MILLIMAN REPORT

# Comprehensive Obesity and Pre-Diabetes Coverage Analysis

## Prepared for the Colorado Division of Insurance

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# Table of Contents

# Introduction

Under Colo. Rev. Stat. § 10-16-155, the Colorado Division of Insurance (DOI) under the Colorado Department of Regulatory Agencies (DORA) has retained Milliman, Inc. ("Milliman"), a global actuarial consulting firm, to perform actuarial reviews of legislative proposals that may impose a new health benefit coverage requirement on health benefit plans or reduce or eliminate coverage required under a health benefit plan. The legislative requirements impact the individual, small group, and large group health insurance markets. The actuarial review must consider the predicted effects of the legislative proposal on the affected markets during the one, five, and ten years immediately following the effective date of the legislative proposal, or during another time period following the effective date of the legislative proposal if such consideration is more actuarially feasible, including:

- An estimate of the number of Colorado residents who will be directly affected by the legislative proposal;
- Estimates of changes in the rates of utilization of specific health-care services that may result from the legislative proposal;
- Estimates of changes in consumer cost sharing that would result from the legislative proposal;
- Estimates of changes in health benefit plan premiums charged to covered persons or employers, in individual, small group and large group markets, that would result from the legislative proposal;
- An estimate of the out-of-pocket health-care cost changes associated with the legislative proposal;
- An estimate of the potential long-term health-care cost changes associated with the legislative proposal;
- Identification of any potential health benefits for individuals or communities that would result from the legislative proposal;
- Information concerning who would benefit from any cost changes and benefit expansions and any disproportionate effects it may have on protected classes, as available; and
- To the extent practicable, the social and economic impacts of the legislative proposal, including information concerning who would benefit from cost changes, and any disproportionate effects and qualitative analysis of the impacts of the legislative proposal.

At the request of the DOI, Milliman was asked to provide an analysis of a legislative proposal that would require all Colorado state-regulated individual and group health benefit plans in Colorado to provide coverage for the treatment of the chronic disease of obesity and the treatment of pre-diabetes, including coverage for intensive behavioral or lifestyle therapy, bariatric surgery, and FDA-approved anti-obesity medication.

The legislative proposal requires coverage criteria for FDA-approved anti-obesity medication to not be more restrictive than FDA-approved indications for the medication. In addition, the coverage must not be different or separate from coverage for any other illness, condition, or disorder for purposes of determining copayments, deductibles, coinsurance, or annual maximum benefit. A plan may still apply utilization management to determine medical necessity for treatment of the chronic disease of obesity and the treatment of pre-diabetes if appropriateness and medical necessity determinations are made in the same manner as those determinations are made for the treatment of any other illness, condition, or disorder covered by the health benefit plan.

The proposed legislation defines "FDA-approved anti-obesity medication" as "any medication approved by the federal food and drug administration with an indication for chronic weight management in patients with obesity." "Intensive behavioral or lifestyle therapy" (IBT) is defined as "an evidence-based, intensive, multi-component behavioral or lifestyle modification intervention that supports healthy weight management as recommended by current clinical standards of care. Interventions include a high frequency of counseling and focus on nutrition or dietary changes, physical activity, and behavioral counseling strategies to achieve health weight management. Interventions may be provided in office, virtual, or community-based settings to support patient access and needs."

Three amendments to the proposed legislation are not able to be considered in this analysis due to timing:

1. **Expansion of weight management therapies for individuals who have a hemoglobin A1C level of 5.6% or higher.**
2. **Expansion of weight management therapies for individuals whose health-care provider recommends bariatric surgery**.
3. **The proposed legislation would apply to state-regulated large group health plans issued or renewed on or after January 1, 2025 and individual and small group health benefit plans issued on or after January 1, 2026.** The effective dates of the original proposed legislation which our analysis was based on, were January 1, 2025 for individual and small group health benefit plans, and January 1, 2026 for large group health benefit plans. Thus, the "first-year" impacts are considered 2025 for individual and small group markets and 2026 for large group markets. Any five-year or ten-year cumulative impacts presented here are considered for the years 2025 through 2029 and 2025 through 2034 respectively, regardless of market.

The second amendment listed could materially impact the results of this study. See the "Financial Analysis" section for more details regarding these amendments.

# Executive Summary

The proposed legislation would require all state-regulated individual and group health benefit plans to provide coverage for the treatment of obesity and pre-diabetes.

Obesity is a chronic condition defined by the CDC as occurring in adults with a Body Mass Index (BMI) of 30 or higher, and children with a BMI at or above the 95$^{th}$ percentile among children of the same age and sex.[1] Pre-diabetes is a condition where blood sugar levels are elevated above normal levels, but not high enough to be considered diabetes. The CDC outlines that a blood glucose measurement (HbA1c level) between 5.7% and 6.4% indicates pre-diabetes, while an HbA1c level of 6.5% or more indicates diabetes.[2]

Obesity and pre-diabetes can increase the risk of developing several conditions including heart disease, type 2 diabetes, stroke, and cancer. Based on self-reported data from 2021, in Colorado, over 25% of adults and 10% of high school students are affected by obesity, with higher prevalence in communities of color.[3] In addition, 38% of the total US adult population had pre-diabetes. [4]

On the other hand, based on using administrative diagnoses codes in claims data, approximately 12% of Colorado's fully insured commercial population were diagnosed with obesity or pre-diabetes in 2022 (see Exhibit 2). Studies show that the use of administrative diagnoses coded in claims data to classify patients as overweight or obese may meaningfully underestimate the prevalence of those conditions.[5] Claims data diagnosed prevalence is based on health care providers coding an official diagnosis for an individual. CDC prevalence rates are based on self-reported data, not claims. In order to access the expanded services resulting from the proposed legislation, enrollees need a diagnosis of obesity or pre-diabetes to determine appropriateness and medical necessity of treatments.

Effective weight management can delay the progression from pre-diabetes to type 2 diabetes and is beneficial in treating type 2 diabetes.[6,7] Therefore, similar to obesity, the recommended treatment for pre-diabetes is weight management. The following weight management treatments were considered in this analysis:

- FDA-approved anti-obesity medication,
- Intensive behavioral or lifestyle therapy, and
- Bariatric surgery.

According to a survey of Colorado health plans conducted by the Colorado Division of Insurance, current coverage for these treatments among the commercially insured population in Colorado is inconsistent across different insurance plans. Medication therapies are the least covered treatment with coverage ranging by market from 0% to 10%. Intensive behavioral therapy coverage varies by market and type of therapy from 35% to 100%. Bariatric procedures are covered for 100% of individual, 99.7% of small group, and 43% of large group enrollees.

Some results of our analysis of the impact of the proposed legislation are highlighted below. For information on how these values were determined, please see the "Methodologies and Assumptions" section of the report.

For medication therapies, the estimated average cost per prescription[1] is estimated to be $525 in 2025. The low coverage, high cost, and high interest in these medication therapies result in these therapies accounting for over 95% of the total premium impact of the proposed legislation for the individual and small group markets.

The estimated average cost of bariatric surgery in 2025 is $42,000. Although utilization is considerably lower than that of medication therapies, the high cost per service and low current coverage in the large group market of bariatric procedures causes 34.62% of the total large group premium impact to be attributed to these services (see Exhibit 8).

As shown in Exhibit 1, the estimated premium impact from implementation of the proposed legislation is a first-year premium increase of $30,467,000 across all markets. The five-year cumulative premium increase is $139,842,000 for all markets. The ten-year cumulative premium increase is $326,732,000 for all markets. When spread over the

[1] Cost per prescription is a unit cost and is standardly used as a measure for pharmacy costs, similar to the cost per service for medical claims.

insured population, the total impact on premium equates to $2.49 per member per month (PMPM) for the first year across all markets.

**EXHIBIT 1: ESTIMATED PREMIUM IMPACT OF PROPOSED LEGISLATIVE LANGUAGE**

| | 1 YEAR (2025) IMPACT | 1 YEAR (2026) IMPACT | 5 YEAR (2025-2029) CUMULATIVE IMPACT | 10 YEAR (2025-2034) CUMULATIVE IMPACT |
|---|---|---|---|---|
| Individual - Total Dollars | $5,087,000 | | $27,700,000 | $61,982,000 |
| Individual - PMPM | $1.68 | | $1.79 | $1.96 |
| Individual - Percent Change | 0.28% | | 0.26% | 0.24% |
| | | | | |
| Small Group - Total Dollars | $5,228,000 | | $28,261,000 | $62,647,000 |
| Small Group - PMPM | $1.75 | | $1.86 | $2.01 |
| Small Group - Percent Change | 0.32% | | 0.29% | 0.26% |
| | | | | |
| Large Group - Total Dollars | | $20,152,000 | $83,881,000 | $202,103,000 |
| Large Group - PMPM | | $3.25 | $3.33 | $3.48 |
| Large Group - Percent Change | | 0.63% | 0.58% | 0.50% |

| | 1 YEAR (2025 IND AND SG, 2026 LG) IMPACT | 5 YEAR (2025-2029) CUMULATIVE IMPACT | 10 YEAR (2025-2034) CUMULATIVE IMPACT |
|---|---|---|---|
| **All Commercial - Total Dollars** | **$30,467,000** | **$139,842,000** | **$326,732,000** |
| **All Commercial - PMPM** | **$2.49** | **$2.51** | **$2.70** |
| **All Commercial - Percent Change** | **0.46%** | **0.40%** | **0.36%** |

The proposed legislation would have a financial impact for obese and pre-diabetic members who currently do not have coverage for the specified services. However, cost sharing for weight management treatment may continue to present a financial burden to members, especially for high-cost services like medication therapies and bariatric surgery.

There are likely to be medical cost offsets for treating obesity and pre-diabetes through weight loss interventions, but quantifying these offsets would require a systematic literature review and modeling transitions of disease states considering starting BMI, comorbidities, adherence to treatment, amount of weight lost, and weight loss intervention used. Additionally, GLP-1 medication therapies are fairly new to the market, and studies estimating long term effectiveness and resulting cost savings are not currently available at the time of this report. Based on the evidence that is available, it is unlikely that the estimated total cost of care impact of the proposed legislation could be completely offset by cost savings generated by weight management treatments. For these reasons we have chosen not to reflect medical cost offsets in our impact analysis. Please see the ”Medical Cost Offsets” sub section of the “Methodology and Assumptions” section of the report for more details around possible medical cost offsets.

We received three potential amendments to the proposed legislation that were not considered in our analysis and are therefore not included in these results:

1. **Expansion of weight management therapies for individuals who have a hemoglobin A1C level of 5.6% or higher.**

2. **Expansion of weight management therapies for individuals whose health-care provider recommends bariatric surgery**.
3. **The proposed legislation would apply to state-regulated large group health plans issued or renewed on or after January 1, 2025 and individual and small group health benefit plans issued on or after January 1, 2026.** The effective dates of the original proposed legislation which our analysis was based on, were January 1, 2025 for individual and small group health benefit plans, and January 1, 2026 for large group health benefit plans. Thus, the "first-year" impacts are considered 2025 for individual and small group markets and 2026 for large group markets. Any five-year or ten-year cumulative impacts presented here are considered for the years 2025 through 2029 and 2025 through 2034 respectively, regardless of market.

The second amendment listed could materially impact the results of this study. See the "Financial Analysis" section for more details regarding these amendments.

