Leicestershire Partnership NHS Trust

Policy and Procedure for Administration of Electroconvulsive Therapy (ECT)

This policy describes the process of safe delivery of ECT from prescription to treatment through to follow-up. The roles and responsibilities of both the prescribing team and treating team are outlined.

Key Words:	ECT	
Version:	7.1	
Adopted by:	Quality Assurance Committee	
Date this version was adopted:	16th October 2024	
Name of Author:	Neuromodulation and Related Treatments Steering Group Committee	
Name of responsible committee:	Neuromodulation and Related Treatments Steering Group Committee	
Please state if there is a reason for not publishing on website:	n/a	
Date issued for publication:	16th October 2024	
Review date:	1 June 2026	
Expiry date:	31 November 2026	
Target audience:	Prescribing Clinicians	
Type of Policy	Clinical √	Non-Clinical

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Version Control and Summary of Changes

Version number	Date	Comments (description change and amendments)
Version 1	06-03-20	Revised policy in line with LPT Policy Template
Version 6	24-03-22	Reviewed and updated as appropriate
Version 6a	13-03-24	Reviewed and additions made as appropriate.
Version 7	16-10-24	Reviewed and updated
Version 7.1	20-10-26	Extension agreed for 1 month to allow review process

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The ECT suite is based within the Bradgate Mental Health Unit.

The Bradgate clinic runs on a Monday, Tuesday, Thursday, and Friday with the first

appointment starting at 9.00 am.

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Abbreviations that apply to this Policy

ECT	Electro-convulsive therapy. This treatment is given under general Anaesthetic and is for Depression, Catatonia and Mania
S1	Electronic patient record
LPT	Leicestershire Partnership Trust
SOAD	Second Opinion Approved Doctor.
RC	Responsible Clinician. The Consultant Psychiatrist responsible for a given individuals care,
EEG	Electro Encephalogram. The measurement of, with regard to ECT, seizure activity.
SPR	Specialist Registrar
S62	Section 62 (urgent treatment). This section is for individuals who require immediate treatment whilst awaiting a SOAD assessment
S58A	Treatments requiring consent or a second opinion under section 58
T6	Form T6 is by a SOAD used to certify ECT in the case of any patient who lacks capacity to give or withhold consent. The patient will also be under a section of the Mental Health Act.
T4	Certifies adult patients consent to ECT who are currently under a section of the Mental Health Act.
ODP	Operating department practitioner who assists the anaesthetist.
ST	Seizure threshold.
ASA Grade	Anaesthetic grading system which provides a grade for medical conditions from 1- 4.
Due Regard	Having due regard for advancing equality involves: • Removing or minimizing disadvantages suffered by people due to their protected characteristics. • Taking steps to meet the needs of people from protected groups where these are different from the needs of other people. • Encouraging people from protected groups to participate in public life or in other activities where their participation is disproportionately low.
Q&S	Community Quality and Safety Group
UHL	University Hospitals of Leicester

ECTAS	ECT Accreditation Service

SECTION ONE

Equality Statement

Leicestershire Partnership NHS Trust (LPT) aims to design and implement policy documents that meet the diverse needs of our service, population, and workforce, ensuring that none are placed at a disadvantage over others. It considers the provisions of the Equality Act 2010 and advances equal opportunities for all. This document has been assessed to ensure that no one receives less favourable treatment on the protected characteristics of their age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex (gender) or sexual orientation.

In carrying out its functions, LPT must have due regard to the different needs of different protected equality groups in their area. This applies to all the activities for which LPT is responsible, including policy development, review, and implementation.

