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Guidelines

Referral criteria and assessment for bariatric surgery: summary of updated NICE guidance

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What you need to know

• These updated recommendations provide a non-exhaustive example list of obesity-related comorbidities that can be improved by bariatric surgery

• The updated guideline removes the recommendation for people to have attempted all non-surgical interventions or to be under management of a tier 3 service in order to be assessed for bariatric surgery

• Medical, nutritional, surgical, and psychological multidisciplinary team assessments should continue to be undertaken in people living with obesity as part of the specialist weight management service

Box end

Until this year, the National Institute for Health and Care Excellence (NICE) had recommended bariatric surgery as a treatment option for people with a body mass index (BMI, weight (kg)/(height (m)2) of ≥40, or with a BMI of 35-39.9 with a significant obesity-related comorbidity, only if all non-surgical interventions had been tried first and the person was receiving management in a tier 3 service. New NICE guidelines now recommend that these groups of people should be offered a comprehensive assessment for bariatric surgery without the requirement for all non-surgical interventions to have been tried first, or for patients to already be under the management of a tier 3 service. The guidelines also provide an evidence-based list of significant health conditions that can be improved by bariatric surgery, which will help clinicians make decisions about who to offer an assessment to, and recommendations on what the assessment for surgery should include.

This article summarises updated recommendations published in July 2023, referring to the updated NICE guidance on weight management.1 These guidelines update the previously published guidelines on management of obesity, first published in 2006 and updated in 2014.2

Recommendations

NICE recommendations are based on systematic reviews of best available evidence and explicit consideration of cost effectiveness. When minimal evidence is available, recommendations are based on the guideline committee’s experience and opinion of what constitutes good practice. Evidence levels for the recommendations are given in italics in square brackets. Definitions of evidence certainty are given in box 1.

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Box 1. GRADE Working Group grades of evidence

*High certainty—*We are very confident that the true effect lies close to that of the estimate of the effect

*Moderate certainty—*We are moderately confident in the effect estimate: the true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different

*Low certainty—*Our confidence in the effect estimate is limited: the true effect may be substantially different from the estimate of the effect

*Very low certainty—*We have very little confidence in the effect estimate: the true effect is likely to be substantially different from the estimate of effect

Box end

Referral for bariatric surgery assessment

The guideline committee agreed that—based on very low to moderate quality evidence from eight randomised controlled trials, seven observational studies, and one systematic review—bariatric surgery was effective for improving a range of obesity related outcomes (weight loss, BMI, mortality) in people with a BMI of ≥40. The effectiveness of surgery was also shown in people with a BMI ranging between 35 and 39.9 with obesity related comorbidities, including cardiovascular disease, hypertension, idiopathic intracranial hypertension, non-alcoholic fatty liver disease, obstructive sleep apnoea, and type 2 diabetes. Four cost utility analyses from the UK also demonstrated the cost effectiveness of bariatric surgery in these groups.

For patients with a BMI ranging between 35 and 39.9 with obesity related comorbidities, a non-exhaustive list of comorbidities is included in the recommendations based on the specific evidence that was found during the guidelines review process. In addition to the comorbidities identified, bariatric surgery may improve outcomes for people with other comorbidities for which the evidence base is currently uncertain, including asthma, hypercholesterolaemia, or infertility.

Offering bariatric surgery only to people who had first tried all “appropriate non-surgical interventions” creates an unjustified barrier to a clinically and cost effective intervention and creates variation in practice.2 A “Getting it Right First Time” (GIRFT) report published in 2017 highlighted that, although overall surgical activity had increased due to the higher prevalence of obesity, only 0.6% of potential surgical activity was being delivered and that access to surgery varied widely across the country.3 A national mapping report commissioned by Public Health England in 2015 also highlighted that tier 3 services were only available in some parts of the country, therefore people outside of those areas were facing an unjustified barrier to treatment, exacerbating regional health inequalities (box 2).5 The guideline committee therefore decided to remove this requirement from the new recommendation.

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Box 2. NHS tiered care weight management pathway (adapted from Obesity Empowerment Network4)

*Tier 1—*Universal services (such as public health or population-wide interventions)

*Tier 2*—Community multicomponent weight management services

*Tier 3—*Specialist weight management services (providing non-surgical intensive medical management with a multidisciplinary team)

*Tier 4—*Specialist weight management services (providing surgical and non-surgical management with a multidisciplinary team)

The guideline committee acknowledged that, due to variations in commissioning arrangements, preoperative assessment for bariatric surgery may lie within the remit of a tier 3 or a tier 4 service. In the guideline, the term specialist weight management service has been used to describe tier 3 and tier 4 services.1

Box end

Although no specific evidence was found for the effectiveness of surgery in people of South Asian, Chinese, other Asian, Middle Eastern, Black African, or African-Caribbean family background, it is recognised that people from these groups are prone to central adiposity and their cardiometabolic risk occurs at a lower BMI than in people from other family backgrounds. Therefore, the guideline committee agreed that people from these groups should be considered for an assessment for surgery at a lower threshold.

