

### IFOA Response to Health and Social Care Committee **Inquiry into Food and Weight Management**

The Institute and Faculty of Actuaries (IFoA) is a royal chartered, not-for-profit, professional body. We represent and regulate over 34,000 actuaries worldwide, and oversee their education at all stages of qualification and development throughout their careers. Actuaries are big-picture thinkers who use mathematical and risk analysis, behavioural insight and business acumen to draw insight from complexity. Our rigorous approach and expertise help the organisations, communities and governments we work with to make better-informed decisions. In an increasingly uncertain world, it allows them to act in a way that makes sense of the present and plans for the future.

The Institute and Faculty of Actuaries (IFoA) welcomes the opportunity to respond to the Health and Social Care Committee Inquiry into Food and Weight Management. This response is taken from a Swiss Re article in The Actuary magazine<sup>1</sup> and an LCP Think Piece for the IFoA<sup>2</sup> and represents the views of the authors. It does not represent IFoA policy per se but reflects emerging thinking within and beyond the actuarial profession and we are submitting this in the public interest.

For actuaries, effective weight management will have implications on insurance, pension schemes, public policy and the future economic and healthcare landscape.

Glucagon-like peptide 1 (GLP-1) drugs, initially developed for diabetes management, are now also recognised as effective treatments for obesity, improving users' metabolic health. GLP-1 drugs mimic the natural hormone 'glucagon-like peptide 1' in the body to slow digestion, stabilise blood glucose, lower insulin resistance, and reduce food intake by improving glycaemic control and stimulating satiety. They may both prevent and treat obesity, affecting associated morbidity, mortality and medical costs.

Semaglutide (Ozempic, Wegovy) is the most effective single GLP-1 receptor agonist. Tirzepatide (Mounjaro, Zepbound) combines GLP-1 with glucose-dependent insulinotropic polypeptide (GIP) and provides superior weight loss.

Currently, anti-obesity medications (AOMs) have a high uptake in private markets (400,000 patients in the UK, 100,000 in Denmark, and 100,000 in Germany<sup>3</sup>) and in the countries they were launched in initially (particularly the US). Investment bank UBS estimates that, globally, 40 million people will be taking GLP-1 drugs by 2029, 44% of them in the US. This translates into approximately \$126bn sales by 2029.

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<sup>1</sup> https://www.theactuary.com/2025/05/08/big-promise-everything-you-need-know-about-weight-loss-drugs

<sup>&</sup>lt;sup>2</sup> https://actuaries.org.uk/media/oehe1msg/think-issue-14-final.pdf.

<sup>&</sup>lt;sup>3</sup> https://www.iqvia.com/locations/emea/blogs/2024/12/doctors-and-obesity-are-healthcare-professionals-ready-for-the-new-antiobesity-medications

The lack of long-term data makes it uncertain whether AOMs will yield lasting health and economic effects. For some groups, these drugs may need to be taken for many years to maintain weight loss; for others they may be a bridge to sustainable weight management through managed lifestyle changes.

AOMs should not be seen as a substitute for non-medical interventions such as healthy eating, exercise, and behavioural and psychological support.

# 1. What challenges and opportunities do weight loss medications like Wegovy and Mounjaro present to the NHS and to individuals?

#### **Opportunities**

The benefits of the drugs can be seen across the human body:

- Weight loss and adjacent metrics Studies suggest that GLP-1 drugs reduce feelings of hunger and subsequently lower the user's food intake, resulting in weight loss. Reductions in body mass index (BMI), waist circumference, triglycerides, glycated haemoglobin, blood pressure and cholesterol have also been observed. The effects can be seen within a year and are comparable to the outcomes of gastric sleeve surgery.
- Cardiovascular disease Semaglutide reduced major cardiovascular events by 20%, and all-cause mortality by 19%, in non-diabetic overweight or obese adults with diagnosed cardiovascular disease (CVD) over 38 months<sup>4</sup>. Tirzepatide showed a modelled 24% reduction in cardiovascular events over 10 years, based on 72 weeks of data in overweight or obese patients with CVD risk factors<sup>5</sup>.
- Cancer By reducing insulin resistance, GLP-1 drugs may lower the risk of more than 30 cancers, including breast, colorectal, stomach, liver and pancreatic. A large study in type 2 diabetics with no prior cancer diagnosis found a significant reduction (hazard ratio 0.35–0.76) in the prevalence of 10 obesity-related cancers, compared with insulin users<sup>6</sup>.
- **Liver disease** GLP-1 drugs reduce liver inflammation, fibrosis and the biomarkers of liver cell death, lowering the likelihood of metabolic dysfunction-associated steatotic liver disease, cirrhosis and potentially liver cancer.
- **Kidney disease** Semaglutide slows chronic kidney disease progression, reducing kidney-related mortality by 26% in people with diabetes<sup>7</sup>.
- **Neurodegenerative disease** early trials suggest there may be benefits for Alzheimer's and Parkinson's diseases in previous generations of GLP-1 drugs<sup>8</sup>, although more research is needed.
- Other benefits GLP-1 drugs show promise in managing asthma, polycystic ovary syndrome
  and metabolic health-linked psychiatric conditions. Tirzepatide is approved in the US for
  moderate-to-severe obstructive sleep apnoea, reducing related cardiometabolic risks. Further
  emerging evidence suggests that these drugs could have benefits for healthy ageing by targeting
  inflammation and organ degeneration. Improvements in addictive behaviours, including alcohol
  and opioid misuse, have also been observed.
- Mental health –Swiss Re research found that disability income insurance claimants with a BMI of 35+ had an element of mood disorder contributing to their claims. While the evidence of GLP-1