# Background

### OBESITY AND PRE-DIABETES

Obesity is a chronic condition that affects millions of adults and children in the United States. The CDC defines obese adults as those with a Body Mass Index (BMI) of 30 or higher, and obese children as those with a BMI at or above the 95th percentile among children of the same age and sex.[1] Obesity in children and adults can increase the risk of developing many chronic conditions including heart disease, type 2 diabetes, osteoarthritis, gall stones and gall bladder disease.[8,9] Obesity in adults is also associated with higher risk of stroke and 13 types of cancer.[10] The presence of obesity and diabetes also leads to higher risk for more severe coronavirus infection and hospitalization.[11,12]

Pre-diabetes is a condition where blood sugar levels are elevated above normal levels, but not high enough to be considered diabetes. The CDC outlines that an HbA1c level between 5.7% and 6.4% indicates pre-diabetes, while an HbA1c level of 6.5% or more indicates diabetes.[2] Pre-diabetes can be asymptomatic. Risk factors for pre-diabetes include being overweight or obese, having a history of gestational diabetes, having a family history of type 2 diabetes, being over 45 years old or having polycystic ovary syndrome.[13]

### OBESITY AND PRE-DIABETES PREVALENCE

According to the 2022 CDC Behavioral Risk Factor Surveillance System (BRFSS) obesity affects over 25% of Colorado adults, with higher prevalence in communities of color; Black,(29%), Latino (30.4%) and American Indian/Alaska Native (39.2%) adults have a higher prevalence of obesity, relative to white adults (24.1%).[14] In 2021, 10% of high school students in Colorado reported being obese[3] and nationally, more than one in five youth ages 10 to 17 are obese.[15] Research has found obesity prevalence in children and adults to be higher in rural areas relative to urban areas.[16,17]

In 2021, 38% of the total US adult population had pre-diabetes and 48.8% of adults 65 and older had pre-diabetes. Prevalence was found to be similar among all racial and ethnic groups.[4]

The diagnosed prevalence rate of obesity or pre-diabetes for the 2022 enrolled population from the 2022 Colorado All Payer Claims Database (APCD) was much lower and ranged from 11.0% in the individual market to 13.2% in the large group market.

Studies show that the use of administrative diagnoses coded in claims data to classify patients as overweight or obese may meaningfully underestimate the prevalence of those conditions.[5] Claims data diagnosed prevalence is based on health care providers coding an official diagnosis for an individual. CDC prevalence rates are based on self-reported data, not claims. Additionally, the diagnosed prevalence rates from the claims data included are across all ages.

For purposes of our analysis, we are relying on diagnosed prevalence rates to inform our utilization assumptions since a diagnosis would be required to determine appropriateness and medical necessity of treatments.

### TREATMENT

Evidence shows that effective weight management can delay the progression from pre-diabetes to type 2 diabetes and is highly beneficial in treating type 2 diabetes. Weight loss may be achieved through lifestyle changes (including diet and exercises), or through clinical interventions, similar to that of weight management treatments for obesity without pre-diabetes. Treatment for weight loss in an obese population may include the following:[18,19,20]

- Intensive behavioral or lifestyle therapy
  - Nutrition related services such as dietary counseling, medical nutrition therapy, weight management class
  - Physical activity related services such as exercise counseling, exercise class, gym club membership
  - Behavioral health therapies such as cognitive behavioral therapy, exposure and response prevention therapy, health behavior assessment and intervention, preventive medicine counseling and risk factor reduction

  - Diabetes prevention program services (for those with pre-diabetes): The National Diabetes prevention program is a lifestyle intervention operated through the Center for Medicare and Medicaid Services that aims to prevent diabetes through weight loss using improved diet and exercise. The program incorporates a year-long CDC-certified curriculum, along with one-on-one health coaching and support groups.[21] The program is offered through Medicare, some state Medicaid programs and some commercial health plans.
- Bariatric surgery (e.g., laparoscopic bariatric surgery, gastric bypass surgery): A surgical procedure that reduces weight by altering the digestive tract. There are several approaches including reducing the size of the stomach or rerouting the small intestine.
- FDA-approved anti-obesity medications – Brand names (generic)
  - Glucagon-like peptide 1 (GLP-1) receptor agonists: These medications work by slowing gastric emptying, which in turn makes the person taking the medication feel full for longer and reduces appetite. They may suppress appetite by affecting the brain's desire for food.[22]
    - Saxenda (Liraglutide)
    - Wegovy (Semaglutide)
    - Zepbound (Tirzepatide)
  - Non-GLP-1s: These medications work to reduce weight through a variety of mechanisms including appetite suppression, metabolism stimulation, or enzyme inhibition related to the breakdown and absorption of fat.
    - Contrave (Bupropion and Naltrexone)
    - Alli and Xenical (Orlistat)
    - Qsymia (Phentermine and Topiramate)
    - Imcivree (Setmelanotide)
    - Adipex-P (Phentermine)

**POTENTIAL HEALTH BENEFITS OF TREATMENT**

Studies have shown that sustained weight loss for individuals with obesity can reduce health risks and improve health outcomes of treated comorbidities.[23] In people with type 2 diabetes who are overweight or obese, weight management has been shown to reduce glycemia levels and reduce the need for glucose-lowering medications.[24] Weight loss has also been shown to reduce the risk of developing diabetes in a prediabetic population.[6,7] Evidence also suggests that cardiometabolic health risk and incidence are improved through weight loss[23,25] and can reduce the risk of certain cancers.[10]

Long term health outcomes will depend on the degree of weight loss and whether the achieved weight loss is maintained.

Behavioral or lifestyle therapies have been shown to be effective in achieving modest weight loss for a subset of participants, but few participants in these programs have been shown to maintain weight loss after ceasing these programs. In a study of a Colorado based weight loss program that offered community-based weigh-ins, health coaching, and daily access to cognitive-theory based email and text support, 24% of participants lost at least 5% of boy weight at the end of the 12-month program. Of those who lost at least 5% of their body weight, 36% maintained their weight loss at six months after achieving weight loss and 19% maintained their weight loss at twelve months.[26] The study found similar results for individuals who lost 3% of body weight.[26] A systematic review of 21 behavioral and lifestyle therapies found that weight regain by twelve months post enrollment occurred in half of the interventions.[27]

Weight loss from bariatric surgery is more drastic and durable than lifestyle changes alone. Patients have been shown to lose at least 20% of initial body weight within the first 2 to 3 years post-surgery[28,29] and maintain this weight loss for the next ten years.[30]

Lastly, adherence among GLP-1 users has been shown to be poor. Research suggests that medication must be taken consistently and long-term to maintain weight loss.[31] One study showed that 32% of people continued to adhere to the therapy at 12 months.[32] One drug manufacturer's study showed that people who stopped taking Semaglutide (Wegovy) after regular use gained back two-thirds of prior weight loss within a year of stopping the

drug.[31] These drugs are relatively new to the market, and longer-term studies are needed to determine the impact on health benefits and net weight loss in the long term.

## INSURANCE COVERAGE OF TREATMENTS FOR OBESITY AND PRE-DIABETES

In December 2023, the Colorado Division of Insurance surveyed Colorado insurance carriers in the individual, small group, and large group markets regarding their current coverage of obesity and pre-diabetes services. This survey revealed a mixed landscape. Bariatric procedures were currently covered by all individual plans and nearly all members (99.7%) in small group plans currently have coverage, but only approximately 43% of members in large group plans currently have coverage for bariatric procedures. While components of Intensive Behavioral Therapy (IBT) such as nutrition classes and dietary counseling, weight management, and behavioral therapies are covered by plans for 71-86% of members, components such as exercise classes are covered by plans for fewer members (50%). Medication therapies are the least covered component of weight management treatment. Approximately 6% of members across all surveyed individual, small group, and large group plans currently have coverage for medication therapies to treat obesity, however, almost no small group plans offer this coverage. These survey results suggest that the proposed legislation would increase plan covered utilization of weight management treatments in individuals with obesity and pre-diabetes. Please see Exhibit 3 for the full results of this survey.

## PUBLIC DEMAND, DISPARITY, & AVAILABILITY OF SERVICES

Our review of literature suggests there are disparities in who receives obesity and pre-diabetes care. Throughout our review of the literature, we observed that utilizers of weight loss therapies were predominantly women. A few examples of this include: 81% of participants in a study of GLP-1 treatment were women[32], 78% of participants in a community lifestyle program were women[26], 76% of National Diabetes Prevention Program (DPP) participants between 2015-2019 [33], and 85% of all anti-obesity prescriptions were for women in a study of eligible adults across 8 major health systems.[34]

There are also known racial and ethnic disparities in the utilization of weight management treatments for obesity.[35,36] For example, Black patients are less likely to be diagnosed with obesity (odds ratio = 0.73)[2] relative to white patients, which can result in fewer referrals to obesity specialists, bariatric surgery and prescriptions for weight loss medications.[37]

Residents in rural areas have less access to weight management treatments for obesity than urban residents. In the US in 2019, travel time to an obesity specialist was 9 minutes in urban areas, 45 minutes in suburban areas and 67 minutes in rural areas.[38] Rural residents have also been found to be 23% less likely to receive bariatric surgery than urban residents.[39]

There is variation in the availability and public demand varies by service. We describe service specific availability and demand in the following sections.

### Intensive behavioral or lifestyle therapy

Enrollment into intensive behavioral or lifestyle therapies is low relative to the eligible population and attrition in these programs is high. Participation in the nationally available Medicare Diabetes Prevention Program (DPP) has been far lower than expected. The program was predicted to enroll 110,000 people in the first ten years but had only enrolled 3,600 in the first three years.[40] In one study of a weight management program implemented across five urban community health centers, 12,487 patients were identified through screening as being overweight or obese, 40% received a provider referral to the program, 15.6% had at least one contact with the program, and 2.1% had more than 10 contacts. This study found the population with less than 10 program contacts did not have significant weight loss.[41]

[2] An odds ratio is a statistical term that measures the likelihood of an event occurring in one group compared to another. An odds ratio of 1 means that there is an equal chance of an event happening in both groups. An odds ratio of less than one means that the event is less likely to occur in the first group compared to the second.

Behavioral changes may be harder to implement for racial and ethnic minorities due to disparities in social determinants of health.[35] For example, in the United States, food insecurity was found to be more common among non-Hispanic Black (20.9%) and Hispanic populations (24.6%) than among white populations (8.1%).[42] Further discussion on this topic can be found in the Social and Economic Impact section.

The availability of programs and exercise facilities in Colorado include 26 suppliers offering the CDC Diabetes Prevention Program (DPP) (the majority of which are located in the Denver-Boulder area), and their classes are delivered in person only. There are also several online versions of the program offered nationwide.[43] There are also 711 private health clubs distributed across the state[44] and fitness class options offered through city or town recreation departments or universities where individuals can participate in fitness classes or self-guided exercise.

According to 2019 BRFSS data, 59.3% of Colorado adults reported achieving at least 150 minutes a week of moderate-intensity aerobic physical activity or 75 minutes a week of vigorous-intensity aerobic activity (or an equivalent combination) and 18.7% of adults reported engaging in no leisure time physical activity. [45]

**Bariatric surgery**

Bariatric surgery has been estimated to be utilized by 1% of the eligible population.[46] This level of utilization is thought to be driven by several factors including patient perception of safety[47], low provider referrals[48], and cost.[49]

In one survey describing demographic differences among primary care patients with BMI greater than 35, only 20% of participating patients reported being recommended surgery by their doctor, and African American participants were less likely than white participants to receive a recommendation, as were men relative to women.[47]

**FDA-approved anti-obesity medications**

In a survey conducted by the Kaiser Family Foundation, 59% of respondents trying to lose weight said they would be interested in taking a safe and effective weight loss drug and about 70% of adults trying to lose at least 20 pounds said they would be interested.[50]

Despite this public interest, the prescribing of non-GLP-1 anti-obesity medication is low.[34,51] In a study of 8 electronic medical records from 8 health systems across the US between 2009-2015, only 1.3% of the 2.2 million eligible patients filled at least one prescription.[34]

There has been significant public demand for GLP-1s, resulting in a shortage of these drugs through at least the end of 2024.[52] For our analysis, we have assumed that these existing supply chain issues will be fully resolved by 2025 due to increasing capacity in manufacturing.

# Financial Analysis

The proposed legislative language we relied upon would require all individual and group health benefit plans to provide coverage for the treatment of the chronic disease of obesity and the treatment of pre-diabetes, including coverage for:

1. intensive behavioral or lifestyle therapy,
2. bariatric surgery, and
3. FDA-approved anti-obesity medication. The coverage criteria for FDA-approved anti-obesity medication must not be more restrictive than FDA-approved indications for the medication.

