# Adult Criterion for Anaesthesia and Anaesthesia led Sedation within the Alliance

University Hospitals of Leicester NHS
NHS Trust

Trust Ref number: B42/2021

#### 1. Introduction

The document details the criterion for adults having minor and intermediate surgical procedures under anaesthesia and anaesthesia led sedation within the Alliance at Melton Mowbray Hospital, Hinckley, District Hospital and Loughborough Community Hospital.

The Royal College of Anaesthetists (2014) defines a remote site as any location at which the anaesthetist is required to provide general/regional anaesthesia, or sedation away from the main theatre suite and/or anaesthetic department and in which it cannot be guaranteed that the help of another anaesthetist will be available. This may either be within or away from the base hospital. The Alliance is a remote site and therefore surgical admission criteria are required to reduce the risk of transfer out to the main UHL site.

#### 2. Scope

This document does not cover the clinical management of the patient presenting for pre-operative assessment and preparation or surgery. Any clinical concerns relating to the patient's fitness to proceed to surgery or the complexity of the surgery must be escalated to the Anaesthetist and Consultant Surgeon, as appropriate and in a timely manner.

Patients for Endoscopy and for procedures under local anaesthesia are outside the scope of this document.

## 3. Recommendations. Standards and Procedural Statements

Pre-operative assessment (POA) is key in determining the suitability for surgery within the Alliance; the presenting comorbidities of the patient and the impact on health and functional status a detailed.

#### **Functional Status**

The preoperative assessment should be a holistic overview of a patient's health status. This includes assessing functional status or exercise tolerance which is a major determinant of perioperative risk. Patients should have a detailed history taken about their functional status and this should be documented. Details on limiting symptoms should be recorded. The Metabolic Equivalent (MET) classification is used as an assessment of functional status. Patients who are able to achieve activities consistent with 4 METS are generally suitable to proceed with day case type surgery. 4 METs is the energy requirement associated with light housework e.g. hoovering, independent living and climbing a flight of stairs. If there is uncertainty about the patients functional status tools such as the Duke Activity Status questionnaire can be useful. Further guidance is given in the table below:

### **METS**

Taking care of yourself	
Walking around the house	
Walk at slow pace (2-3 mph)	<4 METS
Light shopping	
Walking at normal pace (3-4mph)	
Light house work	4 METS
Leisure cycling	
Climbing 1 flight of stairs	
Climbing 2 flights of stairs	
Walk up a hill	>4 METS
Run a short distance	
Scrubbing floors	
Brisk swimming	

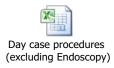
## **Surgery grades**

Surgery grades aligned to SORT calculator <a href="http://www.sortsurgery.com/index.php">http://www.sortsurgery.com/index.php</a>

Surgery grades
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# Excising skin lesion Minor Draining breast abscess Core biopsy lesion of breast Adenoidectomy Removal of grommets Examination of vagina under anaesthesia as sole procedure Adenotonsillectomy - bilateral Intermediate Tonsillectomy – Adult Septoplasty of nose (including attention to turbinates) Phakoemulsification of cataract and lens implant unilateral (topical or local anaesthesia) Primary repair of femoral hernia Primary repair of incisional hernia not requiring mesh Primary repair of inguinal hernia Carpal tunnel release – open Cubital tunnel release without transposition Hysteroscopy (including biopsy, dilatation, curettage and resection of polyp) Hand – Partial amputation of digit

The following list includes the surgical procedures completed within the Alliance and while not exhaustive, is a key consideration in theatre scheduling and planning to ensure that the proposed procedure and complexity of such is appropriate for the Alliance.



# **ASA** grades

The ASA (American Society of Anesthesiologists) Physical Status Classification System is a simple scale describing fitness to undergo an anaesthetic. The ASA states that it does not endorse any elaboration of these definitions. However, anaesthetists in the UK often qualify (or interpret) these grades as relating to functional capacity – that is, comorbidity that does not (ASA 2) or that does (ASA 3) limit a person's activity. https://www.asahq.org/standards-and-guidelines/asa-physical-status-classification-system

#### Surgical admission criterion

The following admission criterion will be used to determine patients that are suitable for elective and expedited day case surgery within the Alliance

