Pre-Operative Assessment Guidelines

V4.1

14 Nov 14

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1. Introduction

1.1. Good pre-assessment prior to elective surgery has many benefits, which include:

- Accurate patient assessment, documentation and dissemination of information
- Improved patient safety
- Increase the quality of patients hospital experience
- Decreased cancellation rates on the day of surgery
- The facilitation of Day Of Surgery admissions
- Decreased bed days
- Facilitation of the MRSA screening process

1.2. These guidelines have been created to ensure pre-assessment practice for elective surgery is underpinned by evidence-based guidance and provides the framework for the scope of practice.

1.3. This version supersedes any previous versions of this document.

2. Purpose of this Policy/Procedure

2.1. The purpose of this document is to provide staff with clear guidelines for pre-assessment practice for patients attending the pre-assessment clinics in the Royal Cornwall Hospitals NHS Trust (RCHT).

2.2. The development of pre-assessment practice is intended to provide patients with a quick and efficient assessment process, respond to patient needs and to make best use of the non- medical health care practitioner skills.

3. Scope

This document applies to all staff regardless of grade or profession who conduct patient pre-assessment for elective surgery. The document provides non-medical health care practitioners with a clear framework for safe and effective practice relating to pre-assessment and sets out the standards and competencies expected when performing this role. The aim is for all elective patients to be pre-assessed either face to face, or by telephone. Difficult cases will be reviewed and/or seen by a consultant anaesthetist each day in the anaesthetic clinic.

4. Definitions / Glossary

Terms stated in full in document.

5. Ownership and Responsibilities

5.1. The Trust, as an employer, will assume ownership of the trust-wide policy with vicarious liability for the actions of non-medical practitioners authorised to work in the pre-assessment clinics providing that:

- They have undergone the preparation
- They are deemed competent to undertake the role, by their line manager
- The practice for pre-assessment has been followed as set in this document has been followed at all times and that, the member of staff has been fully authorised by the Trust to undertake the role.

5.2. Role of the Managers

5.3. The process for pre-assessment for elective surgery must written into clinical area operational policies and local records maintained of staff authorised to practice. Managers are responsible for ensuring that operational procedures are in place and up to date. These documents must have gone through the consultation process before going through the divisional governance arrangements and ratified by the individual who has been given formal authorisation by an executive.

5.4. The Senior Matron and Matron are responsible for ensuring all appropriate training is readily available for staff undertaking this role.

5.5. Role of Individual Staff

5.6. Registered Practitioners have a professional obligation to provide a "duty of care" to their patients (NMC, 2008, HPC, 2008). Each practitioner must work within the scope of this and local operational policies and remain responsible for his or her individual practice. Registered practitioners undertaking this role must ensure they have received sufficient training and are competent. This includes undertaking regular reviews of their practice in accordance with clinical governance activities. Practitioners must be able to recognise when a situation remains outside their level of competence and defer practice to a senior clinician.

5.7. Duty of care cannot be delegated at any time and registered practitioners, who choose to delegate any part of the task of caring for the patient within the pre- operative assessment environment, to non-registered staff, retain professional accountability for the appropriateness of the delegation of that task. Registered practitioners will not be accountable for the decisions and actions taken by the delegated person, however, will be responsible for the overall management of the person in their care. The registered practitioner will also be accountable for the decision to delegate.

5.8. The registered practitioner delegating any task must ensure that the person who receives the delegation has the knowledge and skills to carry out this task, and that they are properly supervised.

5.9. Registered practitioners have a duty to ensure that records completed by non-registered staff or pre-registered students under supervision are clearly written, accurate and appropriate.

6. Standards and Practice

6.1. Inclusion Criteria

6.2. All patients attending RCHT pre-assessment clinic will be assessed by the pre-operative practitioner who is authorised and competent in undertaking the assessment. Alternatively some patients will be suitable for a telephone consultation. There is also a group of patients, who are fit, well and booked for a minor procedure, who do not require formal assessment. Patients for local anaesthetic procedures only, do not require formal assessment but advice may be sort if there are specific concerns (anticoagulation for example). Patients for regional blockade only may also be considered for a modified assessment).

6.3. If the registered practitioner has **any** doubt about the patient's suitability for non-medical pre- assessment then further medical review must be arranged.

6.4. Pre-assessment clinics are available at Royal Cornwall Hospital, St Michaels Hospital and West Cornwall Hospital. This service will run weekdays where a consultant anaesthetist will be available for face to face consultations, note review and advice each afternoon at RCHT. Staff must make clear the nature of the referral and the question/s that need answers when referring patients.

6.5. The anaesthetic rota co-ordinator can provide advice on which anaesthetist will be covering a particular list.

6.6. Criteria for Anaesthetic Consultant review

6.7. The range of patients for whom referral for an anaesthetic opinion would be appropriate is provided in **Appendix 1**. This is not exhaustive list and some patients who do not meet these specific criteria may still merit a specialist assessment. Additionally, not all patients require a formal clinic appointment and many will be suitable for discussion or review of the notes and Staff should use their discretion. Referral may come direct from surgical consultants or pre-operative assessment nursing staff.

6.8. Pre-Operative Investigations

6.9. Full guidance for Pre-operative investigations are provided in the attached appendices. Staff must ensure all appropriate investigations are requested and completed. Staff must record any abnormal result and document appropriate follow- up arrangements.

6.10. Investigations include:

- Guidance for pre-operative investigations (Appendix 2)
- Pre-operative haemoglobin optimisation (Appendix 3)
- Pre-operative echocardiogram (Appendix 4)

6.11. Specific Patient Management

6.12. Patients attending pre-assessment clinic may present with underlying medical conditions and staff must adhere to appropriate assessment guidelines, investigations, management and referral processes as outlined in the following appendices:

- Management of patients with hypertension (Appendix 5)
- Assessment of Ischaemic heart disease (Appendix 6)
- Guidance for perioperative management of clopidogrel in elective surgical patients (Appendix 7)
- Guidelines on the perioperative management of patients on antiplatelet drugs for non- cardiac elective surgery (Appendix 8)
- Guidelines for the perioperative management of patients on antiplatelets drugs for emergency surgery (Appendix 9)
- Management of patients who have undergone Percutaneous Coronary Intervention who present for surgery (Appendix 10)

6.13. Drug Therapy

6.14. Staff working in pre-operative assessment areas must provide patients attending with accurate and appropriate information regarding their drug therapy. Staff must seek advice from the relevant anaesthetist if concerns or doubts arise during a patient assessment. Essential guidance is outlined in:

- Drug Therapy (Appendix 11)
- Guidance on medicines to discontinue / omit prior to surgery
- Herbal Medicines with potential peri-operative complications

6.15. All staffs are responsible for ensuring that information provided to patients conforms to above guidance and should be used in conjunction wit the RCHT policy on pre-operative fasting.

7. Dissemination and Implementation

7.1. This document will be implemented and disseminated through the organisation immediately following ratification and will be published on the organisations intranet site (document library). Access to this document is open to all.

