determine placement on the PDL.

The ACA extended federal statutory rebates to prescription drugs provided under Medicaid managed care arrangements, and most states now "carve in" prescription drugs. Prior to the ACA, manufacturers only had to pay rebates for outpatient drugs purchased on a fee-for-service basis, not those purchased through managed care. This encouraged states to "carve out" prescription drugs so they would be able to get rebates. Extending rebates to drugs purchased through managed care has resulted in more states carving drug coverage back into managed care. Of the 40 states contracting with comprehensive risk-based MCOs in 2018, 35 states reported that the pharmacy benefit was carved in, with some states reporting exceptions such as high-cost or specialty drugs.²¹

Many states also use pharmacy benefit managers (PBMs) in their Medicaid prescription drug programs. PBMs perform financial and clinical services for the program, administering rebates, monitoring utilization, and overseeing preferred drug lists.²² PBMs may be used regardless of whether the state administers the benefit through managed care or on a fee-for-service basis. Some states are

reassessing their use of PBMs in managed care due to issues with the lack of transparency around PBM payments and the prevalence of "spread pricing." Spread pricing refers to the difference between the payment the PBM receives from the MCO and the reimbursement amount it pays to the pharmacy.²³ In the past, PBMs have been able to keep this "spread" as profit, but a number of states are implementing policies to curb or altogether prohibit this practice.²⁴

How does the 340B program interact with the MDRP?

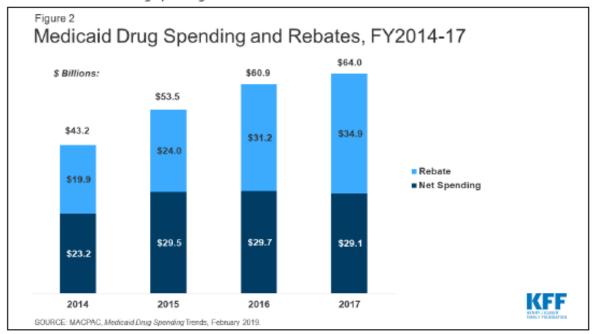
The Medicaid rebate program interacts with other programs that receive manufacturer discounts on drugs. As a condition of participation in the Medicaid Drug Rebate program, manufacturers must also participate in the federal 340B program. The 340B program offers discounted drugs to certain safety net providers that serve vulnerable or underserved populations, including Medicaid beneficiaries. 340B ceiling prices are calculated to match Medicaid prices net of the rebate, but manufacturers can provide additional discounts to 340B providers that are not subject to the best price rule.

Because the 340B program is administered separately, as stipulated by federal law, states and safety net providers must ensure that manufacturers do not pay duplicative discounts for Medicaid beneficiaries.²⁷ Safety net providers eligible for 340B discounts can choose whether or not they provide drugs purchased with the program discounts to Medicaid beneficiaries within state guidelines.^{28,29} States may require providers to make the same decision for FFS and managed care enrollees to streamline the process of determining which claims are eligible for rebates. To avoid charging manufacturers a duplicate discount, state Medicaid programs reference a list of safety net providers that provided drugs under 340B to Medicaid beneficiaries, and the Medicaid program will exclude their drug claims from their invoices to manufacturers.³⁰ The file does not include drugs paid for by managed care plans or those dispensed at contract pharmacies, but MCOs also are required to exclude 340B claims from reports they provide to states for rebate purposes.^{31,32} There are concerns the list can be out of date or inaccurate, so some states maintain their own lists or use claims data to avoid duplicate discounts. Although Medicaid best price and 340B ceiling prices are closely related, the rules states set for how they reimburse pharmacies may have implications for drug costs.^{33,34}

What is the impact of the MDRP?

The rebate program offsets Medicaid costs and reduces federal and state spending on drugs. In 2017, Medicaid spent \$64 billion on drugs and received nearly \$35 billion in rebates. Net spending on outpatient drugs comprises 5% of total Medicaid benefits spending. While gross prescription drug spending has increased substantially over time (from \$43 billion in 2014 to \$64 billion in 2017) rebates have held net spending growth to a much lower rate (Figure 2). Gross spending on drugs increased 48% from 2014-2017, while net spending only increased 25% over the same time period. Net spending actually declined from 2016-2017. In comparison to other programs, like Medicare Part D, rebates in Medicaid are a much larger share of drug spending. Medicare actuaries predicted Medicare Part D rebates to reach 23% of drug spending in 2017 and 25% in 2018.

accounted for 55% of drug spending in 2017.



The structure of the rebate program essentially creates an open formulary. When a manufacturer enters into a rebate agreement with HHS, Medicaid agrees to cover nearly all FDA-approved drugs from that manufacturer. This approach is different from private insurers who can enter into negotiations with manufacturers about whether or not drugs will be on their formularies, leveraging rebates for drugs that are included or covered with lower patient cost-sharing. While the Medicaid rebate structure enables beneficiaries to access a wide range of drugs, it also places some limits on states' ability to negotiate with manufacturers. This challenge is particularly acute for new, blockbuster drugs that Medicaid programs must cover with little leverage to negotiate lower costs.

