

Putting NICE guidance into practice

Resource impact report: Semaglutide for managing overweight and obesity (TA875)

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Summary

NICE has recommended semaglutide as an option for weight management, including weight loss and weight maintenance, alongside a reduced-calorie diet and increased physical activity in adults, only if:

- it is used for a maximum of 2 years, and within a specialist weight management service providing multidisciplinary management of overweight or obesity (including but not limited to tiers 3 and 4), and
- they have at least 1 weight-related comorbidity and:
 - a body mass index (BMI) of at least 35.0 kg/m², or
 - a BMI of 30.0 kg/m² to 34.9 kg/m² and meet the criteria for referral to specialist weight management services in [NICE's guideline on overweight and obesity management](#).
- the company provides semaglutide according to the commercial arrangement.
- Use lower BMI thresholds (usually reduced by 2.5 kg/m²) for people from South Asian, Chinese, other Asian, Middle Eastern, Black African or African-Caribbean family backgrounds.
- Consider stopping semaglutide if less than 5% of the initial weight has been lost after 6 months of treatment.

By 2027 to 2028 we estimate that:

- Around 4.2 million people with at least 1 weight-related comorbidity and a BMI of at least 35.0 kg/m² or between 30.0 kg/m² and 34.9 kg/m² who meet the criteria for referral to specialist weight management services are eligible for treatment with semaglutide and about 49,000 people will access specialist weight management each year after adjusting for predicted population growth.
- Around 46,500 people will have semaglutide each year after adjusting for predicted population growth in as shown in table 1.

Table 1 Estimated number of people in England having semaglutide

	2023 to 2024	2024 to 2025	2025 to 2026	2026 to 2027	2027 to 2028
Cumulative proportion of eligible population treated with semaglutide (%)	30	60	95	95	95
Population continuing treatment with semaglutide each year	0	10,400	10,800	23,500	11,600
Population starting semaglutide each year	13,500	17,200	33,800	22,100	34,900
Total people treated with semaglutide each year	13,500	27,600	44,600	45,600	46,500

This report is supported by a local resource impact template because semaglutide and liraglutide have discounts to their list price which is commercial in confidence. The confidential list price of semaglutide and liraglutide can be put into the template and other variables may be amended.

This technology is commissioned by integrated care boards. Providers are NHS hospital trusts and specialist weight management services outside of secondary care.

1 Semaglutide

1.1 NICE has recommended semaglutide as an option for weight management, including weight loss and weight maintenance, alongside a reduced-calorie diet and increased physical activity in adults, only if:

- it is used for a maximum of 2 years, and within a specialist weight management service providing multidisciplinary management of overweight or obesity (including but not limited to tiers 3 and 4), and
 - they have at least 1 weight-related comorbidity and:
 - a body mass index (BMI) of at least 35.0 kg/m², or
- a BMI of 30.0 kg/m² to 34.9 kg/m² and meet the criteria for referral to specialist weight management services in [NICE's guideline on overweight and obesity management](#).
- the company provides semaglutide according to the commercial arrangement.

Use lower BMI thresholds (usually reduced by 2.5 kg/m²) for people from South Asian, Chinese, other Asian, Middle Eastern, Black African or African-Caribbean family backgrounds.

1.2 Consider stopping semaglutide if less than 5% of the initial weight has been lost after 6 months of treatment.

1.3 Current practice is for the eligible population to use either liraglutide or diet and exercise to help manage their weight. Semaglutide is an additional option for this population.

2 Resource impact of the guidance

2.1 By 2027 to 2028 we estimate that:

- Around 4.2 million people with at least 1 weight-related comorbidity and a BMI of at least 35.0 kg/m² or between 30.0-

34.9 kg/m² who meet the criteria for referral to specialist weight management services are eligible for treatment with semaglutide each year and 49,000 people access specialist weight management each year after adjusting for predicted population growth.

- Around 46,500 people will receive semaglutide each year after adjusting for predicted population growth.

2.2 The current treatment and future uptake figure assumptions are based on clinical expert opinion and are shown in the resource impact template. Table 2 shows the number of people in England who are estimated to receive semaglutide by financial year.

Table 2 Estimated number of people receiving semaglutide using NICE assumptions

	2023 to 2024	2024 to 2025	2025 to 2026	2026 to 2027	2027 to 2028
Cumulative proportion of eligible population treated with semaglutide (%)	30	60	95	95	95
Population continuing treatment with semaglutide each year	0	10,400	10,800	23,500	11,600
Population starting semaglutide each year	13,500	17,200	33,800	22,100	34,900
Total people treated with semaglutide each year	13,500	27,600	44,600	45,600	46,500

2.3 This report is supported by a local resource impact template because semaglutide and liraglutide have a discount to their list price that is commercial in confidence. The confidential list price of semaglutide and liraglutide can be put into the template and other variables may be amended.