8. Monitoring compliance and effectiveness

Review of compliance to practice remains the responsibility of Theatres and Anaesthetics Department

Element to be monitored	Clinical and process outcomes
Lead	Dr Andrew Lee and Lead nurse for pre-operative assessment
Tool	The most important tool used will be “Day of surgery cancellation rates”.
Frequency	Cancellation rates are recorded daily by our division. A report is written weekly And shared weekly amongst the divisional management team.
Reporting arrangements	The report will be reviewed at Divisional business meeting. The reasons for cancellations are scrutinised and individuals involved contacted, in order to identify areas that can be improved. This process is already in place. Leading on this is Simon Pellow.
Acting on recommendations and Lead(s)	Dr. Andrew Lee and Lead Nurse for pre-operative assessment. Required actions will be taken as soon as is practicably possible.
Change in practice and lessons to be shared	Required changes to practice will be identified and actioned through Divisional Governance. A lead member of the team will be identified to take each change forward where appropriate. Lessons will be shared with all the relevant stakeholders through monthly pre-operative assessment meetings and teaching sessions.

9. Updating and Review

9.1. The document review process is managed via the document library. Document review will be every three years unless best practice dictates otherwise. The author remains responsible for policy document review. Should they no longer work in the organisation or in the relevant practice area then an appropriate practitioner will be nominated to undertake the document review.

9.2. Where the revisions to the document are significant the author will ensure revision activity is recorded in the Version Control Table as part of the document control process and the revised document taken through the standard consultation, approval and dissemination processes.

10. Equality and Diversity

10.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the 'Equality, Diversity & Human Rights Policy' or the Equality and Diversity website.

10.2. Equality Impact Assessment

10.3. The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1 – Criteria for Consideration for Anaesthetic Consultant Review (face to face or note review)

This section of the Pre-Operative Assessment Guidelines has been published separately as Appendix 1 and can be accessed via the Document Library by searching for "Pre- Operative Assessment" or click here.

Appendix 2 – Guidance for Pre-Operative Investigations

This section of the Pre-Operative Assessment Guidelines has been published separately as Appendix 1 and can be accessed via the Document Library by searching for "Pre- Operative Assessment" or click here.

Appendix 3 – Pre-operative haemoglobin optimization for lective surgery

This section of the Pre-Operative Assessment Guidelines has been published separately as Appendix 1 and can be accessed via the Document Library by searching for “Pre- Operative Assessment” or click here.

Appendix 4 – Guidelines for Pre-operative Echocardiogram

This section of the Pre-Operative Assessment Guidelines has been published separately as Appendix 1 and can be accessed via the Document Library by searching for "Pre- Operative Assessment" or click here.

Appendix 5 – Management of Patients with Hypertension Attending Pre-Operative Assessment Clinic

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Appendix 6 – Assessment of Ischaemic Heart Disease

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Appendix 7 – Guidelines on the Perioperative Management of Clopidogrel and Aspirin in Elective Surgical Patients in the Pre-Assessment Clinic

This section of the Pre-Operative Assessment Guidelines has been published separately as Appendix 1 and can be accessed via the Document Library by searching for "Pre- Operative Assessment" or click here.

Appendix 8 – Guidelines on the Perioperative Management of Patients on Anti Platelet Drugs For Non-Cardiac Elective Surgery

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Appendix 9 – Guidelines on the Perioperative Management of Patients on Anti Platelet Drugs Emergency Surgery

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Appendix 10 – Management of Patients who have undergone Percutaneous Coronary Intervention (PCI) who present for Surgery

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Appendix 11 – Drug Therapy

This section of the Pre-Operative Assessment Guidelines has been published separately as Appendix 1 and can be accessed via the Document Library by searching for "Pre- Operative Assessment" or click here.

Appendix 12 - Guidance on which medicines should be continued or omitted prior to surgery. An alphabetical list

Disclaimer:

This guideline is believed to be an accurate reflection of the most current evidenced based literature available at time of composition. This is not an exhaustive list; it is intended to be used as a guide only. Users are advised to always consult medical literature and take into account any new developments. Always relate the information provided to the individual clinical situation.

Introduction:

It is important that a patient continues all their regular medication for as long as feasibly possible to ensure a patient is as stable as possible on admission to theatre. This is particularly important for immunosuppressants, *B*-blockers, and other drugs used to treat angina, heart failure, bronchospasm and epilepsy.

Medication can still be taken by a Nil By Mouth (NBM) patient: Plain water will be emptied from the stomach within two hours; therefore medication can be swallowed with a glass of water up to two hours prior to surgery.

Certain medications do need to be withheld prior to surgery. Examples include to reduce a patient's thrombus risk, avoid an interaction with anaesthetics or improving glycaemic control during the NBM period. Below is a list of commonly prescribed medications and whether they can be continued prior to surgery or from when they should be omitted.

Important points:

- This list should be used as a guide only.
- When in doubt, consult the anaesthetist and /or surgeon conducting the procedure.
- If necessary, discuss individual cases with associated speciality teams.
- *Drugs in italics* require action (e.g. omit, alert anaesthetist etc)
- Herbal medication and their potential peri-op complications are listed in a separate guide.

A	
Abiraterone	Continue
Acamprosate	Continue
Acarbose	*Follow Diabetes and surgery guideline. Usually omitted morning of surgery.*
Acenocoumarol	*Treat as for Warfarin. See Anticoagulation policy*
Acetubolol	Continue
Adalimumab	*Omit if due week prior to surgery. Do not re-start until wound clean*
Alendronate	Continue, *but may be safely omitted if due day of procedure*
Alfuzosin	Continue*, but could be withheld if catheterised*
Alimemazine	Continue
Aliskerin	Continue
Allopurinol	Continue – *Take with plenty of water so tablet does not lodge in oesophagus*
Alverine	Continue
Amantadine	Continue

Ambrisentan	Continue
Amifampridine	Continue – *Alert anaesthetist (for myasthenic syndromes)*
Amiloride	Continue
Amiodarone	Continue
Amisulpride	Continue
Amitriptyline	Continue – *but caution with pethidine use. Also increased risk of arrhythmia's and hypotension*
Amlodipine	Continue
Anagrelide	*Seek haematologist advice*
Anastrozole	Continue
Apixaban	*Omit 48 hours pre op*
Apomorphine	Continue
Aripiprazole	Continue
Asenapine	Continue
Aspirin	*Continue (75mg dose) unless otherwise specified. Reduce higher doses to 75mg.*
Atenolol	Continue
Atorvastatin	Continue
Auranofin	Continue
Azathioprine	Continue
Azilsartan	Continue
B	
Baclofen	Continue
Balsalazide	Continue – *but may not be indicated post-op if procedure is to remove diseased bowel.*
Barbiturates	Continue
Bendroflumethiazide	Continue
Benzhexol	Continue
Benperidol	Continue
Betahistine	Continue
Betamethasone (steroid)	Continue *But consider dose increase if long duration or high dose; see Trust Guideline*
Bezafibrate	Continue
Bicalutamide	Continue
Bilastine	Continue
Bisacodyl	Continue – *May omit if laxative action undesirable*
Bisoprolol	Continue
Bosentan	Continue
Bromocriptine	Continue
Budesonide MR capsules	Continue – *but may not be indicated post-op if procedure is to remove diseased bowel.*
Bumetanide	Continue
Buprenorphine	Continue – *but alert anaesthetist*
Buprenorphine patch	Continue – *but alert anaesthetist it's in situ*
Bupropion	Continue – *but avoid pethidine and alert anaesthetist (increases seizure risk)*
Burinex A	Continue
Buspirone	Continue
C	
Cabergoline	Continue
Calcitonin	Continue