Medicaid prices and the rebate program may have implications for prices paid by other payers. There has been increased attention by policymakers and the public to high list prices, with some brand name drugs launching with price tags of hundreds of thousands of dollars or more. Amidst the discussion of high launch prices, analyses of potential solutions have highlighted the role of the MDRP in the larger drug pricing system. Some have suggested that the "best price" provision and the rebate requirements inflate launch prices to account for the rebate and reduce rebates for other payers (like private insurers) to avoid triggering the best price provision. Medicare Part D rebates are not included in the best price calculation. An analysis from CBO was conducted in 1996, shortly after the creation of the Rebate Program, and showed some initial price increases but found increases due to MDRP ceased within a few years.³⁷ In analyzing the potential impact of the ACA rebate provisions, which increased the rebate amount, CBO estimated a small impact on launch prices.³⁸

What are policy debates and proposals about the MDRP?

There is renewed policy interest in the MDRP as states and the federal government explore policies related to drug costs. Proposals at both the state and federal level would make changes directly to the MDRP, and proposed changes to other programs may have implications for Medicaid as well.

Increasing the Effective Rebate Amount in the MDRP

Because the MDRP is a complex program that has evolved over time, it contains some technical issues and provisions that lower the rebate amount paid for some drugs. Policymakers are considering several changes to address these issues and increase the effective rebate amount. While these changes would produce savings for both the federal and state government, authority for undertaking them rests at the federal level, since the MDRP is in federal statute.

One proposed approach is to lift the cap on rebates, which is currently 100% of AMP. Because of rising prices over time, a number of drugs have reached the rebate cap. Increasing or eliminating the cap would generate savings for the program and lower revenues for drug manufacturers.³⁰ The Medicaid and CHIP Payment and Advisory Commission (MACPAC) recommended eliminating the cap entirely.⁴⁰ A bipartisan bill addressing drug costs passed out of the Senate Finance Committee includes a provision to increase the cap to 125% of AMP.

Another policy proposal to increase the Medicaid rebate amount is to change the rebate calculation. Some manufacturers have reduced their rebate obligations by blending the price of an authorized generic with a brand name drug, which reduces the AMP of the brand drug. This occurs when a brand drug manufacturer also produces the authorized generic and the price of both drugs is included in the brand drug's AMP. Because the rebate calculation is based on AMP, an artificially low AMP reduces the rebate a manufacturer pays. Legislation enacted in Fall 2019 prohibits manufacturers from engaging in this practice. 41,42 Preventing this practice is projected to save about \$3.1 billion over the next decade. 43,44

A third set of technical changes to MDRP relates to data and reporting. The rebate calculation relies on price data and product information submitted by manufacturers to CMS. Misclassified drugs or inaccurate price information in these files affects the rebate calculation. A number of policy proposals would strengthen price enforcement mechanisms at the federal level to improve the accuracy of information and ensure appropriate rebates are paid and allow for penalties for reporting inaccurate information. Proposals include providing the Secretary of HHS with the authority to reclassify drugs that are incorrectly classified, increasing oversight of rebates by requiring CMS to conduct regular audits of drug manufacturers' pricing information, providing the Secretary additional authority to impose a penalty on manufacturers that submit inaccurate information and increasing the penalties for not complying with reporting requirements. 45,46

Increasing Supplemental Rebates

Due to the structure of the MDRP, state levers to negotiate supplemental rebate agreements have primarily been limited to PDL placement. In addition, as statutory rebates have increased over time, state supplemental rebates have grown much more slowly and declined as a share of total rebates. 47,48 In recent years, states have been exploring new approaches to try to obtain larger supplemental rebates from manufacturers.

Some policy proposals focus on increasing purchasing power to negotiate additional supplemental rebates. For example, aligning PDLs across FFS and MCOs may provide more leverage for a state negotiating with a manufacturer. As of fiscal year 2019, at least 17 states had a uniform PDL for one or more drug classes.⁴⁹ California has proposed negotiating rebates across all state programs, not just Medicaid.⁵⁰

PBMs have been another area of focus for state efforts to increase supplemental rebates. Much activity in this area involves increased transparency about PBM practices by, for example, requiring PBMs to report their discounts, rebates and profits to the state to ensure that the state is receiving the maximum rebates possible. More than half of states have passed a law addressing some aspect of PBM practices and transparency. Other states have enacted or are considering broader transparency laws to obtain pricing information from manufacturers in an effort to better understand prices paid by different parties in the production and payment chain for prescription drugs.

Other state efforts include expanding the scope of supplemental rebates—for example, by extending supplemental rebates to MCOs—or adding an inflationary component to supplemental rebates.^{52,53}

VALUE-BASED PURCHASING

A final way in which states have been pursuing supplemental rebates is through value-based purchasing. With the increasing number of high-price, breakthrough drugs that cost hundreds of thousands up to millions of dollars, states are examining ways to pay for these therapies within their constrained budgets. Some states are pursuing alternative payment methods, or paying for value, as possible solutions. States have authority to pursue these agreements, but they must fit within the parameters of the MDRP. Given the best price provision, which leads manufacturers to hesitate to offer lower prices, states have opted to craft their arrangements under the umbrella of supplemental rebates, which are exempt from best price. While referred to colloquially as "value-based payment," most agreements so far do not condition payment on clinical outcomes.

As of October 2019, six states have approval to implement alternative payment models via supplemental rebates.⁵⁴ These states include Louisiana and Washington, both of which are implementing a subscription model (also known as the "Netflix model") to pay for hepatitis C drugs. Some legislative proposals would provide further authority for states to enter into risk-sharing, value-based contracts with manufacturers for

outpatient drugs that are potentially curative treatments.^{53,56} These agreements would be treated like supplemental rebates for the purpose of calculating AMP and best price.