As mentioned in the Introduction section, three amendments to the proposed legislation are not able to be considered in this analysis due to timing:

1. **Expansion of weight management therapies for individuals who have a hemoglobin A1C level of 5.6% or higher.**
2. **Expansion of weight management therapies for individuals whose health-care provider recommends bariatric surgery**.
3. **The proposed legislation would apply to state-regulated large group health plans issued or renewed on or after January 1, 2025 and individual and small group health benefit plans issued on or after January 1, 2026.** The effective dates of the original proposed legislation which our analysis was based on, were January 1, 2025 for individual and small group health benefit plans, and January 1, 2026 for large group health benefit plans. Thus, the "first-year" impacts are considered 2025 for individual and small group markets and 2026 for large group markets. Any five-year or ten-year cumulative impacts presented here are considered for the years 2025 through 2029 and 2025 through 2034 respectively, regardless of market.

The second amendment listed could materially impact the results of this study. See the end of this section for more details regarding these amendments.

We considered outcomes-based weight management treatments for individuals with obesity and pre-diabetes, including all modalities that support clinically significant weight loss of at least 5% in body weight among persons with obesity. Services considered include:

- Intensive behavioral or lifestyle therapy
    - Nutrition related services (e.g. dietary counseling, medical nutrition therapy, weight management class)
    - Physical activity related services (e.g. exercise counseling, exercise class, gym club membership)
    - Behavioral health therapies (e.g. cognitive behavioral therapy, exposure and response prevention therapy, health behavior assessment and intervention, preventive medicine counseling and risk factor reduction)
    - Diabetes prevention program services (for those with pre-diabetes)
- Bariatric surgery (e.g., laparoscopic bariatric surgery, gastric bypass surgery)
- FDA-approved anti-obesity medications – Brand names (generic)
    - Glucagon-like peptide 1 (GLP-1) receptor agonists
        - Saxenda (Liraglutide)
        - Wegovy (Semaglutide)
        - Zepbound (Tirzepatide)
    - Non-GLP-1s
        - Contrave (Bupropion and Naltrexone)

- Alli and Xenical (Orlistat)
- Qsymia (Phentermine and Topiramate)
- Imcivree (Setmelanotide)
- Adipex-P (Phentermine)

In addition, the proposed legislation would not allow coverage to be different or separate from coverage for any other illness, condition, or disorder for purposes of determining copayments, deductibles, coinsurance, or annual maximum benefit. The legislative proposal would not prohibit a plan from applying utilization management to determine medical necessity for treatment of the chronic disease of obesity and the treatment of pre-diabetes if appropriateness and medical necessity determinations are made in the same manner as those determinations are made for the treatment of any other illness, condition, or disorder covered by the plan.

Our evaluation projects the population subject to the benefit requirements, cost of benefits, premium and enrollee cost sharing for the implementation year one (calendar year 2025 for individual and small group and calendar year 2026 for large group), the cumulative first five years (calendar years 2025 through 2029 for all markets), and the cumulative first ten years (calendar years 2025 through 2034 for all markets) under the following two scenarios:

1. Baseline – Proposed legislation **does not** go into effect.
2. Post benefit requirement – Proposed legislation **does** go into effect.

The difference between the baseline and post benefit requirement values is the impact of the proposed legislation.

### OBESITY AND PRE-DIABETES PREVALENCE

Exhibit 2 below displays the estimated diagnosed prevalence of obesity and pre-diabetes by coverage type for the 2022 enrolled population from the Colorado All Payer Claims Database (APCD).

**EXHIBIT 2: PREVALENCE OF OBESITY AND PRE-DIABETES, PER 1,000 – COLORADO APCD**

| | INDIVIDUAL | SMALL GROUP | LARGE GROUP |
|---|---|---|---|
| **Obesity (but not pre-diabetes)** | 69.8 per 1,000 | 79.7 per 1,000 | 90.2 per 1,000 |
| **Pre-diabetes (but not obesity)** | 27.1 per 1,000 | 18.4 per 1,000 | 23.7 per 1,000 |
| **Obesity and pre-diabetes** | 13.4 per 1,000 | 13.3 per 1,000 | 17.6 per 1,000 |
| **Total prevalence of obesity or pre-diabetes** | 110.2 per 1,000 | 111.3 per 1,000 | 131.5 per 1,000 |

According to the 2022 CDC Behavioral Risk Factor Surveillance System (BRFSS) over 25% of Colorado adults were obese in 2022.[14] In 2021, 10% of high school students in Colorado reported being obese.[3] The CDC also estimates that in 2021, 38% of the total US adult population had pre-diabetes.

Studies show that the use of administrative diagnoses coded in claims data to classify patients as overweight or obese may meaningfully underestimate the prevalence of those conditions.[5] Claims data diagnosed prevalence is based on doctors coding an official diagnosis for an individual. CDC prevalence rates are based on self-reported data, not claims. Additionally, the diagnosed prevalence rates from the claims data include are across all ages.

For purposes of our analysis, we are relying on diagnosed prevalence rates to inform our utilization assumptions since a diagnosis would be required to determine appropriateness and medical necessity of treatments.

### INSURANCE COVERAGE OF TREATMENTS FOR OBESITY AND PRE-DIABETES

As noted in the Background section of this report, there are varying levels of coverage for treatment options for obesity and pre-diabetes in Colorado. In particular, medication therapies are the least commonly covered treatment.

Exhibit 3 below displays the percentage of enrollees who have coverage for each type of treatment based on survey responses received from carriers.

**EXHIBIT 3: PERCENT OF ENROLLEES WITH CURRENT COVERAGE FOR TREATMENTS FOR OBESITY AND PRE-DIABETES AT BASELINE**

| | INDIVIDUAL | SMALL GROUP | LARGE GROUP |
|---|---|---|---|
| **Medication therapies** | 3.5% | 0.0% | 9.9% |
| **IBT: Nutrition related services** | 83.1% | 100.0% | 83.4% |
| **IBT: Physical activity related services** | 38.5% | 35.3% | 63.9% |
| **IBT: Behavioral health therapies** | 83.3% | 99.6% | 82.8% |
| **Bariatric procedures** | 100.0% | 99.7% | 43.1% |

Information regarding current coverage of diabetes prevention IBT services was not included in the carrier survey, so we assumed diabetes prevention IBT is currently covered by 94% of plans; because most diabetes prevention programs are certified by the Center for Disease Control and Prevention (CDC), we relied on their list of commercial plans who currently cover the National Diabetes Prevention Program (DPP) lifestyle change program to develop our estimate[53].

The proposed language would require all carriers to cover comprehensive weight management treatments for obesity and pre-diabetes. Therefore, we have modeled all treatment categories having 100% coverage post legislation.

### UTILIZATION

Weight management treatments were split into medication therapies, intensive behavioral therapy (IBT), and bariatric procedures. Exhibit 4 below displays the projected baseline utilization per 1,000 enrollees in the first year (2025 for individual and small group and 2026 for large group). This baseline utilization includes assumed utilization for those that currently have coverage and those that do not currently have coverage and are paying out of pocket for these services. For medication therapies it is the expected number of prescriptions per 1,000 enrollees in the first year (2025 for individual and small group and 2026 for large group).

**EXHIBIT 4: BASELINE TREATMENT FOR OBESITY AND PRE-DIABETES UTILIZATION PER 1,000 IN 2025 AND 2026**

| | INDIVIDUAL (2025) | SMALL GROUP (2025) | LARGE GROUP (2026) |
|---|---|---|---|
| **Medication Therapies** | 1.5 | 0.0 | 5.0 |
| **IBT** | 63.0 | 65.8 | 98.4 |
| **Bariatric Procedures** | 0.3 | 0.4 | 0.3 |

The estimated marginal increase in utilization for weight management treatment benefits, assuming all carriers must provide comprehensive coverage of obesity and pre-diabetes, is shown in Exhibit 5.

**EXHIBIT 5: MARGINAL UTILIZATION PER 1,000 FOR WEIGHT MANAGEMENT TREATMENTS IN 2025 AND 2026**

| | INDIVIDUAL (2025) | SMALL GROUP (2025) | LARGE GROUP (2026) |
|---|---|---|---|
| **Medication Therapies** | 40.0 | 41.9 | 45.9 |
| **IBT** | 19.7 | 18.2 | 17.3 |
| **Bariatric Procedures** | 0.0 | 0.0 | 0.4 |

## COST PER SERVICE AND ENROLLEE COST SHARING

As noted in prior sections of the report, we anticipate that weight management treatments for obesity and pre-diabetes will be split into three broad categories: medication therapies, intensive behavioral therapy (IBT), and bariatric procedures. We have summarized the cost per service for each of these treatments below.

We do not anticipate the proposed legislation will change the underlying price of the treatments, and thus did not assume the average cost per service of weight management treatments to change after the effective date of the proposed legislation.

### Medication therapies

We leveraged drug prices from the Medi-Span drug database to develop average cost estimates for both GLP-1 and non-GLP1 FDA-approved anti-obesity medications for those diagnosed with obesity or pre-diabetes. We estimate that the average cost per prescription net of manufacturer rebates is approximately $525 in 2025.

### IBT

The average cost for IBT will vary by type of therapy. The cost per service also varies by market due to demographic and geographic variations by market. The estimated average cost per service in the first year (2025 for individual and small group and 2026 for large group) is shown in Exhibit 6.

**EXHIBIT 6: AVERAGE COST PER SERVICE FOR IBT SERVICES**

| | INDIVIDUAL (2025) | SMALL GROUP (2025) | LARGE GROUP (2026) |
|---|---|---|---|
| **Nutrition Related Services** | $180 | $233 | $218 |
| **Physical Activity Services** | $15 | $15 | $16 |
| **Behavioral Counseling Services** | $201 | $210 | $216 |
| **Diabetes Prevention Program Services** | $190 | $182 | $137 |

Where sufficient data existed, we leveraged the APCD to develop average cost estimates for various IBT treatments for those diagnosed with obesity or pre-diabetes. Sufficient claims data did not exist for physical activity services and the average cost was estimated based on a review of various prices for exercise classes offered from Colorado town recreation departments and universities as well as gyms and punch pass services.

### Bariatric Procedures

We leveraged the APCD to develop average cost estimates for those diagnosed with obesity or pre-diabetes. We estimate that the average cost per bariatric procedure case is approximately $36,147 in 2025 for individual plans, $46,941 in 2025 for small group plans, and $33,493 in 2026 for large group plans. The cost per service varies by market due to demographic and geographic variations by market.

## PREMIUM IMPACT

The estimated premium impact from implementation of the proposed legislative language is shown in Exhibit 7 below. Because the legislative language proposes an implementation date of January 1, 2025 for individual and small group plans and January 1, 2026 for large group plans, we are showing a one-year implementation impact for the calendar year 2025 for individual and small group plans and for calendar year 2026 for large group. The five-year cumulative impact is for years 2025 through 2029 and the ten-year cumulative impact is for years 2025 through 2034, for all groups.

- For individual insurance, we estimate a one-year (2025) total premium increase of $5,087,000, a five-year (2025-2029) cumulative total premium increase of $27,700,000, and a ten-year (2025-2034) cumulative total premium increase of $61,982,000 or $1.68, $1.79, and $1.96 per member per month, respectively. As a percentage, this increase ranges from 0.24% to 0.28% over baseline.
- For small group insurance, we estimate a one-year (2025) total premium increase of $5,228,000, a five-year (2025-2029) cumulative total premium increase of $28,261,000, and a ten-year (2025-2034) cumulative total premium increase of $62,647,000 or $1.75, $1.86, and $2.01 per member per month, respectively. As a percentage, this increase ranges from 0.26% to 0.32% over baseline.
- For large group insurance, we estimate a one-year (2026) total premium increase of $20,152,000, a five-year (2025-2029) cumulative total premium increase of $83,881,000, and a ten-year (2025-2034) cumulative total premium increase of $202,103,000 or $3.25, $3.33, and $3.48 per member per month, respectively. As a percentage, this increase ranges from 0.50% to 0.63% over baseline.