Calcium salts	Continue
Candesartan	Continue
Captopril	Continue
Carbamazepine	Continue
Carbimazole	Continue
Carbocisteine	Continue
Carvedilol	Continue
Celecoxib	Continue
Celiprolol	Continue
Cetirizine	Continue
Chloroquine	Continue
Chlorpheniramine	Continue
Chlorpromazine	Continue
Chlorpropamide	*Follow Diabetes and surgery guideline.*
Ciclosporin	Continue
Cilazapril	Continue
Cilostazol	Continue
Cimetidine	Continue
Cinacalcet	Continue
Cinnarizine	Continue
Ciprofibrate	Continue
Citalopram	Continue – *but caution with pethidine use*
Clodronate	Continue - *but may be safely omitted if due day of procedure*
Clomethiazole	Continue
Clomifene	Continue
Clomipramine	Continue – *but caution with pethidine use. Also increased risk of arrhythmia's and hypotension*
Clonazepam	Continue
Clonidine	Continue
Clopidogrel	*See Algorithm. Discuss with surgical/cardiology teams (If single agent for stroke, usually omit 7 days pre-op. Start 75mg aspirin in its place where possible).*
Clozapine	*Withhold 12 hours pre-op.* *Alert anaesthetist. Alert Pharmacy that pt is in hospital. Dose will need re-titrating if withheld for more than 48hrs.*
Co-amilofruse	Continue
Co-amilozide	Continue
Co-beneldopa	Continue
Co-careldopa	Continue
Co-danthramer	Continue – *May omit if laxative action undesirable*
Codeine phosphate	Continue
Colchicine	Continue – *but alert anaesthetist as pt may have gout*
Colesevelam	Continue
Colestyramine	Continue
Contraceptives	*See oral contraceptives*
Co-phenotrope (lomitil)	Continue
Cortisone (steroid)	*Continue. But consider dose increase if long duration or high dose; see Trust Guideline*
Cyanocobalamin	Continue
Cyproterone	Continue

<table>
<tr><th colspan="4">D</th></tr>
<tr><td rowspan="5">Dabigatran (see simplified recommendations appendix 11)</td><td colspan="3">Renal function and bleeding risk dependant as below:</td></tr>
<tr><td>Creatinine Clearance</td><td>Standard surgery</td><td>Major surgery or high bleeding risk</td></tr>
<tr><td>>80mls/min</td><td>Omit 24hrs pre-op</td><td>Omit 48hrs pre-op</td></tr>
<tr><td>50 -80mls/min</td><td>Omit 36hrs pre-op</td><td>Omit 72hrs pre-op</td></tr>
<tr><td>30-50mls/min</td><td>Omit 48hrs pre-op</td><td>Omit 96hrs pre-op</td></tr>
<tr><td>Dapaglifozin</td><td colspan="3">Follow Diabetes and surgery guideline. Usually omitted morning of surgery.</td></tr>
<tr><td>Deflazacort (steroid)</td><td colspan="3">Continue. But consider dose increase if long duration or high dose; see Trust Guideline</td></tr>
<tr><td>Desferrioxamine</td><td colspan="3">Seek haematologist advice</td></tr>
<tr><td>Desloratidine</td><td colspan="3">Continue</td></tr>
<tr><td>Dexamethasone (steroid)</td><td colspan="3">Continue. But consider dose increase if long duration or high dose; see Trust Guideline</td></tr>
<tr><td>Dexamfetamine</td><td colspan="3">Continue – but alert anaesthetist</td></tr>
<tr><td>Diazepam</td><td colspan="3">Continue</td></tr>
<tr><td>Diclofenac</td><td colspan="3">Continue</td></tr>
<tr><td>Dicycloverine</td><td colspan="3">Continue</td></tr>
<tr><td>Digoxin</td><td colspan="3">Continue</td></tr>
<tr><td>Diltiazem</td><td colspan="3">Continue</td></tr>
<tr><td>Dipyridamole</td><td colspan="3">Withhold 48 hrs prior to procedure or switch to aspirin 75mg</td></tr>
<tr><td>Disopyramide</td><td colspan="3">Continue</td></tr>
<tr><td>Disulfiram</td><td colspan="3">Continue – but alert anaesthetist</td></tr>
<tr><td>Docusate sodium</td><td colspan="3">Continue – May omit if laxative action undesirable</td></tr>
<tr><td>Domperidone</td><td colspan="3">Continue</td></tr>
<tr><td>Donepezil</td><td colspan="3">Continue. But alert anaesthetist – may potentiate muscle relaxation during anaesthesia</td></tr>
<tr><td>Dosulepin</td><td colspan="3">Continue – but caution with pethidine use. Also increased risk of arrhythmia’s and hypotension</td></tr>
<tr><td>Doxazosin</td><td colspan="3">Continue if for BP control
If for urinary symptoms, could be withheld if pt catheterised</td></tr>
<tr><td>Doxepin</td><td colspan="3">Continue – but caution with pethidine use. Also increased risk of arrhythmia’s and hypotension</td></tr>
<tr><td>Dronedarone</td><td colspan="3">Continue</td></tr>
<tr><td>Dutasteride</td><td colspan="3">Continue</td></tr>
<tr><td>Duloxetine</td><td colspan="3">Continue – but caution with pethidine use</td></tr>
<tr><th colspan="4">E</th></tr>
<tr><td>Enalapril</td><td colspan="3">Continue</td></tr>
<tr><td>Entacapone</td><td colspan="3">Continue</td></tr>
<tr><td>Ephedrine</td><td colspan="3">Seek anaesthetist advice</td></tr>
<tr><td>Eplerenone</td><td colspan="3">Continue</td></tr>
<tr><td>Eprosartan</td><td colspan="3">Continue</td></tr>
<tr><td>Escitalopram</td><td colspan="3">Continue – but caution with pethidine use</td></tr>
<tr><td>Eslicarbazepine</td><td colspan="3">Continue</td></tr>
<tr><td>Esomeprazole</td><td colspan="3">Continue</td></tr>
<tr><td>Etanercept</td><td colspan="3">Omit if due week prior to surgery. Do not re-start until wound clean</td></tr>
<tr><td>Ethinylestradiol</td><td colspan="3">Discuss with endocrine team. High doses may need to be stopped or continued at a lower dose.</td></tr>
<tr><td>Ethosuximide</td><td colspan="3">Continue</td></tr>
</table>

