

Metabolic Health Summer Series

An Inside Look at Diabetes
and Weight Loss Medications

July 12, 2023

Presented By:

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Andrea Grande, RPh



Today's Presenters

OPENING REMARKS



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MPH, CWPM**

*National Population Health
Consultant, Brown & Brown*

KEYNOTE SPEAKER



**Austin Morgan,
PharmD, BCACP, CDCES**

*Lead Clinical Pharmacist III –
Development and Training, Tria Health*

EMPLOYER PERSPECTIVE



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Presentation Agenda



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2

Metabolic Syndrome

3

GLP-1 and Incretin Medications

4

Employer Considerations

01

Metabolic Health and Obesity

CONTRIBUTORS TO METABOLIC HEALTH

Metabolic Health

A healthy metabolism means that a body can digest and absorb nutrients from food without unhealthy spikes in blood sugar, blood fat, inflammation and insulin.

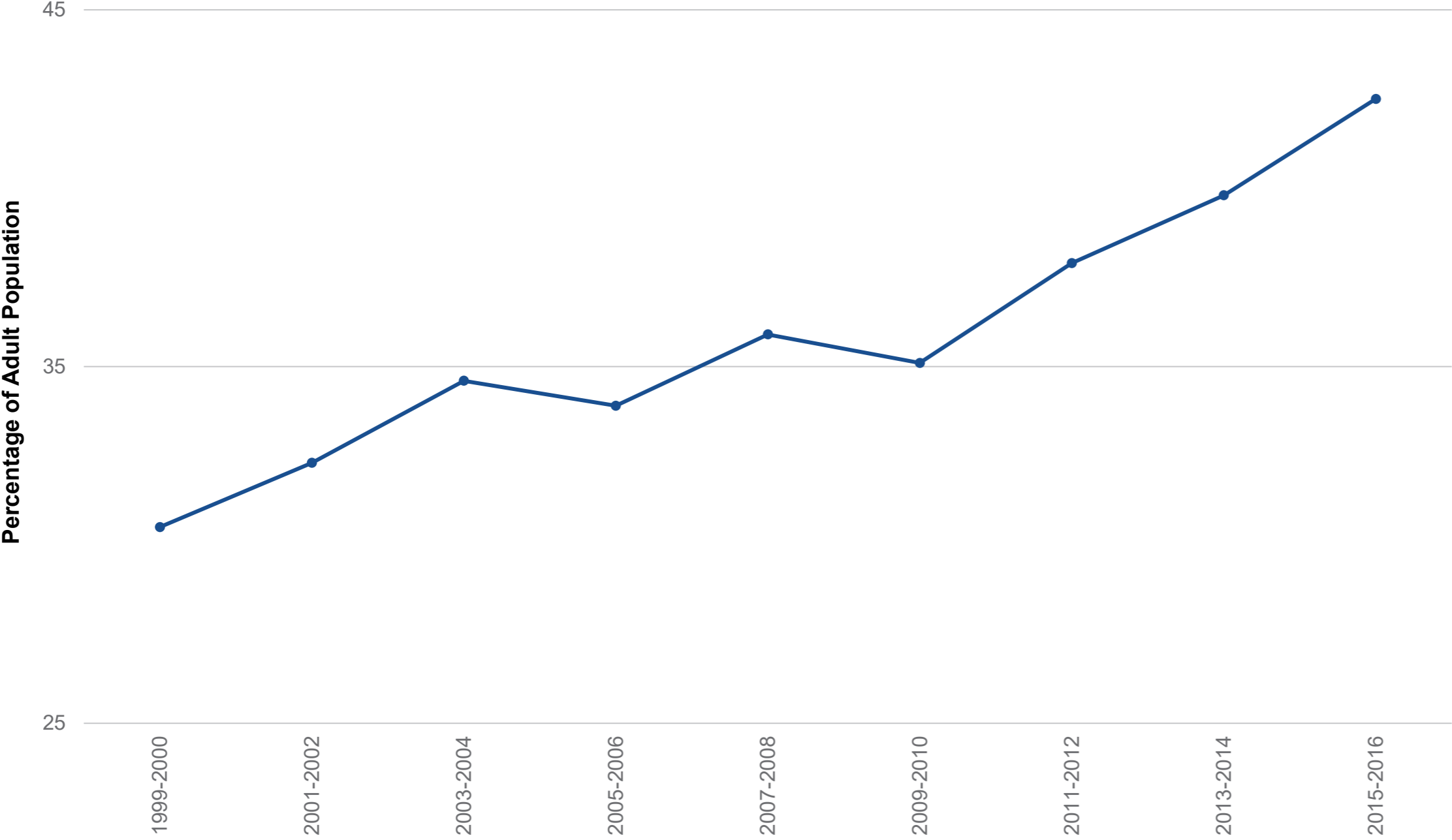
Every individual has their own metabolic health informed by age, sex, genes, hormones, diet, gut microbiome, body composition, weight, sleep, physical activity and mental health.