Opting Out of the MDRP

Some policy discussion in recent years has been about opting out of or eliminating the MDRP, which essentially creates an open formulary, to allow states to use closed formularies in Medicaid, under which only specific drugs in each therapeutic class are covered. Some argue that allowing states to implement these "widely-used commercial tools" would allow states to negotiate greater rebates, because each manufacturer would want their drug to be included as one of the few drugs for the therapeutic class. The Trump Administration has expressed interest in this approach, and the FY 2019 budget called for a new Medicaid demonstration authority to enable up to five state Medicaid programs to create their own formularies and negotiate directly with manufacturers instead of participating in the Medicaid Drug Rebate Program. States are showing limited interest in the idea, though some states have expressed interest in a closed formulary that still obtains MDRP rebates. However, as of October 2019, the federal government has not approved waiver requests for this approach.

Changing Rebates or Prices in Other Programs

While not specifically targeted to Medicaid or MDRP, policy proposals to change the structure of rebates or prices in Medicare and the private market also affect Medicaid. These indirect effects occur because many proposals affect list prices or AMP, which in turn affect Medicaid rebate calculations. For example, in early 2019, the Trump administration released a proposed rule that would have excluded rebate payments by drug manufacturers to PBMs, Medicare Part D plan sponsors, and Medicaid managed care organization (MCO) plan sponsors from "safe harbor" protections that make these payments exempt from anti-kickback penalties. The Administration withdrew the idea, but analyses of the proposal at the time indicated that it would increase Medicaid spending. This outcome would occur through decreased list prices by manufacturers, which would lower the inflationary Medicaid rebate. Similarly, proposals (such as those made by the Administration and by House Democrats) to align Medicare drug prices more closely with drug prices in other countries could have implications for Medicaid rebates and ultimately Medicaid drug spending by changing drug list prices. Policy changes that would allow the federal government to negotiate Medicare prices also may have implications for Medicaid, depending on how the price applies to the wider marketplace and the prices used to set Medicaid rebates.

Summary

The MDRP helps offset federal and state costs of most outpatient prescription drugs dispensed to Medicaid beneficiaries and ensures access to medication for Medicaid beneficiaries. While gross prescription drug costs continue to grow, the Medicaid Drug Rebate Program has held net Medicaid costs largely flat over the past few years. There continues to be growing national attention around the issue of high drug prices and as a result, both states and the federal government are considering a variety of policies to address prescription drug costs. Because of the key role Medicaid plays in providing drugs for

beneficiaries and setting the floor for prices, it is important for policy makers to understand the implications of any proposed policies for the rebate program.

This work was supported in part by Arnold Ventures. We value our funders. KFF maintains full editorial control over all of its policy analysis, polling, and journalism activities.

References

United States Senate Special Committee on Aging, Prescription Drug Pricing: Are We Getting Our Money's Worth? (U.S. Government Printing Office, 1989), https://www.aging.senate.gov/imo/media/doc/reports/rpt289.pdf.

² Ramsey Baghdadi, "Medicaid Best Price," Health Affairs (August 2017), https://www.healthaffairs.org/do/10.1377/hpb20171008.000173/full/.

³ For individuals with incomes above 150% of the FPL, rules allow states to establish higher cost sharing, including coinsurance of up to 20% of the cost of the drug, for non-preferred drugs. See 78 Federal Register 42159-42322 (July 15, 2013), and Laura Snyder and Robin Rudowitz, Premiums and Cost-sharing in Medicaid (Kaiser Family Foundation, February 2013), https://www.kff.org/medicaid/issue-brief/premiums-and-cost-sharing-in-medicaid-a-review-of-research-findings/.

State Health Facts, "Medicaid Benefits: Prescription Drugs, 2018," KFF, https://www.kff.org/medicaid/state-indicator/prescription-drugs.

^{5 42} U.S.C. § 1396b (m)(2)(A)(xiii)

⁶ Kaiser Family Foundation, Medicaid's Prescription Drug Benefit: Key Facts (KFF, May 2019), https://www.kff.org/medicaid/fact-sheet/medicaids-prescription-drug-benefit-key-facts/.

Medicaid statute defines Best Price as "the lowest price available from the manufacturer during the rebate period to any wholesaler, retailer, provider, health maintenance organization, nonprofit entity, or government entity within the United States." There are many important exclusions, including the Department of Veterans Affairs, the 340B program, the Department of Defense, the Public Health Service, the Indian Health Service. The Best Price includes rebates in general, but not Medicaid supplemental rebates or rebates provided through the Medicaid Drug Rebate Program. 42 U.S.C. 1396r-8 (c)(1)(C).

Single source drugs and multiple source innovator drugs are those approved under a "new drug" application with the FDA.

^{9 42} U.S.C. § 1396r-8 (c) (1)(C)

^{10 42} U.S.C. § 1396r-8 (k) (1)(A)

This price does include discounts provided to retail pharmacies but does not include service fees or rebates or discounts to other purchasers (like MCOs and PBMs), see 42 U.S.C. § 1398r-8 (k) (1)(B).

¹² Medicaid and CHIP Payment and Access Commission, Medicaid Payment for Outpatient Prescription Drugs (Medicaid and CHIP Payment and Access Commission, May 2018), https://www.macpac.gov/wp-content/uploads/2015/09/Medicaid-Payment-for-Outpatient-Prescription-Drugs.pdf.

¹³ Office of the Inspector General, U.S. Department of Health and Human Services, *Medicaid Rebates for Brandname Drugs Exceeded Part D Rebates by a Substantial Margin*, OEI-03-13-00650 (HHS OIG, April 2015), https://oig.hhs.gov/oei/reports/oei-03-13-00650.pdf.

