The Ozempic Effect: A Weighty Shift in Global Health Markets

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Abstract:

Novo Nordisk's Ozempic, an injectable semaglutide, has revolutionized diabetes and weight loss treatment since its 2017 approval. With a market value of approximately \$609 billion — 30% of which was realized in 2023 alone — Novo Nordisk's value has outgrown the GDP of its home country, Denmark. Although Ozempic's approved use is as a blood glucose manager for diabetes patients, it is perhaps best known for its "off-label" use for weight loss. Novo Nordisk has also released a weight loss drug containing the same active ingredient, semaglutide, at a higher dosage known as Wegovy. (Cooban, 2024)

Semaglutide is a synthetic version of the natural hormone called GLP-1, which reduces appetite. Interest in the drug grew quickly after Phase I clinical trials showed that patients lost 13% of their body weight in just 12 weeks. While similar drugs are on the market, such as Mounjaro/Zepbound from Eli Lilly, they are all major revenue streams for their respective developers. With 40% of Americans being overweight, the weight loss industry is struggling to keep up with demand — especially in the U.S. market — with GLP-1 receptor agonists being in and out of shortages. (Cooban, 2024)

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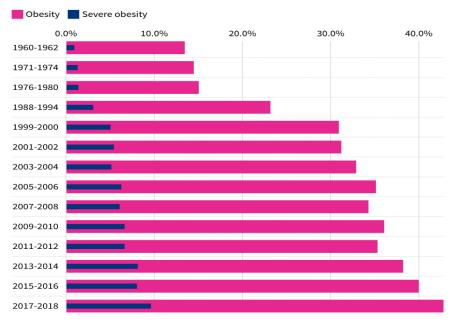
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1. Introduction

Although obesity poses a global healthcare burden, it is especially acute in the United States. In the 1960s, the US Centers for Disease Control and Prevention (CDC) reported obesity rates of about 13%, and as of 2017-2018 they have jumped to an alarming 43%. In a similar trend, the population that was morbidly obese reached 10%, and child obesity rates stand at 19% as of March 2020. Of particular concern is that 73.6% of adults aged 20 or older are reported to be overweight (2017-2018). (USA Facts, 2019)

Figure 1. Obesity rates in the U.S. over the years. (Fryar et al., 2021)

Age-adjusted nationwide obesity and severe obesity rates according to National Health and Nutrition Examination Surveys



This accounts for the population between the ages of 20-74. The obesity category already includes severe obesity.

Because obesity trends with other health conditions, rates of high blood pressure, high cholesterol, type-2 diabetes, asthma, sleep apnea, osteoarthritis, gallstones, etc. have risen significantly. In addition, they can be associated with psychological/social conditions such as anxiety, depression, low self-esteem, and bullying. Consequently, the healthcare cost for obesity and its associated issues was 173 billion USD in 2019. (CDC, 2022)

The factors underlying the United States obesity epidemic grew with the post-World War II economic expansion; namely, the growth of the food industry and the inception of fast-food chains. Advances in wartime food preservation transitioned to civilian markets leading to high-calorie, long-lasting foods; moreover, snacks and packaged food became more popular than ever. Technological advancements that applied economies of scale in food production allowed for larger quantities and lower prices available to consumers, enabling an overconsumption of food.

With increased universal caloric intake, solutions to obesity must target the food consumed and the behaviors associated with eating and exercising. Calorie counting and physical activity apps, meal planning, customized diets, and medications all make the list. While most treatments

might be moderately effective in the short-term, as with any regiment, discipline and adherence are a necessary component. Ameliorating the obesity epidemic requires breath through medications that have long-term, population-wide effects. This paper therefore discusses the glucagon-like peptide-1 (GLP-1) receptor agonist drug class with a special focus on Novo Nordisk's Ozempic, for the treatment of diabetes, and Wegovy, for weight management. (*The 14 Best Weight Loss Programs for 2022*, 2022)

