NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Equality and health inequalities assessment (EHIA)

Disease-specific reference case extension: managing overweight and obesity in adults

The considerations and potential impact on equality and health inequalities have been considered throughout the development of this reference case extension in line with the principles outlined in developing NICE guidelines: the manual and NICE health technology evaluations: the manual.

1. Development of the reference case extension

Are any population groups excluded from the scope?
Children and young people are excluded from the obesity reference case extension. This is because, at this time, there is not enough evidence to support health economic evaluations for this population. In particular, there is not enough evidence on the link between weight loss and long-term health outcomes or quality of life (see the section on advice in NICE's terminated technology appraisal on semaglutide for managing overweight and obesity in young people aged 12 to 17 years).

How will the views and experiences of those affected by equality and health inequality issues be meaningfully included in the development process?
During development, we explored potential equality and health inequality issues in workshops with patient representatives, clinical experts and commissioners of services. Patient advocates were invited to the first workshop during the development of the reference case extension. On the advice of NICE's public involvement programme, this included a member of the Caribbean and African Health Network. A member of Obesity UK, a charity that supports, educates, and advocates for people with obesity, was invited to the first workshop, but could not attend. Equality and health inequalities assessments (EHIAs) and equality impact assessments (EIAs) from existing related NICE guidance were also reviewed to identify equality and health inequality issues relating to this topic. The NICE steering group for this reference case extension included attendees with experience in developing EHIAs and health inequalities briefings for NICE's guideline on overweight and obesity management, the EHIA for NICE's type 2 diabetes in adults guideline, and expertise in developing EHIAs in general.

Based on the equality and health inequality issues identified, do you have representation from relevant stakeholder groups for the consultation process, including groups who are known to be affected by these issues?
Stakeholders for NICE's guideline on overweight and obesity management were invited to register as stakeholders for this reference case extension. These stakeholders included NHS organisations from a wide geographical area across England. A number of stakeholder groups represented those affected by equality and health inequality issues, such as Age UK, The Women's Health and Maternal Well-being Initiative, The National LGB&T Partnership, Race Equality Foundation, among many others from the overweight and obesity management stakeholder list. Attendees of the workshops held during the development of the reference case extension were also invited to register as stakeholders. On the advice from NICE's public involvement programme, this included a member of the Caribbean and African Health Network.

What questions will you ask at the stakeholder consultation about the impact of the reference case extension on equality and health inequalities?
We are including 1 question at stakeholder consultation relating to health inequalities: The role of distributional cost-effectiveness analysis (DCEA) is referred to in the NICE manuals but is not currently included within the NICE reference case. Do you think there is a role for DCEA to inform decision-making specifically around the management of obesity (see 1.8.1)?

2. EIAs and EHIAs from existing guidance

Existing EIAs and EHIAs from existing NICE guidance include:

- EHIA for NICE's guideline on overweight and obesity management, which was based on the health inequalities briefing for obesity and weight management
- EIA for NICE's technology appraisal guidance on liraglutide for managing overweight and obesity
- EIA for NICE's technology appraisal guidance on semaglutide for managing overweight and obesity
- EHIA for NICE's technology appraisal guidance on tirzepatide for managing overweight and obesity.

The following equality and health inequality issues were identified:

Age

- Overweight and obesity rates increase with age. For people aged 45 to 64, 73% are living with overweight or obesity, and for people aged 65 to 74, 76% are living with overweight or obesity. In contrast, 43% of people aged 16 to 24 are living with overweight or obesity.
- Older people may need specific consideration as they may require additional support for some interventions.
- Younger people may need specific consideration, as obesity is a chronic, relapsing condition. Earlier onset of obesity is usually linked to worse health outcomes.
- Older adults may experience some functional loss, other comorbidities, frailty, or some combination of these.
- While older people have comorbidity risk factors that are of concern at different body mass indexes (BMIs), this may mean they are not considered for weight management programmes when it may be appropriate.

Disability

- People with a learning disability are at increased risk of living with overweight or obesity and may require additional support for some interventions.
- People with a physical disability may require additional support for some interventions.

- People with severe mental health problems are at increased risk of living with overweight or obesity and may require additional support for some interventions.
- Certain physical disabilities may impede the accuracy of measurements of overweight and obesity to determine health risk. For example, those with scoliosis and those with a different body composition due to lower muscle mass for a given weight. This may result in people wrongly being classified as ineligible for some weight management treatments.
- People with a mental health disorder, especially those receiving atypical antipsychotic medication, may be at increased risk of developing obesity. Access to specialist services may be restricted for some people with mental health disorders, meaning there may be inequitable access to medicines for treating obesity for these people.

Gender reassignment

- No equality issues identified.

Pregnancy and maternity

- Pregnant women, trans men and non-binary people are excluded from the scope of NICE's guideline on overweight and obesity management as obesity and overweight requires different management in this population and is covered by separate NICE guidance.