**EXHIBIT 7: ESTIMATED PREMIUM IMPACT OF PROPOSED LEGISLATIVE LANGUAGE**

| | 1 YEAR (2025) IMPACT | 1 YEAR (2026) IMPACT | 5 YEAR (2025-2029) CUMULATIVE IMPACT | 10 YEAR (2025-2034) CUMULATIVE IMPACT |
|---|---|---|---|---|
| Individual - Total Dollars | $5,087,000 | | $27,700,000 | $61,982,000 |
| Individual - PMPM | $1.68 | | $1.79 | $1.96 |
| Individual - Percent Change | 0.28% | | 0.26% | 0.24% |
| | | | | |
| Small Group - Total Dollars | $5,228,000 | | $28,261,000 | $62,647,000 |
| Small Group - PMPM | $1.75 | | $1.86 | $2.01 |
| Small Group - Percent Change | 0.32% | | 0.29% | 0.26% |
| | | | | |
| Large Group - Total Dollars | | $20,152,000 | $83,881,000 | $202,103,000 |
| Large Group - PMPM | | $3.25 | $3.33 | $3.48 |
| Large Group - Percent Change | | 0.63% | 0.58% | 0.50% |

| | 1 YEAR (2025 IND AND SG, 2026 LG) IMPACT | 5 YEAR (2025-2029) CUMULATIVE IMPACT | 10 YEAR (2025-2034) CUMULATIVE IMPACT |
|---|---|---|---|
| **All Commercial - Total Dollars** | **$30,467,000** | **$139,842,000** | **$326,732,000** |
| **All Commercial - PMPM** | **$2.49** | **$2.51** | **$2.70** |
| **All Commercial - Percent Change** | **0.46%** | **0.40%** | **0.36%** |

The estimated premium impact attributable to each service category is shown in Exhibit 8 below. The contribution of each service category to the total premium impact is displayed in the bottom section of the exhibit.

**EXHIBIT 8: INSURER PREMIUM CHANGE ATTRIBUTABLE TO PROPOSED BENEFITS, BY SERVICE CATEGORY**

| | INDIVIDUAL (2025) | SMALL GROUP (2025) | LARGE GROUP (2026) |
|---|---|---|---|
| PMPM - Medication Therapies | $1.60 | $1.71 | $2.06 |
| PMPM – IBT | $0.08 | $0.04 | $0.07 |
| PMPM - Bariatric Procedures | $0.00 | $0.00 | $1.12 |
| **PMPM - All Services** | **$1.68** | **$1.75** | **$3.25** |
| Contribution to Impact - Medication Therapies | 95.06% | 97.66% | 63.31% |
| Contribution to Impact – IBT | 4.94% | 2.08% | 2.07% |
| Contribution to Impact - Bariatric Procedures | 0.00% | 0.26% | 34.62% |

For medication therapies, the estimated average allowed cost, net of rebates, per prescription is estimated to be $525 in 2025. The estimated unit cost is based on a 30-day supply and reflects pricing concessions from manufacturer rebates, which are highly confidential, but we have assumed to be 40%. Please see the “Methodology and Assumptions” section for more details on these assumptions. The current low coverage, high cost, and high consumer interest in these medication therapies result in these therapies accounting for over 95% of the total premium impact of the proposed legislation for the individual and small group markets.

The estimated average cost of bariatric surgery in 2025 is $42,000. Although utilization is considerably lower than that of medication therapies, the high cost per service and significantly lower current coverage of bariatric procedures causes the proposed legislation to have a greater premium impact on the large group market ($3.25 PMPM in 2026) than the individual and small group markets ($1.68 and $1.75 PMPM respectively in 2025).

## STATE DEFRAYAL OF MANDATED BENEFITS IN EXCESS OF ESSENTIAL HEALTH BENEFITS

Under federal law, states must defray the premium cost of mandated benefits in excess of Essential Health Benefits (EHBs) for Qualified Health Plans (QHPs) offered on the individual and small group markets.

With respect to the services in the proposed legislation, it appears that carriers offering individual and small group health benefit plans in Colorado are currently covering some of the benefits, such as nutrition related services, behavioral health services, and bariatric surgery services, as part of the coverage required under the state’s EHB benchmark plan. As long as the law is written in a manner to be clear that the coverage is not in excess of EHBs, it does not appear that the legislative proposal would be a new coverage that exceeds EHB.

Some of the other services in the proposed legislation, however, appear to be in addition to EHB. Exhibit 9 shows the estimated average first year (2025), 5-year cumulative (2025-2029), and 10-year cumulative premium cost that may be defrayed. Note that since we have no way of distinguishing QHPs from non-QHPs, we have presented our results assuming all individual and small group market enrollees are included.

**EXHIBIT 9: POSSIBLE PREMIUM DEFRAYAL, BY SERVICE CATEGORY**

| | 1-YEAR | 5-YEAR CUMULATIVE | 10-YEAR CUMULATIVE |
|---|---|---|---|
| **Total small group and individual enrollment** | **501,161** | **2,553,420** | **5,240,449** |
| PMPM - Medication Therapies | $1.682 | $1.791 | $1.943 |
| PMPM - Physical Activity Services | $0.046 | $0.047 | $0.050 |
| PMPM - Diabetes Prevention Program Services | $0.145 | $0.154 | $0.168 |
| **PMPM - All Defrayed Services** | **$1.873** | **$1.992** | **$2.160** |
| Total Dollars - Medication Therapies | $10,118,000 | $54,880,000 | $122,155,000 |
| Total Dollars - Physical Activity Services | $274,000 | $1,446,000 | $3,117,000 |
| Total Dollars - Diabetes Prevention Program Services | $869,000 | $4,711,000 | $10,547,000 |
| **Total Dollars - All Defrayed Services** | **$11,261,000** | **$61,037,000** | **$135,819,000** |

Ultimately, the Colorado DOI believes if it were determined to be an excess of EHB coverage, the state could be required to defray the costs of mandating coverage for all of the proposed benefits. In that case, the possible premium defrayal would be greater than what is presented in Exhibit 9.

## ENROLLEE OUT-OF-POCKET AND TOTAL COST OF CARE IMPACT

The estimated enrollee out-of-pocket cost impact (including both cost sharing and the cost of non-covered benefits at baseline) is in Exhibit 11 below. We assumed that there is some portion of the obese and pre-diabetic population that is currently paying for more nominal non-covered IBT services completely out of pocket at baseline. For more expensive services such as medication therapies and bariatric surgery, we assume that obese and pre-diabetic individuals are not currently paying for non-covered services fully out of pocket. We have assumed that all non-covered benefits that were paid in full by the enrollee at baseline would be included as covered benefits. Therefore, a portion of these newly covered benefits would be part of the premium cost post benefit requirement. However, these services are not required to be covered with no cost sharing, so a portion of these newly covered benefits would be part of the patient out-of-pocket costs post benefit requirement. Many of these services are likely still subject to significant cost sharing. This results in the increase of out-of-pocket costs shown below after accounting for member cost sharing on newly covered benefits. Because the baseline enrollee out-of-pocket costs for these services are relatively small ($0.30, $0.42, and $0.62 PMPM for individual (2025), small group (2025), and large group (2026), respectively) the enrollee out-of-pocket percent change impact of the proposed legislative language is much more significant (154.8%, 98.5%, and 68.1%) than the impact on premium or total cost shown in exhibits 7 and 11.

- For individual insurance, we estimate a one-year (2025) total patient out-of-pocket increase of $1,261,000, a five-year (2025-2029) cumulative total patient out-of-pocket increase of $6,848,000, and a ten-year (2025-2034) cumulative total patient out-of-pocket increase of $15,252,000 or $0.42, $0.44, and $0.48 per member per month, respectively. As a percentage, this increase ranges from 138% to 155% over baseline.
- For small group insurance, we estimate a one-year (2025) total patient out-of-pocket increase of $1,168,000, a five-year (2025-2029) cumulative total patient out-of-pocket increase of $6,369,000, and a ten-year (2025-2034) cumulative total patient out-of-pocket increase of $14,285,000 or $0.39, $0.42, and $0.46 per member per month, respectively. As a percentage, this increase ranges from 87% to 99% over baseline.
- For large group insurance, we estimate a one-year (2026) total patient out-of-pocket increase of $2,286,000, a five-year (2025-2029) cumulative total patient out-of-pocket increase of $10,078,000, and a ten-year (2025-2034) cumulative total patient out-of-pocket increase of $26,848,000 or $0.37, $0.40, and $0.46 per member per month, respectively. As a percentage, this increase ranges from 65% to 68% over baseline.

**EXHIBIT 10: ESTIMATED ENROLLEE OUT-OF-POCKET IMPACT OF PROPOSED LEGISLATIVE LANGUAGE**

| | 1 YEAR (2025) IMPACT | 1 YEAR (2026) IMPACT | 5 YEAR (2025-2029) CUMULATIVE IMPACT | 10 YEAR (2025-2034) CUMULATIVE IMPACT |
|---|---|---|---|---|
| Individual - Total Dollars | $1,261,000 | | $6,848,000 | $15,252,000 |
| Individual – PMPM | $0.42 | | $0.44 | $0.48 |
| Individual - Percent Change | 154.8% | | 147.3% | 137.8% |
| | | | | |
| Small Group - Total Dollars | $1,168,000 | | $6,369,000 | $14,285,000 |
| Small Group – PMPM | $0.39 | | $0.42 | $0.46 |
| Small Group - Percent Change | 98.5% | | 93.3% | 86.6% |
| | | | | |
| Large Group - Total Dollars | | $2,286,000 | $10,078,000 | $26,848,000 |
| Large Group – PMPM | | $0.37 | $0.40 | $0.46 |
| Large Group - Percent Change | | 68.1% | 66.9% | 64.8% |

| | 1 YEAR (2025 IND AND SG, 2026 LG) IMPACT | 5 YEAR (2025-2029) CUMULATIVE IMPACT | 10 YEAR (2025-2034) CUMULATIVE IMPACT |
|---|---|---|---|
| **All Commercial - Total Dollars** | **$4,715,000** | **$23,295,000** | **$56,385,000** |
| **All Commercial – PMPM** | **$0.39** | **$0.42** | **$0.47** |
| **All Commercial - Percent Change** | **87.3%** | **87.3%** | **81.6%** |

The total estimated cost of care impact, including out-of-pocket costs, from implementation of the proposed legislative language is in Exhibit 11 below.

- For individual insurance, we estimate a one-year (2025) total expenditure increase of $6,348,000, a five-year (2025-2029) cumulative total expenditure increase of $34,548,000, and a ten-year (2025-2034) cumulative total expenditure increase of $77,234,000 or $2.10, $2.24 and $2.44 per member per month, respectively. As a percentage, this increase ranges from 0.30% to 0.36% over baseline.
- For small group insurance, we estimate a one-year (2025) total expenditure increase of $6,396,000, a five-year (2025-2029) cumulative total expenditure increase of $34,630,000, and a ten-year (2025-2034) cumulative total expenditure increase of $76,932,000 or $2.14, $2.28, and $2.47 per member per month, respectively. As a percentage, this increase ranges from 0.32% to 0.39% over baseline.
- For large group insurance, we estimate a one-year (2026) total expenditure increase of $22,438,000, a five-year (2025-2029) cumulative total expenditure increase of $93,959,000, and a ten-year (2025-2034) cumulative total expenditure increase of $228,951,000 or $3.62, $3.73, and $3.94 per member per month, respectively. As a percentage, this increase ranges from 0.57% to 0.70% over baseline.