Medical condition being treated

Obesity has affected a considerable part of the American population, creating an opportunity for the introduction of an effective medication with little competition. Serendipitously, the most effective weight loss medication of our time was neither engineered nor approved for weight loss. Novo Nordisk's Ozempic, approved in 2017, entered the U.S market as a medication for the treatment of type-2 diabetes in adults: it helps lower blood glucose, leading to a lower risk of cardiovascular events like strokes and heart attacks. The active compound in Ozempic, semaglutide, is a glucagon-like peptide-1 (GLP-1) receptor agonist. It works by activating GLP-1 receptors throughout the body and enhancing the effects of the naturally occurring hormone GLP-1, which upregulates the release of insulin by the pancreas in response to food intake. During clinical trials, type-2 diabetes patients were observed to lose modest amounts of body weight in addition to their sugar level improvements. Biologically, the drug impacts weight loss via two key mechanisms: affecting the hunger centers in the brain, which reduces appetite and cravings; and, a slow rate of stomach emptying, leading to prolonged fullness. (Northrop, 2023) Additional trial data studied the effectiveness of the semaglutide compound of a slightly higher dosage than Ozempic on patients with obesity but no diabetes. The impactful results led to the manufacturing of Wegovy and its FDA approval for weight loss. (Northrop, 2023) Since its approval, however, Wegovy has been in and out of shortages, leading patients to turn to the off-label usage of Ozempic for weight loss because GLP-1 medications are designed to be taken long-term since, if discontinued, patients regain lost weight within months. Medications for chronic diseases are a recurring healthcare cost that continues to generate income for the manufacturer. (Northrop, 2023)

The next innovative GLP-1 drug to be tested and approved by FDA was Novo Nordisk's Rybelsus (approved September, 2019), an oral semaglutide, that treats type-2 diabetes without the need for injection. This drug was designed for patients who are unable or do not prefer the injection procedure, augmenting adherance. Additionally, more recent developments show that Novo Nordisk plans a label expansion for Rybelus following Phase III trial data. The drug is not only a substitute to the injection for the treatment of diabetes, but it has also proved to reduce the occurrence of major adverse cardiovascular events by 14% in type-2-diabetes patients. (Phalguni Deswal, 2024) In fact, clinical trials for Ozempic indicated to Novo Nordisk additional health benefits from semaglutide other than diabetes and weight management. Improvement of cardiovascular health, slowing of kidney disease progression, lower risk for Alzheimer's, and treatment of osteoarthritis are additional benefits of GLP-1 for which clinical trials are currently being conducted or evaluated.

Side effects

Even though semaglutide is considered relatively safe, there are side effects for which the patient should be aware before taking the drug. The most common ones include nausea, diarrhea, constipation, fatigue, abdominal pain, bloating and loss of appetite. There are over-the-counter medicines that can manage most of these side effects. However, there are also more serious ones that are more uncommon and require immediate medical attention such as: hypoglycemia, allergic reactions, pancreatitis, and kidney damage. Animal studies have shown that prolonged semaglutide exposure increases the incidence of thyroid cancer, yet no data has suggested such an occurrence in humans. (*Ozempic Side Effects: Common, Severe, Long Term*, n.d.)

2. Specific Treatment Advancement

The main ingredient of Ozempic is semaglutide, a Glucagon-like peptide-1 (GLP-1) receptor agonist, which works to delay gastric emptying — thereby prolonging satiety — and upregulate insulin production while simultaneously inhibiting glucagon storage. Ozempic's predecessor in this category, Novo Nordisk's Saxenda/Victoza (approved December, 2014), used a GLP-1 receptor agonist known as liraglutide. Ozempic's major advancement is in its plasma half-life: liraglutide's plasma half-life is 13 hours (Cerillo & Parmar, 2024, whereas semaglutide is approximately 1 week (Kommu & Whitfield, 2024). So great a leap in half-life allows Ozempic to be injected weekly, whereas Saxenda/Victoza must be injected daily, and keep the same mechanism of action and efficacy.