Ethnicity

- There are differences in the prevalence of overweight and obesity, and the risk of resulting ill health, in certain ethnic minority groups.
- For example, people of South Asian descent (defined as people of Pakistani, Bangladeshi and Indian origin) living in England tend to have a higher percentage of body fat at a given BMI compared to the general population of England. They are also more likely to have features of metabolic syndrome (for example, higher triglycerides and lower high-density lipoproteins in females and higher serum glucose in males) at a given BMI. Metabolic syndrome is defined as a group of health problems that put you at risk of type 2 diabetes or conditions that affect your heart or blood vessels.
- Likewise, compared to white European populations, people from black, Asian and other minority ethnic groups are at equivalent risk of type 2 diabetes but at lower BMI levels.

- The differences in prevalence of people living with overweight or obesity and the impact on other health conditions may mean certain groups need specific consideration.

Religion or belief

- No equality issues identified.

Sex

- While men are more likely than women to be living with overweight or obesity, they are less likely to seek support or treatment.

Sexual orientation

- People who are lesbian, gay, bisexual, trans or questioning (LGBTQ) may be less likely to participate with weight-loss programmes because of both the experienced and perceived threat of discrimination.

Socio-economic factors

- Overweight and obesity rates differ between socio-economic groups. Children in the most deprived decile are twice as likely to be living with overweight or obesity than children in the least deprived decile. In adults, 35% of men and 37% of women were living with obesity in the most deprived areas, compared with 20% of men and 21% of women in the least deprived areas.

- There may be cost implications for people who are eligible for total meal replacement diets (for low and very low energy diets) if they have to pay for the products themselves.

- For people who cannot access specialist weight management services, medicines for treating obesity can only be accessed privately. This is more likely to affect access for people on a low income.

- There are health inequalities associated with inequitable access to food with high nutritional value in areas of high deprivation or relating to socioeconomic factors.

Geography

- There is geographical variation in access to NHS weight management services. A lack of tier 3 services (intensive weight loss programmes) in certain areas means not all people living with obesity can access tier 4 services (bariatric surgery), because access to tier 3 services is a prerequisite to surgery.

- There is geographical variation in access to support to help people maintain a healthy weight, and the extent to which local authorities can use legislative and policy levers to provide such support.

- There is inequality in access to treatments that could alleviate disability, such as hip or knee replacements.

Other definable characteristics

- Some people taking medications or receiving treatment may be at higher risk of excess weight gain because of the side effects of the medication or intervention.
- People with endocrine disorders such as type 2 diabetes and hypothyroidism may be at higher risk of excess weight gain.
- Gypsy, Roma and Travellers may be less likely to participate in weight-loss programmes because of poor access to, and uptake of, health services, as well as both the experienced and perceived threat of discrimination.
- Autistic people may experience particular challenges accessing weight management services and may also require additional support for some interventions.
- People with dementia may require additional support for some interventions.
- People recovering from COVID-19 may need additional support for some weight management interventions.

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3. Recommendations in the reference case extension

How have the committee's considerations of equality and health inequality issues been reflected in the draft reference case extension?
The reference case extension includes section 1.8 on equality and other considerations. Recommendation 1.8.1 notes that there is a higher incidence of people living with obesity in areas of high deprivation. It suggests, where appropriate, analysis to present results based on levels of deprivation. Recommending treatments for obesity can potentially help narrow the gap in health outcomes between socio-economic groups. Recommendation 1.8.2 identifies a number of important obesity-related outcomes and patient characteristics. These elements are challenging to quantify and accurately incorporate into a health economic evaluation, and the recommendation notes that a guidance committee might wish to take them into consideration in a more qualitative way. Recommendation 1.1.3 specifies that the population in the economic model should be subgrouped by body mass index (BMI) category and ethnicity, where possible (described in table 1). This reflects that certain ethnic minority groups (for example, South Asian, Chinese, Middle Eastern, Black African, and African-Caribbean) experience elevated cardiometabolic risk at lower BMI levels than white populations.

Could any elements of the draft reference case extension potentially increase inequalities?
A number of important obesity-related health outcomes and patient characteristics were identified during development of the reference case extension. These elements are difficult to quantify and accurately incorporate into a health economic evaluation. Benefits of obesity treatment may be double counted and incorporating all elements may make models too complex or produce results that are too uncertain. Therefore, some groups of people with obesity could be disadvantaged by the methodology outlined in the reference case extension if the benefits of treatment are not fully captured and, as a result, they find it difficult to access treatment.

Recommendation 1.8.2 refers to mental illness, for example, depression and anxiety, where impact on quality of life because of weight loss and weight regain might not be fully captured beyond trial follow-up. Weight reduction could allow people to access other treatments, such as organ transplant, or improve their treatment-related outcomes, such as improvements in fertility. People living with disability and certain ethnic minority groups have a higher prevalence of obesity (being highest in black ethnic groups).

Recommendation 1.8.1 advises on the use of distributional cost-effectiveness analysis based on deprivation quintile where appropriate. However, the number of adults with obesity in England is very large and so committees should be aware that the opportunity cost associated with accepting a slightly higher ICER could be substantial.