PRE-OPERATIVE ASSESSMENT of PATIENTS BEFORE ELECTIVE SURGERY
A general guideline

All patients should be assessed before elective surgery.

Assessment should take place in advance of admission wherever possible in order to:

- Facilitate admission on day of surgery (DoS).
- Minimise the risk of late cancellation by ensuring:
  - The patient is fit for surgery and anaesthesia.
  - The patient is informed of benefits and risks and wishes to undergo the procedure.
  - Appropriate resources are available.
- Identify discharge requirements.

The process of assessment

Assessment should be recorded on a standard document (for the surgical subspecialty involved).

Elements common to all subspecialties (eg past medical history, medications, basic observations) should be in the same format and on the same pages of each subspecialty document, as far as possible. This facilitates assessment and surgery taking place on separate sites.

The thoroughness of assessment should be determined by the complexity of a patient's history rather than the extent of the surgery.

It may be appropriate for the assessment of fit patients undergoing minor or intermediate surgery to be recorded on a shortened pre-operative assessment document.

On the basis of an initial health screen, and depending on the timing of assessment by a surgeon, some patients may be suitable for pre-operative assessment by telephone.

When to assess

Assessment at the time of the surgical consultation minimises hospital attendance and facilitates communication.

If assessment at the time of the surgical consultation is not possible an initial health screen may identify both the need for early referral to specialist or GP and selected fit patients who could be offered assessment by telephone.

Assessment should be no more than three months before the planned date of surgery

If surgery does not take place within three months patients should be telephoned as soon as the date of surgery is known to ascertain the current state of their health.

Patients who attend for a repeat or similar procedure within three months (eg, for check cystoscopy) need not undergo a repeat full assessment but should be telephoned before admission to ascertain the current state of their health.

For these patients repeat investigations, if needed, could be carried out at the most convenient location for the patient eg GP practice, POA clinic or on day of surgery

Medical history

Forms the basis of the assessment and should seek to identify the presence of co-existing disease, its severity and whether or not such co-existing disease is managed optimally.

All patients require

- Pulse and blood pressure
- Height in metres
- Weight in kilograms
- BMI calculation
- Urinalysis

Specific conditions: Anaesthetic and Medical Issues

≤ = Less than or equal to.. < = Less than.. > = More than.. ≥ = More than or equal to..

Condition	***Comments***	***Action to be taken***
Hypertension	Target blood pressure for elective surgery: systolic ≤ 160 mmHg or diastolic ≤ 100 mmHg (Measure in both arms at least twice).	Outside these limits antihypertensive treatment is required to lower BP. Allow at least three weeks of anti-hypertensive therapy before further review (BP results from General Practice preferred) The need for urgent surgery should be discussed with the anaesthetist (preferably by the patient's surgeon).
Myocardial infarction (MI)	MI < 6 months ago.	Unsuitable for elective surgery. The need for surgery within six months of MI should be discussed with the anaesthetist (preferably by the patient's surgeon).
Angina	Condition known and treated with no, or slight, limitation of activity (Grade 1 or 2, Appendix 1) & no recent change .	No action. Should take anti-anginal medication as normal on day of surgery unless otherwise contra-indicated.
	Marked limitation of ordinary physical activity, or some angina occurs on any physical activity (Grade 3 or 4, Appendix 1) or recent worsening of angina.	Seek previous records (inc Trak). Consult anaesthetist: If patient's condition is previously documented and appropriately managed further action may not be necessary (but risk / benefit must be considered), otherwise referral to cardiology may be necessary.

≤ = Less than or equal to.. *< = Less than..* *> = More than..* *≥ = More than or equal to..*		
Condition	***Comments***	***Action to be taken***
Coronary Stenting	Bare metal stent (BMS) < 6 months ago.	Unsuitable for elective surgery
	Drug eluting stent (DES) <12 months ago.	Unsuitable for elective surgery
		The need for surgery within 6 / 12 months of BMS / DES should be discussed with the anaesthetist (preferably by the patient's surgeon). Advice about stopping antiplatelet medication should be sought from the patient's cardiologist. Consult A&T guideline: *Medication in the peri-operative period - general guidance* for advice on management of anti-platelet medication.
Cardiac failure	Dyspnoea on exertion, not otherwise explained. Paroxysmal nocturnal dyspnoea. Major ankle swelling.	Seek previous records (inc Trak). Contact anaesthetist. If patient's condition is previously documented and appropriately managed further action may not be necessary (but risk / benefit must be considered), otherwise referral for echocardiogram or to cardiology may be necessary.
Abnormal ECG	Atrial fibrillation rate > 90/min, heart block with symptoms, history of dizziness, blackouts, breathlessness.	Consult anaesthetist who will advise regarding need for an echocardiogram.
CVA or TIA	CVA or TIA < 3/12	Unsuitable for elective surgery. The need for urgent surgery within three months of CVA / TIA should be discussed with the anaesthetist (preferably by the patient's surgeon).
Asthma	No limitation of activity	No action
	• limits activity • nebuliser > once/month • oral steroids within 3 months • hospital admission within last 12 months	Organise peak expiratory flow rate (PEFR) Seek previous records (inc Trak). Inform anaesthetist.

