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The Multi-Sector Impacts of GLP-1RA Drugs

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Executive Summary

GLP-1RA (Glucagon-like peptide-1 receptor agonist) drugs that help regulate blood sugar levels have been around for close to 20 years and are primarily used in diabetes treatment. However, they have garnered never-before-seen levels of medical, media and business attention over the last few months, following the announcement of recent successful clinical trial results demonstrating the more widespread health benefits of certain GLP-1RAs.

Increasingly used to support weight loss (with several countries authorizing the prescription of Novo Nordisk's Wegovy and Eli Lilly's Zepbound/Mounjaro drugs for weight management), the companies behind these drugs are reporting rapid sales growth and have seen their share prices rise significantly. Novo Nordisk, the Danish pharma company behind several GLP-1RA drugs (including Ozempic/Wegovy and Saxenda) grew its sales by over 30% in 2023, and its share price rose by over 70% in the last year, making it the most valuable European company by market capitalization.

Market analysts expect the demand for these drugs to continue to grow significantly, with the global market size forecast to reach between \$75bn to \$140bn (2030+). There is also growing evidence that the use of GLP-1RAs could lead to broader consumer habit changes – such as a reduction in calories consumed and an increase in physical activity – and changes in overall population health (e.g. lower cardiovascular risk). At the beginning of October 2023, the CEO of Walmart's U.S. operations said that they had started to see a slight reduction in the food basket purchased by those using Wegovy and other weight-loss drugs. These broader changes could have a wide-ranging impact on companies across numerous sectors including healthcare, pharmaceuticals, insurers, medical device companies, the food and beverage industry, retailers, fitness businesses, airlines and many more.

Nevertheless, factors such as supply challenges, restricted funding, high out-of-pocket costs and side effect fears could limit the uptake of the drugs, creating uncertainties around the future size and shape of demand. Recognizing this, there is a huge range of variability in analyst forecasts of the GLP-1RA market opportunity, its impact on consumption and industry implications.

Investors are asking senior business leaders to describe the impact GLP-1RAs may have on their business and the strategic changes required to respond. At Teneo, we bring a unique set of skills that combines our healthcare and life sciences expertise with specialist capabilities in areas such as (but not limited to) demand modelling, strategy design, strategic communications and government affairs to help management and investors understand and navigate the impact that the growing demand for GLP-1RAs could have on their businesses.



Introduction to GLP-1RAs

GLP-1RAs are a class of drugs that mimic the action of the GLP-1 hormone, which plays a role in regulating appetite and blood sugar levels in the body. For 15+ years, they were primarily used to help manage blood sugar levels in patients with type 2 diabetes; however, several drugs (including Novo Nordisk's Wegovy and Eli Lilly's Zepbound/Mounjaro) have recently been approved for chronic weight management. This has contributed to a significant increase in demand for and interest in GLP-1RAs around the world.

What are GLP-1RAs?

Glucagon-like peptide-1 (GLP-1) is a hormone produced by the stomach in response to food, which plays an important role in regulating appetite and blood sugar levels. **GLP-1RAs (GLP-1 receptor agonists)** are a class of drugs that mimic the action of the GLP-1 hormone and work by stimulating the production of insulin, slowing down food digestion and inducing satiety signals in the body. As a result, these drugs can help lower blood sugar and support weight loss. Recent trials have also shown a reduction in the risk of cardiovascular events in non-diabetic patients with obesity and known cardiovascular disease.

The Evolution of GLP-1RA Usage

GLP-1RA drugs have been used in clinical practice since the mid-2000s. The first GLP-1RA was approved by the FDA (U.S. Food and Drug Administration) in 2005 for the treatment of type 2 diabetes mellitus (T2DM). While these drugs were not initially approved for weight management, a small proportion of patients were using them to support weight loss, with doctors prescribing these 'off-label' (off-label prescribing is where a drug is prescribed for a reason other than the one it is licensed for) – in these cases, GLP-1RAs were given to people without diabetes but with a high body mass index (BMI).

Demand for GLP-1RAs has increased significantly in recent years [See Figure 1], driven primarily by their use for weight-loss purposes rather than for diabetes.

This growth was accelerated in 2021 when the FDA approved semaglutide, a Novo Nordisk product under the brand name of Wegovy, for chronic weight management. The percentage of patients in the U.S. prescribed semaglutide who did not have a diagnosis of type 2 diabetes rapidly increased from 11.4% in 2020 to 41.7% in 2023 [Figure 2].

Figure 1: Semaglutide Prescription Rates in the U.S. (2019 – 2023)

Approximately 1.7% of people in the U.S. who attended a health care visit were prescribed a semaglutide medication in 2023...

