

## Memorandum

**To:** Senator Jimmy Hickey, Jr., ALC-EBD Oversight Subcommittee Co-Chair  
Representative Aaron Pilkington, ALC-EBD Oversight Subcommittee Co-Chair

**From:** Patrick Klein, FSA, MAAA Vice President  
Sadhna Paralkar, MD MPH, MBA Senior Vice President, National Medical Director

**Date:** January 12, 2024

**Re:** Actuarial Review of Anti-Obesity Medication (AOM) Costs

Segal was requested to review possible coverage of AOMs for the State Health Plan (ASE & PSE) and management opportunities available to the plan. We prepared an actuarial analysis of these new/costly drugs, utilizing studies currently available and data provided by Navitus. In our analysis we have included expected utilization and costs of the drugs, as well as a potential offset to users' medical spend. We will detail each component and the key assumptions utilized.

### Projection of the Pharmacy Cost

To project the total expenditures Segal needed to quantify how many people would utilize the drugs annually from 2025 (assumed start of coverage) through 2030. The first step it to estimate the number of adults considered obese in the population and therefore covered by the AOMs. With access to the plan's detailed claims, our data team pulled the current number of obese adults in 2022 for the ASE & PSE health plans. The percent of obese members was 34.5%. The CDC published the % obese by state<sup>1</sup>, with details from 2011 (30.9%) through 2022 (37.4%). Segal fit this into a regression model and projected the percentages through 2030, ending at 38.8%.

Navitus provided Segal an estimate of the net cost after rebates for Wegovy \$867 per script, and Zepbound \$652 per script under the current contract. Segal assumed the drugs have a 50/50 utilization split over the lifetime of the analysis and be consisted of preferred brand with a \$40 member copay per prescription. The plan is projected to pay \$720 per script in 2025 after applying the assumptions above. The net cost per script is assumed to trend at 5% annually. We made this assumption based on other high-priced drugs that eventually get competition and use rebate increases to control net prices.

The near-term and long-term utilization of these weight loss drugs are difficult to project as ASE & PSE plans have no prior history of covering AOMs and the high demand nationally is a recent development. We reviewed other Segal client's that are covering AOMs to yield an assumption that 30% of obese adults would start taking an AOM in 2025. This take rate is expected to grow at 5% each year through 2030. However, the take rate is limited to those who haven't started taking the drug and a limited percentage of members who are assumed to re-start

<sup>1</sup> <https://www.cdc.gov/obesity/index.html>

treatment. This level of rigor is needed due to the low persistence rate compared to other drug classes.

With all these items considered, we are projecting that the program's net costs for GLP1s related to Weight Loss (AOMs), will increase from \$44M in 2025 to \$85M by 2030 due to the increase in utilizers, total scripts, and the cost per drug.

Year	# of Scripts	Total Cost		
		Net Claims After Rebate	Members Cost Share	Plan Cost
2025	60,565	\$45,998,862	\$2,422,587	\$43,576,275
2026	86,847	\$69,258,391	\$3,473,884	\$65,784,507
2027	92,853	\$77,750,545	\$3,714,130	\$74,036,416
2028	94,319	\$82,927,208	\$3,772,779	\$79,154,429
2029	93,421	\$86,244,472	\$3,736,855	\$82,507,617
2030	91,516	\$88,710,020	\$3,660,652	\$85,049,368

## Medical Cost Savings

There are studies available showing the expected claims savings from reducing a member's weight. The most applicable study was published in 2021, "*Economic value of nonsurgical weight loss in adults with obesity*"<sup>2</sup>. This cohort study listed members cost reduction in the years after weight loss, quantifying it by percentage of bodyweight lost: 3-5%, 5-10% and 10%+. We compared the published numbers to other studies that detail the additional cost of obesity, including: "*Association of body mass index with health care expenditures in the US by age/sex*"<sup>3</sup> and "*Direct medical costs of obesity in the United States and the most populous states*"<sup>4</sup>. Similar cost relationships were seen in these other studies.

We stated earlier these drugs have a low persistence rate. Research has shown that a high percentage of members who start taking the drugs do not make it through a complete year. A study done by Prime Therapeutics<sup>5</sup> showed that around 27% of members who started taking Wegovy were compliant and still taking it a year later. Another study from the Obesity Society<sup>8</sup> stated 40% 1-year persistence. Utilizing this study, we projected 60% discontinue the first year.