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<sup>4</sup> https://pubmed.ncbi.nlm.nih.gov/36216945/

<sup>&</sup>lt;sup>5</sup> https://pmc.ncbi.nlm.nih.gov/articles/PMC10714284/

<sup>&</sup>lt;sup>6</sup> https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2820833

<sup>7</sup> https://diabetesonthenet.com/diabetes-primary-care/distilled-flow-semaglutide/#:~:text=The%20FLOW%20(Evaluate%20Renal%20Function%20with%20Semaglutide,outcomes\*\*%20\*%20Rate%20 of%20decline%20of%20eGFR

<sup>8</sup>https://www.sciencedirect.com/science/article/pii/S1878747925001904#:~:text=Abstract,therapies%20to%20maximize%20therapeutic%20potential.

drugs' benefits for mental health is limited, early research suggests that improving insulin resistance may reduce mental health issues.

Anti-obesity medications are an attractive form of weight management as they are non-invasive (currently administered via injection but oral tablets are on the near horizon, with an oral tablet by a pharmaceutical company (Eli Lilly) seeking approval in 2026<sup>9</sup>), and they do not require substantial changes to patients' lifestyles.

Pharmaceutical companies are increasingly viewing AOMs as an attractive investment proposition. This is leading to many AOMs being added to various stages of their drug development pipeline, in the hope that AOMs with higher efficacy or improved safety profiles can be launched<sup>10</sup>. The expiry dates of the patents (semaglutide starting with China in 2026 and tirzepatide in many countries in 2036) will drive generic alternatives, increasing affordability and accessibility.

If the combined approach of AOMs and lifestyle changes proves successful, we could see a reversal of obesity's effect on recent mortality trends, filtering through to mortality improvement assumptions. This will have opposing implications for life and health insurance compared to pension schemes and retirement income products in terms of longevity risk.

The use of AOMs will likely lower body mass index, affecting portfolio ratings and ultimately pricing where BMI is a core factor in assumption setting. This will benefit the consumer. Swiss Re data shows that more than 75% of its portfolio underwritten as non-standard has an elevated BMI.

There is also a broader value of weight management to the economy and society:

- Workforce and productivity: Effective weight management reduces absenteeism, early retirement, and the burden of both formal and informal caregiving. Improved physical and mental health outcomes translate into greater participation and productivity across the workforce.
- **Fiscal impact**: Each year, obesity-related work absence and sickness benefits are estimated to cost the UK government just over £10 billion<sup>11</sup>.
- **Health equity**: Targeted weight management interventions have greater scope for improving health outcomes in disadvantaged populations and would contribute to reducing health disparities.
- **Environmental impact**: Reduced calorie consumption and lower transportation-related fuel use would reduce carbon emissions.
- **Scientific spillovers**: Investment in obesity treatments, especially multi-indicated AOMs, may drive innovation and therapeutic breakthroughs in other disease areas, such as type 2 diabetes, cardiovascular disease and Alzheimer's disease, amplifying their long-term value.

In collaboration with Eli Lilly, the SURMOUNT-REAL study in Northern England is assessing tirzepatide's real-world effect on employment, healthcare use and sick days over a period of five years<sup>12</sup>.

### Challenges

3 actuaries.org.uk

<sup>&</sup>lt;sup>9</sup> https://investor.lilly.com/news-releases/news-release-details/lillys-oral-glp-1-orforglipron-successful-third-phase-3-trial

<sup>&</sup>lt;sup>10</sup> https://www.rootsanalysis.com/key-insights/top-anti-obesity-drug-companies.html

<sup>11</sup> https://insights.lcp.com/rs/032-PAO-331/images/LCP-Are-we-undervaluing-measures-to-keep-people-well-november-2024.pdf

<sup>12</sup> https://www.manchester.ac.uk/about/news/new-study-to-deepen-understanding-of-a-weight-loss-medication/#:~:text=Health%20Innovation%20Manchester%20and%20The,and%20sick%20days%20from%20work.

AOMs do require ongoing adherence from patients for longer lasting change. Studies show that around 63% of users remain on therapy at one year, with that number dropping to around 14% by three years 13.

AOMs may cause gastrointestinal side effects, hair loss, low blood sugar and fatigue<sup>14</sup>. They may also reduce users' enjoyment of eating, potentially affecting their mental wellbeing. Rare but serious side effects, including bowel obstructions, pancreatitis and potential cancer links, warrant further investigation.