Etidronate	*Omit on day of procedure*
Etodolac	Continue
Etoricoxib	Continue
Exemestane	Continue
Exenatide	*Follow Diabetes and surgery guideline. Usually omitted morning of surgery.*
Ezetimbe	Continue
F	
Famotidine	Continue
Fampridine	Continue – *but alert anaesthetist (use for MS)*
Feboxustat	Continue
Felodipine	Continue
Fenofibrate	Continue
Fentanyl patch	Continue – *but alert anaesthetist it's in situ*
Ferrous fumarate	Continue
Ferrous gluconate	Continue
Ferrous sulphate	Continue
Fexofenadine	Continue
Finasteride	Continue
Flavoxate	Continue. *May be omitted if pt catheterised*
Flecanide	Continue
Fluazepam	Continue
Fludrocortisone (steroid)	*Continue. But consider dose increase if long duration or high dose; see Trust Guideline.*
Fluoxetine	Continue – *but caution with pethidine use*
Flupentixol	Continue – *but caution with pethidine use*
Flutamide	Continue
Fluvastatin	Continue
Fluvoxamine	Continue – *but caution with pethidine use*
Folic acid	Continue
Fosinopril	Continue
Furosemide	Continue
G	
Gabapentin	Continue
Galantamine	Continue. *But alert anaesthetist – may potentate muscle relaxation during anaesthesia*
Gaviscon	Continue
Gemfibrozil	Continue
Glibenclamide	*Follow Diabetes and surgery guideline.*
Gliclazide	*Follow Diabetes and surgery guideline. Usually omitted morning of surgery.*
Glimepiride	*Follow Diabetes and surgery guideline. Usually omitted morning of surgery.*
Glipizide	*Follow Diabetes and surgery guideline. Usually omitted morning of surgery.*
Glucosamine	*Stop 2 weeks pre-op if mixed with chondroitin*
H	
Haloperidol	Continue

HRT: Oestrogens only	*Advise to omit 4 weeks prior to any elective surgery but warn of possible menopausal like side effects of withdrawal, which may be considerable. Offer leaflet. Ensure adequate thromboprophylaxis if continued. If concerns, discuss with gynaecology.*
HRT: combined oestrogens and progesterones	*Advise to omit 4 weeks prior to any elective surgery but warn of possible menopausal like side effects of withdrawal, which may be considerable. Offer leaflet. Ensure adequate thromboprophylaxis if continued. If concerns discuss with gynaecology.*
Hydromorphone	Continue
Hydralazine	Continue
Hydrocortisone (steroid)	*Continue. But consider dose increase if long duration or high dose; see Trust Guideline*
Hydroxychloroquine	Continue
Hydroxyzine	Continue
Hyoscine butylbromide (Buscopan)	Continue
I	
Ibandronate	Continue*, but may be safely omitted if due day of procedure*
Ibuprofen	Continue
Imidapril	Continue
Imipramine	Continue – *but caution with pethidine use. Also increased risk of arrhythmia's and hypotension*
Indapamide	Continue
Indometacin	Continue
Indoramin	Continue if for BP control. *If for urinary symptoms, could be withheld if pt catheterised*
Infliximab	*Omit if due week prior to surgery. Do not re-start until wound clean*
Insulins	*Follow Diabetes and surgery guideline. Guidance is procedure and product dependant.*
Irbesartan	Continue
Isocarboxazid (MAOI)	*Seek both anaesthetic and psychiatric input!* *If withdrawal necessary; do so slowly, well in advance to allow a 2 week drug free period.*
Isosorbide dinitrate	Continue
Isosorbide mononitrate	Continue
Ispaghula husk	Continue – *May omit if laxative action undesirable*
Isradipine	Continue
Ivabradine	Continue
Ivacaftor	Continue
K	
Ketoprofen	Continue
L	
Labetalol	Continue
Lacidipine	Continue
Lacosamide	Continue
Lactulose	Continue – *May omit if laxative action undesirable*
Lamotrigine	Continue

Lansoprazole	Continue
Leflunomide	Continue
Lenolidomide	Continue – *Increase DVT risk but usually benefits outweigh risks*
Lercanidipine	Continue
Letrozole	Continue
Levetiracetam	Continue
Levocetirizine	Continue
Levomepromazine	Continue
Levothyroxine	Continue
Liothyronine	Continue
Linaclotide	Continue – *May omit if laxative action undesirable*
Linagliptin	*Follow Diabetes and surgery guideline. Usually omitted morning of surgery.*
Liraglutide	*Follow Diabetes and surgery guideline. Usually omitted morning of surgery.*
Lisdexamfetamine	Continue – *but alert anaesthetist*
Lisinopril	Continue
Lithium	Continue – *but alert anaesthetist and monitor electrolytes and fluid balance closely*
Lixisenatide	*Follow Diabetes and surgery guideline. Usually omitted morning of surgery.*
Lofepramine	Continue – *but caution with pethidine use. Also increased risk of arrhythmia's and hypotension*
Loperamide	Continue
Loprazolam	Continue
Loratidine	Continue
Lorazepam	Continue
Lormetazepam	Continue
Losartan	Continue
M	
Magnesium triscilicate	Continue
Maxepa	Continue
Mebeverine	Continue
Mefenamic acid	Continue
Meloxicam	Continue
Memantine	*Discuss with anaesthetist – structurally related to ketamine so may be hallucinogenic*
Meprobamate	Continue
Meptazinol	Continue
Mercaptopurine	Continue
Mesalazine	Continue – *but may not be indicated post-op if procedure is to remove diseased bowel.*
Metformin	*Follow Diabetes and surgery guideline. Usually omitted morning of surgery.*
Methadone	Continue. *Alert anaesthetist. Avoid buprenorphine.*
Methotrexate	Continue
Methylcellulose	Continue – *May omit if laxative action undesirable*
Methyldopa	Continue
Methylphenidate	Continue

Methylprednisolone (steroid)	*Continue. But consider dose increase if long duration or high dose; see Trust Guideline*
Metoclopramide	Continue
Metolazone	Continue
Metoprolol	Continue
Metyrapone	*Discuss with anaesthetist*
Minoxidil	Continue
Mirabegron	Continue. *May be omitted if pt catheterised*
Mirtazepine	Continue – *but caution with pethidine use*
Misoprostol	Continue
Moclobemide	*Omit 12 hours pre-op*
Modafinil	Continue
Montelukast	Continue
Morphine	Continue
Movicol	Continue – *May omit if laxative action undesirable*
Moxonidine	Continue
Mycophenolate	Continue
N	
Nabumetone	Continue
Nadolol	Continue
Naftidrofuryl oxalate	Continue
Nalmefene	Continue – *but alert anaesthetist*
Naproxen	Continue
Nateglinide	*Follow Diabetes and surgery guideline. Usually omitted morning of surgery.*
Nebivolol	Continue
Neostigmine	*Discuss with anaesthetist*
Nicardipine	Continue
Nicorandil	Continue
Nicotinic acid	Continue
Nifedipine	Continue
Nimodipine	Continue
Nitrazepam	Continue
Nizatidine	Continue
Nortriptyline	Continue – *but caution with pethidine use. Also increased risk of arrhythmia's and hypotension*
O	
Olanzapine	Continue
Olmesartan	Continue
Olsalazine	Continue – *but may not be indicated post-op if procedure is to remove diseased bowel.*
Omacor	Continue
Omeprazole	Continue
Oral contraceptive: combined oestrogen and progesterones	*Advise to omit 4 weeks prior to any elective surgery & offer advice re alternative methods & issue leaflet. If continuing, document decision & ensure adequate thromboprophylaxis.*
Oral contraceptive: progesterone only	Continue
Orlistat	*Omit once nil by mouth*
Oxazepam	Continue