	Suitable for Alliance	Not suitable for Alliance	Rationale / Comments
ВМІ	BMI below 35 having minor/intermediate surgery  BMI 35-40 to be discussed with Anaesthetist	BMI>40 BMI <18	Fitness for day case surgery should not be limited by assessment of BMI in isolation and should be in consideration of other co-morbidities and functional status  There may be increased risks associated with longer laparoscopic operations and these should be timed for early on a list
ASA	ASA 1 and ASA 2 ASA 3 for Local Anaesthesia	ASA 4 patients ASA 3 for GA/sedation – Not suitable ASA 3 patients with significant functional	Fitness for a procedure should relate to a patients functional status and not be limited by

		limitations which would limit suitability for	ASA status alone.
		day case surgery	
Cardiac			
Hypertension	Blood pressure controlled in community i.e. below 160/100 on GP or home reading within 12 months (AAGBI, 2016)	If BP in community is over 160/100 with evidence of end organ damage (i.e. renal impairment / LVH by voltage criteria)	There is no clear evidence that patients with BP below 180/110 without end organ damage have increased perioperative cardiovascular risk.
			Assessment of a patient's cardiovascular risk should consider other risk factors.
Valvular disease	Mild valvular disease/stable – LA only  Ensure recent ECHO available <2 years and ECG taken – discuss with Anaesthetist	Diagnosed valve disease – History of collapse, shortness of breath on exertion, abnormal rhythm	Asymptomatic patients often tolerate non cardiac surgery well. However the risk of complications increases with valve disease severity.
			Patients with moderate to severe lesions should be managed in a centre with 24 hour access to cardiology on site cover.
Pulmonary Hypertension		Clinical or echocardiographic signs of right heart failure and any decline in functional status	Surgery is expected to have increased risks in patients with pulmonary hypertension
Pacemaker		Cardiac Resynchronisation Therapy Implanted defibrillator Pacemaker	
MI	>6 months ago with minimal angina and good functional status i.e. CCS	MI within 6 months	Surgery can be a risk factor for myocardial ischaemia and

	1-2	On-going restrictive angina since MI (CCS 3-4)	recurrent MI.
		MI with occluded vessel being medically managed	In the presence of a reduced functional status due to angina and overnight stay is prudent for observation.
Coronary angioplasty/ stenting/CABG	Procedure completed > 6 months  Minimal symptoms of angina since procedure and good exercise tolerance >4 METS  Should be discussed with Anaesthetist	Coronary angioplasty/stenting/CABG completed less than 6 months ago  Patients on dual antiplatelet therapy	Non urgent surgery best postponed until antiplatelet therapy can be safely stopped following stenting
Angina	Angina only during strenuous prolonged activity, such as digging the garden.  Depends on the procedure being performed and other patient factors.  Discuss with Consultant Anaesthetist.	Any other Angina (CCS 2-4*) Angina at rest Angina associated with poor functional status	
Heart failure	No symptoms or limitation of ordinary activity NYHA class 1	Symptomatic heart failure (NYHA class 2-4*)	Patients with heart failure having urgent minor surgery may be appropriate for day case surgery
Cardiomyopathy		Cardiomyopathy	Cardiomyopathy may be asymptomatic but this is not predictive of risk. These patients are at increased risk and may be affected by arrhythmias.
Dysrhythmia	1st degree heart block (rate >50bpm) Rate controlled atrial fibrillation <90bpm	Any other dysrhythmia Asymptomatic bi-fasicular or tri- fasicular heart blocks Ventricular bigeminy/trigeminy	Poorly controlled AF can become faster postoperatively preventing day case surgery. Asymptomatic tri-fasicular heart

Peripheral vascular disease Aortic aneurysm	Must be discussed with Anaesthetist  Good exercise tolerance >4 METS  AAA under surveillance <5cm	Poor exercise tolerance and restricted functional ability Awaiting AAA repair	block should be discussed preoperatively with cardiology with a view to pacing (either pre or post operatively)  An AAA of 5.5cms has a rupture
	Discuss with Anaesthetist	Intra-abdominal AAA over 5cms	rate of only 2-3% per annum although there is anecdotal evidence that the risk of rupture increases after major surgery.
Respiratory			
Acute Respiratory infection		Acute respiratory infection	
Asthma	Stable well controlled asthma  Good functional ability with no symptoms of wheeze or SOB on exertion – Asymptomatic	Chest infection within 6 weeks (i.e. from date of antibiotic course completion) should be discussed with preoperative anaesthetist.  ITU admission due to asthma attack within last 12months  Oral steroid course completed for asthma within 6 weeks  Normal activities extremely limited by asthma	Patients with stable and well controlled asthma are often better managed as day case due to minimal disruption to their daily routine.  If there is a history of brittle asthma with exacerbations from anaesthesia these patients may benefit from a night of postoperative observation.
COPD	Stable well controlled COPD  Good functional status METS >4  Alert Anaesthetist and add alert  to ORMIS	SOB rest or on minimal exertion  Oxygen therapy at home  Cor pulmonale	Spirometry does not necessarily correlate with postoperative outcome, but may be helpful for those patients who have no previous spirometry done or who are on suboptimal/no