% of people in the U.S. with a health care visit who were prescribed semaglutide

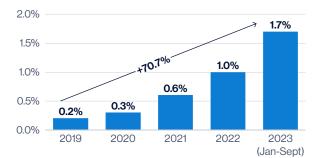
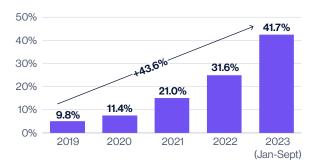


Figure 2: Proportion of Semaglutide Prescription for Non-T2DM Indication (2019 – 2023)

... with an increasing proportion of prescriptions going to patients without T2DM – principally to support with weight loss management.

% of patients in the U.S. prescribed semaglutide who do not have a diagnosis of T2DM



Source(s): CNN, Epic Research

Note(s): Figure 1: Includes Ozempic and Rybelsus approved for T2DM and Wegovy approved for chronic weight management Figure 2: 2023 data as of September 21, 2023

Table 1: GLP-1RA Drugs Approved (including approval date) for T2DM and Weight Control inSelect Key Regions (as of December 2023)

Company	Active Ingredient	Brand	U.S. (FDA)	UK (MHRA)	EU (EMA)	Japan (PMDA)	Australia (TGA)
novo nordisk [®]	Semaglutide	Ozempic (diabetes)	Oec 2017	Feb 2018	Feb 2018) Mar 2018	Aug 2019
		Wegovy (weight loss)	Jun 2021	Sep 2021	Jan 2022	Mar 2023	() Mar 2022
	Liraglutide	Victoza (diabetes)	Jan 2010	June 2009	June 2009	Jan 2010	Jan 2018
		Saxenda (weight loss)	Oec 2014	Jan 2021	Mar 2015	$\overline{\times}$	Jan 2018
Lilly	Tirzepatide	Mounjaro (diabetes)	May 2022	Oct 2022	Nov 2022	Sep 2022	Dec 2022
		Mounjaro/ Zepbound (weight loss)	Nov 2023	Nov 2023	Nov 2023	$\overline{\times}$	\bigotimes

There are now three GLP-1RA drugs approved in multiple countries [see Table 1] for chronic weight management, all of which are administered as injections: Wegovy (active substance semaglutide) and Saxenda (active substance liraglutide) from Novo Nordisk, and Mounjaro/Zepbound¹ (active substance tirzepatide) from Eli Lilly – the latter being the first dual receptor agonist² drug approved. In addition, there are multiple other drugs currently under development, including several oral drugs such as Orforglipron from Eli Lilly and Danuglipron from Pfizer, as well as further dual and triple receptor agonists.

Although weight-loss specific drugs are now licensed, supply is limited, and as a consequence, off-label prescribing of diabetic drugs has continued to grow (particularly of Ozempic (active ingredient: semaglutide) and Mounjaro (active ingredient: tirzepatide)). In some countries, this has led to severe drug shortages and challenges for the diabetic population.

In the future, it is likely that the clinical indications for GLP-1RAs will expand, with pharmaceutical companies running various drug trials to substantiate a wider array of use cases, such as the reduction of cardiovascular risk and the treatment of chronic kidney disease.

2. Molecules with effects on two peptide hormone receptors - in this instance, tirzepatide activates both the GLP1 and GIP (glucose-dependent insulinotropic polypeptide) receptors.

^{1.} Approved under the brand name Zepbound in the U.S. in November 2023 for weight control. In Europe and the UK, MHRA and the EMA have extended the indications that the existing T2DM drug Mounjaro can be used for to include weight management in certain conditions.

Drivers of the Recent Interest in GLP-1 RA

Though GLP-1RAs have been available for close to 20 years, there has been a surge in recent interest amongst the business community. A Reuters analysis of earnings transcripts revealed that mentions of "GLP-1" and related terms doubled from 127 in Q2 2023 to 256 mentions in Q3 across 29 U.S. and European healthcare and consumer companies.³

Although several factors contributed to this rise in interest, two key developments have been particularly important:

- Celebrity endorsement: A number of high-profile celebrities, such as Elon Musk, have publicly credited GLP-1RA drugs with their transformative weight loss, leading to a spike in public interest in using the drugs for weight loss.
- Recent clinical trial results: A number of high-profile clinical trial findings have driven a material change in the perception of how these drugs may be used in the future. For semaglutide alone, trials relating to cardiovascular disease (SELECT), kidney disease (FLOW) and heart failure (STEP) have announced positive results in the last 12 months.

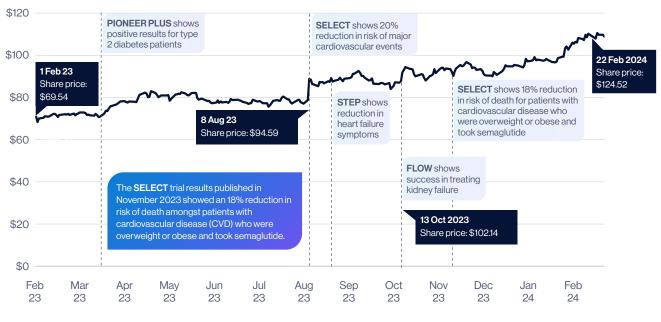


Figure 3: Novo Nordisk's share price, Jan – Nov 2023

Source(s): Clinical Trials Arena, CNBC, FT, HCP Live, TCTMD, Yahoo Finance

Valuations for the two pharmaceutical companies (Novo Nordisk and Eli Lilly) at the core of this trend have rapidly increased as a result. As of February 28, 2024, Novo Nordisk's share price had risen by over 70% in the previous year [see Figure 3], with its market cap in September briefly surpassing Denmark's annual GDP. Eli Lilly's share price more than doubled in the same period.