Oxcarbazepine	Continue
Oxprenolol	Continue
Oxybutynin	Continue. *May be omitted if pt catheterised*
Oxycodone	Continue
P	
Pancreatin enzymes (Creon)	Continue
Pantoprazole	Continue
Paroxetine	Continue – *but caution with pethidine use*
Penicillamine	Continue
Pentoxifyline	Continue
Peppermint oil	Continue
Peptac	Continue
Pergolide	Continue
Perampanel	Continue
Perindopril	Continue
Pethidine	*Omit day of procedure (increases seizure risk)*
Phenelzine (MAOI)	*Seek both anaesthetic and psychiatric input! If withdrawal necessary; do so slowly, well in advance to allow a 2 week drug free period.*
Phenindione	*Treat as for Warfarin See Anticoagulation policy and Appendix 4*
Phenobarbital	Continue
Phentolamine	*Seek anaesthetist advice*
Phenytoin	Continue
Pindolol	Continue
Pioglitazone	*Follow Diabetes and surgery guideline. Usually omitted morning of surgery.*
Piracetam	Continue – *but alert anaesthetist*
Pirfenidone	Continue
Piroxicam	Continue
Pizotifen	Continue
Pramipexole	Continue
Prasugrel	*See Algorithm. Discuss with surgical/cardiology teams*
Pravastatin	Continue
Prazosin	Continue if for BP control *If for urinary symptoms, could be withheld if pt catheterised*
Prednisolone (steroid)	*Continue. But consider dose increase if long duration or high dose; see Trust Guideline*
Pregabalin	Continue
Prestylon	Continue
Primidone	Continue
Propafenone	Continue
Propantheline	Continue. *May be omitted if pt catheterised*
Propiverine	Continue. *May be omitted if pt catheterised*
Propranolol	Continue
Propylthiouracil	Continue
Prucalopride	Continue – *May omit if laxative action undesirable*
Pyridostigmine	*Discuss with anaesthetist*

Q	
Quetiapine	Continue
Quinapril	Continue
Quinine	Continue
R	
Rabeprazole	Continue
Raloxifene	Continue
Ramipril	Continue
Ranitidine	Continue
Rasagiline	Continue – *but avoid pethidine*
Reboxetine	Continue – *but caution with pethidine use*
Repaglinide	*Follow Diabetes and surgery guideline. Usually omitted morning of surgery.*
Retigabine	Continue
Rifaximin	Continue
Riluzole	Continue – *but alert anaesthetist*
Risedronate	Continue, *but may be safely omitted if due day of procedure*
Risperidone	Continue
Rivaroxaban	*Omit 48 hours pre-op*
Rivastigmine	Continue. *But alert anaesthetist – may potentate muscle relaxation during anaesthesia*
Ropinirole	Continue
Rosiglitazone	*Follow Diabetes and surgery guideline. Usually omitted morning of surgery.*
Rosuvastatin	Continue
Rotigotine	Continue
Rufinamide	Continue
Rupatadine	Continue
S	
Saxagliptin	*Follow Diabetes and surgery guideline. Usually omitted morning of surgery.*
Selegiline	Continue – *but avoid pethidine*
Senna	Continue – *May omit if laxative action undesirable*
Sertindole	Continue
Sertraline	Continue – *but caution with pethidine use*
Sevelamer	*Omit once patient NBM*
Sibutramine	Continue
Simvastatin	Continue
Sirolimus	Continue
Sitagliptin	*Follow Diabetes and surgery guideline. Usually omitted morning of surgery.*
Sodium Valproate	Continue
Solifenacin	Continue. *May be omitted if pt catheterised*
Sotalol	Continue
Spironolactone	Continue
Strontium	Continue, *but may be safely omitted if due day of procedure*
Sulfasalazine	Continue – *but may not be indicated post-op if procedure is to remove diseased bowel.*
Sulindac	Continue
Sulpiride	Continue

T	
Tacrolimus	Continue
Tafamidis	Continue – *but alert anaesthetist*
Tamoxifen	Continue
Tamsulosin	Continue
Tapentadol	*Omit day of procedure (increases seizure risk)*
Telaprevir	Continue
Telmisartan	Continue
Temazepam	Continue
Tenoxicam	Continue
Terazosin	Continue if for BP control. *If for urinary symptoms, could be withheld if pt catheterised*
Tetrabenazine	Continue – *but alert anaesthetist*
Thalidomide	*Seek haematologist advice*
Theophylline	Continue – *consider checking level pre-op if pt risk of arrhythmias*
Tibolone	Continue
Ticagrelor	*See Algorithm. Discuss with surgical/cardiology teams*
Tigabine	Continue
Timolol	Continue
Tolbutamide	*Follow Diabetes and surgery guideline. Usually omitted morning of surgery.*
Tolcapone	Continue
Tolterodine	Continue. *May be omitted if pt catheterised*
Tolvaptan	Continue
Topiramate	Continue
Toremifene	Continue
Tramadol	*Continue where appropriate*
Trancypromine (MAOI)	*Seek both anaesthetic and psychiatric input!* *If withdrawal necessary; do so slowly, well in advance to allow a 2 week drug free period.*
Trandolapril	Continue
Tranexamic acid	Continue
Trazodone	Continue – *but caution with pethidine use. Also increased risk of arrhythmia's and hypotension*
Triamterene	Continue
Trifluoperazine	Continue
Trihexyphenidyl	Continue
Trilostane	*Discuss with anaesthetist*
Trimipramine	Continue – *but caution with pethidine use. Also increased risk of arrhythmia's and hypotension*
Trospium	Continue. *May be omitted if pt catheterised*
U	
Ulipristal	Continue –*may not be needed post op if removing uterine fibroids*
Ursodeoxycholic acid	Continue
V	
Valproic acid	Continue
Valsartan	Continue
Varenicline	Continue
Venlafaxine	Continue – *but avoid pethidine use*

Verapamil	Continue
Vigabatrin	Continue
Vildagliptin	*Follow Diabetes and surgery guideline. Usually omitted morning of surgery.*
W	
Warfarin	*See Anticoagulation policy*
Z	
Zafirlukast	Continue
Zolendronate	Continue, *but may be safely omitted if due day of procedure*
Zolpidem	Continue
Zopiclone	Continue
Zotepine	Continue
Zuclopenthixol	Continue

Appendix 13 – Herbal Medicines with potential peri-operative complications

Disclaimer:

This guideline is believed to be an accurate reflection of the most current evidenced based literature available at time of composition. This is not an exhaustive list; it is intended to be used as a guide only. Users are advised to always consult medical literature and take into account any new developments. Always relate the information provided to the individual clinical situation.

Background:

The use of natural medicines in the UK is extensive. Many patients do not consider these products to be drugs or medication and often do not disclose their use to health providers. As a result there is a risk that patients may take these products in the perioperative period without healthcare provider's knowledge.

Purpose:

Many natural medicines have pharmacological effects that have the potential to interfere with surgical procedures. Therefore, assessment of natural medicine use is an important aspect of perioperative assessment. Patients should be asked specifically about their use of herbs, vitamins, minerals, or other natural or alternative products.