Obesity Prevalence and Costs



Prevalence of Obesity in U.S. Adults*



From 1975 to 2016, the global obesity rate has nearly tripled; **almost 50% of Americans are considered obese.**

The CDC estimates that the extra medical expenses associated with obesity **exceeds \$173 Billion.**

Obesity increases the risk of other costly conditions, including diabetes, cardiovascular disease and certain cancers.

*Centers for Disease Control and Prevention, National Health and Nutrition Examination Survey (NHANES) Prevalence of US Adults 20+ with Chronic Conditions

Obesity Treatments



Due to limited efficacy on weight loss with **lifestyle and behavior intervention** alone, the focus on obesity drug treatment strategies have continued to evolve.



While **bariatric surgery** continues to be effective, it is not always an optimal or available option along with plan cost considerations.



Until recently, **anti-obesity medications**, namely appetite suppression, metabolism boosters and fat absorption blockers, were challenging due to their side effect profile and lack of sufficient weight loss results.



The newest drugs to market, called the **GLP-1s**, are not only effective with a relatively 'safer' side effect profile, but are becoming among the costliest medications for employers over the past two years.



smarter. medication. management.

02

Metabolic Syndrome

Metabolic Syndrome¹

ABDOMINAL OBESITY

Excess body fat around the waist and trunk and waist circumference show a strong association with other metabolic conditions. The volume and location of visceral fat are more relevant than BMI, which is not as specific in accounting for body composition, but BMI and obesity are often used as a proxy.

HYPERTENSION

Also known as “High Blood Pressure,” is a sign that the heart is working harder to pump blood through narrowing and less elastic arteries. Hypertension can damage the heart and blood vessels if elevated for extended periods of time.



HIGH TRIGLYCERIDES & BLOOD SUGAR

High blood sugar and fat levels can raise the risk of blood clots and heart disease. It is also a precursor to diabetes, and at a certain threshold, qualifies as pre-diabetes.

HYPERLIPIDEMIA

High cholesterol or hyperlipidemia is a form of dyslipidemia, but even more important is the ratio of HDL cholesterol to LDL cholesterol. HDL “Good” cholesterol can help remove LDL “Bad” cholesterol from blood vessels.

1. Beilby J. Definition of Metabolic Syndrome: Report of the National Heart, Lung, and Blood Institute/American Heart Association Conference on Scientific Issues Related to Definition. *Clin Biochem Rev.* 2004;25(3):195-198.
2. Meigs JB, Wilson PW, Fox CS, et al. Body mass index, metabolic syndrome, and risk of type 2 diabetes or cardiovascular disease. *J Clin Endocrinol Metab.* 2006;91(8):2906-2912. doi:10.1210/jc.2006-0594

Metabolic Syndrome¹

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HYPERTENSION

Also known as “High Blood Pressure,” is a sign that the heart is working harder to pump blood through narrowing and less elastic arteries. Hypertension can damage the heart and blood vessels if elevated for extended periods of time.

