

Putting NICE guidance into practice

Resource impact report: Liraglutide for managing overweight and obesity (TA664)

Published: December 2020

Summary

NICE has recommended liraglutide as an option for managing overweight and obesity alongside a reduced-calorie diet and increased physical activity in adults who have a body mass index (BMI) greater than 35kg/m² or greater than 32.5kg/m² for people from black and minority ethnic backgrounds and who have non-diabetic hyperglycemia and high risk of cardiovascular disease (CVD). The drug can only be prescribed by specialist multidisciplinary tier 3 weight management services in secondary care.

We estimate that:

- 6,650 people with BMI greater than 35kg/m² or greater than 32.5kg/m for people from black and minority ethnic backgrounds, who have non-diabetic hyperglycemia and high risk of CVD are eligible for treatment with liraglutide
- 5,990 people each year will start treatment with liraglutide from year 2 onwards once uptake has reached 90% as shown in table 1.

Table 1 Estimated number of people in England having liraglutide

	2020/21	2021/22	2022/23	2023/24	2024/25
Uptake rate for liraglutide (%)	25	90	90	90	90
Population starting treatment with liraglutide each year	1,660	5,990	5,990	5,990	5,990

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

This technology is commissioned by clinical commissioning groups. Providers are NHS hospital trusts.

1 Liraglutide

- 1.1 NICE has recommended liraglutide as an option for managing overweight and obesity alongside a reduced-calorie diet and increased physical activity in adults, only if:
- they have a body mass index (BMI) of at least 35 kg per m² (adjust accordingly using lower thresholds for members of minority ethnic groups known to be at equivalent risk of the consequences of obesity at a lower BMI than the white population) and
 - they have non-diabetic hyperglycaemia (defined as a haemoglobin A1c level of 42 to 47 mmol per mol [6.0 to 6.4%] or a fasting plasma glucose level of 5.5 to 6.9 mmol per L) and
 - they have a high risk of cardiovascular disease based on risk factors such as hypertension and dyslipidaemia and
 - it is prescribed in secondary care by a specialist multidisciplinary tier 3 weight management service and
 - the company provides it according to the commercial arrangement (see section 2).
- 1.2 Currently there is no existing drug therapy for use in tier 3 weight management services so liraglutide addresses an unmet need.
- 1.3 Liraglutide has been demonstrated to help with weight loss. Losing weight can help reduce the risk of diabetes and cardiovascular disease.

2 Resource impact of the guidance

- 2.1 We estimate that:
- 166,000 people with BMI greater than 35kg/m² or greater than 32.5kg/m² for people from BAME backgrounds, who have non-diabetic hyperglycemia and high risk of CVD are eligible for treatment with liraglutide each year.

- 6,650 people will access tier 3 NHS weight management services each year.
- 5,990 people will start treatment with liraglutide from year 2 onwards once uptake has reached 90%
- 4,250 people will continue treatment from a previous year from year 2022/23 onwards once a steady state has been reached.

2.2 The current treatment and future uptake figure assumptions are based on discussions held with the company, NHSE and NICE as part of the budget impact test process and are shown in the resource impact template. Table 2 shows the number of people in England who are estimated to have liraglutide by financial year.

Table 2 Estimated number of people having liraglutide using NICE assumptions

	2020/21	2021/22	2022/23	2023/24	2024/25
Uptake rate for liraglutide (%)	25	90	90	90	90
Population starting treatment with liraglutide each year	1,660	5,990	5,990	5,990	5,990
Population continuing treatment with liraglutide each year	0	1,180	4,250	4,250	4,250
Total people receiving liraglutide each year	1,660	7,165	10,230	10,230	10,230

2.3 This report is supported by a local resource impact template. liraglutide commercial arrangement in place which makes it available with a commercial-in-confidence discount to the list price. The discounted price of liraglutide can be put into the template and other variables may be amended. For enquiries about the patient access scheme please contact Novo Nordisk Ltd.

Savings and benefits

- 2.4 Losing weight can reduce the risk of diabetes and CVD in people with high BMI. This can have a future saving from a reduction in these long term conditions. The value of savings cannot be estimated so are not included in the resource impact template.

3 Implications for commissioners

- 3.1 This technology is commissioned by clinical commissioning groups. Providers are NHS hospital trusts.
- 3.2 Liraglutide can only be prescribed by tier 3 weight management services but the availability of this drug may lead to increased demand for these services.
- 3.3 Liraglutide falls within the programme budgeting category 21X, healthy individuals.

4 How we estimated the resource impact

The population

- 4.1 There are around 5.8 million adults with a BMI 35kg/m or higher in England and there are around 4.1 million adults with a BMI between 32.5kg/m² and 34.9kg/m². Of those adults between 32.5-34.9kg/m², around 624,400 will be from a BAME background giving a total population meeting the BMI criteria of around 6.4 million. Of adults with a BMI greater than 35kg/m² or with a BMI greater than 32.5kg/m and BAME background, there will be about 166,000 with non-diabetic hyperglycaemia and a high risk of CVD. Around 4% of these adults are expected to access tier 3 weight management services each year, giving a total eligible population of around 6,650 per year.

Table 3 Number of people eligible for treatment in England

	Population	Proportion of previous row (%)	Number of people
	Total population		55,977,178
a	Adult population		44,022,560
b	Prevalence of BMI $\geq 35\text{kg/m}^2$ ¹	13.10	5,767,000
c	Prevalence of BMI $\geq 32.5 < 35\text{kg/m}^2$ ¹	9.4 of a	4,138,000
d	Proportion of adults who are from BAME backgrounds ²	15.09	624,400
e	Total population with BMI $\geq 35\text{kg/m}^2$ or BMI $\geq 32.5\text{kg/m}^2$ from a BAME background	b+d	6,391,000
f	Proportion of people who have non-diabetic hyperglycaemia and CVD ³	2.6	166,000
	Proportion of people who will access tier 3 weight management services and are eligible for treatment with liraglutide ⁴	4	6,650
	Total number of people estimated to start treatment with liraglutide each year from year 2 ⁴	90	5,990
¹ Source: Nicholson et al (2019) ² Source: Office of National Statistics Research report on population estimates by ethnic group and religion [online: accessed 9 October 2020] ³ Source: Based on discussions between NHSE, NICE and the company ⁴ Source: NICE assumption			

Assumptions

4.2 The resource impact template assumes that:

- People who respond well to treatment get two full years of treatment, this can be amended by users of the template.
- The template assumes that increased risk at lower BMI thresholds applies uniformly for all BAME people but the risks are different for individual ethnic groups and clinicians should assess each person individually before referring to tier 3 weight management services.
- The number of people who meet the criteria for BMI, non-diabetic hyperglycaemia and CVD each year will remain constant, this can be amended by users of the template.
- The proportion of people with a BMI between 32.5kg/m^2 - 34.9kg/m^2 from a BAME background who meet the criteria for non-diabetic

hyperglycaemia and CVD risk is the same as in people with a BMI 35kg/m² and above.

- The number of people referred to tier 3 NHS weight management services each year will not change, this can be amended by users of the template.
- People who do not respond well to liraglutide stop treatment after 16 weeks
- Needles will be provided to NHS trusts free of charge.

About this resource impact report

This resource impact report accompanies the NICE guidance on [insert guidance title and embed hyperlink, for example <http://www.nice.org.uk/guidance/TA/DG/MTXXX>] and should be read with it.

© NICE [year]. All rights reserved. See [Notice of rights](#).