Hertfordshire and West Essex Integrated Care System

NHS
Hertfordshire and West Essex
Integrated Care Board

Evidence Based Intervention

Fitness for Surgery

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Version:	v1.3
Approved By:	Commissioning Committee
Date of Approval:	1st July 2022
Date of Review:	December 2024 If the review date has exceeded, the published policy remains valid

Policy:

Smoking and obesity are both associated with adverse health outcomes including increased complications with surgery and can be modified through lifestyle intervention. Health events, such as the need for an operation, are recognised triggers to improve health behaviours. Therefore, supporting patients to stop smoking and/or lose weight prior to surgery could trigger an ongoing healthy lifestyle change as well as reducing their surgical risk.

A review* of the evidence has found that morbidly obese patients (BMI more than 40) would benefit from a weight loss of at least 15%, and that those undergoing hip, knee and spinal procedures with a BMI over 29.9 (regardless of metabolic syndrome) would benefit from a weight loss of at least 10% before surgery. The evidence on smoking cessation before surgery has further strengthened with national advice on an optimal benefit of at least eight weeks of cessation before surgery.

Therefore, in view of this new evidence, and to ensure we support our patients to optimal health prior to surgery, the policy has been developed.

*Evidence review is available on request

1. Purpose

The purpose of the policy is to optimise a patient's health prior to surgery, through weight loss and/or smoking cessation, to:

- Reduce the risks of routine elective non-urgent inpatient or day-case surgery under general anaesthetic or spinal/epidural anaesthesia, particularly the risks of major complications.
- Improve outcomes and rehabilitation following surgery.

2. Scope

2.1 The policy will apply to all patients aged 18 years or older and registered at a general practice in Hertfordshire or West Essex who require elective inpatient or day case non-urgent surgery under either general anaesthetic or spinal or epidural anaesthesia.

2.2 **Exclusions to these criteria are:**

Urgent or emergency surgery (non-elective surgery where there is an acute threat to the patients' life or well-being).

Where the risk to life of waiting for surgery is greater than the health benefit from weight loss and/or smoking cessation.

Surgery for cancer or suspected cancer.

Those undergoing surgery under local anaesthetic, and cardiological, cardiothoracic, neurosurgical or fracture related procedures.

3. Definitions

3.1 BMI

Body Mass Index (BMI) is a person's weight in kilograms (kg) divided by his or her height in meters squared. The National Institutes of Health (NIH) now defines normal weight, overweight, and obesity according to BMI rather than the traditional height/weight charts.

BMI (kg/m2)	Description
Less than 18.5	Underweight
18.5 to less than 25	Normal
25 to less than 30	Overweight
30 or more	Obese
40 or more	Morbidly obese

(World Health Organisation (WHO) definition)

3.2 Obesity

Obesity is defined as abnormal or excessive fat accumulation that may impair health. Obesity can cause several health problems, such as type 2 diabetes, coronary heart disease, high blood pressure, stroke, gallbladder disease, reproductive problems, mechanical disorders such as osteoarthritis and low back pain, obstructive sleep apnoea, breathlessness and reduced mental well-being.

3.3 Metabolic syndrome

A cluster of the heart attack risk factors: diabetes and prediabetes, abdominal obesity, high cholesterol, and high blood pressure.

IDF defines metabolic syndrome: central obesity / BMI>29.9 AND any two of the following:

- Raised triglyceride ≥ 150 mg/dl (1.7 mmol/L), or specific treatment for this lipid abnormality.
- Reduced HDL-C <40mg/dl (1.03 mmol/L) in men and <50 mg/dl (1.29 mmol/L) in women or specific treatment for this
- High blood pressure (BP): >130/85 mmHg or treatment of previously diagnosed hypertension
- Raised fasting plasma glucose - (FPG) ≥ 100 mg/dL (5.6 mmol/L), or previously diagnosed type 2 diabetes.

3.4 IFR

Individual Funding Requests (IFR) are for clinicians to apply for exceptional funding where the patient does not meet the set criteria for funding. This involves providing evidence why the patient is clinically exceptional to the set criteria.

4. Content

Policy Statement

Criteria for 'Fitness for Surgery Policy'	
Note: Weight loss can be achieved through a calorie-controlled diet, so inability to exercise is not an exclusion to a weight loss programme.	
BMI	**All patients with a BMI over 29.9 should be asked to optimise their weight before an operation in accordance with target weights below (unless they meet exclusions as above).** Patients should be offered weight management support to promote weight loss and healthy lifestyle changes, to optimise their health before an operation. They should be informed of the risks of obesity and surgery, and the benefits of weight loss.

<table>
<tr><td></td><td>A personalised approach should be taken, with patients counselled through a motivational interviewing approach to develop their own action plan, including their individualised weight goal (as per criteria below).

Local weight management services are available across Hertfordshire and West Essex.</td></tr>
<tr><td rowspan="3">Target weights</td><td><u>BMI over 40 prior to elective non-urgent surgery</u>

• Reduce their weight by at least 15% over 9 months.

Or

• Reduce their weight to where their BMI is less than 40.