Three or More = Metabolic Syndrome

Relates to the risk of diabetes, heart disease, stroke, renal disease, cancer and mortality².

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Metabolic Syndrome¹

How to Manage?

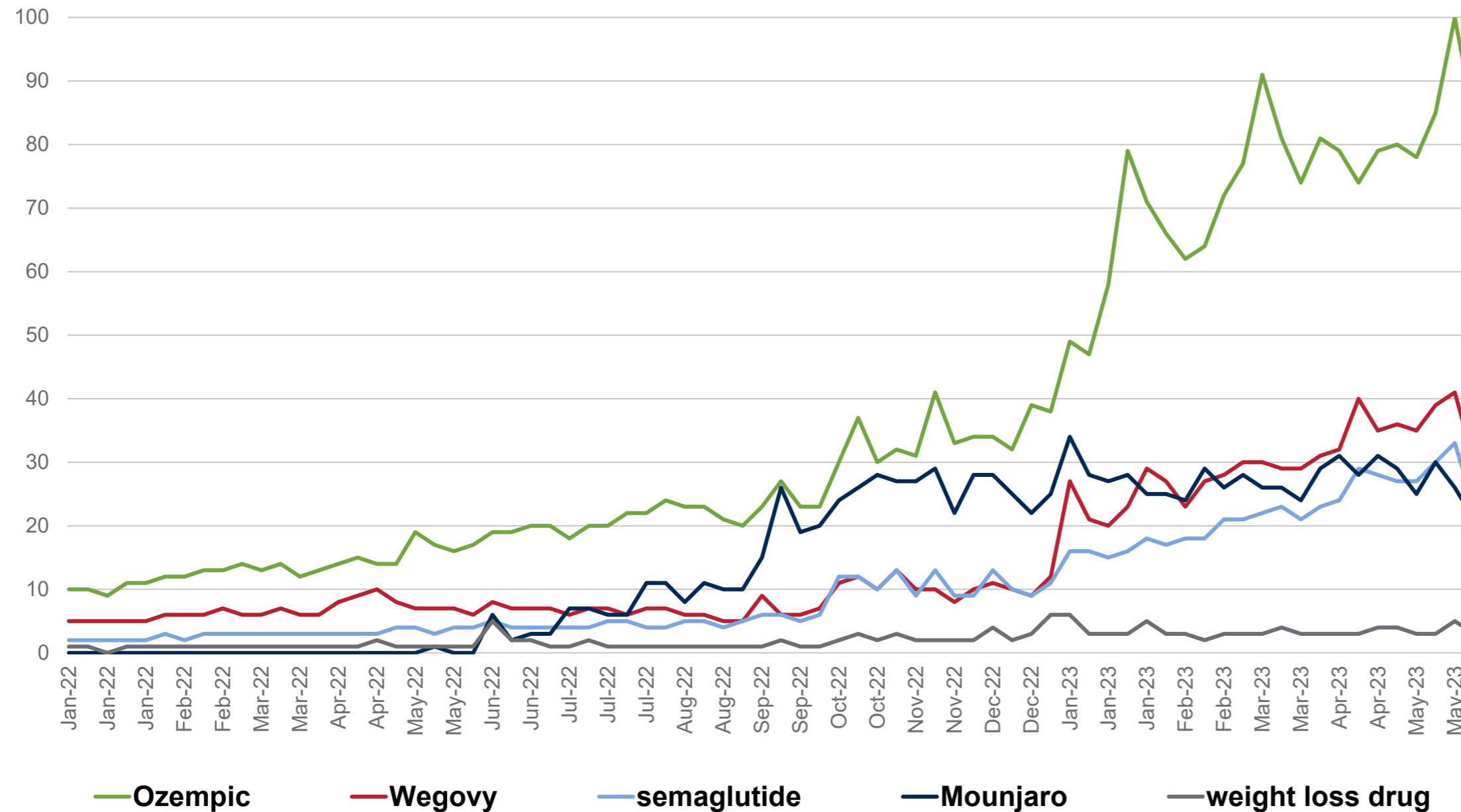
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2. *Meigs JB, Wilson PW, Fox CS, et al. Body mass index, metabolic syndrome, and risk of type 2 diabetes or cardiovascular disease. J Clin Endocrinol Metab. 2006;91(8):2906-2912. doi:10.1210/jc.2006-0594*