		Oral steroids within 6 weeks	treatment
Obstructive	Patients with the following	Procedure is moderate with	Operating in the morning
sleep apnoea	STOPBANG scores must be	need for significant IV morphine or	enables clearance of sedative
	discussed with the Anaesthetist	postoperative opioids	drugs medical led discharge.
	http://www.stonbone.co/coc/concenies	Door commission on with CDAD (ALII	SAMBA guidance from
	http://www.stopbang.ca/osa/screening .php On line calculator	Poor compliance with CPAP (AHI over 30 at latest review)	20125 recommends that patients with known OSA can
	.prip Off fille calculator	Resting SpO2 on air are under 94%	be considered for day case
	OSA - Intermediate Risk:	Treesing op 52 on an are under 5 176	surgery if they have and are
	Yes to 3-4 questions	Presence of non-optimised comorbidities	able to use CPAP after surgery
	·	(i.e. hypertension, arrhythmias, heart	and have any co-morbidities
		failure)	optimised.
	Modified from		
	Chung F et al. Anesthesiology 2008;	Operation which might prevent the use of	Low saturations may indicate
	108: 812-821, Chung F et al Br J Anaesth 2012; 108:	CPAP mask post op e.g. nasal septoplasty, necessitates overnight stay	higher risk of nocturnal hypoxia.
	768-775.	septoplasty, necessitates overlight stay	
	Chung F et al J Clin Sleep Med Sept	Patients with the following STOPBANG	
	2014	scores must be discussed with the	
		Anaesthetist with a plan for referral for	
		further assessment	
		http://www.ctanhang.co/coc/corooning.nh	
		http://www.stopbang.ca/osa/screening.php On line calculator	
		D On line calculator	
		OSA - High Risk:	
		Yes to 5 - 8 questions Yes to 2 or	
		more of 4 STOP questions + male	
		gender	
		Yes to 2 or more of 4 STOP      STOP      STOP      The stop of the stop	
		questions + BMI >35kg/m • Yes to 2 or more of STOP	
		questions + neck circumference	
		16 inches / 40cm	
		Modified from	

		Chung F et al. Anesthesiology 2008; 108: 812-821, Chung F et al Br J Anaesth 2012; 108: 768-775, Chung F et al J Clin Sleep Med Sept 2014	
Chronic Respiratory Conditions	Well controlled, stable Cystic Fibrosis Pulmonary fibrosis with stable symptoms and reasonable functional ability  METS >4 Alert Anaesthetist and add alert to ORMIS	Cystic Fibrosis with moderate/severe disease or multisystem involvement.  Symptomatic bronchiectasis with chest infection within 6 weeks of surgery  Pulmonary fibrosis causing extreme limitation of everyday activities	Day surgery may be feasible in patients with stable disease and good baseline functional status.  These patients must be discussed with the POA consultant and multidisciplinary team. Patients with advanced Cystic Fibrosis are usually better managed in a regional centre
COVID			See UHL Alliance criterion
Neurological / N	leuromuscular		
Epilepsy	Grand Mal Seizure more than 12 weeks before planned surgery  Partial seizures	Grand mal Seizure within 12 weeks of planned surgery  History of status epilepticus  Nocturnal seizures	Patients with epilepsy are at increased risk for postoperative complications (i.e. seizure) and therefore it is important to ensure that seizure control is optimised before surgery