Savings and benefits

2.4 Semaglutide is an additional treatment option to help people manage their weight which requires fewer injections than liraglutide

because injections are administered weekly rather than daily and has less severe side effects than orlistat.

- 2.5 Semaglutide has been demonstrated to be more effective than liraglutide and placebo at aiding with weight loss.
- 2.6 By helping people lose weight, semaglutide reduces their risk of cardiac events and knee replacement surgery. Table 3 shows the number of cardiac events and knee replacement surgeries saved over a 40 year period if 45,000 people are treated with semaglutide.

Table 3 reduction in cardiac events and knee surgeries over a 40-year period for England based on 45,000 people having semaglutide.

Event type	Events saved
Total cardiovascular events (detailed below)	18.6
Stroke	2.6
Transient ischaemic attack	0.7
Myocardial infarction	9.0
Angina	6.3
Cardiac events above which result in death	5.3
Total knee replacements (detailed below)	192.0
Non-fatal knee replacement	191.4
Fatal knee replacement	0.6

3 Implications for commissioners

- 3.1 This technology is commissioned by integrated care boards.
Providers are NHS hospital trusts and specialist weight

management outside of secondary care (for example, community specialist weight management services).

- 3.2 Semaglutide falls within the programme budgeting category 4X endocrine, nutritional and metabolic disorders.

4 How we estimated the resource impact

The population

- 4.1 There are around 12,963,000 adults in England with a BMI of 30.0 kg/m² to 39.9 kg/m². Of these adults there are around 8,996,000 with 1 or more weight-related comorbidities and of these around 6,297,000 (70%) have a BMI between 30.0 kg/m² and 34.9 kg/m² and around 690 (0.011%) meet the criteria for referral to a specialist weight management service.
- 4.2 Of the 8,996,000 adults with a BMI of 30.0 kg/m² to 39.9 kg/m² with 1 or more weight-related comorbidity, around 2,699,000 (30%) have a BMI between 35.0 kg/m² and 39.9 kg/m².
- 4.3 There are around 1,527,000 adults with a BMI of 40 kg/m² or higher with 1 or more weight-related comorbidity.
- 4.4 Combining these 3 groups gives an eligible population of 4,226,000 by year 2026 to 2027.
- 4.5 Capacity in specialist weight management services is expected to increase from around 45,000 to around 49,000 over the next 5 years.

Table 4 Number of people eligible for treatment in England

	Population	Proportion of previous row (%)	Number of people in 2027 to 2028
a	Adult population	–	46,263,200
b	Adults with a BMI of 30.0 kg/m ² to 39.9 kg/m ² ¹	28.02	12,963,000
c	Adults with a BMI of 30.0 kg/m ² to 39.9 kg/m ² with 1 or more weight-related comorbidity ²	69.4	8,996,000
d	Adults with a BMI of 30.0 kg/m ² to 34.9 kg/m ² with 1 or more weight-related comorbidity ²	70.0	6,297,000
e	Proportion of people with a BMI of ≥ 30 kg/m ² to 34.9 kg/m ² with 1 or more weight-related comorbidity who meet the criteria set out in NICE's guideline on overweight and obesity management for referral to a tier-3 weight management service ²	0.011	690
f	Adults with a BMI of ≥ 35 kg/m ² to 39.9 kg/m ² with 1 or more weight-related comorbidity ²	30.0 of c	2,699,000
g	Adults with a BMI of ≥ 40 kg/m ² with 1 or more weight-related comorbidity ²	3.3 of a	1,527,000
	Total number of people estimated to be eligible for treatment with semaglutide	e+f+g	4,226,000
	People accessing specialist weight management and able to be prescribed semaglutide	–	49,000
	Total number of people expected to receive semaglutide in 2022 to 2023	–	13,500
	Total number of people estimated to receive semaglutide each year by 2027 to 2028 based on predicted population growth	–	46,500
¹ Source: https://digital.nhs.uk/data-and-information/publications/statistical/health-survey-for-england/2019			
² Source: clinical opinion from committee meeting and appraisal consultation document			

Assumptions

4.6 The resource impact template assumes that:

- 67% of semaglutide is prescribed in specialist weight management services in secondary care and 33% in specialist weight management services outside of secondary care.
- Medicines prescribed in secondary care and dispensed by home delivery incur £50 per month administrative costs to cover any prescribing overheads after reaching any stopping rule, but have no administration costs when being dispensed in secondary care before reaching the stopping rule. This can be amended in the template to reflect local circumstances.
- Diet and exercise has no cost in the template and is assumed to be used as a single strategy and as part of all of the drug supported strategies.
- 20% VAT is incurred for all drugs prescribed and administered in secondary care, but this can be amended locally.
- Semaglutide and liraglutide have a treatment duration of 2 years unless stopped due to no response.

About this resource impact report

This resource impact report accompanies the [NICE guidance on semaglutide for managing overweight and obesity](#) and should be read with it.

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