03

GLP-1 and Incretin Medications

Public Interest Is Spiking

U.S. Google Trends



Data Source: Google Trends (<https://www.google.com/trends>). Accessed 6/2/23

- GLP1s and GIP/GLP1 classes of medications are approved to treat diabetes or obesity, and both are effective weight loss agents.
- **Semaglutide** (Ozempic®/Wegovy®) and **tirzepatide** (Mounjaro™) are most popular, but there are others in this drug family.
- Public awareness and interest in these drugs have spiked over the last 6-18 months.

GLP-1s Have Significant Impact on Weight Loss

- **Wegovy** (semaglutide) weight loss clinical trials¹
 - » Between 10% and 17.5% body weight lost
 - » Weight gain or up to 5% weight loss with placebo
- **Diabetes medications** in same classes also showed positive effects on weight
- **Mounjaro** (tirzepatide) weight loss clinical trials²
 - » Between 13% and 21% body weight lost
 - » Less than 5% weight loss with placebo



1. Eleanor McDermid. A quick guide to the STEP trials. *diabetes.medicinematters.com*. Published February 11, 2021. <https://diabetes.medicinematters.com/semaglutide/obesity/quick-guide-step-trials/18854832>

2. Eleanor McDermid. A quick guide to the SURPASS and SURMOUNT trials. *diabetes.medicinematters.com*. Published October 14, 2020. <https://diabetes.medicinematters.com/tirzepatide/type-2-diabetes/a-quick-guide-to-the-surpass-and-surmount-trials/18478154>

A Word of Caution



FDA Warning

- Ongoing Ozempic and Wegovy shortage
- Compounded semaglutide¹
 - » Different salt forms of active ingredient
 - » Not shown safe or effective in humans



Reason for Concern

- Unregulated
- Risk for side effects or contamination

1. Research Center for Drug Evaluation and Research. Medications Containing Semaglutide Marketed for Type 2 Diabetes or Weight Loss. FDA. Published online May 31, 2023. <https://www.fda.gov/drugs/postmarket-drug-safety-information-patients-and-providers/medications-containing-semaglutide-marketed-type-2-diabetes-or-weight-loss>



What Are the Similarities and Differences?

Active Ingredient	Brand Name Product	FDA Approval
Semaglutide	Ozempic®	Diabetes
Semaglutide	Wegovy®	Obesity
Liraglutide	Victoza®	Diabetes
Liraglutide	Saxenda®	Obesity



- Same active ingredients and mechanisms
- Different doses and clinical trial design
- Tirzepatide (Mounjaro) is a 'dual-incretin' (GIP/GLP-1)

The Biggest Differences? Insurance Coverage

Injectable Incretin Mimetics

Active Ingredient	Brand Name Product	FDA Approval
Semaglutide	Ozempic®	Diabetes
Semaglutide	Wegovy®	Obesity
Liraglutide	Victoza®	Diabetes
Liraglutide	Saxenda®	Obesity
Dulaglutide	Trulicity®	Diabetes
Exenatide	Bydureon®	Diabetes
Tirzepatide	Mounjaro®	Diabetes



- Diabetes approvals = tiered copays
- Weight management approvals = challenging access
- Limited options to help with out-of-pocket cost if insurance does not cover¹

1. Wegovy® Savings Card | Wegovy® (semaglutide) Injection 2.4 mg. [www.wegovy.com. https://www.wegovy.com/coverage-and-savings/save-on-wegovy.html](https://www.wegovy.com/coverage-and-savings/save-on-wegovy.html)

The Impact of Increased Media Attention



Pros

- Highlights that overweight and obesity are chronic health conditions that are treatable with effective drugs.¹
- Many people will likely get treatment they did not otherwise realize was available to help them lose weight successfully.