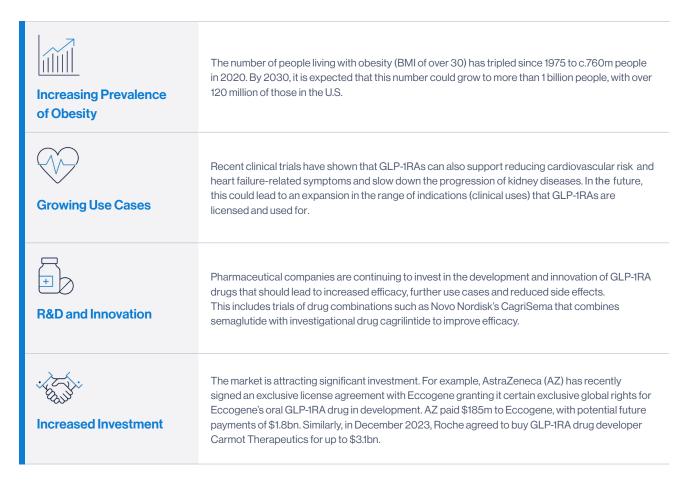
^{3.} Satija, B. and Mishra, S., 2023. Reuters. Wegovy craze was all the rage on Q3 earnings calls. Available from: https://www.reuters.com/business/healthcare-pharmaceuticals/wegovy-craze-was-all-rage-q3-earnings-calls-2023-11-20/

Projected Evolution of GLP-1RA Use

The growing interest in and diverse applications of GLP-1RAs are driving a substantial increase in the drugs' user base. The rising global prevalence of obesity and continuing trials and R&D investment in the sector are likely to fuel further growth. Analysts project the global GLP-1RA market to reach between \$75bn and \$140bn by 2030. Nevertheless, there are a number of uncertainties facing the industry which explain the large variations in the future forecasts, both in terms of the size of demand and the shape of growth.

Projected Users and Market Size Evolution

Numerous analysts have published projections on the future use of GLP-1RAs, with all forecasting demand to grow significantly, driven by a combination of factors that include:



The underlying drivers for GLP-1RA growth are strong. In the short-term, demand may be somewhat curbed by governments and insurers being slow to reimburse, high out-of-pocket costs, supply shortages and side effect fears. In the long-term, these dynamics are likely to partially or fully resolve.

Growth Headwind	Short-term Headwind	Long-term Expectation
Restricted Public Reimbursement	Most public healthcare systems have restricted the reimbursement of GLP-1RAs to a narrow subset of patients. For example, in the UK, Wegovy can only be prescribed on the NHS for patients with at least one weight-related comorbidity, and either a BMI of over 35, or a BMI of 30 to 34.9 provided they meet the criteria for referral to specialist weight management services. In the U.S., federal laws currently do not allow Medicare to cover weight-loss drugs.	Healthcare systems around the world are facing a rising chronic disease burden that they are not resourced or equipped to cater for. Investing in medications that can prevent the development and progression of these diseases through upstream intervention is likely to be core to public policy. Given this dynamic, we would expect reimbursement of GLP-1RAs to increase significantly over the next five years.
Limited Insurance Coverage	Many insurers are reluctant to provide reimbursement for GLP-1RAs for weight loss. In the U.S., the majority of insurers do not cover the drug for weight-loss indications. In the UK, two of the country's largest private insurers, Aviva and AXA Health, have recently stated that they will not cover Wegovy.	With growing interest and increasing evidence of their broader health benefits, it is likely that more insurers will fund GLP-IRAs for a broader range of circumstances. The American Medical Association recently called for insurers to fully cover GLP-IRAs for weight-loss control.
High Out-of-Pocket Costs	Currently priced at over \$1,000 per month in the U.S. (although considerably lower in some other geographies), GLP-1RA drugs are not affordable out-of-pocket for the majority.	In January 2024, Eli Lilly launched its direct-to- consumer platform, selling Zepbound directly to consumers through its website, with prices close to \$500 lower than previously. Increased competition, lower production costs and the eventual introduction of generic GLP-1RAs will likely further decrease out-of-pocket prices over time.
Supply Challenges	Production capacity has been unable to keep up with the growth in demand, resulting in supply shortages. For example, in Germany, supply-related restrictions were introduced less than a month after the launch of Wegovy.	Mass investment in production, such as Eli Lilly's planned \$2.5bn spend on a new facility in Germany and Novo Nordisk's \$6bn investment in manufacturing capacity in Denmark, is expected to reduce supply challenges from 2025.
Adverse Side Effects	Medical opinion of the side effects, based on clinical trial data, suggests GLP-1RA side effects are within tolerable norms compared to other medications. However, media coverage of GLP-1RAs has focused on side effect fears and a small number of deaths associated with GLP-1RA use.	Recent media coverage has amplified the risk of side effects; this is likely to dampen over time. R&D investment could also help find solutions to reduce side effects while increasing efficacy.
Administration by Injection	GLP-1RAs are primarily available as injectables, which is believed to deter some potential users. In the UK, the NHS estimates that at least one in ten people have a phobia of needles.	Despite recent setbacks, various oral GLP-1RAs for weight-loss indications are in development that will provide alternatives for patients.