(Whichever is the greater)</td></tr>
<tr><td><u>BMI 30-40 and undergoing an elective hip, knee or spinal procedure.</u>

• Reduce their weight by at least 10% over 9 months.
Or
• Reduce their weight to where their BMI is less than 30.</td></tr>
<tr><td><u>BMI 30-40 and undergoing an elective non-urgent procedure other than hip, knee or spinal.</u>

• Reduce their weight by at least 10% over 9 months.
Or
• Reduce their weight to where their BMI is less than 30.</td></tr>
</table>

	If there is documented evidence the patient does **not** have metabolic syndrome (see Definition in Section 3.3), they do not have to meet the above criteria. However, healthy lifestyle advice and weight loss support should still be provided.

Smoking	**Patients are expected to have stopped smoking or switched to e-cigarettes for at least 8 weeks prior to surgery.** At initial appointment, they should be informed of the risks of smoking and surgery and provided with a brief intervention and healthy lifestyle advice, including the option to switch to e-cigarettes. (E-cigarettes can contain nicotine, which acts as a vasoconstrictor. In some surgical procedures this is contra-indicated. This will be at the discretion of the surgeon and/or anaesthetist.) All people who are current smokers should be offered intensive support for smoking cessation to optimise their health before an operation. A shared decision making tool for stopping smoking is available here. Patients should be aware the chances of a successful quit attempt are significantly higher when engaging with stop smoking services. Confirmation of smoking cessation may be confirmed using a carbon monoxide test. Any carbon monoxide readings should be recorded in the patient notes.

Please note:

4.1 GPs will not be prevented from referring patients for a surgical opinion. However, they should ensure the patient is aware of the BMI and smoking criteria, and initiate weight loss/smoking cessation interventions at the earliest contact. In the case of musculoskeletal conditions where weight loss is a recommended conservative measure, this would normally be required before referral, in line with the policy for hip and knee surgery.

GPs should consider the timing of referring a patient for surgical opinion if they feel the surgery is of lower priority and the benefits of weight loss and/or smoking cessation outweigh the benefit of surgery. A discussion should be held with the patient about whether to delay the referral for weight loss or smoking cessation, or whether the patient would prefer to start this

whilst waiting for an appointment, or understands that their surgery, if required, may be delayed after a decision to operate is made.

In all cases, patients should be given safety netting advice by their GP and advised when to seek medical attention for their condition.

4.2 At pre-operative assessment, providers need to record smoking status (including smoking certificate of abstinence) and BMI and ensure the criteria in this policy are met.

4.3 In some cases, it may be appropriate to clinically reassess the patient after successful weight loss to determine whether they continue to need the elective intervention (as weight loss/improved fitness may lead to improvement in their health and obviate their need for intervention), then listed for surgery as needed.

4.4 At 9 months, if the patient has not met their target weight and/or stopped smoking, they should be reassessed for their need for- and fitness for- surgery. This will include current BMI and smoking status, evidence of healthy lifestyle changes and engagement with support services. If they have not met the target, but the anaesthetist and surgeon are happy to proceed and the patient does not want to wait any longer, surgery should not be delayed.

4.5 At any point within the 9 months, if there is a change in the patient's condition the patient should inform their clinician and they should be reassessed in a timely manner appropriate to the clinical situation.

4.6 Some national and local Evidence Based Interventions policies may contain additional criteria in relation to smoking and BMI.

5. Roles and Responsibilities

5.1 Roles and responsibilities of clinicians managing the care of patients.

All clinicians with the responsibility for the care of Hertfordshire and West Essex patients need to ensure that they are aware of the contents of this policy. This includes a requirement to review the contents and assess the relevance in managing the care of their patients.

Clinicians should ensure weight, BMI and smoking status is recorded and documented at referral, surgical outpatients, and pre-operative assessment clinic.

Clinicians should be aware of the process of complaints (See section 6.2)

Clinicians should also refer to the Individual Funding Requests Policy.

5.2 Roles and responsibilities of ICB staff

As responsible bodies, HWE ICB take responsibility for the policy. All ICB staff need to ensure that they review the contents of this policy and assess the relevance to their role.

The EBI and IFR team should refer to this policy and the Individual Funding Requests Policy.

6. Monitoring and Compliance

6.1 **All referrals** for eligible elective non-urgent surgery (as outlined in Section 2: Scope) should have smoking status and BMI/weight recorded in all relevant documentation.

6.2 Providers will be audited at regular intervals as per the Terms of Reference within their contracts for compliance to the policy.

6.3 The policy will be reviewed every two years or earlier in response to new evidence.

7. Education and Training

Clinicians managing the care of HWE patients and ICB staff need to be aware of this policy and its implications.

Supporting materials will be developed to communicate the policy to both clinicians and to patients.

Change History:

Version	Date	Reviewer(s)	Revision Description
1.1	December 2022	Lara Segovia	Removed sentence relating to artificially affected muscle bulk.
1.2	September 2024	Patricia Duffy	Corrected high fasting glucose level Corrected obesity level to >29.9 from >30
1.3	November 2024	Patricia Duffy	Risk to life information made as an exclusion to the policy

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