**EXHIBIT 11: ESTIMATED TOTAL COST OF CARE IMPACT OF PROPOSED LEGISLATIVE LANGUAGE**

| | 1 YEAR (2025) IMPACT | 1 YEAR (2026) IMPACT | 5 YEAR (2025-2029) CUMULATIVE IMPACT | 10 YEAR (2025-2034) CUMULATIVE IMPACT |
|---|---|---|---|---|
| Individual - Total Dollars | $6,348,000 | | $34,548,000 | $77,234,000 |
| Individual - PMPM | $2.10 | | $2.24 | $2.44 |
| Individual - Percent Change | 0.36% | | 0.33% | 0.30% |
| | | | | |
| Small Group - Total Dollars | $6,396,000 | | $34,630,000 | $76,932,000 |
| Small Group - PMPM | $2.14 | | $2.28 | $2.47 |
| Small Group - Percent Change | 0.39% | | 0.36% | 0.32% |
| | | | | |
| Large Group - Total Dollars | | $22,438,000 | $93,959,000 | $228,951,000 |
| Large Group - PMPM | | $3.62 | $3.73 | $3.94 |
| Large Group - Percent Change | | 0.70% | 0.65% | 0.57% |

| | 1 Year (2025 Ind and SG, 2026 LG) impact | 5 Year (2025-2029) Cumulative impact | 10 year (2025-2034) Cumulative impact |
|---|---|---|---|
| **All Commercial - Total Dollars** | $35,182,000 | $163,137,000 | $383,117,000 |
| **All Commercial - PMPM** | $2.88 | $2.92 | $3.17 |
| **All Commercial - Percent Change** | 0.53% | 0.47% | 0.42% |

See Appendix E through J for more detailed information on PMPM and Total Cost of Care.

## AMENDMENTS NOT CONSIDERED IN ANALYSIS

As mentioned in the Introduction section, three amendments to the proposed legislation are not able to be considered in this analysis due to timing:

1. **Expansion of weight management therapies for individuals who have a hemoglobin A1C level of 5.6% or higher.** This reference to A1C level has a slightly lower minimum than clinical guidelines for defining pre-diabetes, but we expect this definition to have little impact on the size of the population eligible for coverage for the treatment of pre-diabetes.
2. **Expansion of weight management therapies for individuals whose health-care provider recommends bariatric surgery**. **This amendment could materially and significantly impact results** as it may substantially increase the size of the population with required coverage of intensive behavioral therapy (IBT), bariatric surgery, and FDA-approved anti-obesity medication. Because this amendment requirement is only that a health-care provider recommends bariatric surgery (not that the recommendation for bariatric surgery be based on evidence-based clinical guidelines or that the patient undergo bariatric surgery), health-care providers may increase their recommendations for bariatric surgery to overweight individuals, which then would entitle the individuals to coverage of anti-obesity medication or IBT. Such use of anti-obesity medications for overweight individuals could still be within the FDA-approved indications.
3. **The proposed legislation would apply to state-regulated large group health plans issued or renewed on or after January 1, 2025 and individual and small group health benefit plans issued on or after January 1, 2026.** The original proposed legislation which our analysis was based on applied January 1,

2025 for individual and small group health benefit plans, and January 1, 2026 for large group health benefit plans. Thus, the "first-year" impacts are considered 2025 for individual and small group markets and 2026 for large group markets. Any five-year or ten-year cumulative impacts presented here are considered for the years 2025 through 2029 and 2025 through 2034 respectively, regardless of market. This amendment has little impact on our analysis and only impacts the timing and trend of the first-year impacts.

**LONG TERM HEALTH CARE COST IMPACT**

As mentioned in the Potential Health Benefits section, the durability of weight loss results varies across services. People who lose weight through medication or intensive behavioral and lifestyle therapy will likely gain back at least some of the weight within months to years of treatment. [26,27] Additionally, over the course of time following any implementation of new coverage requirement, new people will become obese and pre-diabetic and seek treatment. To address this churn of people who are obese or pre-diabetic at various points in our analysis, we kept the diagnosed prevalence of obesity and pre-diabetes constant throughout time. This can be observed in the long-term impacts in Exhibit 11 above. The total cost of care impact as a percent change is relatively stable for the one-year impact, five-year cumulative total impact, and ten-year cumulative total impact. Because the diagnosed prevalence of obesity is assumed to not change, the resulting impacts do not compound with time.

If expanded coverage of treatments meaningfully reduces the population prevalence of obesity and pre-diabetes, then the actual cost impacts would compound on each other and vary from what we modeled in our analysis.

There are likely to be medical cost offsets for treating obesity and pre-diabetes through weight loss interventions, but quantifying these offsets would require a systematic literature review and modeling transitions of disease states considering starting BMI, comorbidities, adherence to treatment, amount of weight lost, and weight loss intervention used. Additionally, GLP1 medication therapies are fairly new to the market, and studies estimating long term effectiveness and resulting cost savings are not currently available at the time of this report. Based on the evidence that is available, it is unlikely that the estimated total cost of care impact of the proposed legislation could be completely offset by cost savings generated by weight management treatments. For these reasons we have chosen not to reflect medical cost offsets in our impact analysis. Please see the "Medical Cost Offsets" sub section of the "Methodology and Assumptions" section of the report for more details around possible medical cost offsets.

**SOCIAL AND ECONOMIC IMPACT**

The proposed legislation would have financial impact for prediabetic or obese health plan members who currently do not have coverage for the specified services (Exhibit 3) but are seeking treatment. Coverage would be expanded across all markets for medication therapies and IBT related services and among large group carriers for bariatric surgery. The increase in premiums across the population is $2.49 PMPM on average in the first-year for the total covered population (see Exhibit 7). In addition, cost sharing for weight management treatment may continue to present a financial burden to health plan members, especially for high-cost services, such as bariatric surgery or GLP-1 medications. Higher cost sharing in bariatric surgery has been shown to be associated with lower utilization. A study of commercially insured members who had undergone bariatric surgery in the IBM MarketScan database found that every $1,000 increase in cost sharing was associated with 5 fewer bariatric operations / 1,000 insured lives.[54] Cost-sharing would be the greatest burden for low-income individuals.

Common insurance precertification criteria for bariatric surgery have been shown to reduce utilization. In a study of bariatric utilization by insurance type across 5 counties in Pennsylvania, an insurance requirement for 3-6 months medically supervised weight management was associated with lower odds of undergoing surgery (odds ratio = 0.46). [55]

Societal stigma related to obesity has been shown to negatively impact access and utilization of weight management health care services. Weight bias among health care providers has been shown to impact the quality of care for obese individuals.[56,57] For example, in a randomized prospective study of the relationship between patient obesity and primary care experience, physicians were found to spend less time educating obese individuals about their health and less time building rapport.[58] Evidence from systematic literature reviews on weight bias in health care

shows providers often view patients with obesity as less adherent, more lazy, and less disciplined than patients without obesity.[56,57] This stigma can negatively impact an individual's self-esteem and trust with providers and can lead to care avoidance and low treatment adherence.[57,59] In a national survey about provider weight stigma consisting of 600 adults with a BMI at least 25, patients who perceive judgement from their provider about their weight were less likely to achieve weight loss than those who did not perceive judgement.[60]

Weight stigma has also been shown to impact utilization of exercise facilities. In a survey of gym experiences among individuals with BMI at least 25, experiences with stigma at the gym were associated with negative attitudes toward gym attendance and poor self-reported physical and emotional health.[61]

Social determinants of health (SDOH) may also influence the ability for individuals to access weight management treatment and contribute to health inequities among low-income individuals, people of color and individuals living in rural areas.[35, 62, 63] SDOH are the nonmedical factors that influence health outcomes. They are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life[64] Access to transportation, food insecurity and schedule constraints such as childcare and work schedules can make it difficult to attend lifestyle or behavioral interventions.[35,63] In 2020, 8% of Coloradans experienced food insecurity and 5% of the population has limited access to healthy food.[65]

# Methodology and Assumptions

As noted in the prior section, the financial evaluation projects the population, cost of benefits, premium and enrollee cost sharing for calendar year 2025 (for individual and small group markets), calendar year 2026 (for large group markets), calendar years 2025 through 2029, and calendar years 2025 through 2034 under the following two scenarios:

1. Baseline – Proposed legislation **does not** go into effect.
2. Post benefit requirement – Proposed legislation **does** go into effect.

The difference between the baseline and post benefit requirement values is the impact of the proposed legislation.

### COLORADO POPULATION

We used 2022 enrollment data from the Colorado All Payer Claims Database (APCD) to identify fully-insured commercial enrollment in preferred provider organization plans (PPO), point of service plans (POS), exclusive provider organization plans (EPO), and health maintenance organization plans (HMO). We limited the data to enrollment months with both medical and pharmacy coverage and placed each enrollment month into individual, small group, or large group based on their plan size. We then used Colorado population projections from the Department of Local Affairs to trend the 2022 enrollment data to 2025 through 2034.

### COLORADO CLAIMS AND PREMIUM

Using the data provided in the Colorado APCD, we summarized medical and pharmacy claims by individual, small group, and large group incurred during calendar year 2022 and paid through July 2023. Claims were adjusted to account for claims incurred but not paid using completion factors calculated using the development method. The resulting completion factors are in Exhibit 12. The medical factors range from 0.967 to 0.980 by market and the pharmacy completion factors range from 0.997 to 1.000.

**EXHIBIT 12: 2022 COMPLETION FACTORS**

| | INDIVIDUAL | SMALL GROUP | LARGE GROUP |
|---|---|---|---|
| **Medical Completion Factor** | 0.980 | 0.973 | 0.967 |
| **Pharmacy Completion Factor** | 0.998 | 1.000 | 0.997 |

The completed 2022 medical and pharmacy paid claims were projected to represent 2025 through 2034 claims using a 6.5% annual claims trend with a 0.5% cost share leveraging factor. Claims trend was developed by reviewing historical individual, small group, and large group trend in Colorado and nationwide, as well as reviewing Colorado filing documents and unified rate review templates submitted by various insurance carriers to the DOI.

We applied administration expense ratios by individual, small group, and large group lines of business from the 2020 and 2021 Colorado DOI Department of Regulatory Agencies Health Insurance Cost Reports to the projected claims to develop premiums for 2025 through 2034. Administration projections include a 2% assumed profit. Exhibit 13 shows the assumed administration expenses as a percentage of total premium.

**EXHIBIT 13: ADMINISTRATION INCLUDING PROFIT, AS A PERCENTAGE OF TOTAL PREMIUM**

| | INDIVIDUAL | SMALL GROUP | LARGE GROUP |
|---|---|---|---|
| **Administration Ratio** | 16.8% | 16.1% | 10.0% |

## BENEFIT COVERAGE

As noted previously, the Colorado Division of Insurance surveyed insurance carriers in Colorado about current coverage of weight management treatments for obesity and pre-diabetes. We received responses from 14 carriers. The survey provided to respondents is in Appendix A.

There are varying levels of coverage for treatment options for obesity and pre-diabetes. In particular, medication therapies are the least commonly covered treatment. Exhibit 3 displays the percentage of enrollees who have coverage for each type of treatment based on survey responses received. Additionally, we assumed 94% of enrollees currently have coverage for diabetes prevention programs (see "Insurance Coverage of Weight Management Treatment for Obesity and Pre-Diabetes" section for more details on the development of this assumption). The proposed language would cover all treatment types and we have assumed 100% coverage for all treatment types post mandate.