Table 2: Potential Short-term Challenges to GLP-1RA Growth

Recognizing these uncertainties, analysts' estimates on the future penetration of GLP-1RA and the shape and timing of this growth vary significantly and are highly speculative at this stage. For example, Morgan Stanley⁴ estimates the current U.S. user base of anti-obesity medications (such as GLP-1RAs) to be c.5m users and expects this to grow to c.24m by 2035, while Goldman Sachs⁵ projects c.15m U.S. patients by 2030. Similarly, JP Morgan⁶ forecasts that the use of GLP-1RA drugs for both weight loss and diabetes indications in the U.S. could be as high as c.30m by 2030. Growth estimates outside of the U.S. are less regularly referenced but are likewise significant. Some (e.g., Canaccord, Mizuho) believe there is not enough data yet to make explicit forecasts on long-term demand and user base. The current global market size for anti-obesity medications (such as GLP-1RAs) was estimated by Goldman Sachs⁷ to be c.\$6bn. Multiple banks, such as BMO Capital Markets,⁸ Morningstar⁹ and Goldman Sachs¹⁰ expect the market to grow to or beyond \$100bn by 2030, with some, such as JP Morgan,¹¹ predicting as high as \$140bn by 2032. Other banks, such as Jefferies,¹² also project growth beyond \$100bn, though their timelines are less definitive. The actual future market size will likely be highly impacted by whether GLP-1RAs end up being used as longer-term treatments for individuals and how costs and pricing evolve over time.



- 4. Morgan Stanley, 2023. Could obesity Drugs Take a Bite Out of The Food Industry? September 5, 2023. Available from: https://www.morganstanley.com/ideas/obesity-drugs-food-industry?
- Schafer, 2023. Goldman: 15 million Americans will be taking weight loss drugs by 2030. Yahoo Finance. October 17, 2023. Available from: https://finance.yahoo.com/news/goldman-15-million-americans-will-be-taking-weight-loss-drugs-by-2030-193750289.html
- 6. J. P. Morgan, 2023. The increase in appetite for obesity drugs. November 29, 2023. Available from: https://www.jpmorgan.com/insights/global-research/current-events/obesity-drugs
- 7. Goldman Sachs, 2023. Why the anti-obesity drug market could grow to \$100 billion by 2030. October 30, 2023. Available from: https://www.goldmansachs.com/intelligence/pages/anti-obesity-drug-market.html
- Erman, M., 2023. Novo Nordisk rivals see room to compete in \$100 billion weight-loss drug market. Yahoo Finance. May 8, 2023. Available from: https://www.reuters.com/business/ healthcare-pharmaceuticals/novo-nordisk-rivals-see-room-compete-100-bln-weight-loss-drug-market-2023-05-04/
- Andersen, K., 2023. Novo Nordisk Earnings: Shares Remain Overvalued Despite Our \$100 Billion GLP-1 Market Forecast. Morningstar. November 2, 2023. Available from: https://www.morningstar.com/stocks/novo-nordisk-earnings-shares-remain-overvalued-despite-our-100-billion-glp-1-market-forecast
- 10. Goldman Sachs, 2023. Why the anti-obesity drug market could grow to \$100 billion by 2030. October 30, 2023. Available from: https://www.goldmansachs.com/intelligence/pages/anti-obesity-drug-market.html
- 11. O'Connell, 2024. One major Wall Street investment firm says some sugary drink brands will survive this health trend. The Street. October 24, 2023. Available from: https://www.thestreet.com/ retailers/one-major-wall-street-investment-firm-says-some-sugary-drink-brands-will-survive-this-health-trend
- 12. Jefferies, 2023. Weigh to Go: Assessing the Wider Implications of a Slimmer Society. October 2, 2023. Available from: https://insights.jefferies.com/october-2023-quarterly-insights/weigh-to-go-assessing-the-wider-implications-of-a-slimmer-society

Consumer Behavior Trends and Sectoral Impacts

The impact of GLP-1RAs on the life sciences sector and the broader healthcare sector is clear. However, more widespread use of GLP-1RAs is likely to have broader impacts on eating and fitness habits, population health and consumer behavior. These trends are expected to have a material impact on a number of non-health industries, with some benefiting and others disadvantaged, although there is a lack of consensus on the scale and timing of the impact.