Advise patients to *discontinue taking all non-essential natural medicines two weeks before an elective surgery procedure.* Some products may not need to be discontinued this far in advance; however, there often is not enough information about which constituents cause a particular pharmacological effect or the half-life of those constituents[1].

Below is a list of herbal medicines known to have pharmacological effects which could adversely affect surgery. Advise patients to stop taking any preparation with these ingredients two weeks prior to surgery[1-4]. If a patient discloses a medication not on this list but wishes to continue taking it, please seek further advice from pharmacy.

Constituent	Reason why it should be stopped
5-HTP	Has serotinergic properties; treat as an SSRI. Caution with pethidine use.
Agnus Castus	Pro-oestrogenic; could increase thrombus risk Dopamine agonist; Treat as haloperidol clozapine or sulpiride.
Agrimony	Clinical evidence of hypotensive effects Clinical research suggests hypoglycaemic effects
Alfalfa	Immunomodulating properties; Possible increased risk of infection and poor wound healing Pro-oestrogenic; could increase thrombus risk Clinical research suggests hypoglycaemic effects
Aloes/Aloe vera	Clinical research suggests hypoglycaemic effects
Alpha-lipoic acid	Clinical research suggests hypoglycaemic effects
Andrographis	Preliminary evidence of hypotensive effects
Aniseed	Pro-oestrogenic; could increase thrombus risk Sympathomimetic; can cause hypertension, tachycardia and arrythmias

Arnica	Anticholinesterase action; bradycardia, hypotension, bronchoconstriction.
Asafoetida	Clinical evidence of hypotensive effects
Avens	Clinical evidence of hypotensive effects
Banaba	Clinical research suggests hypoglycaemic effects
Bayberry	Mineralocorticoid effect; could increase blood pressure
Bilberry	Antiplatelet effect; increases bleeding risk
Bitter melon	Clinical research suggests hypoglycaemic effects
Bitter orange	Stimulant. Structurally related to phenylephrine, it can predispose the patient to stroke, myocardial infarction, arrhythmia from tachycardia and hypertension. May interact with MAOIs. Omit a minimum of 24hours pre-op.
Black Cohosh	Pro-oestrogenic; could increase thrombus risk
Black tea (concentrated tablets)	Large quantities of caffeine in black tea can have antiplatelet effects; increased bleeding risk
Blue Cohosh	Theoretical hypertensive effects
Boldo	Anticoagulation effect; increased risk of bleeding. Can potentiate the effects of warfarin.
Boneset	Immunomodulating properties; Possible increased risk of infection and poor wound healing
Broom	Hypertensive; potential to raise blood pressure Potential cardiac depressant activity
Burdock	Clinical research suggests hypoglycaemic effects
Butterbur	Clinical evidence of hypotensive effects
Calamus	Clinical evidence of hypotensive effects Theoretical catecholamine activity Potentiates barbiturate sleeping time
Calendula	Immunomodulating properties; Possible increased risk of infection and poor wound healing
Capsicum	Sympathomimetic; can cause hypertension, tachycardia and arrhythmias
Cat's Claw	Antiplatelet effect; increases bleeding risk Clinical evidence of hypotensive effects Immunomodulating properties; Possible increased risk of infection and poor wound healing
Celery	Clinical research suggests hypoglycaemic effects Sedatives effect
Centaury	Sedative effect
Chamomile	Immunomodulating properties; Possible increased risk of infection and poor wound healing Mild sedative effects; could potentiate anaesthetics
Chondroitin	Anticoagulation effect; increased risk of bleeding. Can potentiate the effects of warfarin. Chondroitin also affects blood sugar control
Clove	Antiplatelet effect; increases bleeding risk
Coenzyme Q10	Clinical research suggesting modest hypotensive effects
Cola nut	Stimulant. Increased risk of tachycardia and hypertension.

Coltsfoot	Vasopressor activity causes hypertension
Corn Silk	Clinical evidence of hypotensive effects Clinical research suggests hypoglycaemic effects
Couchgrass	Sedative effect
Cowslip	Initially causes hypotension, then later hypertension
Damiana	Clinical research suggests hypoglycaemic effects
Dandelion	Clinical research suggests hypoglycaemic effects
Danshen	Anticoagulation effect; increased risk of bleeding. Can potentiate the effects of warfarin
Devil's Claw	Clinical research suggests hypoglycaemic effects Clinical evidence of hypotensive effects
Dong quai	Anticoagulation effect; increased risk of bleeding. Can potentiate the effects of warfarin
Drosera	Immunomodulating properties; Possible increased risk of infection and poor wound healing
Echinacea	Possible increased risk of infection and poor wound healing
Elecampane	Clinical research suggests hypoglycaemic effects Sedative effect Clinical evidence of hypotensive effects
Ephedra	Stimulant: Is a source of ephedrine, pseudoephedrine, and phenylpropanolamine. Can cause tachycardia and hypertension with spontaneous adverse events including stroke, myocardial infarction, QT interval prolongation and arrhythmia. Also known to inhibit complement pathway
Epimedium	Preliminary evidence of hypotensive effects
Eucalyptus	Clinical research suggests hypoglycaemic effects
Fenugreek	Anticholinesterase action; bradycardia, hypotension, bronchoconstriction. Anticoagulation effect; increased risk of bleeding. Can potentiate the effects of warfarin Clinical research suggests hypoglycaemic effects
Feverfew	Antiplatelet effect; increases bleeding risk
Fucus	Anticoagulation effect; increased risk of bleeding. Potential hypotensive effects Both hyper- and hypo thyroidism reported with continued use
Fumitory	Clinical evidence of hypotensive effects
Garlic	Antiplatelet effect; increases bleeding risk Also has hypotensive properties Clinical research suggests hypoglycaemic effects
Ginger	Antiplatelet effect; increases bleeding risk Clinical research suggests hypoglycaemic effects Also has hypotensive properties
Ginkgo	Pro-oestrogenic; could increase thrombus risk MAOI activity Antiplatelet effect; increases bleeding risk