3. Specific details about innovation in the treatment

Between Novo Nordisk's March 2006 patent for the medical use of GLP-1 receptor agonists in medicine (US8129343B2) and its April 2017 patent for the use of semaglutide for cardiovascular conditions (US20190134162A1) we observe that semaglutide is slightly less homologous to human GLP than liraglutide (94% < 97%) as a consequence of the following three modifications: first, "a C-18 fatty acid is conjugated to Lys in position 26 via a glutamate spacer" which, "...promotes albumin binding, leading to prolonged renal clearance." Second, "...Lys in position 34 is substituted by Arg," to keep the conjugated Lys in position 26 from binding away from albumin; and third, "...alanine in position 8 is replaced by α-aminoisobutyric acid" which gives the effect of, "...[shielding semaglutide] from metabolic degradation by the dipeptidyl peptidase-4 (DPP-4) enzyme..." (Guja & Dănciulescu Miulescu, 2017) Nevertheless, the functionally irrelevant 3% decrease in chemical similarity permits a greatly augmented length of action and bioavailability. Liraglutide reaches its peak concentration between 8 and 12 hours after injection with a bioavailability of 55%. Semaglutide, however, reaches its peak concentration much later, 1 to 3 days after injection, with a significantly higher bioavailability of 89% which is congruent with the observed plasma half-life duration.

Manufacturing innovations (and the much-decreased injection schedule) also permit Ozempic to be produced at a lower price than Saxenda: \$40 marginal cost for a month's treatment of Ozempic subcutaneous injections compared to a \$50 marginal cost for Saxenda. (Levi et al., 2023) Relevant manufacturing patents include Novo Nordisk's October 2019 stabilization of semaglutide formulations (US20210379159A1). Semaglutide's use in drugs

outside of Ozempic is covered by Novo Nordisk's April (US12029779B2) and May 2020 (US11478533B2) patents which extend its effective range to weight management, as with Wegovy, and liver disease, respectively.

4. FDA trials information

Ozempic

The SUSTAIN FORTE study evaluated the efficacy of semaglutide during a 40-week, randomized, controlled, and double-blind Phase 3B clinical trial across 125 clinics in 10 countries. The participants were 961 adults with type-2 diabetes, an average age of 58, and an average BMI of 34.6. They were divided into groups where 1 mg and 2 mg doses of semaglutide were administrated. HbA1c (blood sugar indicator) and weight reduction were studied. For the 2 mg dosage, HbA1c decreased on average 2.2% and for the 1 mg dosage, it decreased 1.9%. Patients lost on average 6.9 kg of their body weight with the 2 mg dosage, and 6.0 kg with the 1 mg dosage. The most common adverse events included gastrointestinal symptoms, which affected 34% of the 2 mg group and 31% of the 1 mg group. (Frias et al., 2021)

Wegovy

Further studies and clinical trials were conducted to evaluate the weight loss effect more closely after the initial Ozempic trials. In 2021, the New England Journal of Medicine sponsored by Novo Nordisk, published their data. A sample of approximately 2,000 patients who were overweight or obese, but did not have diabetes, was split into two groups, where one group was given the placebo and the other the semaglutide (2.4 mg) over a period of 68 weeks. Those who took semaglutide lost 14.9% of their body weight compared to 2.4% for the control group. The dosage used in this study was higher than Ozempic (which has a dose of 0.25, 0.5, 1 or 2 mg of semaglutide). Eventually, an adjusted dose of 2.4 mg of semaglutide purposed specifically for weight loss was approved by the FDA. Novo Nordisk started supplying the U.S. market with Wegovy (for weight loss) in addition to Ozempic (for diabetes type-2). The trials led to the following benefits for the patient pool: 5-20% body weight loss, reduced waist circumference, improved blood sugar and blood pressure, and improved cholesterol levels. (Wilding et al., 2021)