• Offer adults a referral for a comprehensive assessment by specialist weight management services providing multidisciplinary management of obesity to see whether bariatric surgery is suitable for them, if they:

- Have a BMI of ≥40, or between 35 and 39.9 with a significant health condition that could be improved if they lost weight (see box 3 for examples) *and*

- Agree to the necessary long term follow-up after surgery (for example, lifelong annual reviews).

• Consider referral for people of South Asian, Chinese, other Asian, Middle Eastern, Black African, or African-Caribbean family background using a lower BMI threshold (reduced by 2.5) than in recommendation above, to account for the fact that these groups are prone to central adiposity and their cardiometabolic risk occurs at lower BMI.

[*Based on very low to moderate quality evidence from randomised controlled trials and observational studies and published cost utility analyses evaluating the cost effectiveness of bariatric surgery in the UK*]

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Box 3. Examples of common health conditions that could be improved by bariatric surgery

• Cardiovascular disease

• Hypertension

• Idiopathic intracranial hypertension

• Non-alcoholic fatty liver disease with or without steatohepatitis

• Obstructive sleep apnoea

• Type 2 diabetes

These examples are based on the evidence identified for this guideline, and the list is not exhaustive.

Box end

Specialist weight management service and multidisciplinary assessment

The guideline committee agreed that, although bariatric surgery is effective for weight loss and can improve comorbidities, there are also potential medical, nutritional, surgical, and psychological risks or complications that can arise from the procedure. The committee also noted that there is a current lack of service provision for assessments for bariatric surgery and variation in practice across the country.

Because of variations in commissioning arrangements, pre-operative assessment for bariatric surgery may lie within the remit of a specialist weight management service (tier 3 or a tier 4 service). Within the guideline, a specialist weight management service is defined as a specialist primary, community, or secondary care multidisciplinary team offering a combination of surgical, dietetic, pharmacological, and psychological obesity management interventions, including but not limited to tier 3 and tier 4 services. To incorporate this new definition, the updated guideline recommends that a multidisciplinary team within a specialist weight management service should include or have access to health and social care professionals with expertise in conducting medical, nutritional, surgical, and psychological assessments in people living with obesity, and be able to assess whether surgery is suitable.

Assessment for surgery should also include how to support people to access bariatric surgery. Part of the assessment should include a discussion around what previous attempts people have made to manage their weight and their response to treatment. Although “having tried all appropriate non-surgical interventions” is no longer a requirement of the new recommendations, discussing someone’s weight management history with them may help the multidisciplinary team understand how much support is needed, what support has previously been lacking, or any barriers to treatment a person may have faced. These discussions will also contribute to shared decision making about potential treatment options (including bariatric surgery). The guideline committee agreed that the assessment should actively consider the needs of any populations affected by health inequalities, such as people with learning or neurodevelopmental disabilities, including any factors that may affect their response after surgery or may require additional specialist support.

• Ensure the multidisciplinary team within a specialist weight management service includes or has access to health and social care professionals who have expertise in conducting medical, nutritional, psychological, and surgical assessments in people living with obesity, and are able to assess whether surgery is suitable.

• Carry out a comprehensive, multidisciplinary assessment for bariatric surgery based on the person’s needs. As part of this, assess:

- The person’s medical needs (for example, existing comorbidities)

- The person’s nutritional status (for example, dietary intake and eating habits and behaviours)

- Any psychological needs that, if addressed, would help ensure surgery is suitable and support adherence to postoperative care requirements

- The person’s previous attempts to manage their weight, and any past response to a weight management intervention (such as one provided by a specialist weight management service)

- Any other factors that may affect the response to surgery (for example, language barriers, learning disabilities and neurodevelopmental conditions, deprivation, and other factors related to health inequalities)

- Whether any individual arrangements need to be made before the day of the surgery (for example, if the person needs additional dietary or psychological support or support to manage existing or new comorbidities)

- The person’s fitness for anaesthesia and surgery.

[*Based on the experience and opinion of the guideline committee*]

Implementation

Removing the requirement for all non-surgical measures to be tried before offering bariatric surgery, and for all patients to be under the management of a tier 3 service, will reduce variation in practice and increase the overall number of referrals and surgeries carried out. For patients in whom surgery is unsuitable or for those who decline surgery, alternative weight management services and interventions will need to be explored, which may result in increased referrals to other multidisciplinary services.