Ginseng (American, Eleutherococcus and Panax)	Immunomodulating properties; Possible increased risk of infection and poor wound healing Has erratic blood glucose control in patients reporting both hyper- and hypo-glycaemic control CNS depressant and stimulant Pro-oestrogenic; could increase thrombus risk Antiplatelet effects; increases bleeding risk Also has erratic blood pressure altering properties, causing both hyper- and hypo-tension in patients. MAOI potentiation, suspected phenelzine interaction
Glucomannan	Clinical research suggesting hypoglycaemic effects
Glucosamine	Anticoagulation effect; increased risk of bleeding. Can potentiate the effects of warfarin. Glucosamine can also affect blood sugar control.
Golden Seal	Potential hypotensive effects Heparin antagonist Sedative effect
Greater Celandine	Immunomodulating properties; Possible increased risk of infection and poor wound healing
Green tea (concentrated)	Large quantities of caffeine in green tea can have antiplatelet effects; increased bleeding risk. It can also be a stimulant in large quantities.
Guarana	Antiplatelet effects; increases bleeding risk Also a known stimulant; increases risk of tachycardia, hypertension and arrhythmias.
Gymnema	Clinical research suggests hypoglycaemic effects
Hawthorn	Clinical evidence of hypotensive effects CNS depressant; potentiates barbiturate sleeping time
Hops	Mild sedative effects(usually used in combination with other sedative products). Could potentiate anaesthetics.
Horehound, White	Vasodilator properties; lowers blood pressure
Horse chestnut	Active constituents thought to have antiplatelet activity; increases bleeding risk. Clinical evidence of hypotensive effects
Horseradish	Clinical evidence of hypotensive effects Peroxidase stimulates synthesis of arachidonic acid metabolites Both hyper- and hypo thyroidism reported with continued use
Hydrocotyl	Hyperglycaemic effect Sedative effect
Jamaica Dogwood	Sedative effect
Java Tea	Clinical evidence of hypotensive effects Clinical research suggests hypoglycaemic effects
Juniper	Clinical evidence of hypotensive effects Clinical research suggests hypoglycaemic effects
Kava	Additive effects with benzodiazepines increasing sedation; also linked to numerous reports of hepatotoxicity Possible dopamine antagonist effects. Treat as haloperidol clozapine or sulpiride.

L-arginine	Clinical research suggesting modest hypotensive effects
Lavender	Mild sedative effects; additive effects with CNS depressants and anaesthetics.
Lemon balm	Clinical research suggesting sedative effects. Could potentiate anaesthetics.
Liquorice	Mineralocorticoid effect; could increase blood pressure Pro-oestrogenic; could increase thrombus risk Antiplatelet effect; increases bleeding risk Also has a laxative effect similar to senna. Particularly important to withdraw prior to bowel surgery.
L-tryptophan	Clinical research showing sedative effects; documented reports of additive effects with CNS depressants and anaesthetics. Also has serotinergic properties; treat as an SSRI. Caution with pethidine.
Marshmallow	Clinical research suggests hypoglycaemic effects
Maté	Stimulant. Increased risk of tachycardia and hypertension
Melatonin	Clinical research suggesting sedative effects; can potentiate anaesthetics. Seek anaesthetic advice if prescribed by a clinician (especially in children).
Mistletoe	Clinical evidence of hypotensive effects Promotes coagulation Immunomodulating properties; Possible increased risk of infection and poor wound healing
Motherwort	Oxytocic properties
Myrrh	Clinical research suggests hypoglycaemic effects
Nettle	Clinical evidence of hypotensive effects CNS depression, in vivo Clinical research suggests hypoglycaemic effects Anticholinesterase action; bradycardia, hypotension, bronchoconstriction.
Parsley	Sympathomimetic; can cause hypertension, tachycardia and arrhythmias
Passionflower	Mild sedative effects; animal models suggest additive effects with CNS depressants
Plantain	Clinical evidence of hypotensive effects
Pleurisy Root	Sympathomimetic; can cause hypertension, tachycardia and arrhythmias Pro-oestrogenic; could increase thrombus risk
Pokeroot	Clinical evidence of hypotensive effects
Policosanol	Possible antiplatelet effect (based on anecdotal evidence). May increase bleeding risk
Prickly Ash (North and South)	Clinical evidence of hypotensive effects
Prickly pear cactus	Clinical research suggesting hypoglycaemic effects
Red Clover	Pro-oestrogenic; could increase thrombus risk
Resveratrol	Possible antiplatelet effect (based on in vitro data). May increase bleeding risk
Rosemary	Hyperglycaemic effect
Sage	Potential hypotensive effects Sedative effect Clinical research suggests hypoglycaemic effects

SAMe,	Has serotinergic properties; treat as an SSRI. Caution with pethidine use.
Saw Palmetto	Immunomodulating properties; Possible increased risk of infection and poor wound healing Both oestrogenic and anti-androgenic properties Possible antiplatelet effect (based on anecdotal evidence). May increase bleeding risk
Scullcap	Reputed action
Senega	CNS depressant, Clinical research suggests hypoglycaemic effects
Shepherd's Purse	Potentiates barbiturate sleeping time Anticholinesterase action; bradycardia, hypotension, bronchoconstriction.
Squill	Clinical evidence of hypotensive effects
St. John's wort	Has serotinergic properties; treat as an SSRI. Caution with pethidine use. Also reduces warfarin effect. Clinical evidence of hypotensive effects
Tansy	Clinical research suggests hypoglycaemic effects
Theanine	Hypotensive effects
Thyme	Clinical evidence of hypotensive effects
Valerian	Sedative effects. Potentiates anaesthetics. Advise patients to withdraw slowly to avoid withdrawal effects.
Vanadium	Clinical research suggesting hypoglycaemic effects
Vervain	Erratic blood pressure altering properties, causing both hyper- and hypo-tension in patients. Inhibition of gonadotrophic activity; conflicting results Some sympathomimetic activity; causing, tachycardia and arrhythmias
Vitamin E	High doses associated with antiplatelet effects; increases bleeding risk
Wild Carrot	Clinical evidence of hypotensive effects Sedative effect Pro-oestrogenic; could increase thrombus risk
Wild Lettuce	Sedative effect
Yarrow	Clinical evidence of hypotensive effects Promotes coagulation

Appendix 14 – Surgical severity score

Grade 1:	Minor procedures e.g diagnostic endoscopy, breast biopsy
Grade 2:	Inguinal hernia repair, varicose veins adenotonsillectomy, knee arthroscopy
Grade 3:	Total abdominal hysterectomy, TURP, lumbar discectomy, thyroidectomy
Grade 4:	Major procedures, e.g. total joint, artery reconstruction, colonic resection, radical neck dissection

ASA: Perioperative Physical status score (American Society of Anaesthetists

ASA 1:	Healthy patient
ASA 2:	Mild systemic disease. No functional limitation
ASA 3:	Moderate systemic disease. Definite functional limitation
ASA 4:	Severe systemic disease that is a constant threat to life
ASA 5:	Moribund patient. Unlikely to survive 24 hours, with or without treatment

Postscript E indicates emergency surgery

Appendix 2 - ASA: Perioperative Physical status score (American Society of Anaesthetists

Appendix 15 - Guidelines for Pre-Operative Assessment of Elective Surgical Patients with Cardiac Implantable Electronic Devices

PRE OP

Implantable loop recorders(ILRs) and **insertable cardiac monitors (ICMs)** are used for monitoring cardiac arrhythmias. There is no additional risk to the patient during surgery and no additional actions are required.

Pacemakers (PPM) – Look up device check records on Maxims or paper notes. Contact Cardiac Physiologists if:

the re-check frequency is less than 6 months, or

previous problems were noted on the last check, or

the record is not available, or

the next check is overdue.

Otherwise pre-operative checks are *not required*.

NB. Pacemaker dependant patients (no underlying rhythm) undergoing breast / clavicle / shoulder or upper limb surgery above the elbow, may require PPM reprogramming if prolonged diathermy close to the device is likely. Clarify with surgeon, then anesthetic consultant.