TIA/CVA	More than 6 months – If completely recovered or minimal disability. Discuss with Anaesthetist in consideration of functional status and residual symptoms	TIA /CVA within the last 6 months	
Parkinson's Disease	Good functional status discuss with Anaesthetist	Poor functional status Requires significant assistance with activities of daily living Impaired swallow Cognitive impairment Deterioration or relapse after previous anaesthetic	Impaired swallow may put Parkinson's patients at risk of postoperative respiratory complications. Cognitive impairment predisposes to postoperative delirium.
Multiple Sclerosis	Good functional status Minimal weakness Discuss with Anaesthetist	Patients with severe restrictions due to MS, poor swallow, speech difficulties  MS with reduced mobility and active symptoms  Deterioration or relapse after previous anaesthetic	Patients with MS who have weakness may have an unpredictable response to neuromuscular blocking agents.
Muscular Dystrophy / Myasthenia Gravis / Myotonic Dystrophy / Motor Neurone Disease		Muscular Dystrophy Myasthenia Gravis Myotonic Dystrophy Motor Neurone Disease	
Metabolic			

	day of surgery emonstration of is per HbA1C) is
Non-insulin controlled diabetes subcutaneous <i>insulin</i> infusion) good control (as important.	
on day of surgery, i.e. blood sugar under	
https://cpoc.org.uk/guidelines- resources-guidelines- Iikely to require CVRII which precludes	
resources/guideline-diabetes day case surgery)	
Liver disease Abnormal coagulation	
Known cirrhosis and severe liver disease	
CKD associated with hyperkalaemia if they are composition of the compo	e for day surgery pliant with their mme and have a re and post
U&Es require d	
Thyroid disease Abnormal TSH and normal T4 Discuss other abnormalities with	
Asymptomatic and treated thyroid disease Consultant Anaesthetist	
Musculoskeletal	
	ny mandate an On to reduce risk
Good functional ability of cervical myel  Consider mobili	

A utla uiti a		Cavena authoritie of ions and authorise	positioning during and after surgery – Transfer from bed to trolley, and lithotomy
Arthritis		Severe arthritis of jaw, neck or hips	Consider mobility and patient positioning during and after surgery – Transfer from bed to trolley, and lithotomy
Cervical spondylosis	Pain free and unrestricted movement of cervical spine (extension and flexion)	Severe spondylosis	
Haematological			
Anaemia	Treated Anaemia and Hb> 100  Discuss with Anaesthetist if between 90-100 undergoing an investigative procedure.	Patients with anaemia previously investigated and treated:  Hb <100g / L for surgery e.g. hernia repair  Hb <90g / L for investigative procedure e.g. hysteroscopy  If surgery is routine and non-urgent (i.e. non cancer case) patient should be referred to the GP for investigation and treatment of anaemia.	Anaemia is associated with adverse outcomes after surgery. In addition anaemia may be a marker for underlying disease, therefore anaemic patients should be referred on for further investigation. Where the surgery is related to the cause of the anaemia it is often appropriate to proceed as a method of 'treating' the anaemia.
Sickle cell disease	Sickle Cell Trait – Short procedure and without risk of dehydration	History of sickle cell crisis	
Bleeding or coagulation disorder	Disorders other than Haemophilia should be discussed with the surgeon and anaesthetist. A haematological opinion and perioperative plan should be sort	Haemophilia	
Anaesthetic	•		•

Anaesthetic history		Personal or family history of Personal or family history (not investigated) Suxamethonium (Scoline) Apnoea or Malignant Hyperpyrexia History of: Difficult Intubation Severe post-operative nausea and vomiting (PONV score 4) Difficult Spinal or Epidural Anaesthetic Awareness During Anaesthesia Anaphylaxis	
Medicines	and allergies		
Monoamine oxidase inhibitors		Patients prescribed Monoamine oxidase inhibitors	
Anticoagulants and Antiplatelet agents	Patients prescribed DOAC (Direct oral anticoagulants) Add alert to ORMIS	Patients prescribed Warfarin	
Lithium	Patients prescribed Lithium – Lithium levels to be checked and discussed with Anaesthetist Add alert to ORMIS		Non- steroidal anti-inflammatory drugs (NSAIDs) analgesia contraindicated.
Latex	Non-anaphylactic history of latex allergy acceptable – 1st on list	Allergy to Latex with a history of anaphylaxis	First on the operating list
Other			