Weight regain is common, with up to two-thirds of lost weight returning within a year of stopping treatment. This highlights the need for a lifestyle change alongside, to achieve a sustainable outcome. Notably, one-third of the weight lost comes from lean muscle and bone density, increasing the risk of frailty, especially in older adults. This makes protein intake and resistance training essential for function preservation.

AOMs are currently expensive (around £289 per month for Mounjaro and around £269 per month for Wegovy for the highest dose<sup>15</sup>). Supply-chain constraints and limited clinic availability are also barriers.

Endorsements by celebrities and social media influencers have fuelled fears about their potential misuse for cosmetic weight loss. In April, the FDA in the US warned counterfeit Ozempic (semaglutide) in the US drug supply chain<sup>16</sup> and has banned the sale of compound (unapproved) AOMs<sup>17</sup>.

Weight management services are generally not covered by private medical insurers as obesity does not generally result in acute conditions, which are the key conditions covered by these policies, and there is currently little evidence that policyholders may benefit from these services or treatments within their duration of cover. Where weight management is covered, these are predominantly nutrition programmes, subsidised gym membership, wearable devices, clinical counselling and bariatric surgery.

However, insurers are now assessing whether to offer these medications at a discount for eligible policyholders. Vitality in the UK and Medicaid in the US among the first to launch AOM coverage, though its current high cost and uncertain treatment duration are key deterrents<sup>18,19</sup>.

A consideration for insurers is that some people may take AOMs for a brief period before buying a new insurance product, temporarily making themselves appear healthier. Underwriting application forms do not currently ask about use of weight loss drugs, so applicants may not disclose this information. In the future, insurers may need to factor in applicants' use of these medications, adherence to them and associated lifestyle changes. Additionally, longitudinal weight history can be modelled alongside other risk factors to understand the likelihood of relapse to a higher BMI.

The Lancet Diabetes & Endocrinology Commission has advocated for a broader obesity definition that incorporates waist circumference, waist-to-hip ratio and metabolic markers such as body fat

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<sup>13</sup> https://www.pharmexec.com/view/research-how-long-glp1-users-keep-using-medication-weight-loss

<sup>&</sup>lt;sup>14</sup> https://www.nhsinform.scot/tests-and-treatments/medicines-and-medical-aids/types-of-medicine/diabetes-and-weight-loss-medication

<sup>15</sup> https://drugs4delivery.com/mounjaro-and-wegovy-price-changes-coming-september-2025/

<sup>&</sup>lt;sup>16</sup> https://www.fda.gov/drugs/drug-safety-and-availability/fda-warns-consumers-not-use-counterfeit-ozempic-semaglutide-found-us-drug-supply-chain

<sup>&</sup>lt;sup>17</sup> https://www.fda.gov/drugs/postmarket-drug-safety-information-patients-and-providers/fdas-concerns-unapproved-glp-1-drugs-used-weight-loss

<sup>&</sup>lt;sup>18</sup> https://www.verywellhealth.com/does-medicaid-cover-anti-obesity-medication-8650269

<sup>19</sup> https://www.vitality.co.uk/media/vitality-announces-number-of-enhancements-targeting-better-health-in-launch-event/

composition<sup>20</sup>. This approach could help insurers to assess health more holistically, especially for people who are using weight-loss medications.

## Are weight loss injections cost-effective to the NHS and how does this compare with other treatments?

Obesity is estimated to cost the UK health system around £11.4 billion a year<sup>21</sup>. The variation in the potential impact and cost across interventions is shown in Nesta's blueprint to halve obesity in the UK<sup>22</sup>.

AOMs can currently be prescribed to patients with a BMI of 35 (although in some instances it may be lower) and at least one co-morbidity, and after other weight management strategies such as lifestyle changes have been attempted<sup>23</sup>. NHS patients eligible for AOMs would typically be eligible for bariatric surgery, which has been shown to be more effective, but is a more invasive option<sup>24</sup>.

Primary prevention approaches for weight management or increasing physical activity tend to be population-wide and cost-effective or relatively low-cost<sup>25</sup>.

Should you wish to discuss any of these points further, please contact Caroline Winchester in the first instance, <a href="mailto:caroline.winchester@actuaries.org.uk">caroline.winchester@actuaries.org.uk</a>

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<sup>&</sup>lt;sup>20</sup> https://www.kingshealthpartners.org/our-work/clinical-academic-integration/diabetes-endocrinology-and-obesity/lancet-diabetes-and-endocrinology-commission-clinical-

obesity#:~:text=Obesity%20is%20currently%20defined%20by,negative%20health%20consequences%20of%20obesity.

<sup>&</sup>lt;sup>21</sup> https://www.gov.uk/government/publications/life-sciences-healthcare-goals/obesity-healthcare-goals

<sup>22</sup> https://blueprint.nesta.org.uk/

<sup>&</sup>lt;sup>23</sup> https://www.nhs.uk/conditions/obesity/treatment/

 $<sup>^{24}\</sup> https://www.nhs.uk/tests-and-treatments/weight-loss-surgery/what-is-weight-loss-surgery/whit-weight-lo$ 

<sup>&</sup>lt;sup>25</sup> https://www.cph.cam.ac.uk/making-case-prevention