Implantable Cardiac Defibrillators (ICDs) for treatment of life-threatening ventricular tachycardia, biventricular or resynchronisation pacemakers and ICDs for treatment of heart failure using ventricular resynchronisation (CRT-P and CRT-D respectively) Look up device check records on Maxims or paper notes. Contact Cardiac technicians if:

the re-check frequency is less than 6 months, or

previous problems were noted on the last check, or

the record is not available, or

the next check is overdue.

Otherwise pre-operative checks are *not required*.

A request for device deactivation before surgery and reactivation after surgery will need to be made for the day of surgery. This should be done using the request form on Maxims for cardiac devices.

NB. Endoscopy or dental procedures – deactivation is only required if argon beam or prolonged diathermy is anticipated; clarify with the surgeon.

POST OP – for all devices:
No post op device checks required unless programming has been altered or an adverse event has occurred.

NB. Patients with PPM who have undergone lithotripsy or ECT should have the device interrogated within 1 month of the procedure.

Site Suitability

The presence of ILR, ICM or PPM is not a contraindication to surgery at peripheral sites.

NOTE:
Pacemaker dependant (*no* underlying rhythm) patients having:
- upper limb surgery proximal to the elbow
- clavicle/shoulder surgery
- breast surgery

are not suitable for peripheral sites.

ICDs – RCH only.

Cardiac Physiologist

Available 0900-1700 Monday to Friday. Ext 2432.
Royal Cornwall Hospital – Treliske only

Appendix 16 – Governance Information

Document Title	Pre-Operative Assessment Guidelines			
Date Issued/Approved:	Nov 14			
Date Valid From:	Nov 14			
Date Valid To:	Nov 17			
Directorate / Department responsible (author/owner):	Anaesthetic and Theatre Division - Andy Lee, Consultant Anaesthetist			
Contact details:	01872 253133			
Brief summary of contents	Outlines the scope of practice for nurse-led Pre-Operative Assessment clinic and provides staff with clinical guidance in elective pre-assessment procedures.			
Suggested Keywords:	Drugs, Assessment, Pre-Operative, Surgery,			
Target Audience	RCHT	PCH	CFT	KCCG
	✓			
Executive Director responsible for Policy:	Medical Director			
Date revised:	Nov 13			
This document replaces (exact title of previous version):	Pre-Operative Assessment Guidelines			
Approval route (names of committees)/consultation:	Theatres and Aanesthesia Divisional Governance Committee			
Divisional Manager confirming approval processes	Terry Skinner – Divisional Director			
Name and Post Title of additional signatories	Gary Matthews			
Signature of Executive Director giving approval	{Original Copy Signed}			
Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet & Intranet	✓	Intranet Only	
Document Library Folder/Sub Folder	Clinical/Anaesthetics			
Links to key external standards	CQC standards: 1; 4; 6; 16			
Related Documents:	RCHT Guidelines for the Anaesthetic Management of Patients with Latex Allergy			

	RCHT Management of Patients who are Symptomatic or at risk of any transmissible Spongiform Encephalopathy Policy inc: Creutzfeldt – Jakob disease RCHT Guidelines for the Management of Adult Patients with Diabetes Mellitus during Surgery. RCHT Thrombosis Prevention and Anticoagulation Policy RCHT Blood Transfusion Policy RCHT Patient Identification Policy RCHT Policy for the pre-operative fasting of patients RCHT Consent to Treatment/Examination RCHT Standards of Record Keeping RCHT Infection Control Policy NMC (2008) The Code: Standards of conduct, performance and ethics for nurses and midwives NICE: Venous thromboembolism: reducing risk (CG92 Jan 2010) SPC-EU June 2013 Xarelto (rivaroxaban) SPC June 2013 Pradaxa (dagibactran) HPC (2008) Standards of Proficiency
Training Need Identified?	No.

Version Control Table

Date	Version No	Summary of Changes	Changes Made by *(Name and Job Title)*
June 2009	01	Original version	Andy Lee, Consultant Anaesthetist
November 2010	02	Amendments to pregnancy testing	Andy Lee, Consultant Anaesthetist
November 2013	03	Update to anticoagulation therapy peri-operatively	Andy Lee, Consultant Anaesthetist
14 Nov 14	04	Appendices moved to separate documents for publication via mobile guidelines website	Andy Lee, Consultant Anaesthetist
03 May 16	04.1	Appendix Added relating to Cardiac Implantable Electronic Devices	Barry Phypers, Consultant Anaesthetist

Appendix 17 – Initial Equality Impact Assessment Form

Name of Name of the strategy / policy /proposal / service function to be assessed (hereafter referred to as *policy*) (Provide brief description): Pre-Operative Assessment Guidelines	
Directorate and service area: Anaesthetics	Is this a new or existing Policy? Existing
Name of individual completing assessment: Andy Lee, Consultant Anaesthetist	Telephone: 01872 253133
1. Policy Aim* Who is the strategy / policy / proposal / service function aimed at?	Pre-operative assessment clinic staff and members of the anaesthetic and surgical divisions.
2. Policy Objectives*	Clarify and guide management of patients in the pre-operative period, especially with regard to pre-operative optimisation and testing.
3. Policy – intended Outcomes*	Clear guidance and prevention of unnecessary cancellations on day of elective surgery.
4. *How will you measure the outcome?	Cancellation rates due to pre-operative assessment process failure.
5. Who is intended to benefit from the policy?	Patients and all staff preparing patients for anaesthetic and surgery.
6a) Is consultation required with the workforce, equality groups, local interest groups etc. around this policy? b) If yes, have these *groups been consulted? C). Please list any groups who have been consulted about this procedure.	Yes. Pre-operative assessment workforce, surgical consultants and anaesthetic consultants. Yes Diabetic specialist nurse teams, DVT specialist nurse team, haematology coagulation lead, blood conservation team, cardiology, anaesthetic consultants and surgical consultants.

7. The Impact Please complete the following table.			
Are there concerns that the policy **could** have differential impact on:			
Equality Strands:	Yes	No	Rationale for Assessment / Existing Evidence
Age		**x**	

Sex (male, female, trans-gender / gender reassignment)		**X**	
Race / Ethnic communities /groups		**X**	
Disability - learning disability, physical disability, sensory impairment and mental health problems		**X**	
Religion / other beliefs		**X**	
Marriage and civil partnership		**X**	
Pregnancy and maternity		**X**	
Sexual Orientation, Bisexual, Gay, heterosexual, Lesbian		**x**	

You will need to continue to a full Equality Impact Assessment if the following have been highlighted:

You have ticked "Yes" in any column above and

No consultation or evidence of there being consultation- this excludes any *policies* which have been identified as not requiring consultation**. or**

- Major service redesign or development

8. Please indicate if a full equality analysis is recommended.	**Yes**	**No x**

9. If you are not recommending a Full Impact assessment please explain why.

Few changes since last document review 3 years ago.

Signature of policy developer / lead manager / director	Date of completion and submission

Names and signatures of members carrying out the Screening Assessment	1. 2.	

Keep one copy and send a copy to the Human Rights, Equality and Inclusion Lead, c/o Royal Cornwall Hospitals NHS Trust, Human Resources Department, Knowledge Spa, Truro, Cornwall, TR1 3HD

A summary of the results will be published on the Trust‟s web site.

Signed _____

Date _____