¹⁴ Due to rising costs over time, some rebates could exceed 100% of AMP.

- ¹⁵ Centers for Medicare and Medicaid Services, "Medicaid Pharmacy Supplemental Rebate Agreements (SRA), As of June 2019," https://www.medicaid.gov/medicaid-chip-program-information/by-topics/prescription-drugs/downloads/xxxsupplemental-rebates-chart-current-qtr.pdf.
- ¹⁶ Richard Cauchi, Pharmaceutical Bulk Purchasing (National Council of State Legislatures, May 2019), http://www.ncsl.org/research/health/bulk-purchasing-of-prescription-drugs.aspx.

- 18 States retain a portion of the rebate based on their FMAP, and the remainder that is owed to the federal government is subtracted from federal payments to states.
- ¹⁹ This includes the state share. See Cindy Mann, "Re: Medicaid Prescription Drugs, Methodology for Calculating the Estimated Quarterly Rebate Offset Amount," CMS, https://www.medicaid.gov/Federal-Policy-Guidance/downloads/SMD10019.pdf.
- State Health Facts, "Total Medicaid MCO Enrollment, 2017", KFF, https://www.kff.org/other/state-indicator/total-medicaid-mco-enrollment/.
- ²¹ Kathleen Gifford, Eileen Ellis, Barbara Coulter Edwards, Aimee Lashbrook, Elizabeth Hinton, Larisa Antonisse, and Robin Rudowitz, States Focus on Quality and Outcomes Amid Waiver Changes: Results from a 50-State Medicaid Budget Survey for State Fiscal Years 2018 and 2019 (KFF, October 2018), https://www.kff.org/medicaid/report/states-focus-on-quality-and-outcomes-amid-waiver-changes-results-from-a-50-state-medicaid-budget-survey-for-state-fiscal-years-2018-and-2019/.
- ²² States that use PBMs in administering the prescription drug benefit in a fee-for-service setting pay the PBM administrative fees for these services. See Magellan Health, Medicaid Pharmacy Trend Report, Second Edition (Magellan Rx Management, 2017), https://www1.magellanrx.com/media/671872/2017-mrx-medicaid-pharmacy-trend-report.pdf.
- ²³ Sarah Lanford and Maureen Hensley-Quinn, New PBM Laws Reflect States' Targeted Approaches to Curb Prescription Drug Costs (National Academy for State Health Policy, August 2019), https://nashp.org/new-pbm-laws-reflect-states-targeted-approaches-to-curb-prescription-drug-costs/.
- ²⁴ Lanford and Hensley-Quinn, New PBM Laws Reflect States' Targeted Approaches to Curb Prescription Drug Costs (NASHP, August 2019), https://nashp.org/new-pbm-laws-reflect-states-targeted-approaches-to-curb-prescription-drug-costs/.
- ²⁵ Eligible covered entities include the following: federally qualified health centers, federally qualified health center look-alikes, native Hawaiian health centers, tribal/urban Indian health centers, Ryan White HIV/AIDS Program grantees, children's hospitals, critical access hospitals, disproportionate share hospitals, freestanding cancer hospitals, rural referral centers, sole community hospitals, black lung clinics, comprehensive hemophilia diagnostic treatment centers, Title X family planning clinics, sexually transmitted disease clinics, and tuberculosis clinics. See MACPAC, The 340B Drug Pricing Program and Medicaid Drug Rebate Program: How They Interact (MACPAC, May 2018), https://www.macpac.gov/wp-content/uploads/2018/05/340B-Drug-Pricing-Program-and-Medicaid-Drug-Rebate-Program-How-They-Interact.pdf.
- Mike McCaughan, "The 340B Drug Discount Program, Health Affairs (September 2017), https://www.healthaffairs.org/do/10.1377/hpb20171024.863441/full/.

Providers can choose whether they "carve in" — use drugs purchased under the 340B program for Medicaid beneficiaries — or "carve out" — the provider does not use drugs purchased under 340B and the drugs are eligible for the Medicaid Rebate Program. HRSA uses a Medicaid Exclusion File to track drugs purchased under 340B but, this method only applies to FFS Medicaid. States must have their own methods for managed care beneficiaries. See Office of Pharmacy Affairs, Clarification on Use of the Medicaid Exclusion File (HHS Health Resources and Services Administration, December 2014).

 $\underline{https://www.hrsa.gov/sites/default/files/opa/programrequirements/policyreleases/clarification-medicaid-exclusion.pdf.}$

²⁹ MACPAC, The 340B Drug Pricing Program and Medicaid Drug Rebate Program: How They Interact (MACPAC, May 2018), https://www.macpac.gov/wp-content/uploads/2018/05/340B-Drug-Pricing-Program-and-Medicaid-Drug-Rebate-Program-How-They-Interact.pdf.

^{17 42} U.S.C. § 1396r-8 (b) (3)

^{27 42} U.S.C. § 1396r-8 (a) (5)

³⁰ The Medicaid Exclusion File (MEF) is maintained by the Health Resources and Services Administration (HRSA).
See MACPAC, The 340B Drug Pricing Program and Medicaid Drug Rebate Program: How They Interact (MACPAC, May 2018), https://www.macpac.gov/wo-content/uploads/2018/05/340B-Drug-Pricing-Program-and-Medicaid-Drug-Rebate-Program-How-They-Interact.pdf.

^{31 42} Federal Register 27497-27901, (May 6, 2016).