The increase in GLP-1RA use going forward is expected to have fundamental impacts on broader consumer and commercial behavior. For example, in October 2023, the CEO of Walmart's U.S. operations stated that the U.S. supermarket chain was already seeing an impact on shopping behavior, with patients prescribed Ozempic, Wegovy and other appetitesuppressing medications showing "a slight pullback in overall basket."¹³ Some analysts are forecasting a 1-3% reduction in annual calorie consumption by the middle of the next decade as a result of the wider uptake of GLP-1RAs.¹⁴

"We definitely do see a slight change compared to the total population, we do see a slight pullback in overall basket. Just less units, slightly less calories."

John Furner Walmart U.S. CEO There have also been significant changes in share prices across companies in different sectors in the wake of the clinical trial result announcements – demonstrating the widespread impact that the market believes GLP-1RAs could have, as well as the high fixation of investors on any new piece of information given the uncertainties around longer-term demand. For example, the Krispy Kreme stock was downgraded by several investment banks from "buy" to "hold," with the stock price dropping c.14% in the immediate wake of the SELECT trial announcement in August 2023 (from \$14.40 to \$12.43) due to the uncertain impact that the rise in weight-loss drugs will have on the future sales of the business.¹⁵



13. Bloomberg interview with John Furner, US CEO of Walmart. October 4, 2023.

^{14.} Sochovsky, N. and Miles, H., 2023. GLP-1: The Weight of Speculation. Morgan Stanley Global Equity Observer. December 28, 2023. Available from: https://www.morganstanley.com/im/en-us/individual-investor/insights/articles/glp1-the-weight-of-speculation.html

^{15.} Leon, J., 2023. Krispy Kreme Downgraded on Worry Ozempic Will Hit Demand. Bloomberg. October 30, 2023. Available from: https://www.bloomberg.com/news/articles/2023-10-30/krispy-kreme-dnut-falls-on-worries-that-ozempic-will-hit-donut-demand

Figure 4: Impacted Company Stock Performance Since GLP-1RA Interest

Key impacted company share price performance since GLP-1RA interest, values rebased to 100



As a result, public companies are already seeing a growing number of questions from investors and media around GLP-1RAs and the impact they may have on their business. In order to be able to address these, businesses will need to understand:

- What GLP-1RAs are, how they are used and how they are likely to evolve going forward;
- The projected uptake of GLP-1RAs in the geographies relevant to their business and how this may change under different scenarios;
- The potential impact on their business specifically, and their sector more broadly, based on their product/service mix, customer profiles and geographic focus;
- How their strategy needs to change to capture the opportunity from or mitigate the risk of GLP-1RAs.

Implications of the Growing Popularity of Weight-Loss Drugs

In this section, we review five different potential implications of the growing popularity of weight-loss drugs and how these could impact a range of different sectors and companies.

1. Growing Demand for Weight-Loss Drugs

The most direct consequence of the recent developments is the growth in demand for the weightloss drugs themselves. Pharmaceutical companies already at the forefront of GLP-1RA development have benefitted from this, while others are making significant investments to enter the weight-loss drugs market.

The impact will also be felt more broadly within the healthcare sector. For example, healthcare systems will need to decide how, when and for what indications they will reimburse new weight-loss drugs. Additionally, there will be increasing pressure on health insurers to include them within their coverage driven by objective evidence from clinical trials of the outcome benefits of these drugs on different populations (e.g. individuals with cardiovascular or renal disease).

Example Impacts:

Pharmaceutical Companies:

Pharmaceutical companies with existing products, such as Novo Nordisk and Eli Lilly have already seen significant increases in both revenue and share prices. Nevertheless, they will need to understand how to best capture this opportunity early on (while there is limited competition) by working with local regulators and funders to increase access to the drugs and by expanding production to meet demand.

Other pharmaceutical companies may be assessing the impact on their portfolio and reviewing their current R&D pipeline and priorities. Alternative strategies, such as through acquisitions or licensing agreements will need to be considered. Examples include AstraZeneca's investment in Eccogene and Roche's agreement to buy GLP-1 drug developer Carmot Therapeutics for up to \$3.1bn in December 2023.

Health Insurers:

There is growing pressure on health insurers to consider the coverage of GLP-1RA drugs for weight-loss purposes, particularly in the wake of trial results that show the broader health benefits. Health insurers will need to understand the likely demand and competitors' strategies to carefully consider how to change their offers and pricing.