Rybelsus

Rybelsus, an oral semaglutide, is the first oral GLP-1 receptor agonist approved by FDA. A placebo-controlled study over 26 weeks, showed that patients taking Rybelsus as a stand-alone therapy, decreased their HbA1c (blood sugar) lower than 7% compared to 31% of the patients in the placebo group. However, Rybelsus is not recommended as a first choice of medicine for treating diabetes. Patients who have ever had thyroid carcinoma or have a family member who has it, are not advised to use Rybelsus. Nevertheless, oral semaglutide is effective at lowering blood sugar compared to a placebo drug. (Office of the Commissioner, 2019)

Semaglutide on Cardiovascular Diseases

A clinical study was conducted to evaluate the effects of semaglutide on patients with diabetes type-2 and cardiovascular risk. 3297 patients participated in this trial and they were given once weekly semaglutide or placebo over a period of 104 weeks. The evaluation of effectiveness would be done over the first time occurrence of adverse events such as

cardiovascular death, nonfatal myocardial infarction, or nonfatal stroke. Such events occurred on 6.6% of the semaglutide group and 8.9% on the placebo group. The results of this study show that the patients with type-2 diabetes, who were at high cardiovascular risk, had a significantly lower occurrence of cardiovascular adverse events compared to the placebo group. (Marso et al., 2016)

Semaglutide on Kidney Disease

Patients with type-2 diabetes often suffer from chronic kidney diseases. A clinical study was conducted to evaluate the effect of semaglutide on 3533 patients who suffered from both diseases. The patients were randomized and divided into the 1 mg weekly semaglutide and placebo group. The median follow-up was 3.4 years, and the results showed a 24% lower risk of a primary-outcome event in the semaglutide group compared with the placebo group. In conclusion, semaglutide reduces the risk or slows down the progression of chronic kidney diseases. (Perkovic et al., 2024)

Semaglutide on Alzheimer's Disease

The possibility of semaglutide in Alzheimer's Disease (AD) prevention has initiated clinical trials to study those effects. Trials included 1,094,761 eligible patients with Type-2 Diabetes Mellitus (T2DM), who had no prior AD diagnosis, and compared those taking semaglutide versus other antidiabetic medications. The first-ever diagnosis of AD occurred within 3 years of the study. The results showed that T2DM patients taking semaglutide had a 40-70% reduced risk of first-time AD diagnosis compared to other antidiabetic medications. If it eventually gets filed and approved by the FDA, it would be the first-ever AD preventive drug on the market. (Wang et al., 2024)

Semaglutide on Knee Osteoarthritis

The effects of GLP-1 receptor agonists on knee osteoarthritis are not well studied and the possibility of them being beneficial led to an official clinical study. In a 68-week trial, double-blind, randomized, and placebo-controlled, 407 participants with an average age of 56 years and BMI of 40.3 were given semaglutide at the dosage of 2.4 mg weekly. All the patients selected had a history of moderate knee osteoarthritis diagnosis and suffered from at least moderate pain (average WOMAC pain score of 70.9). On week 68, the group that was administered semaglutide lost 13.7% of their body weight and had a reduction of 41.7 points of WOMAC pain score., while the placebo group had a 3.2% weight reduction and 27.5 points of WOMAC score reduction. Serious adverse events affected both groups, which led to the discontinuation of the trial for 6.7 % of participants in semaglutide, and 3.0% in the placebo group, with the most common reason being gastrointestinal disorders. In conclusion, semaglutide helps lower the pain score and the body weight of patients who suffer from moderate knee osteoarthritis. (Bliddal et al., 2024)

5. Price of treatment and role of insurance (private, Medicare. Medicaid).

While Ozempic and Wegovy contain the same semaglutide ingredient (but are available at different dosages), Ozempic is usually covered by private insurance for the treatment of

diabetes type-2 and Wegovy is not. In the case of patients covered by Medicare and Medicaid, similar exceptions apply. The benefit of Ozempic is that approximately 80% of patients with type-2 diabetes are also overweight, leading to a double treatment for diabetes and obesity. (Northrop, 2023) As mentioned earlier, the dosage of semaglutide varies from 0.5 to 2 mg depending on the prescription. As of November 2024, the sticker price of a 4-use (1 month) Ozempic pen (regardless of the concentration) is \$968.52 (*Ozempic® Pricing*, n.d.), and in the presence of commercial insurance, Novo Nordisk's Manufacturer Coupon can lower Ozempic's price to \$25 per pen.