³² HRSA guidance states that contract pharmacies are prohibited from dispensing 340B drugs to Medicaid beneficiaries unless the covered entity, contract pharmacy, and Medicaid agency establish "an arrangement to prevent duplicate discounts" and notify HRSA of the arrangement. See Office of Pharmacy Affairs, Clarification on Use of the Medicaid Exclusion File (HHS Health Resources and Services Administration, December 2014), https://www.hrsa.gov/sites/default/files/opa/programreguirements/policyreleases/clarification-medicaid-exclusion.pdf.

³³ The Covered Outpatient Drug final rule requires states to reimburse 340B covered entities at actual acquisition cost (AAC) plus a professional dispensing fee (PDF) up to the 340B ceiling price. AAC for 340B drugs may be lower than Medicaid prices but these "below-ceiling" prices may be difficult for states to obtain. The AAC requirement only applies to FFS Medicaid drugs, drugs covered by MCOs in Medicaid are not subject to this requirement. See 81 Federal Register 5169-5357, (February 1, 2016) and CMS, Covered Outpatient Drug Final Rule with Comment (CMS-2345-FC) Frequently Asked Questions (CMS, July 2016), https://www.medicaid.gov/federal-policy-guidance/downloads/faq070818.pdf.

³⁴ For covered entities that carve in to 340B, the AAC would generally be the 340B ceiling price. There is some potential for spread pricing in Medicaid if a covered entity purchases drugs at sub-ceiling prices. See MACPAC, The 340B Drug Pricing Program and Medicaid Drug Rebate Program: How They Interact (MACPAC, May 2018), https://www.macpac.gov/wp-content/uploads/2018/05/340B-Drug-Pricing-Program-and-Medicaid-Drug-Rebate-Program-How-They-Interact.pdf.

Totals include state and federal spending. See MACPAC, Medicaid Drug Spending Trends (MACPAC, February 2019), https://www.macpac.gov/wp-content/uploads/2019/02/Medicaid-Drug-Spending-Trends.pdf.

³⁶ Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds, 2018 Annual Report of the Board of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds (CMS, June 2018), https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/Downloads/TR2018.pdf.

³⁷ Congressional Budget Office, How the Medicaid Rebate on Prescription Drugs Affects Pricing in the Pharmaceutical Industry (CBO, January 1998), https://www.cbo.gov/sites/default/files/104th-congress-1995-1996/reports/1996doc20.pdf

³⁸ Douglas W. Elmendorf, Letter to Hon. Paul Ryan, Ranking Member on the Committee on the Budget (Congressional Budget Office, November 2010), https://www.cbo.gov/sites/default/files/111th-congress-2009-2010/reports/11-04-drug-pricing.pdf.

³⁹ MACPAC, Next Steps in Improving Medicaid Prescription Drug Policy (MACPAC, June 2019), https://www.macpac.gov/wp-content/uploads/2019/06/Next-Steps-in-Improving-Medicaid-Prescription-Drug-Policy.pdf.

⁴⁰ MACPAC, Next Steps in Improving Medicaid Prescription Drug Policy (MACPAC, June 2019), https://www.macpac.gov/wp-content/uploads/2019/06/Next-Steps-in-Improving-Medicaid-Prescription-Drug-Policy.pdf.

⁴¹ Fair AMP Act, H.R.3276, 116th Congress (2019).

⁴² Continuing Appropriations Act, 2020, and Health Extenders Act of 2019, H.R.4378, 116th Congress (2019).

⁴³ CBO, Proposals Affecting Health Programs in Budget Function 550 – CBO's Estimate of the President's Fiscal Year 2020 Budget (CBO, May 2019), https://www.cbo.gov/system/files/2019-05/55208-healthprograms.pdf.

⁴⁴ Jay Hancock and Sydney Lupkin, "Drugmakers Master Rolling Out Their Own Generics To Stifle Competition," Kaiser Health News (August 5, 2019), https://khn.org/news/drugmakers-now-masters-at-rolling-out-their-own-generics-to-stifle-competition/.