## UTILIZATION FOR ENROLLEES WITH COVERAGE AT BASELINE

We identified and summarized weight management treatment services for obesity and pre-diabetes from the 2022 incurred claims data in Colorado APCD by commercial market. We first identified enrollees with obesity and/or pre-diabetes using ICD-10-CM diagnosis codes and diabetes prevention program service codes (only for pre-diabetes). Current Procedural Terminology (CPT)/Healthcare Common Procedure Coding System (HCPCS); International Classification of Diseases, 10th Revision, Procedure Coding System (ICD-10-PCS); and National Drug Code (NDC) codes were used to identify services for these enrollees from the following categories:

- Intensive behavioral or lifestyle therapy
  - Nutrition related services (e.g., dietary counseling, medical nutrition therapy, weight management class)
  - Physical activity related services (e.g., exercise counseling, exercise class, gym club membership)
  - Behavioral health therapies (e.g. health behavior assessment and intervention, preventive medicine counseling and risk factor reduction)
    - Select services required a diagnosis code indicating that the service was related to obesity and/or pre-diabetes.
  - Diabetes prevention program services (for those with pre-diabetes)
- Bariatric surgery (e.g., laparoscopic bariatric surgery, gastric bypass surgery)
- FDA-approved anti-obesity medications – Brand names (generic)
  - Glucagon-like peptide 1 (GLP-1) receptor agonists
    - Saxenda (Liraglutide)
    - Wegovy (Semaglutide)
    - Zepbound (Tirzepatide)
  - Non-GLP-1s
    - Contrave (Bupropion and Naltrexone)
    - Alli and Xenical (Orlistat)
    - Qsymia (Phentermine and Topiramate)
    - Imcivree (Setmelanotide)
    - Adipex-P (Phentermine)

ICD-10-CM diagnosis, ICD-10-PCS, HCPCS, and NDC codes identified by Milliman clinicians were used to identify individuals with obesity and pre-diabetes and services representing the management, treatment, and monitoring of those conditions (physical activity, nutrition-related services, behavioral counseling for weight loss, bariatric surgery, weight loss medications, diabetes prevention program services). While some codes were specific to treatments for obesity and pre-diabetes, regardless of the diagnosis codes on the encounter claims, other more general codes were attributed to treatments for obesity and pre-diabetes only if weight- or pre-diabetes-related diagnosis codes were observed on the claims for these services. Bariatric surgery included all claims on the day of the bariatric surgery (outpatient bariatric surgery) or during the full duration of the inpatient stay (inpatient bariatric surgery). The code lists and algorithms to identify the relevant medical conditions and treatments were developed to ensure all services identified were for the diagnosis, treatment, appropriate management, or ongoing monitoring of obesity or pre-diabetes, consistent with the coverage required by the proposed legislation.

Where sufficient data existed, we leveraged the Colorado APCD to develop underlying baseline utilization estimates for those that currently have coverage. Details about the utilization of each service category are below.

To project 2022 through 2034 utilization, we applied secular utilization trend. Secular utilization trend is a measure of change in the number of services per member, resulting from only those factors that affect a static population with a fixed set of benefits. We assumed the following secular utilization trends by service category:

**EXHIBIT 14: ASSUMED ANNUAL UTILIZATION TRENDS BY SERVICE CATEGORY**

| SERVICE CATEGORY | UTILIZATION TREND |
|---|---|
| **Medication Therapies** | 3.10% |
| **Intensive Behavioral Therapies** | 0.50% |
| **Bariatric Procedures** | 0.50% |

### Intensive behavioral or lifestyle therapy (IBT)

Sufficient data existed for nutrition related services, behavioral health therapies, and diabetes prevention program services in the Colorado APCD to develop underlying baseline utilization estimates for those that currently have coverage. Since physical related activity services are often reimbursed outside of claims systems, we relied on participation rates and number of services from a study of community health center weight management programs which included exercise classes for obese participants to develop our baseline utilization assumptions.[41]

Working from the APCD data and the literature cited above, the estimated first year baseline utilization for those that currently have coverage (2025 for individual and small group and 2026 for large group), including those who are not obese or prediabetic, is shown in Exhibit 15. Estimated utilization varies by market due to demographic and geographic variations by market.

**EXHIBIT 15: BASELINE BENEFIT UTIL / 1,000 FOR THOSE CURRENTLY COVERED FOR IBT SERVICES**

| | INDIVIDUAL (2025) | SMALL GROUP (2025) | LARGE GROUP (2026) |
|---|---|---|---|
| **Nutrition Related Services** | 4.9 | 5.3 | 8.4 |
| **Physical Activity Services** | 48.8 | 49.3 | 58.5 |
| **Behavioral Counseling Services** | 17.7 | 20.3 | 34.6 |
| **Diabetes Prevention Program Services** | 11.4 | 9.2 | 14.2 |

### Bariatric Surgery

Sufficient data existed for bariatric surgeries in the Colorado APCD to develop underlying baseline utilization estimates for those that currently have coverage. We identified trigger procedures to construct bariatric surgery cases, to develop underlying baseline utilization rates. Working from this data, we estimated baseline bariatric surgery utilization per 1,000 for those with current coverage to be 0.3, 0.4, and 0.7 for individual (calendar year 2025), small group (calendar year 2025), and large group (calendar year 2026) respectively.

### Medication Therapies

We considered separate baseline utilization assumptions for GLP-1 drugs and non-GLP-1 drugs. We estimated that 3.2% of enrollees with obesity would use GLP-1 drugs if fully covered by their health plan and 1.5% for non-GLP-1 drugs. These estimates were based on 2023 pharmacy claims data from Milliman's proprietary MyRxConsultant for a national self-insured employer that offers coverage of these medications and has offered such coverage for several years, and a study of anti-obesity medication use in commercial populations.[34] Additionally, we assumed each user would fill 8 prescriptions per year which was based on usage patterns observed in Milliman research. These assumptions resulted in overall baseline utilization for those with coverage for medication therapies (GLP-1s and non-GLP-1s) of 41.4, 41.9, and 51.0 prescriptions per 1,000 for individual (calendar year 2025), small group (calendar year 2025), and large group (calendar year 2026) respectively.

## UTILIZATION FOR ENROLLEES WITHOUT COVERAGE AT BASELINE

At baseline, we assumed that there would be enrollees without coverage that are currently utilizing services and self-paying for these services. We assumed this self-pay utilization would be less than those currently with coverage and would vary by cost of the underlying service. We assumed that self-pay utilization for medication therapies and bariatric surgery is 0 due to the high costs of these services. Our assumed IBT services reduced utilization factor for self-pay compared to currently covered utilization was informed by Milliman's commercial *Health Cost Guidelines*™ induced utilization factors and actuarial judgment.

Post benefit requirement, we assumed obese and pre-diabetic individuals who did not have coverage at baseline would use weight management treatment services at the same rate as enrollees with coverage.

## COST PER SERVICE AND ENROLLEE COST SHARING

Similar to our analysis of current utilization, we identified and summarized average cost for weight management treatment services for obese and pre-diabetic individuals from the 2022 incurred claims data in the Colorado APCD by commercial market. Where sufficient data existed, we leveraged this data to develop underlying baseline average cost estimates for those that currently have coverage.

We assumed the following annual unit cost trends by service category to project 2022 through 2034 average cost per service and reflect anticipated trends for various services (e.g. inpatient trends for bariatric surgery, professional trends for IBT):

**EXHIBIT 16: ASSUMED ANNUAL UTILIZATION TRENDS BY SERVICE CATEGORY**

| SERVICE CATEGORY | UNIT COST TREND |
|---|---|
| **Medication Therapies** | 0.00% |
| **Intensive Behavioral Therapies** | 5.75% |
| **Bariatric Procedures** | 5.00% |

### Intensive behavioral or lifestyle therapy (IBT)

The average cost for IBT will vary by type of therapy. Sufficient data existed for nutrition related services, behavioral health therapies, and diabetes prevention program services in the Colorado APCD to develop underlying baseline average cost and patient cost sharing estimates for those that currently have coverage. Since physical related activity services are often reimbursed outside of claims systems, we reviewed various prices for exercise classes from Colorado town recreation departments and universities as well as gyms and punch pass services to estimate the average cost per service. Patient cost sharing for physical activity services was calculated by applying the ratio of 2022 insurer paid amount per professional service for obese and pre-diabetic patients to 2022 average cost from the Colorado APCD to the 2025 through 2034 projected average allowed cost.

The estimated first year (2025 for individual and small group and 2026 for large group) average cost per service for IBT services for those with current coverage is shown in Exhibit 17. The cost per service also varies by market due to demographic and geographic variations by market.

**EXHIBIT 17 AVERAGE COST PER SERVICE FOR IBT SERVICES**

| | INDIVIDUAL (2025) | SMALL GROUP (2025) | LARGE GROUP (2026) |
|---|---|---|---|
| **Nutrition Related Services** | $180 | $233 | $218 |
| **Physical Activity Services** | $15 | $15 | $16 |
| **Behavioral Counseling Services** | $201 | $210 | $216 |
| **Diabetes Prevention Program Services** | $190 | $182 | $137 |

### Bariatric Surgery

Sufficient data existed for bariatric surgeries in the Colorado APCD to develop underlying baseline average cost per service and patient cost sharing estimates for those that currently have coverage. We identified trigger procedures to construct bariatric surgery cases, to develop underlying baseline cost assumptions. We estimate that the average cost per bariatric procedure case for those who currently have coverage is approximately $36,145 in 2025 for individual plans, $46,940 in 2025 for small group plans, and $35,495 in 2026 for large group plans. The cost per service varies by market due to demographic and geographic variations by market.

### Medication Therapies

We considered separate baseline cost per service assumptions for GLP-1 drugs and non-GLP-1 drugs. We estimated an average 2025 unit cost net of rebates of $753 per prescription for GLP-1 drugs and $34 per prescription for non-GLP-1 drugs. The estimated unit cost is based on a 30-day supply and reflects pricing concessions from manufacturer rebates. Manufacturer rebates are highly confidential, but we assumed they would be 40% based on a publicized 40% manufacturer rebate the North Carolina State Health Plan would have received for Wegovy and Saxenda from Novo Nordisk.[66] Unit cost was estimated from the Medi-Span drug database. Patient cost sharing estimates for those who currently have coverage for medication therapies are based on Milliman pharmacy data.

We assumed that the average cost per service would be the same as the currently covered average cost per service for those without current coverage. Additionally, we assumed no change in the average cost of weight management treatments post benefit requirement.

For those without current coverage, we assumed 100% of the average cost per service would be paid by the enrollee. We assumed the same cost sharing percentage as that seen by the population who currently have coverage at baseline after the implementation of the mandated benefit.

Patient cost sharing is calculated by observing the ratio of 2022 insurer paid amount per service to 2022 average cost per service in the Colorado APCD, then applying that ratio to the 2025 through 2034 projected average allowed cost.

**MEDICAL COST OFFSETS**

While studies have shown that sustained weight loss for individuals with obesity can reduce health risks and improve health outcomes of treated comorbidities[23,25,67] , quantifying the impact in terms of impact to an individual's total health care costs is challenging and published estimated impacts have varied. Please see the "Potential Health Benefits of Treatment" section for more details.

There are many factors to consider when quantifying the cost savings impact of these treatments including starting BMI and comorbidities, adherence to treatment, amount of weight lost, weight loss intervention used and the duration of sustained weight loss. As mentioned in the "Long Term Health Care Cost Impact" section, the durability of weight loss results can also vary depending on treatment which may influence health care long term costs. Estimates of annual cost savings from surgical and non-surgical weight loss interventions, excluding GLP-1s, ranged from $0 to $2,316 with greater cost reduction associated with greater weight loss [68, 69,.70] In a study of cost savings and health care utilization from participation in a digital Diabetes Prevention Program, commercially insured participants had a reduction in all-cause spending of $1,169 per participant per year primarily driven by a reduction in inpatient admits and length of stay.[71] A longitudinal analysis comparing a bariatric surgery cohort with a matched non-surgical cohort enrolled in BlueCross BlueShield health insurance plans found that bariatric surgery does not reduce overall health care costs in the long term.[69]

A systematic literature review of comparing the relative costs of anti-obesity medication, including non-GLP-1s and semaglutide, found that medication resulted in $2,586 of direct medical costs savings per patient per year (Kim et al. 2023).[72] Yet, in another study of changes to total cost of care after one year of GLP-1 weight loss treatment found that the annual cost for those taking GLP-1 drugs was $7,727 higher per member as compared to a control group.[32]

We can see from these few examples that cost savings are highly variable. There may be medical cost offsets for treating obesity and pre-diabetes through weight loss interventions, but quantifying these offsets would require a systematic literature review and modeling transitions of disease states considering starting BMI, comorbidities, adherence to treatment, amount of weight lost, and weight loss intervention used. Additionally, GLP-1 medication therapies are fairly new to the market, and studies estimating long term effectiveness and resulting cost savings are not currently available at the time of this report. Based on the evidence that is available, it is unlikely that the estimated total cost of care impact of the proposed legislation could be completely offset by cost savings generated by weight management treatments. For example, the 1-year impact across all commercial markets is $2.88 PMPM (see Exhibit 11). With a diagnosed prevalence rate of obesity or pre-diabetes of 12.1% across all markets (see Exhibit 2) and assuming roughly 7.5% of individuals with obesity or pre-diabetes are utilizing weight management treatments, on average, each individual diagnosed with obesity or pre-diabetes and utilizing weight management treatments would have to achieve approximately $3,800 of annual savings from weight management treatments to completely offset the cost of these services. The combination of weight loss treatments used by each individual may influence this estimate.

