# Top Tips Chronic Disease Stabilisation prior to referral for surgery

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| **Patient Preparation** | Is the patient aware that they may be **listed** for surgery?<br>Does the patient want to have surgery?<br>Is the patient likely to benefit from surgery?<br>Is the patient aware of options other than surgery?<br>Do they have holidays booked in the next 3 months that may interfere with a date for surgery? |
| **Hypertension** | **Please do not refer patients if BP 160/100 or more. Refer once BP less than 160/100 aiming for ≤140/85mmHg (non-diabetic) and ≤140/80mmHg (diabetic)**<br>Poorly-controlled BP has perioperative cardiac instability / cardiovascular complications.<br>'Cosmetic' control of pre-op hypertension is *not* recommended as vascular and cerebrovascular autoregulation remains abnormal for up to 6 weeks – ensure stable prior to referral.<br>For patients with 'white coat hypertension', including 3 stable home readings / ambulatory BP monitor report in the referral letter is helpful.<br>**Flowchart for referral – see appendix** |
| **Diabetes** | Glycaemic control should be optimized before referral.<br>**HbA1C of ≤ 70 nmol/ml (8.5%) within 3 months of surgery** with emphasis on diet and treatment compliance.<br>Good control can reduce perioperative mortality by 50%.Optimal management of complications of diabetes e.g. renal impairment, cardiac disease, diabetic feet and other infections. |
| **Anaemia** | HB should be >13 in men and >12g/dl in women (WHO criteria)<br>Pre-operative anaemia and blood transfusion independently associated with adverse outcomes.<br>This is of particular significance prior to joint replacement (big elective surgery in which a significant risk, transfusion, can be reduced) |
| **Ischaemic Heart Disease, Heart Failure and Cardiomyopathy** | Ensure patients' symptoms have been **stable** with no recent deterioration.<br>Optimize treatment to achieve maximum exercise tolerance.<br>Avoid referring patients who have had an MI, coronary stents in previous 6 months as they are incredibly high risk for perioperative MI / stent thrombosis as dual antiplatelet therapy stopped. Very high mortality associated with stent thrombosis (25%).<br>Refer to Cardiologist if required. |
| **Arrhythmia e.g. Atrial Fibrillation** | Ensure rate control to <100 per minute.<br>Adequate anticoagulation if indicated. (Symptomatic palpitations need investigating) |
| **Neurological conditions** | Risk of further TIA's / CVA's and mortality is reduced if patients wait 9 months after a CVA before elective surgery.<br>Patients with frequent seizures / still under investigation need to be established on treatment and stable before referral. |
| **Thyroid Disease** | Clinically euthyroid with TFTs within normal range, checked within previous 6-12 months.<br>Patient should be on stable treatment dose > 1 month prior to referral. |
| **Asthma and COPD** | Aim for symptom control achieving patient's max PEFR and Exercise Tolerance +minimum requirement of prn bronchodilator. |