Authorization is often needed from medical providers for insurance to approve the treatment coverage. Some plans might not approve Ozempic immediately, requiring the patient to go through cheaper therapies at first and evaluate their effectiveness before moving to Ozempic. Like other insurance companies, Medicaid programs in many states cover the cost of the treatment but often with the requirements of step therapy, medication approval, and limited quantities. (Northrop, 2023) Medicare Part D covers the use of Ozempic for type-2 diabetes, but not for weight-loss (this is an off-label use of Ozempic). The Inflation Reduction Act, signed into law in 2022, includes a maximum out-of-pocket spending cap for Medicare Part D beneficiaries, with the cap being lowered every year. Patients on Medicare without commercial insurance and those eligible for Medicaid may qualify to receive Ozempic for free through Novo Nordisk's Patient Assistance Program (PAP).

On the other hand, Wegovy serves as a primary treatment for obesity for patients with a BMI of 30 or above (or 27 and above for those with a weight-related ailment). (Northrop, 2023) Weight-loss drugs can be excluded from the Medicaid rebate program. (42 U.S. Code § 1396r–8 - Payment for Covered Outpatient Drugs, n.d.) Nevertheless, Medicaid spending on such drugs has increased dramatically since 2019. Because Ozempic's on-label use is for type-2 diabetes, it constitutes the brunt of this increase. (Medicaid Utilization and Gross Spending on New Drugs Used for Weight Loss Has Increased Rapidly in Recent Years, 2019)

The other semaglutide medications manufactured by Novo Nordisk as alternatives to the injection form of drug delivery or for different prescription purposes also range on the same price levels of approximately 1000-1300 U.S. dollars for 30 days of supply before insurance. Rybelsus, the oral semaglutide, costs within the same range for a supply of 30 oral tablets before insurance. (Morris, 2024)

6. Competition for the treatment and the stock price effect

Eli Lilly's Mounjaro is a tirzepatide approved on May 13, 2022 that competes with Ozempic in its treatment category: controlling blood sugar in type-2 diabetes patients. The tirzepatide active ingredient is a mixture of GLP-1 and Gastric Inhibitory Polypeptide (GIP), which increases insulin production after eating food. Per fill, Mounjaro is \$1069.08, and although Eli Lilly's competing drug is 10.4% more expensive, it is significantly more effective: in the duration of treatment, patients taking tirzepatide lost considerably more weight and had greater control over blood sugar than those administered semaglutide (Frías et al., 2021; Rodriguez et al., 2024). Consequently, tirzepatide is more cost-effective (Azuri et al., 2022).

In the context of weight loss, Eli Lilly's Zepbound (Nov 8 2023) is approximately \$1059.87 per fill, whereas Novo Nordisk's Wegovy is \$1430.01. With the efficacy and pricing arguments above, Novo Nordisk faces sharp competition from Eli Lilly. As of Q3 2024, Eli Lilly's revenue increased 20% from Mounjaro/Zepbound sales (Bishop, 2024) alone compared to Q3 2023. Nevertheless, as of Q2 2024 Novo Nordisk's sales of Ozempic, Wegovy, and Ozempic have increased by 36%, 31%, and 74%, respectively, compared to Q2 2023. These in turn contribute to a 26% augmentation in total diabetes and obesity care revenue (James-Brown, 2024).

Viking Therapeutics, a competitor in the diabetes and obesity care category, has been developing another tirzepatide GLP-1/GIP receptor agonist, like Mounjaro/Zepbound, known internally as VK2735. As of February 2024, VK2735's subcutaneous formulation successfully moved out of phase 2 trials. Notwithstanding its efficacy, the introduction of another GLP-1/GIP receptor agonist into the market will induce more competitive pricing.