For these reasons we have chosen not to reflect medical cost offsets in our impact analysis.

**ADMINISTRATIVE COSTS**

We assumed no undue burden from administering this additional benefit. Administration costs will increase in proportion to the cost of additional mandated benefits.

**CONSIDERATIONS AND LIMITATIONS**

As stated in the Obesity and Pre-Diabetes Utilization and Cost section above, we relied on data from the Colorado APCD as well as available research to develop cost and utilization assumptions for this analysis. To the extent that the assumed cost and utilization of weight management treatments varies from these assumptions, then some components of our analysis could be materially different.

For purposes of our analysis, we are relying on diagnosed prevalence rates to inform our utilization assumptions since a diagnosis would be required to determine appropriateness and medical necessity of treatments. As stated in the "Financial Analysis" Section, administrative diagnoses coded in the claims data may meaningfully underestimate

the prevalence of obesity. It is possible that the diagnosed prevalence rates may increase as a result of this proposed legislation. We have not assumed an increase in diagnosed prevalence rates in our analysis. Any offsets modeled in the form of reduced medical costs due to effective weight management treatments are highly theoretical. Due to the emerging use of GLP-1 medications, these long-term effects have not been observed. Actual effects could be materially different.

We received three potential amendments to the proposed legislation that were not considered in our analysis and are therefore not included in these results:

1. **Expansion of weight management therapies for individuals who have a hemoglobin A1C level of 5.6% or higher.** This reference to A1C level has a slightly lower minimum than clinical guidelines for defining pre-diabetes, but we expect this definition to have little impact on the size of the population eligible for coverage for the treatment of pre-diabetes.
2. **Expansion of weight management therapies for individuals whose health-care provider recommends bariatric surgery**. **This amendment could materially and significantly impact results** as it may substantially increase the size of the population with required coverage of intensive behavioral therapy (IBT), bariatric surgery, and FDA-approved anti-obesity medication. Because this amendment requirement is only that a health-care provider recommends bariatric surgery (not that the recommendation for bariatric surgery be based on evidence-based clinical guidelines or that the patient undergo bariatric surgery), health-care providers may increase their recommendations for bariatric surgery to overweight individuals, which then would entitle the individuals to coverage of anti-obesity medication or IBT. Such use of anti-obesity medications for overweight individuals could still be within the FDA-approved indications.
3. **The proposed legislation would apply to state-regulated large group health plans issued or renewed on or after January 1, 2025 and individual and small group health benefit plans issued on or after January 1, 2026.** The effective dates of the original proposed legislation which our analysis was based on, were January 1, 2025 for individual and small group health benefit plans, and January 1, 2026 for large group health benefit plans. Thus, the “first-year” impacts are considered 2025 for individual and small group markets and 2026 for large group markets. Any five-year or ten-year cumulative impacts presented here are considered for the years 2025 through 2029 and 2025 through 2034 respectively, regardless of market.

# Variability of Results

Differences between our estimates and actual amounts depend on the extent to which future experience conforms to the assumptions made in this model. It is certain that actual experience will not conform exactly to the assumptions used in this model. Actual amounts will differ from projected amounts to the extent that actual experience is higher or lower than expected.

# Model and Data Reliance

Milliman has developed certain models to estimate the values included in this report. The intent of the models was to estimate the impact of proposed legislation related to the comprehensive coverage of obesity and pre-diabetes. We have reviewed these models, including inputs, calculations, and outputs for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice (ASOP).

The models rely on data and information as input to the models. We have relied upon certain data and information for this purpose and accepted it without a systematic audit. To the extent that the data and information provided are not accurate, or are not complete, the values provided in this report may likewise be inaccurate or incomplete.

Milliman's data and information reliance includes:

- Data from Colorado's All Payer Claims Database (APCD),
- Colorado census data and projections,
- Published papers, reports, and articles listed in the references section, and
- All other sources mentioned inline and in references, including the carrier surveys and studies.

The models, including all input, calculations, and output may not be appropriate for any other purpose.

We have performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our investigation.

# Qualifications to Perform Analysis

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. Shelley Moss is a member of the American Academy of Actuaries and meets the qualification standards for performing the analyses supported by this model.

# Distribution and Usage

Milliman does not intend to benefit, or create any legal duty to, any third-party recipient of its work product, even if Milliman consents to the release of its work product to such third party. Shelley Moss is a member of the American Academy of Actuaries and meets the qualification standards for performing the financial analyses.

# Appendix A: Carrier Coverage Survey


## COVERAGE SURVEY FOR OBESITY TREATMENT

The following survey relates to comprehensive coverage of outcomes-based obesity treatments, including all modalities that support clinically significant weight loss of at least 5% in body weight among persons with obesity.

Services include screening for obesity, screening for obesity-related complications in obese individuals, intensive behavioral therapy (cognitive, physical activity, and nutrition components), pharmacotherapy, bariatric procedures, services to prevent weight regain and support continued monitoring of weight-related health, ongoing services (including pharmacological and behavioral therapy) for individuals who have achieved clinically significant weight loss, and reinitiation or intensification of obesity treatment when a patient begins to gain weight, presents with new or worsening obesity-related complications, or requests intensification of treatment. Coverage must be consistent with professional consensus statements, clinical guidelines, or other evidence-based sources on the appropriate amount, scope, duration, and delivery approach for obesity treatments.

Please return this survey via email to Tara Smith (tara.smith@state.co.us) and Debra Judy (debra.judy@state.co.us) by January 16, 2024.

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1) What is the name of the insurance carrier?

2) Please complete the following table with how many people are enrolled in the following lines of business as of October 31, 2023? Please exclude all self-insured or administrative services only plans in your responses.

| Individual Market | Small Group Market | Large Group Market |
|---|---|---|
| | | |

3) Please complete the following table with the % of members that have coverage of the listed benefits for obesity treatment.

| | Individual Market | Small Group Market | Large Group Market |
|---|---|---|---|
| Screening for obesity | | | |
| Screening for obesity-related complications in obese individuals | | | |
| Medication therapies (e.g., Bupropion-naltrexone, Liraglutide, Orlistat, Semaglutide, Setmelanotide) | | | |
| Nutrition Related Services (e.g., dietary counseling, nutrition class, weight management class) | | | |
| Physical Activity Related Services (e.g., physical therapy education, exercise class) | | | |
| Bariatric procedures (e.g., laparoscopic bariatric surgery, gastric bypass surgery) | | | |

| | | | |
|---|---|---|---|
| Behavioral health therapies (e.g., cognitive behavioral therapy, Exposure and Response Prevention therapy) to manage neuropsychiatric symptoms | | | |

4) Are there currently specific cost sharing requirements for enrollees with coverage for obesity, that differ from standard cost sharing for other benefits (e.g., generic/brand drugs, lab tests, mental health therapy visits, etc.)?

5) For obesity treatments, are there any limitations such as dollar limits or frequency limits on treatment that can be received?

6) Is there any additional information you would like to share about coverage for obesity treatment as defined above?

# Appendix B: Individual Enrollees Impacted by Benefit Requirement

| Individual Market | 1-Year (2025) | 5-Year (2025-2029) | 10-Year (2025-2034) |
|---|---|---|---|
| **Total enrollment subject to state benefit requirements** | 252,347 | 1,286,557 | 2,641,694 |
| **Total population affected** | 252,347 | 1,286,557 | 2,641,694 |
| **Baseline Utilization per 1,000** | | | |
| Medication Therapies | 1.5 | 1.5 | 1.7 |
| Intensive Behavioral Therapies | 63.0 | 63.7 | 64.5 |
| Bariatric Procedures | 0.3 | 0.3 | 0.3 |
| **Baseline Cost per procedure** | | | |
| Medication Therapies | $525 | $525 | $525 |
| Intensive Behavioral Therapies | $105 | $115 | $135 |
| Bariatric Procedures | $36,145 | $40,005 | $45,745 |
| **Baseline Patient Cost-sharing per procedure** | | | |
| Medication Therapies | $125 | $125 | $125 |
| Intensive Behavioral Therapies | $40 | $45 | $55 |
| Bariatric Procedures | $4,845 | $5,365 | $6,135 |
| **Post-benefit requirement Utilization per 1,000** | | | |
| Medication Therapies | 41.4 | 44.1 | 47.8 |
| Intensive Behavioral Therapies | 82.7 | 83.6 | 84.7 |
| Bariatric Procedures | 0.3 | 0.3 | 0.3 |
| **Post-benefit requirement Cost per procedure** | | | |
| Medication Therapies | $525 | $525 | $525 |
| Intensive Behavioral Therapies | $90 | $100 | $115 |
| Bariatric Procedures | $36,145 | $40,005 | $45,745 |
| **Post-benefit requirement Cost-sharing per procedure** | | | |
| Medication Therapies | $125 | $125 | $125 |
| Intensive Behavioral Therapies | $30 | $35 | $40 |
| Bariatric Procedures | $4,845 | $5,365 | $6,135 |

# Appendix C: Small Group Enrollees Impacted by Benefit Requirement

| Small Group Market | 1-Year (2025) | 5-Year (2025-2029) | 10-Year (2025-2034) |
|---|---|---|---|
| **Total enrollment subject to state benefit requirements** | 248,814 | 1,266,864 | 2,598,754 |
| **Total population affected** | 248,814 | 1,266,864 | 2,598,754 |
| **Baseline Utilization per 1,000** | | | |
| Medication Therapies | 0.0 | 0.0 | 0.0 |
| Intensive Behavioral Therapies | 65.8 | 66.5 | 67.3 |
| Bariatric Procedures | 0.4 | 0.4 | 0.4 |
| **Baseline Cost per procedure** | | | |
| Medication Therapies | $525 | $525 | $525 |
| Intensive Behavioral Therapies | $115 | $115 | $115 |
| Bariatric Procedures | $46,940 | $46,940 | $46,940 |
| **Baseline Patient Cost-sharing per procedure** | | | |
| Medication Therapies | $115 | $115 | $115 |
| Intensive Behavioral Therapies | $50 | $55 | $65 |
| Bariatric Procedures | $4,670 | $5,165 | $5,905 |
| **Post-benefit requirement Utilization per 1,000** | | | |
| Medication Therapies | 41.9 | 44.6 | 48.3 |
| Intensive Behavioral Therapies | 84.0 | 84.9 | 86.0 |
| Bariatric Procedures | 0.4 | 0.4 | 0.4 |
| **Post-benefit requirement Cost per procedure** | | | |
| Medication Therapies | $525 | $525 | $525 |
| Intensive Behavioral Therapies | $95 | $95 | $95 |
| Bariatric Procedures | $46,940 | $46,940 | $46,940 |
| **Post-benefit requirement Cost-sharing per procedure** | | | |
| Medication Therapies | $115 | $115 | $115 |
| Intensive Behavioral Therapies | $40 | $45 | $50 |
| Bariatric Procedures | $4,670 | $5,165 | $5,905 |