- ⁴³ MACPAC, Improving Operations of the Medicaid Drug Rebate Program (MACPAC, June 2018), https://www.macpac.gov/wp-content/uploads/2018/06/Improving-Operations-of-the-Medicaid-Drug-Rebate-Program.pdf.
- ⁴⁶ MACPAC recommendations include providing the Secretary with the authority to reclassify drugs that are incorrectly classified as well as to levy intermediate monetary penalties. The Senate Finance Committee Bill would increase oversight of rebates by requiring CMS to conduct regular audits of drug manufacturers' pricing information and submit those audits to Congress. The Secretary of HHS would have the authority to impose a penalty on manufacturers that submit inaccurate information and would increase penalties for not complying with reporting requirements. See:
- https://www.finance.senate.gov/imo/media/doc/FINAL%20Description%20of%20the%20Chairman's%20Mark%20for%20the%20Prescription%20Drug%20Pricing%20Reduction%20Act%20of%202019.pdf.
- 47 KFF analysis of CMS-64 data.
- ⁴⁸ Office of Inspector General, HHS, States' Collection of Offset and Supplemental Medicaid Rebates (HHS OIG, December 2014), https://oig.hhs.gov/oei/reports/oei-03-12-00520.pdf.
- ⁴⁹ Gifford, Ellis, Edwards, Lashbrook, Hinton, Antonisse, and Rudowitz, States Focus on Quality and Outcomes Amid Waiver Changes: Results from a 50-State Medicaid Budget Survey for State Fiscal Years 2018 and 2019 (KFF, October 2018), https://www.kff.org/report-section/states-focus-on-quality-and-outcomes-amid-waiver-changes-pharmacy-and-opioid-strategies/.
- ³⁰ Gabriel Petek, The 2019-20 Budget: Analysis of the Carve Out of Medi-Cal Pharmacy Services From Managed Care (California State Legislative Analyst's Office, April 2019), https://lao.ca.gov/Publications/Report/3997.
- ⁵¹ Lanford and Hensley-Quinn, New PBM Laws Reflect States' Targeted Approaches to Curb Prescription Drug Costs (NASHP, August 2019), https://nashp.org/new-pbm-laws-reflect-states-targeted-approaches-to-curb-prescription-drug-costs/.
- ⁵² Pew Charitable Trusts, Use of State Medicaid Inflation Rebates Could Discourage Drug Price Increases (Pew, June 2018), https://www.pewtrusts.org//media/assets/2018/06/implementingstatemedicaidinflationrebatescoulddiscouragedrugpriceincreases factsheet.pdf.
- ⁵³ An Act to Improve Health Care by Investing in Value, Massachusetts Bill H.4134, 191st Legislature (2019).
- ³⁴ Two states have moved forward with a subscription-based model: Louisiana reached an agreement with Gilead to treat more than 31,000 people in the state with hepatitis C under a modified subscription model over the next five years. The agreement allows the state to cap gross spending at a fixed amount. Washington state received approval from CMS to negotiate a fixed annual amount to pay for hepatitis C drugs and entered into a contract with AbbVie. Oklahoma has executed four alternative payment model agreements with manufacturers related to financial outcomes, including adherence, costs and hospitalizations. If the drug fails to meet certain benchmarks, the manufacturer will make additional payments to the state in the form of a supplemental rebate. Massachusetts, Colorado, and Michigan have received approval from CMS to enter into value or outcomes-based supplemental rebate agreements with drug manufacturers.
- ³⁵ U.S. Senate Committee on Finance, Description of the Chairman's Mark: The Prescription Drug Pricing Reduction Act (PDPRA) of 2019 (Senate Finance, July 2019), https://www.finance.senate.gov/imo/media/doc/FINAL%20Description%20of%20the%20Chairman's%20Mark%20for%20the%20Prescription%20Drug%20Pricing%20Reduction%20Act%20of%202019.pdf.
- ⁵⁶ Rachel Sachs, "Understanding the Senate Finance Committee's Drug Pricing Package," Health Affairs (July 26, 2019), https://www.healthaffairs.org/do/10.1377/hblog20190726.817822/full/.
- ³⁷ Office of Medicaid, Executive Office of Health and Human Services, MassHealth Section 1115 Demonstration Amendment Request (Commonwealth of Massachusetts EOHHS, Office of Medicaid, September 2017), https://www.mass.gov/files/documents/2017/10/27/masshealth-section-1115-demonstration-amendment-request-09-08-17.pdf.
- ⁵⁸ Prices negotiated through this demonstration would be exempt from Best Price. These states would also maintain an appeals process for non-covered drugs.
- ⁵⁹ HHS, Putting America's Health First: FY 2019 President's Budget for HHS (HHS, February 2018), https://www.hhs.gov/sites/default/files/fy-2019-budget-in-brief.pdf.

Office of Medicaid, EOHHS, MassHealth Section 1115 Demonstration Amendment Request (Commonwealth of Massachusetts EOHHS, Office of Medicaid, September 2017), https://www.mass.gov/files/documents/2017/10/27/masshealth-section-1115-demonstration-amendment-request-09-08-17.pdf.

⁶¹ Division of TennCare, TennCare II Demonstration: Amendment 42 DRAFT (Division of TennCare, September 2019), https://www.tn.gov/content/dam/tn/tenncare/documents2/TennCareAmendment42.pdf.

Virgil Dickson, "CMS denies Massachusetts' request to choose which drugs Medicaid covers," Modern Healthcare (June 27, 2018), https://www.modernhealthcare.com/article/20180627/NEWS/180629925/cms-denies-massachusetts-request-to-choose-which-drugs-medicaid-covers.

⁶³ CBO, Incorporating the Effects of the Proposed Rule on Safe Harbors for Pharmaceutical Rebates in CBO's Budget Projections (CBO, May 2019), https://www.cbo.gov/system/files/2019-05/55151-SupplementalMaterial.pdf.

⁶⁴ 83 Federal Register 54546-54561, (October 30, 2018).

Office of the Actuary, Financial Impact of Titles I and II of H.R. 3, "Lower Drug Costs Now Act of 2019 (CMS, October 2019), https://www.scribd.com/document/429847530/HR3-TitleI-II-Memo.

Louisiana Medicaid-Diabetes and Obesity Analysis Additional Claims Analysis Information

Notes:

- 1. Limited to paid and adjusted claims.
- 2. Capitation claims were excluded.
- 3. Members with evidence of dual/TPL eligibility at any point during the year were excluded.
- 4. Obesity Assignment Rule: If an individual had at least one claim for severe obesity during the measurement year, they were placed in the severe obesity group. Their disease-specific claims included claims with a diagnosis of obesity or severe obesity and also includes medications used in the treatment of chronic obesity.
- 5. Diabetes Assignment Rule: If ever Type 1, then Type 1; of the remaining members, if ever type II then type II; of the remaining members, if ever prediabetes, then prediabetes; of the remaining members, members with a diagnosis of insulin resistance are categorized as insulin resistant.
- 6. 'Treatment Categories' were derived from the Medicaid claim type. The 'Other' treatment category included claim types such as transportation, Medicare cross-over, LTC, and dental.
- 7. Diagnoses/Conditions were identified in any diagnosis position. The 'Diagnosis Code Identifiers' tab includes the ICD-10 CM diagnosis codes used in this request.
- 8. Ancillary claims were excluded when identifying disease states/conditions of interest.
- 9. For pharmacy expenditures, all pharmacy claims (regardless of reason(s) for use) for the identified recipients were included in the calculation of total (all-cause) expenditures. For disease-specific expenditures, only pharmacy claims for medications indicated for the diseases/conditions of interest were included, except for prediabetes and insulin resistance where medications commonly used in treatment were included. The 'Medication Identifiers' tab lists the specific medications utilized for this request.
- 10. This analysis does not consider the impact of any potential medication rebates or federal-state share (match) reimbursement methodologies.