Of those producing semaglutide injection medications, not all firms strictly produce their own formulation, taking advantage of a compounded medication classification to manufacture drugs still under patent. According to the FDA, although facilities are not permitted to manufacture compounded drugs that are virtually identical to an FDA-approved drug, they may do so *if there is a shortage*. Semaglutide — the active ingredient in Ozempic, Wegovy, and Rybelsus — has, until recently, been in a shortage (Chen, 2024). The shortage, beginning in 2022, enabled various compounders to produce semaglutide under the auspices of the FDA's lower shortage compounding standard. One such company, Hims & Hers, Health Inc., was able to produce semaglutide subcutaneous injections at \$199/mo (specific citation needed) through BPI labs, a Florida-based drug manufacturer (Miller, 2024). As a consequence of semaglutide's removal from the shortage list, H&H's stock value has taken a major hit and Novo Nordisk is advocating for the FDA to further restrict the distribution of, "unsafe" compounded semaglutide by domestic laboratories (Seeking Alpha, 2024).

In Figure 2, the movement of Novo Nordisk's (NVO) daily close stock price is tracked with time. The approval date of Novo Nordisk drugs and those of its competitors are labelled. Table 1 summarizes the stock movement numerically at these dates:

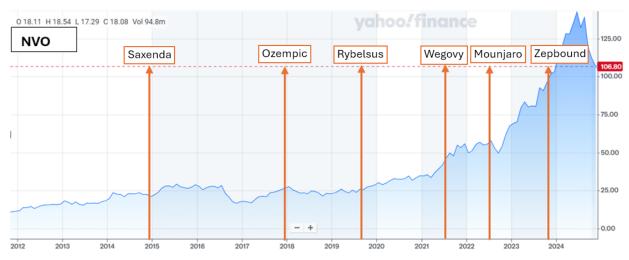


Figure 2: Graph of Novo Nordisks' stock movements (Yahoo Finance, NYSE Nasdaq 2024)

Brand Name	FDA approval Date	Novo Nordisk Closing Stock Price on the day
Saxenda	December 23, 2014	\$21.36
Ozempic	December 5, 2017	\$25.35
Rybelsus	September 20, 2019	\$26.47
Wegovy	June 4, 2021	\$40.47
Mounjaro	May 13, 2022	\$53.03
Zepbound	November 8, 2023	\$101.76

Table 1. Tabulated data from Figure 2. Graph (*Drugs@FDA: FDA Approved Drug Products*, 2009)

7. Costs to the overall healthcare system

Private Health Insurance

Approximately 165 million Americans use employer-sponsored health insurance, and according to Dickler, 1 in 3 employees is looking at GLP-1 treatments as their best bet to fight obesity. Nevertheless, at \$1,350 per month for a single patient, insurance companies tend to drop coverage for these drugs. In 2024 alone, there was an 8.6% increase in the price of prescription drugs due to the overconsumption of GLP-1 drugs. Currently, only 42% of corporate insurance plans cover the weight-loss drug, and another 27% are considering being added to the list next year. Since the COVID-19 pandemic, healthcare costs have currently reached a post-pandemic high, which will lead to some of the companies removing these weight loss medications from their coverage plans. (Dickler, 2024)

Medicare

Private health insurance companies are not the only insuring bodies struggling to cover Ozempic/Wegovy. There is a growing trend for the population of ages 65 and older to be suffering from diabetes type-2, therefore Ozempic becomes a Medicare problem too. The cost of Ozempic on Medicare in 2022 was \$4.6 billion, compared to \$2.6 billion in 2021. Yet, the beneficiaries of Medicare pay a maximum of \$3,333 annually, which will be lowered to \$2,000 in 2025. (Wynn & Gang, 2024) This rising expenditure raises questions about the cost-benefit tradeoff of covering Ozempic under Medicare. While the upfront costs are high, Ozempic's benefits—such as better blood sugar control and weight loss—could reduce healthcare costs by lowering the risk of complications like heart disease and kidney failure. Policymakers must weigh these potential long-term savings against the immediate financial burden on Medicare.