Due regard

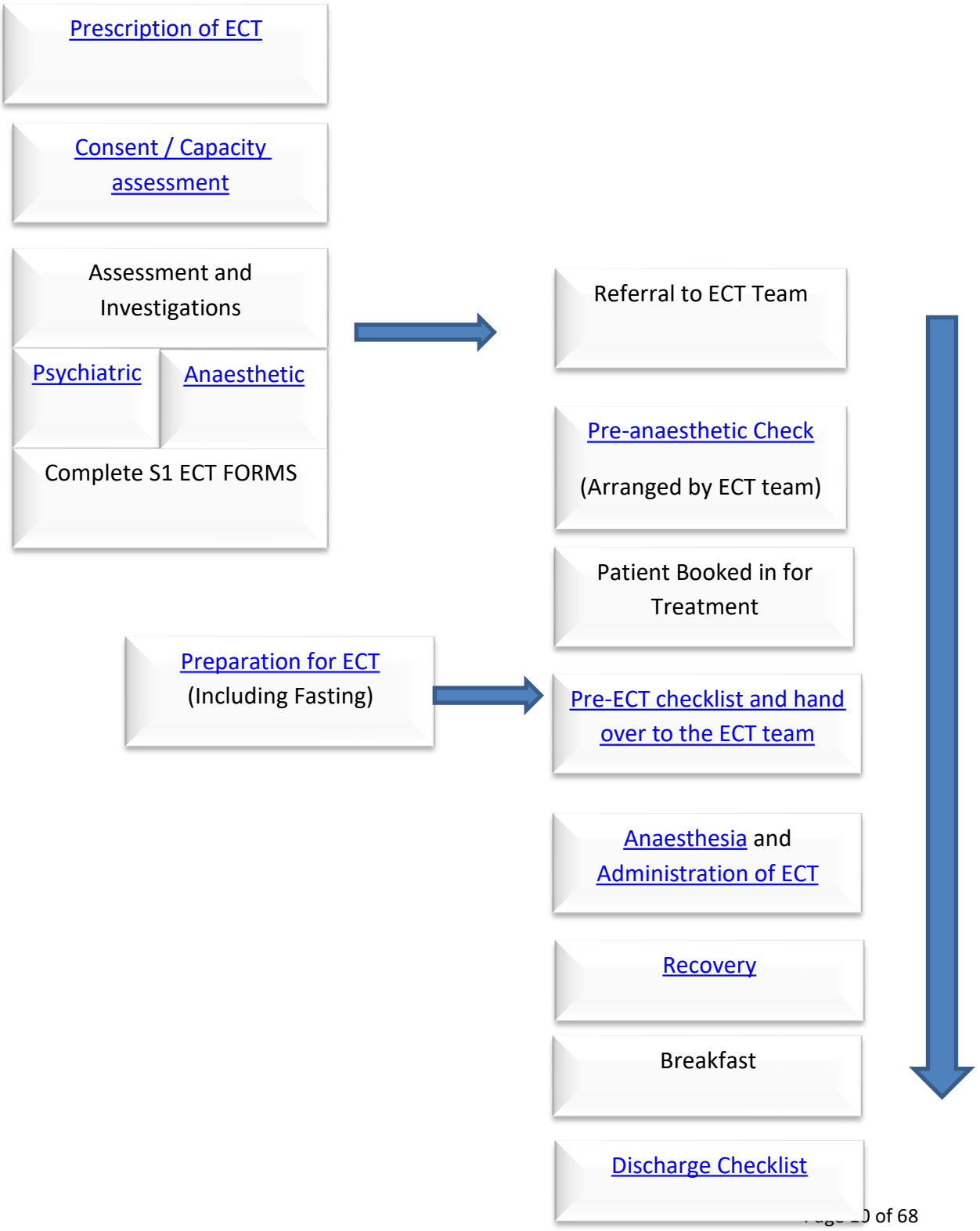
This policy has been screened in relation to paying due regard to the general duty of the Equality Act 2010 to eliminate unlawful discrimination, harassment, victimization; advance equality of opportunity and foster good relations. This policy is designed to ensure that LPT manage an effective and professional ECT services that is undertaken in a dignified and respectful manner to all service users. Every effort will be made to communicate all information in an appropriate format (written or otherwise) and with the support of family member's Carer's etc.

The organisation is committed to positive action towards removing barriers to services and opportunities for those from discriminated groups. There will be continuous monitoring of the operation of this policy and the associated procedures to ensure that they are not discriminating against any particular equality group and that there is equality of access to the protection that the procedures offer. This will be demonstrated by effective monitoring of relevant service user equality data.

See Appendix 10 for Due Regard Assessment.

Flow Chart for ECT

(The flow chart provides an overview of key points only. Please use the links to navigate through the policy. Please feel free to use the detailed index for the contents of the policy)



1.0 SUMMARY

The ECT policy has drawn on recommendations of The Royal college of Psychiatrists ECT handbook (2019), The Royal College of Anaesthetists (2007), National Institute for Clinical Effectiveness (NICE) guidelines on use of ECT (2003), the Mental Health Act (2007), and the Mental Capacity Act (2005) as well as the Royal College of Psychiatrists ECT accreditation standards (ECTAS) (2021).