Cons

- Increased off-label use has led to shortages of medication for those who need it to manage diabetes.²
- Supply issues may also require patients to go to other pharmacies where they do not have a relationship with their pharmacist and drug-drug interactions could be missed due to lack of a full medication profile to review.
- As these drugs also require gradual dose increases when starting treatment, patients may have to readjust their dose if they go without the medication for weeks at a time.

1. Bendix A. Ozempic and Wegovy add new layers to the understanding of obesity as a chronic health condition. NBC News. <https://www.nbcnews.com/health/health-news/ozempic-wegovy-obesity-chronic-health-condition-rcna68831>. February 8, 2023. Accessed February 10, 2023.

2. ASHP Drug Shortages List – Current Drug Shortage Bulletins. American Society of Health-System Pharmacists. <https://www.ashp.org/drug-shortages/current-shortages/drug-shortages-list?page=CurrentShortages>. Accessed February 10, 2023.

Using Medications for Weight Loss



Pros

- Increasing acceptance of obesity as a chronic condition
- High effectiveness
- Ease of use
- Overall good safety and tolerability profile
- Extra benefits for blood sugar and heart disease if someone is at risk
- Improves quality of life
- Weight loss reduces the risk of 30 other chronic conditions including diabetes, high blood pressure, high cholesterol, etc.¹



Cons

- High cost and limited insurance coverage
- Prior authorization criteria for the drugs only approved for diabetes
- Not everyone responds to treatment
- Side effects: GI, pancreatitis and gallbladder issues
- Lack of ongoing treatment without behavior change will lead to weight regain in many patients²
- Lack of evidence if someone does not have overweight or obesity
- May worsen body dysphoria or eating disorders for people who already suffer from them³

1. Ryan DH, Yockey SR. Weight Loss and Improvement in Comorbidity: Differences at 5%, 10%, 15%, and Over. *Curr Obes Rep.* 2017;6(2):187-194. doi:10.1007/s13679-017-0262-y

2. Wilding JPH, Batterham RL, Davies M, et al. Weight regain and cardiometabolic effects after withdrawal of semaglutide: The STEP 1 trial extension. *Diabetes Obes Metab.* 2022;24(8):1553-1564. doi:10.1111/dom.14725

3. News ABC. Eating disorder experts are worried about diabetes drugs like Ozempic being used for weight loss. ABC News. <https://abcnews.go.com/Health/eating-disorder-experts-worried-ozempic/story?id=97615429>



Using Medications for Weight Loss

CASE 1

- Patient interested in weight loss during chronic condition management appointment
- The pharmacist referred patient to an in-house health coach with Tria's weight management program and, after comprehensive medication/disease state review, recommended semaglutide (Wegovy) if needed in addition to lifestyle modifications and healthy behaviors
- After six months of working with a health coach and taking Wegovy, patient has lost over 50 lbs. (21.6% body weight)



Using Medications for Weight Loss

CASE 2

- Patient with T2DM started tirzepatide (Mounjaro) for A1c and weight reduction
- Weight, BMI and A1c at initiation: 330 lbs., 53.3 kg/m² and 6.9%, respectively
- Minimal lifestyle change on top of medication
- After 2 titrations to tirzepatide 7.5 mg, A1c decreased to 5.6%
- Weight decreased by 3% to 320 lbs.