Louisiana Medicaid-Comorbidities Additional Claims Analysis Information

Notes:

- 1. Limited to paid and adjusted claims.
- 2. Capitation claims were excluded.
- 3. Members with evidence of dual/TPL eligibility at any point during the year were excluded.
- 4. Diagnoses/Conditions were identified in any diagnosis position. The 'Diagnosis Code Identifiers' tab includes the ICD-10 CM diagnosis codes used in this request.
- 5. Ancillary claims were excluded when identifying disease states/conditions of interest.
- 6. This analysis does not consider the impact of any potential medication rebates or federal-state share (match) reimbursement methodologies.

Bibliography

¹ Centers for Disease Control and Prevention. (CDCb) (2024). CDC - Overweight & Obesity Causes and Consequences. [online] Available at: https://www.cdc.gov/obesity/adult/causes.html [Accessed 2 Dec. 2024].

- https://assets.americashealthrankings.org/app/uploads/2018ahrannual_020419.pdf [Accessed 12 Dec. 2024].
- ^v Cancer facts & figures 2022. https://www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures-2022.html/. American Cancer Society. Updated January 12, 2022. Accessed March 8, 2022. [Google Scholar]
- vi Behavioral Risk Factor Surveillance System Survey Data. Unpublished. New Orleans, Louisiana: Louisiana Department of Health, 2014-2023.
- vii CDC. (2024, September 20). Fast Facts: Obesity Among Children in WIC. Obesity. https://www.cdc.gov/obesity/data-and-statistics/facts-about-obesity-among-young-children-enrolled-in-wic.html
- viii CDC. (2024, November). *Breastfeeding Report Card*. Breastfeeding Data. https://www.cdc.gov/breastfeeding-data/breastfeeding-report-card/index.html
- ix CDC. (2024, September 20). Fast Facts: Obesity Among Children in WIC. Obesity. https://www.cdc.gov/obesity/data-and-statistics/facts-about-obesity-among-young-children-enrolled-in-wic.html
- ^x Stierman B, Afful J, Carroll MD, et al. National Health and Nutrition Examination Survey 2017–March 2020 Prepandemic Data Files—Development of Files and Prevalence Estimates for Selected Health Outcomes. *National Health Statistics Reports* 2021;158:1-20.
- xi Hales CM, Carroll MD, Fryar CD, Ogden CL. Prevalence of obesity and severe obesity among adults: United States, 2017-2018. *NCHS Data Brief* 2020;(360):1-8.
- xii American Medical Association. Recognition of obesity as a disease. . 2013;
- riii Trogdon JG, Finkelstein EA, Feagan CW, Cohen JW. State- and payer-specific estimates of annual medical expenditures attributable to obesity. *Obesity* 2012;20(1):214-20.
- xiv Haase CL, Eriksen KT, Lopes S, Satylganova A, Schnecke V, McEwan P. Body mass index and risk of obesity-related conditions in a cohort of 2.9 million people: Evidence from a UK primary care database. *Obes Sci Pract* 2021;7(2):137-147.

[&]quot;CDC. (2024, September 20). Risk Factors for Obesity. CDC. https://www.cdc.gov/obesity/risk-factors.html

Behavioral Risk Factor Surveillance System Survey Data. Unpublished. New Orleans, Louisiana: Louisiana Department of Health, 2023.