Healthcare Systems:

As demand for GLP-1RAs grows, governments and healthcare systems will need to consider whether to reimburse new weight-loss drugs and at what cost. Full reimbursement is likely to be unaffordable for most publicly funded healthcare systems in the short term, but a steady reduction in the threshold for reimbursement is believed to be inevitable in the medium to long term. In addition, healthcare systems may also see broader changes to their service requirements, driven by a downstream reduction in chronic diseases such as cardiovascular and diabetes (covered in further detail later in this section). There is increasing recognition of the impact of obesity on workforce health (and as a result, on GDP), which further strengthens the case for healthcare systems investing more to enable additional widespread uptake of GLP-1RAs.

Alternative Weight-Loss Solutions:

The efficacy and popularity of GLP-1RA drugs for weight loss are placing pressure on and could replace alternative weight-loss solutions, such as bariatric surgery or lifestyle-focused weight-loss programs. To counter such impacts, some companies are exploring ways that GLP-1RA drugs could complement their existing solutions. For example, in March 2023, WW (formerly Weight Watchers) acquired Sequence, a telehealth company that offers prescriptions for obesity drugs, enabling WW to combine its lifestyle and behavioral therapy offers with prescribing GLP-1RAs where appropriate.16 Hims & Hers Health, a U.S.-based telemedicine company, has recently announced future plans to provide GLP-1RA drugs as part of its new weight-loss platform, alongside personalized nutrition guidance, digital tracking tools, mental health support, etc.¹⁷ Similar acquisitions or a broader diversification of offerings may be required by alternative weight-loss solution providers to mitigate the risk of being replaced by GLP-1RAs.

^{16.} WeightWatchers, 2023. WeightWatchers to Acquire Sequence, a Digital Health Platform for Clinical Weight Management. March 6, 2023. Available from: https://corporate.ww.com/news-room/press-releases/news-details/2023/WeightWatchers-to-Acquire-Sequence-a-Digital-Health-Platform-for-Clinical-Weight-Management

^{17.} Landi, H., 2023. Hims & Hers rolls out weight loss program with future plans to include GLP-1 drugs. Fierce Healthcare. December 6, 2023. Available from: https://www.fiercehealthcare.com/digital-health/hims-hers-rolls-out-weight-loss-program-future-plans-include-glp-1-drugs

2. Reduction in Certain Diseases

Recent clinical trial results suggest that the health impacts of GLP-1RAs go beyond weight loss, with the drug leading to a reduction in various diseases, such as cardiovascular disease or slowing down the progression of some illnesses such as chronic kidney disease. This could lead to broader changes in population health management and overarching changes in health system needs.

Example Impacts:

Kidney/Cardiovascular/Diabetes Drugs and Device Makers:

A reduction in disease burden is likely to have a negative impact on demand for drugs, devices, software and services related to these conditions. Following the announcement of positive trial results, share prices of various device makers in the diabetes (including insulin pump makers such as Insulet and glucose monitor makers such as DexCom) and chronic kidney disease (e.g. dialysis machine manufacturers DaVita and Baxter International) markets have dropped. These companies will need to understand how their demand may be impacted in the future, which part of their markets will be most affected, how their portfolio could evolve to mitigate the impact and how they can establish themselves as complementary to GLP-1RAs.

Healthcare Systems and Providers:

As referenced above, health systems will need to understand how a reduction in certain diseases and a healthier population will impact the demand for different services, and how they need to adapt their service configuration to meet evolving population needs. For the majority of healthcare systems, GLP-1RAs and other novel weight-loss therapies may provide an answer to the rising chronic disease burden which is crippling many systems across the globe.

Insurance:

Broader health improvements could lead to a reduction in mortality rates, impacting the life insurance industry. A report from Jefferies highlighted that while a healthier population is likely to reduce insurance premiums, this would only be seen in new business.¹⁸ At the same time, delayed mortality could enable insurers to hold investment earnings for longer periods of time. These improvements may also impact the broader medical insurance sector, potentially leading to both reduced premiums and reduced claims burdens. A proactive pricing strategy from both types of insurance provider will be important to retain clients and maximize revenue.



Jefferies, 2023. Weigh to Go: Assessing the Wider Implications of a Slimmer Society. October 2, 2023. Available from: <u>https://insights.jefferies.com/october-2023-quarterly-insights/weigh-to-go-assessing-the-wider-implications-of-a-slimmer-society</u>

3. Changes in Eating Patterns

GLP-1RA drugs can lower appetite and are often prescribed in combination with dietary measures which can lead to people consuming fewer calories and making more nutritious choices (as suggested by the Walmart data from October 2023¹⁹). A Morgan Stanley research survey showed that obesity medicines can reduce daily calorie intake by 20% to 30%.²⁰ The study also showed the most significant reductions are in foods high in sugar and fat. Additionally, patients reported a reduced desire to drink alcohol. These trends may have long-term implications for many companies, particularly in the Food & Beverage (F&B) industry.