≤ = Less than or equal to.. *< = Less than..* *> = More than..* *≥ = More than or equal to..*		
Condition	***Comments***	***Action to be taken***
Epilepsy		Note time since last seizure, frequency of seizure, especially recent change in frequency, known precipitants, whether or not the patient has driving licence Medication to be taken as normal up to and including day of surgery.
Airway problems	Previous failed intubation Cervical spine instability / previous cervical spine surgery Severe limitation of neck flexion / extension. Mouth opening <3 cm (ie.3 finger breadths) Mallampati score IV Thyro-mental distance < 6.5cm	Inform anaesthetist
Gastro-oesophageal reflux	Symptoms despite treatment	Inform anaesthetist, patient may require proton pump inhibitor (PPI) or H2 antagonist therapy. Ensure current H2 antagonist or PPI therapy is taken on morning of surgery Not to be first on list if patient requires medication on day of surgery
Alcohol abuse	If over 40 units per week	LFTs & Coagulation screen Discuss with anaesthetist if GA required
Recreational drug use		Note drugs, frequency. Record in notes
HIV, Hep B, MRSA	Inform medical staff Place last on theatre list	

Investigations *(also see NICE Clinical Guideline 3: Preoperative tests, 2003)*

- The following is intended as a guide to investigations for most elective patients under most circumstances and does not replace subspecialty specific requirements or guidelines.
- More than one indication may be present (eg major surgery and age ≥ 60y and diabetes).
- Do not request investigations without an indication.
- Do not request a second investigation just because a first is requested (eg, FBC because U&E requested)
- See also: Echocardiography - Guideline for requests before elective surgery
  Pulmonary function tests (PFTS) - Guideline for requests before elective surgery

Investigation / **Indication**	FBC	U&Es	LFTs	Capillary blood	HBA1c	ECG	Sickle test
Age ≥ 80y	✓	✓				✓	
Age ≥ 60y		✓				✓	
BMI ≥ 40				✓			
Scheduled for major surgery	✓	✓					
Likely to have significant operative bleeding	✓	✓					
History of unexplained or untreated anaemia	✓						
Active malignancy (other than skin lesions)	✓						
Liver disease	✓			✓			
Kidney disease	✓	✓					
Rheumatoid arthritis & other inflammatory conditions	✓	✓					
Diabetes	✓	✓		✓	✓		
Blood disorders	✓						
Taking diuretics, ACE inhibitors & / or angiotensin II receptor antagonists		✓					
Hypertension						✓	
Irregular pulse						✓	
History of vascular disease, including MI, TIA, stroke, claudication & (unexplained) chest pain.	✓					✓	
Shortness of breath on exertion (not explained by obesity, lung disease or arthritis).	✓					✓	
Known liver disease, or drinks > 40 units alcohol / week			✓				
Patients of Afro-Caribbean origin							✓

Appendix 1

CANADIAN CARDIOVASCULAR SOCIETY FUNCTIONAL CLASSIFICATION of STABLE ANGINA PECTORIS

Grade 1
Ordinary physical activity, such as walking and climbing stairs, does not cause angina. Angina with strenuous or rapid or prolonged exertion at work or recreation.

Grade 2
Slight limitation of ordinary activity. Angina occurs when walking or climbing stairs rapidly, walking uphill, walking or stair climbing after meals, in cold, in wind, or when under emotional stress, or only during the few hours after awakening. Walking more than two blocks on the level and climbing more than one flight of ordinary stairs at a normal pace and in normal conditions precipitates angina.

Grade 3
Marked limitation of ordinary physical activity. Angina precipitated by walking one to two blocks on the level and climbing more than one flight in normal conditions.

Grade 4
Inability to carry on any physical activity without discomfort, anginal syndrome *may be* present at rest.