- ^{xv} Guh DP, Zhang W, Bansback N, Amarsi Z, Birmingham CL, Anis AH. The incidence of co-morbidities related to obesity and overweight: a systematic review and meta-analysis. *BMC Public Health* 2009;9:88.
- xvi Choi J, Joseph L, Pilote L. Obesity and C-reactive protein in various populations: a systematic review and meta-analysis. *Obes Rev* 2013;14(3):232-44.
- ^{xvii} Ageno W, Di Minno MN, Ay C, et al. Association between the metabolic syndrome, its individual components, and unprovoked venous thromboembolism: results of a patient-level meta-analysis. *Arterioscler Thromb Vasc Biol* 2014;34(11):2478-85.
- ^{xviii} Aune D, Mahamat-Saleh Y, Norat T, Riboli E. High body mass index and central adiposity is associated with increased risk of acute pancreatitis: A meta-analysis. *Dig Dis Sci* 2021;66(4):1249-1267.
- xix Aune D, Norat T, Vatten LJ. Body mass index and the risk of gout: a systematic review and dose-response meta-analysis of prospective studies. *Eur J Nutr* 2014;53(8):1591-601.
- ^{xx} Lauby-Secretan B, Scoccianti C, Loomis D, Grosse Y, Bianchini F, Straif K. Body fatness and cancer--Viewpoint of the IARC Working Group. *N Engl J Med* 2016;375(8):794-8.
- xxi Jokela M, Laakasuo M. Obesity as a causal risk factor for depression: Systematic review and metaanalysis of Mendelian Randomization studies and implications for population mental health. *J Psychiatr Res* 2023;163:86-92.
- Amiri S, Behnezhad S. Obesity and anxiety symptoms: A systematic review and meta-analysis. *Neuropsychiatr* 2019;33:72-89.
- ^{xxiii} Anstey KJ, Horswill MS, Wood JM, Hatherly C. The role of cognitive and visual abilities as predictors in the Multifactorial Model of Driving Safety. *Accident; analysis and prevention* 2012;45:766-74.
- xxiv Zhou J, Zhang Y, Teng Y, et al. Association between preconception body mass index and fertility in adult female: A systematic review and meta-analysis. *Obes Rev* 2024;25(10):e13804.
- xxv Dobbie LJ, Pittam B, Zhao SS, et al. Childhood, adolescent, and adulthood adiposity are associated with risk of PCOS: a Mendelian randomization study with meta-analysis. *Hum Reprod* 2023;38(6):1168-1182.
- xxvi Li Y, Lin Y, Ou C, et al. Association between body mass index and semen quality: a systematic review and meta-analysis. *Int J Obes (Lond)* 2024;
- xxvii Taira KG, Wang M, Guo W, Kam O, Kaufmann T. Association of cellulitis with obesity: Systematic review and meta-analysis. *JMIR Dermatol* 2024;7:e54302.
- xxviii Yosipovitch G, DeVore A, Dawn A. Obesity and the skin: skin physiology and skin manifestations of obesity. *J Am Acad Dermatol* 2007;56(6):901-16; quiz 917-20.
- xxix Pan CW, Lin Y. Overweight, obesity, and age-related cataract: a meta-analysis. *Optom Vis Sci* 2014;91(5):478-83.
- xxx Raeisi T, Mozaffari H, Sepehri N, et al. The negative impact of obesity on the occurrence and prognosis of the 2019 novel coronavirus (COVID-19) disease: a systematic review and meta-analysis. *Eat Weight Disord* 2022;27(3):893-911.
- xxxi Phung DT, Wang Z, Rutherford S, Huang C, Chu C. Body mass index and risk of pneumonia: a systematic review and meta-analysis. *Obes Rev* 2013;14(10):839-57.

- Ebbeling CB, Pawlak DB, Ludwig DS. Childhood obesity: public-health crisis, common sense cure. *Lancet* 2002;360(9331):473-82.
- xxxiii Simmonds M, Llewellyn A, Owen CG, Woolacott N. Predicting adult obesity from childhood obesity: a systematic review and meta-analysis. *Obes Rev* 2016;17(2):95-107.
- Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. *BRFSS Prevalence & Trends Data [online]*. 2024. [accessed Sep 23, 2024]. URL: https://www.cdc.gov/brfss/brfssprevalence/. 2024.
- xxxv Obesity's Impact on Louisiana's Economy and Workforce in Available at: https://www.globaldata.com/health-economics/US/Louisiana/Obesity-Impact-on-Louisiana-Factsheet.pdf.
- xxxvi Obesity Medicine Association (2023) *How Much Does Obesity Cost the U.S?*, *Obesity Medicine Association*. Available at: https://obesitymedicine.org/blog/health-economic-impact-of-obesity/.
- xxxvii ICER Publishes Evidence Report on Treatments for Obesity Management ICER. (2022). ICER. https://icer.org/news-insights/press-releases/icer-publishes-evidence-report-on-treatments-for-obesity-management/?utm_source=chatgpt.com
- xxxviii Ganguly R et al. Diabetes Res Clin Pract. 2018;(143):348-356 A retrospective analysis of 26,522 adult patients in the Truven Health MarketScan® claims databases evaluated prescription fill/refill data, days covered, and proportion of days covered during the first 6 months following the index claim (between January 2015 and March 2016) for an anti-obesity medication prescribed for long-term use. Kleinsinger F. Perm J 2018:22:18-033. A healthcare communication provides a brief literature review and call to action regarding medication non-adherence for patients with chronic diseases.
- xxxix Ganguly R et al. Diabetes Res Clin Pract. 2018;(143):348-356 A retrospective analysis of 26,522 adult patients in the Truven Health MarketScan® claims databases evaluated prescription fill/refill data, days covered, and proportion of days covered during the first 6 months following the index claim (between January 2015 and March 2016) for an anti-obesity medication prescribed for long-term use. Kleinsinger F. Perm J 2018:22:18-033. A healthcare communication provides a brief literature review and call to action regarding medication nonadherence for patients with chronic diseases.
- xI Trends in anti-obesity pharmacotherapy use, including following bariatric surgery, were assessed from 2010-2019, using data from Explorys®, a population-level commercial database. Trends in pharmacotherapy utilization were evaluated for patients with obesity as determined by a BMI ≥30 kg/m2 (n=11,195,020) and were compared with adults with obesity who were prescribed anti-obesity drugs (n=274,160).
- xli Hebert, J. R., Allison, D. B., Archer, E., Lavie, C. J., & Blair, S. N. (2013). Scientific Decision Making, Policy Decisions, and the Obesity Pandemic. *Mayo Clinic Proceedings*, 88(6), 593–604. https://doi.org/10.1016/j.mayocp.2013.04.005
- xiii Tay, A., Hoeksema, H., & Murphy, R. (2023). Uncovering Barriers and Facilitators of Weight Loss and Weight Loss Maintenance: Insights from Qualitative Research. *Nutrients*, *15*(5), 1297. https://doi.org/10.3390/nu15051297