Medicaid

Between 2019 and 2022, the prescriptions for weight-loss drugs increased over 600%. The cost of rebates was over \$900 per prescription by 2022. These drugs accounted for 0.2% of all Medicaid prescriptions and 1.3% of all gross Medicaid spending in 2022. The gross pending of Medicaid for all weightloss drugs reached 1.1 billion dollars in 2022, with Ozempic being the highest expense as the most prescribed medication from this class of drugs. (Williams et al.,

2023) Estimating the total cost of Ozempic on the healthcare system is challenging, as private insurance companies do not disclose spending data in the same manner as public insurers. However, based on available information, Medicare and Medicaid together spent approximately \$5 billion on Ozempic in 2022. This figure reflects the increasing financial burden these programs face as the demand for weight-loss drugs like Ozempic continues to rise.

Figures 3 and 4 summarize the proportion increase of prescriptions and gross spending on weight loss drugs from 2019 to 2022:

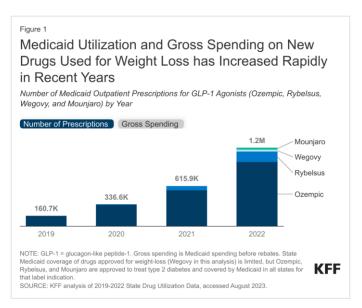


Figure 3. Medicaid number of prescriptions on weight-loss drugs. (Williams et al., 2023)

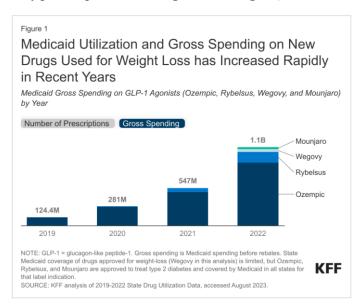


Figure 4. Medicaid gross spending on weight-loss drugs. (Williams et al., 2023)

8. Conclusions and policy implications

Ozempic, Wegovy, and other GLP-1/GIP receptor agonist treatments have emerged as a promising treatment for type-2 diabetes and obesity, offering substantial benefits in terms of blood sugar control and weight reduction. Clinical trials and real-world data have shown their effectiveness in helping patients lose weight, with some reporting a reduction of up to 15-20% of their body weight. This has sparked interest in prescribing Ozempic not just for diabetes but also for obesity, a growing concern in many countries. However, the high cost of the drug and its widespread demand—especially for off-label uses—pose significant challenges for healthcare systems, particularly in terms of affordability and resource allocation. If more healthcare providers include these drugs in standard prescriptions, the financial burden could lead to cuts in other critical areas, leaving less funding for preventive care and treatments for other health conditions.

Given the limited budgets available to healthcare systems, especially in the face of rising demand, policymakers must find a balance in how Ozempic is integrated into treatment plans. One solution could be to prioritize the drug for patients who have the greatest need, such as those with severe obesity or poorly controlled diabetes. Additionally, negotiating lower prices with pharmaceutical companies, or encouraging competition in the market, could help make Ozempic more accessible while protecting public health finances. Governments could also invest in preventive programs, including those that focus on lifestyle changes like diet and exercise, which would reduce the long-term demand for these treatments.

Furthermore, the high cost of Ozempic, despite its efficacy, requires it be used as part of a broader treatment strategy for type-2 diabetes and obesity, rather than being viewed as a quick fix. It's crucial that healthcare professionals continue to promote a comprehensive approach that includes monitoring blood sugar, improving diet, increasing physical activity, and using medications sparingly. Policymakers should encourage research into alternative treatments for diabetes and obesity to create a diverse range of options that cater to different patient needs. This would deter over-reliance on a single drug class, ensuring better patient care while keeping healthcare spending sustainable.

In the future, it is essential for healthcare systems to strike a balance between innovative treatments and long-term, cost-effective care. By investing in prevention, supporting ongoing research, and carefully managing the use of high-cost medications like Ozempic, policymakers can improve patient outcomes while ensuring that healthcare remains accessible and affordable for all.

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