Example Impacts:

F&B Manufacturers:

Demand for food and beverage may decrease in the future if the overall calorie consumption of the population drops as a result of the increased use of weight-loss drugs - some analysts forecast a 1-3% overall reduction in calorie intake in the U.S. by 2030 or 2035 (although others suggest it is premature to forecast the longer-term impact of GLP-1RAs on consumer habits).²¹ The most significant headwind will be felt by companies with a portfolio centered around food high in salt, sugar and fat, or alcohol. Following the Walmart announcement at the beginning of October, share prices for companies such as Pepsi and Krispy Kreme came under pressure as investors considered the potential for demand disruption [see Figure 4]. Manufacturers will need to understand how changes in consumer behavior will evolve and impact demand for their products and how their strategy and portfolio need to change to react to this (e.g. inclusion of more healthy options, changes to portion sizes etc.).

Restaurants:

Restaurants, in particular quick-service and fastfood restaurants could also be impacted by changes in eating habits and consumption. For example, Domino's share prices have fallen following the recent announcements around GLP-1RAs (although they have since partially recovered). Restaurants will need to understand how GLP-1RAs may impact their future demand and what changes they need to make to their menu options, pricing and packaging and customer experience.

Retailers:

The Walmart findings suggest that retailers could also see a reduction in the total amount of food purchased by customers, although other retailers, such as Kroger, expect this to be more of a change in the types of food purchased, rather than an overall reduction in basket size.²² Multi-purpose retailers are likely to be less impacted due to a typically diverse offering, while those with pharmacies could see higher sales and increased foot traffic through offering GLP-1RAs. This is already seen in the U.S., where some retailers have reported that their 2023 second-quarter sales have been boosted by prescription weight-loss drugs.



^{19.} Bloomberg interview with John Furner, US CEO of Walmart. October 4, 2023.

^{20.} Sochovsky, N. and Miles, H., 2023. GLP-1: The Weight of Speculation. Morgan Stanley Global Equity Observer. December 28, 2023. Available from: https://www.morganstanley.com/im/en-us/individual-investor/insights/articles/glp1-the-weight-of-speculation.html

^{21.} Ibid

^{22.} Constantino, A., 2023. Weight loss drugs boost sales at retail pharmacies, but they may not help profits much. CNBC. August 21, 2023. Available from: https://www.cnbc.com/2023/08/21/weight-loss-drugs-boost-retail-pharmacy-sales.html

4. Acceleration of Broader Lifestyle Changes

Responsible prescribing of GLP-1RAs will typically include a recommendation to also increase physical activity. In addition, following the weight loss, many individuals could become more physically active and experience other changes in their lifestyle habits as a result of changes in physical appearance.

Example Impacts:

Fitness Industry:

The impact on the fitness industry is expected to change with time. The near-term impact may be neutral to negative, with some consumers provided with an alternative route to losing weight. However, the longer-term impact of GLP-1RAs is likely to be positive for the industry, driven by an expected higher uptake of physical activity by previously overweight individuals, and the growing evidence of the importance of exercise to preserving muscle mass. A Morgan Stanley survey found a twofold increase in weekly exercise for individuals after beginning their weightloss drug regimen.²³ Fitness providers, such as gyms or equipment manufacturers, may look to develop expansion plans to keep up with potential demand which will require rigorous and localized demand modelling and strategic investment prioritization.

Sports Apparel:

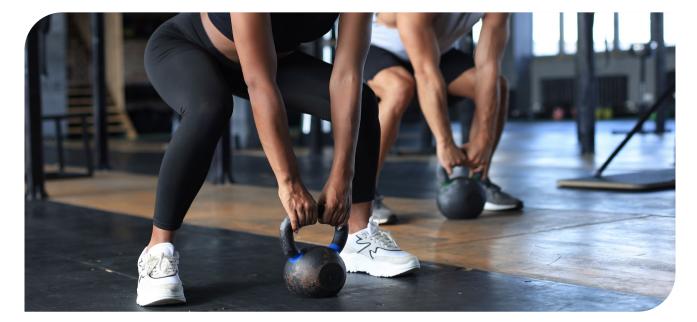
Physical and psychological changes for consumers may also have a longer-term impact on the sports apparel industry. As well as an increase in the practical use of sportswear for exercise purposes, there may be a rush to "join the athleisure craze" as suggested by a BMO Capital Markets analysis.²⁴

Cosmetics/Beauty and Wellness Industry:

The psychological impact of the change could have a similar impact on the cosmetic/beauty industry, with a Piper Sandler analyst recently highlighting that the "broader awareness for appearance could be a tailwind."²⁵

5. Reduction in Average Weight

A reduction in average weight across the population could also have widespread impact across several industries. For example, a recent Jefferies report calculated that if the average United Airlines passenger were to lose 10 pounds (c.4.5kg), it would lead to annual fuel cost savings of \$80m for the airline industry.²⁶ Potential changes in physical appearance may also impact other industries such as the clothing industry.