Drug	Patients on a Methadone programme	Narcotic dependence	Advise patient to continue with
Dependence	with no other illicit drug use. Prioritise on theatre list where possible.  Alert Anaesthetist and add alert on ORMIS		medication – do not miss a dose
Mental health	Acute mental health concerns should be discussed with the Anaesthetist to ensure that appropriate level of care and support care be provided within the Alliance		
Alcohol misuse and dependence	Alcohol intake of less than 50 units per week without any LFT derangement.  Without symptoms of alcohol dependence - https://assets.publishing.service.gov.u k/government/uploads/system/uploads /attachment_data/file/684828/Fast_alc ohol_use_screening_testFASTp df  Discuss with Anaesthetist	Alcohol intake above 70 units or above 50 units with LFT or clotting derangement any patient with cirrhosis, any patient who cannot stop drinking without anxiety and any patient who has a history of alcoholic related seizures and is currently drinking.	Patients drinking over 70 units are at risk of perioperative complications or alcohol withdrawal which means they are not always suitable for day case surgery.
Patients under investigation for another condition other than the presenting condition for surgery		All patients listed for elective surgery should have a diagnosis confirmed or excluded for any neuro, metabolic, CVS or RS. Decision on results will fall in the criteria listed above.	

New York Heart Failure Index*	Canadian Cardiovascular Society grading of angina*
Class 1 Cardiac Disease with no symptoms and no limitation in ordinary physical activity i.e. no SOB on climbing stairs	Class 1 - Angina only during strenuous or prolonged activity.
Class 2 Mild symptoms (mild SOB and/or angina) and slight limitation during ordinary activity	Class 2 – Slight limitation with angina only during vigorous physical activity.
Class 3 Marked limitation in activity due to symptoms, even during less than ordinary activity (i.e. walking short distances <50m). Comfortable only at rest	Class 3 Symptoms with everyday living activities, i.e. moderate limitation.
Class 4 Severe limitations. Experiences symptoms even while at rest. Mostly bedbound patients.	Class 4 Inability to perform any activity without angina or angina at rest i.e. severe limitation

# 4. Education and Training

The POA RNs work to a guidance issued locally within the Alliance and a call with the RNs will be completed on ratification to meet any learning requirements.

# 5. Monitoring and Audit Criteria

Key Performance Indicator	Method of Assessment	Frequency	Lead
On the day cancellations	Monitoring of on the day cancellations due to inappropriate listing within the Alliance	Monthly reporting although more frequently as required	Matron Alliance
Clinical incident reporting	Review of clinical incident reporting in relation to delayed discharge, transfers out resulting from inappropriate listing for surgery within the Alliance	Within the time frames outlined in UHL Policy for Datix	Matron Alliance

# 6. Legal Liability Guideline Statement

See section 6.4 of the UHL Policy for Policies for details of the Trust Legal Liability statement for Guidance documents

# 7. Supporting Documents and Kev References

- 1. Verma R, Alladi R, Jackson I, et al. Day case and short stay surgery: 2, Anaesthesia 2011; 66: pages 417-434 This guideline can be viewed online via the following URL: <a href="http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2044.2011.06651.x/pdf">http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2044.2011.06651.x/pdf</a>
- 2. Raja MH et al. The Impact of High BMI on Outcomes after Day Case Laparoscopic Cholecystectomy: A United Kingdom University Hospital Experience. AMBULATORY SURGERY 23.4 DECEMBER 2017
- 3. Association of Anaesthetists of Great Britain and Ireland. The measurement of adult blood pressure and management of hypertension before elective surgery 2016. Anaesthesia 2016; 71: 326-337. This guideline can be viewed online via the following URL:

  http://onlinelibrary.wiley.com/doi/10.1111/anae.13348/full
- 4. Qaseem A et al. Risk assessment for and strategies to reduce perioperative pulmonary complications for patients undergoing non-cardiothoracic surgery: a guideline from the American College of Physicians. Ann Intern Med 2006 Apr 18 144(8) 575-80
- 5. Society for Ambulatory Anesthesia Consensus Statement on Preoperative Selection of Adult Patients with Obstructive Sleep Apnoea Scheduled for Ambulatory Surgery Anesth Analg. 2012 Nov;115(5):1060-8

#### 8. Kev Words

List of words, phrases that may be used by staff searching for the Policy on SharePoint:

- Alliance
- Criterion
- Criteria
- Anaesthetic assessment
- Pre-assessment
- Pre-operative assessment

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This table is used to track the development and approval and dissemination of the document and any changes made on revised / reviewed versions

		DEVELO	PMENT AND AP	PROVAL RECORD F	OR THIS DOCUMENT				
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Approved by:	Policy an	Policy and Guideline Committee		Date Appro	Date Approved: 15.12.23 (v2)				
REVIEW RECORD									
Date	Issue Number	Reviewed By		Description Of Changes (If Any)					
			DIST	TRIBUTION RECORD	):				
Date	Name		Dept		Received				