Looking Forward to a Full Pipeline



RESEARCH

DEVELOPMENT

MANUFACTURING

REGULATORY

CLINICAL
STUDIES

Retatrutide

“triple-G”
agonist¹

Oral, Non-Peptide GLP-1 RA

Orforglipron²

Danuglipron³

Combined Mechanisms

Cagrilintide plus
semaglutide - amylin
analog plus GLP-1 RA⁵

Survodutide - glucagon/
GLP-1 agonist⁷

Oral High-Dose Semaglutide⁴

The Big Question

End stage outcomes
SELECT-CVOT⁶

1. Jastreboff AM, Kaplan LM, Frias JP, et al. Triple-Hormone-Receptor Agonist Retatrutide for Obesity - A Phase 2 Trial [published online ahead of print, 2023 Jun 26]. *N Engl J Med.* 2023;10.1056/NEJMoa2301972. doi:10.1056/NEJMoa2301972
2. Wharton S, Blevins T, Connery L, et al. Daily Oral GLP-1 Receptor Agonist Orforglipron for Adults with Obesity [published online ahead of print, 2023 Jun 23]. *N Engl J Med.* 2023;10.1056/NEJMoa2302392. doi:10.1056/NEJMoa2302392
3. Saxena AR, Frias JP, Brown LS, et al. Efficacy and Safety of Oral Small Molecule Glucagon-Like Peptide 1 Receptor Agonist Danuglipron for Glycemic Control Among Patients With Type 2 Diabetes: A Randomized Clinical Trial. *JAMA Netw Open.* 2023;6(5):e2314493. Published 2023 May 1. doi:10.1001/jamanetworkopen.2023.14493
4. Knop FK, Aroda VR, do Vale RD, et al. Oral semaglutide 50 mg taken once per day in adults with overweight or obesity (OASIS 1): a randomised, double-blind, placebo-controlled, phase 3 trial [published online ahead of print, 2023 Jun 23]. *Lancet.* 2023;S0140-6736(23)01185-6. doi:10.1016/S0140-6736(23)01185-6
5. Novo Nordisk. A research study to see how well CAGRISEMA helps people with excess body weight lose weight - full text view. *ClinicalTrials.gov.* Accessed June 30, 2023. <https://classic.clinicaltrials.gov/ct2/show/NCT05567796>.
6. Novo Nordisk. Semaglutide Effects on Heart Disease and Stroke in Patients with Overweight or Obesity (SELECT) – full text view. *ClinicalTrials.gov.* Accessed June 30, 2023. <https://classic.clinicaltrials.gov/ct2/show/NCT03574597>.
7. Monostra M. Survodutide induces up to 18.7% weight loss among adults with obesity in phase 2 trial. *www.healio.com.* Accessed July 5, 2023. <https://www.healio.com/news/endocrinology/20230630/survodutide-induces-up-to-187-weight-loss-among-adults-with-obesity-in-phase-2-trial>

04

Employer Considerations

Employer Benefit Coverage

EVALUATING THE PROS AND CONS OF EMPLOYER COVERAGE OF ANTI-OBESITY DRUGS



Pros

- May help employee recruitment and retention
- Likely weight reduction may progress health improvements with the potential to reduce healthcare costs
- Newer drug versions may achieve weight loss comparable to surgery
- Side effect profiles of newer agents are better tolerated and for most patients than drugs developed prior to 2021

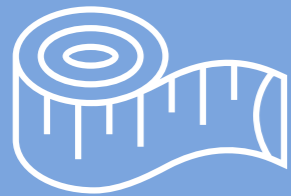


Cons

- Medications are costly with no current guidelines to end treatment
- No long-term studies validating increase quality of life with decreases in healthcare expenditures
- Risks involved with use; caution for those at risk of thyroid cancers, other side effects including pancreatitis
- Body weight returns when treatment is halted

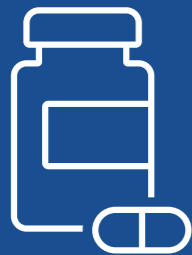
Employer Benefit Coverage

OTHER CONSIDERATIONS



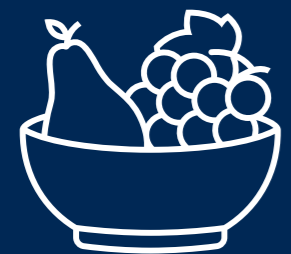
BMI is not always an accurate measure of health.