 Morgan Stanley, 2023. Could obesity Drugs Take a Bite Out of The Food Industry? September 5, 2023. Available from: https://www.morganstanley.com/ideas/obesity-drugs-food-industry?
 Erman, M., 2023. Novo Nordisk rivals see room to compete in \$100 billion weight-loss drug market. Yahoo Finance. May 8, 2023. Available from: https://www.reuters.com/business/ healthcare-pharmaceuticals/novo-nordisk-rivals-see-room-compete-100-bin-weight-loss-drug-market-2023-05-04/

^{25.} Saul, D., 2023. Will the Ozempic weight loss craze hit fitness stocks? Here's what analysts predict. Forbes. November 10, 2023. Available from: https://www.forbes.com.au/news/world-news/ the-huge-numbers-behind-the-ozempic-weight-loss-craze/

^{26.} Jefferies, 2023. Weigh to Go: Assessing the Wider Implications of a Slimmer Society. October 2, 2023. Available from: https://insights.jefferies.com/october-2023-quarterly-insights/weigh-to-go-assessing-the-wider-implications-of-a-slimmer-society

How Teneo Can Help

Teneo is a leading global CEO advisory firm, providing integrated advisory services across its five business segments (Management Consulting, Strategy & Communications, Financial Advisory, Risk Advisory and People Advisory) to help clients solve and respond to complex business challenges. It is comprised of over 1,600 professionals, operating across 40+ countries.

Teneo brings together a unique set of capabilities and is the best partner to help senior management and investors understand and navigate the potential impact of GLP-1RAs on their business.



We Understand GLP-1RAs:

We have already been engaged by several clients to advise them on the potential impact of GLP-1RAs on their business. Some of our senior advisors have specific knowledge of GLP-1RA and sit on committees that are influencing the potential strategic and operational directions of uses of GLP-1RAs.



We Know Pharma and Healthcare:

We have a specialist team of life sciences and healthcare experts, who have deep sector knowledge and clinical expertise (with a number of doctors working within the team). We have worked with some of the world's leading life sciences players on their most significant reputational or commercial challenges. We have developed a deep understanding of healthcare systems in many major geographies, having advised both public and private players in the space.



We are Trusted by Leading Brands:

Our expertise extends beyond healthcare, and we work across a wide range of sectors and capabilities. We are the trusted advisor to numerous major global brands.



We have a Network of Senior Advisors:

Our clients benefit from access to Teneo's network of senior advisors with decades of healthcare, business and government expertise.

Area of Expertise	Example Teneo Support
Demand Modelling	 Sizing the current and future evolution of GLP-1RA usage (alongside other potential weight management options). Modelling different scenarios of GLP-1RA growth on a country-specific level considering factors, including licensing and approvals; potential users; supply issues; side effect fears; etc.
Impact and Porfolio Assessment	 Supporting organizations to develop a granular understanding of the potential long-term impact of GLP- 1RA drugs on the current and potential portfolio, including analysis of the client portfolio and customer base segmentation to assess with regards to potential changes in customer behavior. Modelling impact to end-sectors, considering factors, including consumption habits (e.g. total calorie intake, snacking behaviors); shopping basket composition; support service wraparound (education, dietician services, meal subscriptions); demand for competing solutions (e.g. medical devices, other weight-loss products) etc. Bespoke studies on the change in behaviors of those using GLP-1RAs.
Future Strategy Design	 Devising appropriate strategies to mitigate risk and capture potential upside. Design of go-forward operating model to capture the new opportunity presented by GLP-1RA usage.
M&A and Investment Support	 Identification of potential investors/funders to support strategic investments (e.g. in portfolio expansion to respond to GLP-1RA, in new clinical trials or licenses). M&A target search and identification, commercial and financial due diligence of prospective targets.
Reputation Management	 Design of communications strategy to ensure product offering and pricing are positioned complementary to GLP-1RA drugs. Narrative development on the potential impact of GLP-1RAs. Ongoing communications support to key stakeholders.
Public Engagement	Advising clients on how to engage with public and government agencies to build support for favorable policy changes such as increasing public support for the medical treatment of obesity.

Table 3: Example areas of potential Teneo support (non-exhaustive)

Key Contacts



Edward Matthews Senior Managing Director, Health and Social Care Practice Lead

Management Consulting



Lucy Thorp Managing Director Management Consulting



Juliana Bruton-Dubois Senior Managing Director Strategy & Communications



Christian Buss Senior Managing Director Strategy & Communications



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Professor John Deanfield
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Professor of Cardiology at
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Prevention Champion
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Teneo is the global CEO advisory firm.

We partner with our clients globally to do great things for a better future.

Drawing upon our global team and expansive network of senior advisors, we provide advisory services across our five business segments on a stand-alone or fully integrated basis to help our clients solve complex business challenges. Our clients include a significant number of the Fortune 100 and FTSE 100, as well as other corporations, financial institutions and organizations.

Our full range of advisory services includes strategic communications, investor relations, financial transactions and restructuring, management consulting, physical and cyber risk, organizational design, board and executive search, geopolitics and government affairs, corporate governance, ESG and DE&I.

The firm has more than 1,600 employees located in 40+ offices around the world.

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