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| | Regular bronchodilators or steroid inhalers may be required.<br>**Patients can be referred to breathing space to optimise respiratory conditions prior to referral for surgery.** |
| **Obstructive Sleep Apnoea** | OSA is of a particular concern in anaesthesia due to its increased associated peri-operative morbidity and mortality. It is generally under diagnosed in the community, and is strongly associated with obesity. It is found in 40% of obese women and 50% of obese men.<br>Consider STOP BANG score – see appendix<br>Patients who snore who have a STOP BANG score of 5 or more are referred for sleep studies pre op. This can take up to 6 weeks. Patients who are found to have moderate / severe OSA are recommended for CPAP. CPAP is recommended for 6 weeks prior to surgery, where surgery is non urgent. CPAP therapy reduces patients peri operative and lifetime risks of cardiovascular / cerebrovascular events.<br>Patients proven to have OSA needing CPAP (non urgent, elective surgery) will be referred back to their GP as their surgery cannot be completed within the 18 week pathway. |
| **Obesity** | Weight reduction prior to surgery will lower peri operative risks. Patients should be advised to lose weight. Consider referral to weight loss services prior to referral. Patients undergoing hip and knee replacement surgery are subject to Clinical Thresholds |
| **Smoking** | Patients who smoke should be advised of the risks associated with smoking and surgical procedures and given the CCG Fit for Surgery leaflet and referred to the Smoking Cessation Service |
| **Frailty scoring** | Pre op assessment nurses now do a clinical frailty score. Score 5 and above is associated with increased post op morbidity, mortality and longer hospital stays and reduced likelihood post-op independence – a potential problem for primary care post discharge. Consider frailty as increasing patient's peri operative risk and do they still wish to have surgery? See appendix |
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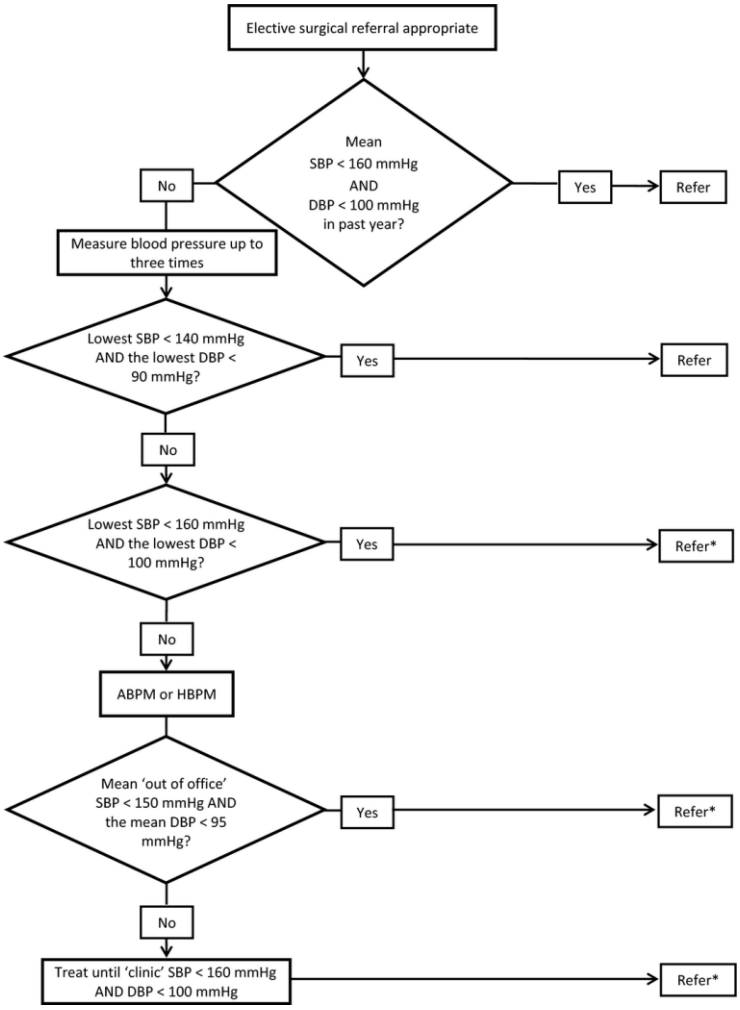
| **Date Approved** | |
| **Review Date** | |

**Appendix**

**The measurement of adult blood pressure and management of hypertension before elective surgery**




**Primary care blood pressure assessment of patients before referral for elective surgery. *Investigations and treatment should continue to achieve blood pressures < 140/90 mmHg. ABPM and HBPM, ambulatory and home blood pressure measurement; DBP and SBP, diastolic and systolic blood pressure.**

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## STOP-BANG Questionnaire

Age _____ Male / Female
BMI _____

Neck Circumference _____ cm

Date: _____

| STOP-BANG Score | Yes | No |
|---|---|---|
| **S**noring<br>Do you snore loudly? (Heard through closed doors) | ☐ | ☐ |
| **T**ired<br>Do you often feel tired or sleepy during the daytime? | ☐ | ☐ |
| **O**bserved<br>Has anyone observed you stop breathing in your sleep? | ☐ | ☐ |
| Blood **P**ressure<br>Do you have, or are you treated for high blood pressure? | ☐ | ☐ |
| **B**ody Mass Index **>** 35 kg/m²? | ☐ | ☐ |
| **A**ge > 50? | ☐ | ☐ |
| **N**eck Circumference > 40 cm in male or > 37.5 cm in female? | ☐ | ☐ |
| **G**ender male? | ☐ | ☐ |

STOP-BANG Score of **≥ 5** suggests moderate/severe OSA
Refer for Sleep Studies

**Clinical Frailty Scale**

1 Very fit — robust, active, energetic, well motivated and fit; these people commonly exercise regularly and are in the most fit group for their age

2 Well — without active disease, but less fit than people in category 1

3 Well, with treated comorbid disease — disease symptoms are well controlled compared with those in category 4

4 Apparently vulnerable — although not frankly dependent, these people commonly complain of being “slowed up” or have disease symptoms

5 Mildly frail — with limited dependence on others for instrumental activities of daily living

6 Moderately frail — help is needed with both instrumental and non-instrumental activities of daily living

7 Severely frail — completely dependent on others for the activities of daily living, or terminally ill