Too high or too low is not an ironclad guarantee that a chronic disease will develop; it's an important piece of information in the context of evaluating the whole person.¹



Evaluate PBM formulary; FDA approved clinical guidelines will support appropriate utilization such as prior authorizations, step therapies and quantity limits.

Current treatment is available as an injectable only, newer drug forms in trials will offer an oral treatment option.



Consider lifestyle programs to successfully address obesity before moving to drug treatment.

Work with medical carrier or other vendors that can offer nutritional and behavioral health programs in tandem with weight loss medications.

1. Cleveland Clinic: Is BMI an Accurate Measure of Health, January 2022

How We Can Help

The Brown & Brown Population Health & Well-Being team takes a proactive and comprehensive approach to help prevent metabolic conditions from developing and helping those with existing conditions to manage their health.

- ✓ Pharmacy consultation, formulary evaluation of medication coverages and review of appropriate utilization management and prior authorization.
- ✓ Evaluation of population health profile, social determinants of health, disparities and metabolic conditions.
- ✓ Organizational policies and benefit plan design recommendations.
- ✓ Vendor and partner evaluation and selection for metabolic from Brown & Brown Metabolic Vendor Collective.
- ✓ Innovation Hub knowledge base of leading-edge solutions.
- ✓ Centers of Excellence evaluation for selection of best-practice and evidence-based obesity treatment and bariatric procedures.



Health care costs for those with metabolic syndrome are on average **160% higher** than those without.¹

In 2022, Diabetes remained the **fourth leading condition** driving employers' healthcare cost.²

Obese injured persons' worker's compensation claims are **30 to 60 times more expensive** than non-obese counterparts.³

1. Boudreau DM, Malone DC, Raebel MA, Fishman PA, Nichols GA, Feldstein AC, Boscoe AN, Ben-Joseph RH, Magid DJ, Okamoto LJ. Health care utilization and costs by metabolic syndrome risk factors. *Metab Syndr Relat Disord.* 2009 Aug;7(4):305-14. doi: 10.1089/met.2008.0070. PMID: 19558267.
2. Business Group on Health (2023). *Large Employers' Health Care Strategy and Plan Design Survey- Chart Pack.* (August 2023), 75.
3. NCCI Holdings, Inc., Shuford, H., & Restrepo, T. (2010, December). *How Obesity Increases the Risk of Disabling Workplace Injuries.* Retrieved from https://www.ncci.com/Articles/Pages/II_obesity_research_brief.pdf

The Metabolic Summer Series Continues...

The Future of Metabolic Health: Weight-Loss Medication Benefits for Positive Impact on Your Population and Your Bottom Line

Wednesday, August 16, 2023
1:00 – 2:00 PM CDT

Speakers

- Tim Church, M.D., Ph.D., M.P.H., *Chief Medical Officer, Wondr Health*
- Louise Short, M.D., M.Sc. FACOEM, *National Clinical Leader, Brown & Brown*

Beyond the Drugs: HumanCentered Strategy that Supports the Metabolic Health of Your Employees

Wednesday, September 13, 2023
1:00 – 2:00 PM CDT

Speakers

- Linda Gigliotti, MS, RDN, CDE, CSOWM
- Gina Julian, M.S., R.D., *Managing Consultant, Brown & Brown*



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How Brown & Brown Can Help

Connect with your local Brown & Brown representative or visit us on the web to learn more about our population health and employee benefits services.

VISIT [BBROWN.COM/CONTACT](https://bbrown.com/contact) →



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