Reports indicate that once a utilizer stops taking the medicine, they will regain a large percentage of what was lost. A study published in 2023, "*Continued Treatment with Tirzepatide for Maintenance of Weight Reduction in Adults with Obesity*"<sup>6</sup>, showed a 20.90% mean weight loss while on Tirzepatide for 36-weeks. Further, the study showed those who stopped gained back on average 14%, while those who remained on Tirzepatide showed an additional -5.5% mean weight loss. A study published in 2022, "*Weight regain and cardiometabolic effects after withdrawal of semaglutide: The STEP 1 trial extension*"<sup>7</sup>, showed a 17.3% mean weight loss

<sup>2</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10394211/>

<sup>3</sup> <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0247307>

<sup>4</sup> <https://pubmed.ncbi.nlm.nih.gov/33470881/>

<sup>5</sup> <https://www.primetherapeutics.com/news/real-world-analysis-of-glp-1a-drugs-for-weight-loss-finds-low-adherence-and-increased-cost-in-first-year/>

<sup>6</sup> <https://jamanetwork.com/journals/jama/fullarticle/2812936>

<sup>7</sup> <https://pubmed.ncbi.nlm.nih.gov/35441470/>

<sup>8</sup> <https://onlinelibrary.wiley.com/doi/full/10.1002/oby.23952>

over 60 weeks. It then went on to say that those who go off the medicine gain back 11.6%, leaving a net weight loss of 5.6%. This was assessed at 120 weeks (60 weeks after stopping).

In order to project out the savings, we assumed 40% of those who begin taking the drug, complete the first year and achieve weight loss savings. We then track people over future periods to apply different savings amounts associated with the time since first taking the drugs. Those who stop taking the drug after completion of the first year are bucketed into two categories:

- Discontinued due to adverse experience or lack of benefit resulting in limited weight loss
- Discontinued after achieving weight loss goals and maintain a healthy weight through healthy habits.

It can be somewhat confusing, but in general the savings is bracketed based on remaining weight loss:

- 1<sup>st</sup> year – \$99 monthly savings in 2025 based on 3-5% weigh loss as they begin to achieve results over the year
- 2<sup>nd</sup> year – \$333 monthly savings in 2025 based on 10%+ weight loss after 1 year
- 3<sup>rd</sup> year – \$319 monthly savings in 2025 based on 10%+ weigh loss after 2+ years

The amounts above were derived from the studies discussed earlier, with savings based on the applicable weight loss brackets.

Integrating all the assumptions above, we projected that medical cost savings could increase from \$6.7M in 2025 and \$65M by 2030 by covering AOMs if the assumptions materialize. Although this seems like a significant medical savings, the costs of the AOMs are still higher – \$85M.

Year	Start an AOM	Full Year User	Discontinue		Total Medical Claims Savings		
			Re-gain Weight	Maintain Weight	Still on AOM	Discontinue AOM	Total
2025	14,085	5,634	8,451	-	\$6,663,025	\$0	\$6,663,025
2026	13,122	8,629	18,127	451	\$21,075,386	\$1,843,611	\$22,918,996
2027	10,757	9,480	27,072	1,411	\$29,091,084	\$6,177,654	\$35,268,738
2028	8,331	9,832	34,204	2,260	\$35,796,241	\$10,581,900	\$46,378,141
2029	6,099	9,906	39,549	2,939	\$41,634,277	\$14,728,450	\$56,362,727
2030	4,266	9,837	43,369	3,454	\$46,766,513	\$18,521,144	\$65,287,657

Note that all the cost savings numbers were trended at 7%.

### Net Cost To ASE & PSE

Overall, the cost of the AOMs is far greater than the offsetting medical savings. The initial medical savings could be greater with the more potent newer generation of AOMs that can result in greater weight loss in year 1. Nonetheless, there is an inherent lag on the savings. Also, we assumed some members will maintain weight loss and achieve savings while no longer taking the drug. Therefore, the magnitude of the annual net loss does decrease over time. Below is a summary by year:

Year	Drug Cost	Medical Savings	Net Loss	Cummulative Loss
2025	\$43,576,275	\$6,663,025	\$36,913,250	\$36,913,250
2026	\$65,784,507	\$22,918,996	\$42,865,510	\$79,778,761
2027	\$74,036,416	\$35,268,738	\$38,767,678	\$118,546,438
2028	\$79,154,429	\$46,378,141	\$32,776,289	\$151,322,727
2029	\$82,507,617	\$56,362,727	\$26,144,889	\$177,467,616
2030	\$85,049,368	\$65,287,657	\$19,761,711	\$197,229,327

At this point, the cost of the drugs is not supported by the savings achieved by moderate weight loss. This is even more evident in the fact that, without behavior modifications, members tend to gain the majority of the weight back when they go off the medication. Cumulatively, the total loss is projected to reach \$197M.

### Summary

The projected costs for covering AOMs are significant, however as time passes, we would expect the costs to drop, likely through enhanced rebates, much like Ozempic has done.

We believe the estimates are fair and represent a reasonable estimate of the cost/savings. The numbers and assumptions can be tweaked somewhat, but the overall results do not change significantly.

### Conclusion

Determining how to manage coverage for GLP-1s for weight management, or whether to cover them at all – is a unique decision based on the organizational philosophy and affordability. Lifestyle changes are an essential component of achieving and maintaining a healthy weight, regardless of whether a member is using weight management medication. Members who enroll in a weight management programs get individualized clinical and nutrition support to help them stay on track.

We can help further determine what level of control that works best for your plan goals and member needs. The levels can be:

1. Formulary and plan design
2. Utilization management
3. Personalized clinical support and nutrition

cc: Matthew Nguyen