# Appendix D: Large Group Enrollees Impacted by Benefit Requirement

| Large Group Market | 1-Year (2026) | 5-Year (2025-2029) | 10-Year (2025-2034) |
|---|---|---|---|
| **Total enrollment subject to state benefit requirements** | 516,875 | 2,098,353 | 4,843,730 |
| **Total population affected** | 516,875 | 2,098,353 | 4,843,730 |
| **Baseline Utilization per 1,000** | | | |
| Medication Therapies | 5.0 | 5.3 | 5.7 |
| Intensive Behavioral Therapies | 98.4 | 99.1 | 100.4 |
| Bariatric Procedures | 0.3 | 0.3 | 0.3 |
| **Baseline Cost per procedure** | | | |
| Medication Therapies | $525 | $525 | $525 |
| Intensive Behavioral Therapies | $105 | $105 | $105 |
| Bariatric Procedures | $33,495 | $33,495 | $33,495 |
| **Baseline Patient Cost-sharing per procedure** | | | |
| Medication Therapies | $40 | $40 | $40 |
| Intensive Behavioral Therapies | $65 | $70 | $80 |
| Bariatric Procedures | $4,820 | $5,195 | $5,930 |
| **Post-benefit requirement Utilization per 1,000** | | | |
| Medication Therapies | 51.0 | 53.4 | 57.9 |
| Intensive Behavioral Therapies | 115.6 | 116.5 | 118.0 |
| Bariatric Procedures | 0.7 | 0.7 | 0.8 |
| **Post-benefit requirement Cost per procedure** | | | |
| Medication Therapies | $525 | $525 | $525 |
| Intensive Behavioral Therapies | $100 | $100 | $100 |
| Bariatric Procedures | $33,495 | $33,495 | $33,495 |
| **Post-benefit requirement Cost-sharing per procedure** | | | |
| Medication Therapies | $475 | $475 | $475 |
| Intensive Behavioral Therapies | $60 | $65 | $75 |
| Bariatric Procedures | $21,140 | $21,305 | $21,620 |

# Appendix E: Individual Enrollee PMPM

| Individual Market | 1-Year (2025) | 5-Year (2025-2029) | 10-Year (2025-2034) |
|---|---|---|---|
| **Total enrollment subject to state benefit requirements** | 252,347 | 1,286,557 | 2,641,694 |
| **Total population affected** | 252,347 | 1,286,557 | 2,641,694 |
| **Baseline PMPM** | | | |
| Insurer premium | $590.06 | $680.85 | $822.66 |
| Enrollee cost sharing | $0.30 | $0.33 | $0.39 |
| Enrollee non-covered | $0.04 | $0.05 | $0.05 |
| **Total Baseline PMPM** | $590.39 | $681.23 | $823.10 |
| **Post benefit requirement PMPM** | | | |
| Insurer premium | $591.74 | $682.64 | $824.61 |
| Enrollee cost sharing | $0.75 | $0.82 | $0.92 |
| Enrollee non-covered | $0.00 | $0.00 | $0.00 |
| **Total Post benefit requirement PMPM** | $592.49 | $683.47 | $825.54 |
| **Change attributable to required benefits** | | | |
| Insurer premium | $1.68 | $1.79 | $1.96 |
| Enrollee cost sharing | $0.46 | $0.49 | $0.54 |
| Enrollee non-covered | ($0.04) | ($0.05) | ($0.05) |
| **Total change PMPM** | $2.10 | $2.24 | $2.44 |
| **Percent change attributable to required benefits** | | | |
| Insurer premium | 0.28% | 0.26% | 0.24% |
| Enrollee cost sharing | 154.77% | 147.28% | 137.80% |
| Enrollee non-covered | -100.00% | -100.00% | -100.00% |
| **Total percent change** | 0.36% | 0.33% | 0.30% |

# Appendix F: Small Group Enrollee PMPM

| Small Group Market | 1-Year (2025) | 5-Year (2025-2029) | 10-Year (2025-2034) |
|---|---|---|---|
| **Total enrollment subject to state benefit requirements** | 248,814 | 1,266,864 | 2,598,754 |
| **Total population affected** | 248,814 | 1,266,864 | 2,598,754 |
| | | | |
| **Baseline PMPM** | | | |
| Insurer premium | $554.27 | $639.54 | $772.70 |
| Enrollee cost sharing | $0.42 | $0.47 | $0.55 |
| Enrollee non-covered | $0.02 | $0.02 | $0.02 |
| **Total Baseline PMPM** | $554.71 | $640.04 | $773.27 |
| | | | |
| **Post benefit requirement PMPM** | | | |
| Insurer premium | $556.02 | $641.40 | $774.70 |
| Enrollee cost sharing | $0.83 | $0.91 | $1.03 |
| Enrollee non-covered | $0.00 | $0.00 | $0.00 |
| **Total Post benefit requirement PMPM** | $556.86 | $642.31 | $775.74 |
| | | | |
| **Change attributable to required benefits** | | | |
| Insurer premium | $1.75 | $1.86 | $2.01 |
| Enrollee cost sharing | $0.41 | $0.44 | $0.48 |
| Enrollee non-covered | -$0.02 | -$0.02 | -$0.02 |
| **Total change PMPM** | $2.14 | $2.28 | $2.47 |
| | | | |
| **Percent change attributable to required benefits** | | | |
| Insurer premium | 0.32% | 0.29% | 0.26% |
| Enrollee cost sharing | 98.53% | 93.27% | 86.65% |
| Enrollee non-covered | -100.00% | -100.00% | -100.00% |
| **Total percent change** | 0.39% | 0.36% | 0.32% |

# Appendix G: Large Group Enrollee PMPM

| Large Group Market | 1-Year (2026) | 5-Year (2025-2029) | 10-Year (2025-2034) |
|---|---|---|---|
| **Total enrollment subject to state benefit requirements** | 516,875 | 2,098,353 | 4,843,730 |
| **Total population affected** | 516,875 | 2,098,353 | 4,843,730 |
| **Baseline PMPM** | | | |
| Insurer premium | $516.95 | $575.33 | $693.73 |
| Enrollee cost sharing | $0.62 | $0.68 | $0.80 |
| Enrollee non-covered | $0.06 | $0.06 | $0.06 |
| **Total Baseline PMPM** | $517.63 | $576.07 | $694.59 |
| **Post benefit requirement PMPM** | | | |
| Insurer premium | $520.20 | $578.66 | $697.21 |
| Enrollee cost sharing | $1.05 | $1.14 | $1.32 |
| Enrollee non-covered | $0.00 | $0.00 | $0.00 |
| **Total Post benefit requirement PMPM** | $521.25 | $579.80 | $698.53 |
| **Change attributable to required benefits** | | | |
| Insurer premium | $3.25 | $3.33 | $3.48 |
| Enrollee cost sharing | $0.43 | $0.46 | $0.52 |
| Enrollee non-covered | -$0.06 | -$0.06 | -$0.06 |
| **Total change PMPM** | $3.62 | $3.73 | $3.94 |
| **Percent change attributable to required benefits** | | | |
| Insurer premium | 0.63% | 0.58% | 0.50% |
| Enrollee cost sharing | 68.11% | 66.90% | 64.83% |
| Enrollee non-covered | -100.00% | -100.00% | -100.00% |
| **Total percent change** | 0.70% | 0.65% | 0.57% |

# Appendix H: Individual Enrollee Total Dollars

| Individual Market | 1-Year (2025) | 5-Year (2025-2029) | 10-Year (2025-2034) |
|---|---|---|---|
| **Total enrollment subject to state benefit requirements** | 252,347 | 1,286,557 | 2,641,694 |
| **Total population affected** | 252,347 | 1,286,557 | 2,641,694 |
| **Baseline total dollars** | | | |
| Insurer premium | $1,786,785,000 | $10,511,432,000 | $26,078,438,000 |
| Enrollee cost sharing | $895,000 | $5,136,000 | $12,330,000 |
| Enrollee non-covered | $124,000 | $716,000 | $1,739,000 |
| **Total Baseline dollars** | $1,787,804,000 | $10,517,284,000 | $26,092,507,000 |
| **Post benefit requirement total dollars** | | | |
| Insurer premium | $1,791,872,000 | $10,539,132,000 | $26,140,420,000 |
| Enrollee cost sharing | $2,280,000 | $12,700,000 | $29,321,000 |
| Enrollee non-covered | $0 | $0 | $0 |
| **Total Post benefit requirement dollars** | $1,794,152,000 | $10,551,832,000 | $26,169,741,000 |
| **Change attributable to required benefits** | | | |
| Insurer premium | $5,087,000 | $27,700,000 | $61,982,000 |
| Enrollee cost sharing | $1,385,000 | $7,564,000 | $16,991,000 |
| Enrollee non-covered | ($124,000) | ($716,000) | ($1,739,000) |
| **Total change** | $6,348,000 | $34,548,000 | $77,234,000 |
| **Percent change attributable to required benefits** | | | |
| Insurer premium | 0.28% | 0.26% | 0.24% |
| Enrollee cost sharing | 154.75% | 147.27% | 137.80% |
| Enrollee non-covered | -100.00% | -100.00% | -100.00% |
| **Total percent change** | 0.36% | 0.33% | 0.30% |

# Appendix I: Small Group Enrollee Total Dollars

| Small Group Market | 1-Year (2025) | 5-Year (2025-2029) | 10-Year (2025-2034) |
|---|---|---|---|
| **Total enrollment subject to state benefit requirements** | 248,814 | 1,266,864 | 2,598,754 |
| **Total population affected** | 248,814 | 1,266,864 | 2,598,754 |
| **Baseline total dollars** | | | |
| Insurer premium | $1,654,933,000 | $9,722,572,000 | $24,096,555,000 |
| Enrollee cost sharing | $1,249,000 | $7,174,000 | $17,260,000 |
| Enrollee non-covered | $63,000 | $323,000 | $671,000 |
| **Total Baseline dollars** | $1,656,245,000 | $9,730,069,000 | $24,114,486,000 |
| **Post benefit requirement total dollars** | | | |
| Insurer premium | $1,660,161,000 | $9,750,833,000 | $24,159,202,000 |
| Enrollee cost sharing | $2,480,000 | $13,866,000 | $32,216,000 |
| Enrollee non-covered | $0 | $0 | $0 |
| **Total Post benefit requirement dollars** | $1,662,641,000 | $9,764,699,000 | $24,191,418,000 |
| **Change attributable to required benefits** | | | |
| Insurer premium | $5,228,000 | $28,261,000 | $62,647,000 |
| Enrollee cost sharing | $1,231,000 | $6,692,000 | $14,956,000 |
| Enrollee non-covered | ($63,000) | ($323,000) | ($671,000) |
| **Total change** | $6,396,000 | $34,630,000 | $76,932,000 |
| **Percent change attributable to required benefits** | | | |
| Insurer premium | 0.32% | 0.29% | 0.26% |
| Enrollee cost sharing | 98.56% | 93.28% | 86.65% |
| Enrollee non-covered | -100.00% | -100.00% | -100.00% |
| **Total percent change** | 0.39% | 0.36% | 0.32% |

# Appendix J: Large Group Enrollee Total Dollars

| Large Group Market | 1-Year (2025) | 5-Year | 10-Year |
|---|---|---|---|
| **Total enrollment subject to state benefit requirements** | 516,875 | 2,098,353 | 4,843,730 |
| **Total population affected** | 516,875 | 2,098,353 | 4,843,730 |
| **Baseline total dollars** | | | |
| Insurer premium | $3,206,364,000 | $14,486,914,000 | $40,322,816,000 |
| Enrollee cost sharing | $3,872,000 | $17,213,000 | $46,597,000 |
| Enrollee non-covered | $351,000 | $1,438,000 | $3,362,000 |
| **Total Baseline dollars** | $3,210,587,000 | $14,505,565,000 | $40,372,775,000 |
| **Post benefit requirement total dollars** | | | |
| Insurer premium | $3,226,516,000 | $14,570,795,000 | $40,524,919,000 |
| Enrollee cost sharing | $6,509,000 | $28,729,000 | $76,807,000 |
| Enrollee non-covered | $0 | $0 | $0 |
| **Total Post benefit requirement dollars** | $3,233,025,000 | $14,599,524,000 | $40,601,726,000 |
| **Change attributable to required benefits** | | | |
| Insurer premium | $20,152,000 | $83,881,000 | $202,103,000 |
| Enrollee cost sharing | $2,637,000 | $11,516,000 | $30,210,000 |
| Enrollee non-covered | ($351,000) | ($1,438,000) | ($3,362,000) |
| **Total change** | $22,438,000 | $93,959,000 | $228,951,000 |
| **Percent change attributable to required benefits** | | | |
| Insurer premium | 0.63% | 0.58% | 0.50% |
| Enrollee cost sharing | 68.10% | 66.90% | 64.83% |
| Enrollee non-covered | -100.00% | -100.00% | -100.00% |
| **Total percent change** | 0.70% | 0.65% | 0.57% |

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