Uptake for bariatric surgery may also increase among people of ethnic minority family backgrounds given the lower BMI thresholds recommended to be used for people from these groups. This will broaden the population of people who can benefit from bariatric surgery and help to address health inequalities.

Specifying the expertise needed in the multidisciplinary assessment of patients undergoing bariatric surgery, and what this assessment includes, will help to reduce variation in practice across the country, ensure people who are suitable have access to bariatric surgery at the right time, and provide a model for the expertise a specialist weight management service should have access to. Although increased referral numbers to bariatric surgery may create extra initial costs with respect to the number of people undergoing bariatric surgery, we anticipate these will be outweighed by a reduction in long term obesity and the service costs for obesity related comorbidities.

Future research

The guideline committee made two recommendations for future research based on gaps in the evidence they assessed.

• What is the effectiveness and cost effectiveness of bariatric surgery in achieving weight loss and improving treatment outcomes in people who are unable to receive treatment for other health conditions (such as joint replacement surgery or fertility treatment) because they are living with obesity?

• What is the effectiveness and cost effectiveness of bariatric surgery in achieving weight loss and maintaining a healthier weight in adults from minority ethnic family backgrounds who are living with obesity?

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Guidelines into practice

• Who do you offer assessment for bariatric surgery to, and what comorbidities are currently considered obesity related?

• What steps can you take to ensure assessment for bariatric surgery includes or has access to the multidisciplinary expertise outlined in these recommendations?

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How patients were involved in the creation of this article

Committee members involved in this guideline update included lay members who contributed to the formulation of the recommendations summarised here.

Box end

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Further information on the guidance

This guidance was developed by the Guideline Development Team in accordance with NICE guideline methodology ([www.nice.org.uk/media/default/about/what-we-do/our-programmes/developing-nice-guidelines-the-manual.pdf](http://www.nice.org.uk/media/default/about/what-we-do/our-programmes/developing-nice-guidelines-the-manual.pdf)). A guideline committee (GC) was established by the Guideline Development Team, which incorporated the following expertise: academics with interest in weight management, diabetes consultants, surgeons, a general practitioner, consultant psychiatrist, psychologist, dietician, health visitor, public health practitioner, and three lay members. The guideline is available at <https://www.nice.org.uk/guidance/cg189>.

The guideline committee identified relevant review questions and collected and appraised clinical and cost effectiveness evidence. Quality ratings of the evidence were based on GRADE methodology ([www.gradeworkinggroup.org](http://www.gradeworkinggroup.org)). These relate to the quality of the available evidence for assessed outcomes or themes rather than the quality of the study. The GC agreed recommendations for clinical practice based on the available evidence or, when evidence was not found, based on their experience and opinion using informal consensus methods.

The draft of the guideline went through a rigorous reviewing process, in which stakeholder organisations were invited to comment; the GC took all comments into consideration when producing the final version of the guideline. NICE will conduct regular reviews after publication of the guidance, to determine whether the evidence base has progressed significantly enough to alter the current guideline recommendations and require an update.

Box end

The members of the guideline committee were: Marie Burnham (chair), Margaret Ashwell, Nivedita Aswani, Kate Anderson, Rachel Batterham, Jamie Blackshaw, Sarah Britton, Preetpal Doklu (lay member), Susan Jebb, Julian Hamilton-Shield, Lisa Hodgson, Phoebe Kalungi, Sarah Le Brocq (lay member), Grace O’Malley, Alex Miras, Helen Parretti, Suzy Taylor (lay member), Billy White, Twane Celliers, Omar Khan, Samantha Scholtz, Laurence Taggart.

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<eref>1 National Institute for Health and Care Excellence. Obesity: identification, assessment and management (clinical guideline CG189). 2023 https://www.nice.org.uk/guidance/cg189/.</eref>

<eref>2 National Clinical Guideline Centre. Obesity: identification, assessment and management of overweight and obesity in children, young people and adults (partial update of CG43). 2014. https://www.nice.org.uk/guidance/cg189/evidence/full-guideline-november-2014-pdf-193342429.</eref>

<eref>3 GIRFT. (Getting it Right First Time). General surgery: GIRFT programme national specialty report, 2017. <https://gettingitrightfirsttime.co.uk/wp-content/uploads/2017/07/GIRFT-GeneralSurgeryReport-Aug17v1.pdf>.</eref>

<eref>4 Obesity Empowerment Network. NHS tiered care weight management pathway. <https://oen.org.uk/managing-obesity/nhs-tiered-care-weight-management-pathway/>.</eref>

<eref>5 Public Health England. National mapping of weight management services: Provision of tier 2 and tier 3 services in England. 2015. <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/484115/Final_Weight_Management_Mapping_Report.pdf>.</eref>