The policy details the Care Pathway for a patient having ECT within the trust. It details the roles and responsibilities of the various professionals involved in the delivery of the Care Pathway, the assessments required before, during and after ECT for each patient. It is Team process involving the wards, outpatients and ECT staff working together. The prescription, consent, dosing protocol, nursing, anaesthetists, medical and recovery nurse's tasks are facilitated through easy-to-read charts and posters, enabling easy communications between the several disciplines. Training needs of staff are highlighted.

1.1 INTRODUCTION

This policy document will provide an overarching governance framework to support the prescribers and treating clinicians when administering electroconvulsive therapy (ECT) to the patients requiring this procedure whilst within the care of the Leicestershire Partnership Trust. The document is intended to be used by the clinical team administering ECT and for those wishing to refer patients for this procedure.

This policy provides a clear guidance for the specialist team that delivers this treatment and can be used as a point of reference for Responsible Clinician.

Electroconvulsive therapy (ECT) is a medical treatment most used in patients with severe major depression or bipolar disorder that has not responded to other treatments. ECT involves a brief electrical stimulation of the brain while the patient is under anesthesia.

- ECT within LPT is provided by the Acute Recovery Team in line with ECTAS and RCP guidance and standards. This policy is in keeping with those standards.
- Treatment will be delivered by a specialist dedicated team collaboration between UHL and LPT. The UHL staff provided are Consultant Anesthetist, ODP and 2 Recovery Staff.
- ECT will be offered to outpatients assessed as appropriate to be treated from home. Appropriate arrangements for after care are put in place before outpatients ECT is prescribed, ensuring a responsible adult remains with the patient for a 24-hour period post treatment. Outpatients should not drive during an acute course of treatment.
- Inpatient ECT will be carried out during the patient's hospital stay. Ward staff to provide escort on each occasion.
- Patients from other Hospitals will attend with correct MHA or Consent paperwork and will have been referred to the ECT service. They will attend with Nurse who knows them and who can confirm current patient status by completing the attached form.
- On return to the Hospital the ECT service will print off treatment details as a handover back to the referring team.

1.2 PURPOSE

The purpose of the Clinical Guidance Document for ECT is to ensure that clinicians are fully aware of the roles and responsibilities of administering ECT and that this is delivered in a safe and

consistent manner for patients accepted for treatment. The document is to be used for clinical reference outlining the expectations for pre-treatment assessment, guidance on the requirements of the current Mental Health Act and Mental Capacity Act, Anaesthetic contra-indications and the delivery of the treatment. The policy sets out the standards and process required to operate such a service and provides assurances to stakeholders and patients alike.

1.3 MONITORING AND AUDIT

The Leicestershire Partnership NHS Trust ECT clinical service is an accredited member of ECTAS (Electro-Convulsive Therapy) which is part of the Royal College of Psychiatrists. The delivery of the ECT service is guided by ECTAS standards and membership of ECTAS is determined by achievement of these standards. To maintain accreditation the ECT service is required to comply with the 3 yearly accreditation cycle which is assessed by peer review and evidenced documentation.

The ECT service delivery and governance will be overseen by the ECT Steering and related treatments Group that meets monthly and will report to the Quality and Safety (Q&S) Group.

- All ECT related audits will be monitored by ECT, and related treatments steering group will action plan these audits as appropriate.

- ECTAS accreditation 3 yearly accreditation cycle

	Minimum Requirements	Evidence for Self-assessment	Process for Monitoring	Responsible Individual / Group	Frequency of monitoring
	ECTAS accreditation	Completion of self-assessment tool	Peer Review by ECTAS	ECT steering group	Every 3 years
	ECT and related treatments steering group	Minutes of ECT and related treatments steering group	Update to Q&S	Lead professionals within ECT, Patient representative, and audit.	Every year

1.4 CLINICAL AUDIT

The ECT and related treatments steering group will be responsible for and oversee and agree any proposal for audit and research. Members of the ECT and related treatments steering group are encouraged to develop and participate in Clinical audit. The steering group will also be responsible for ECT training for LPT staff which is usually held each year.

1.5 STANDARDS AND KEY PERFORMANCE INDICATORS

TARGET / STANDARDS	KEY PERFORMANCE INDICATOR
Audit standards for consent ECTAS Standards Royal College of Psychiatrists.	As in ECTAS standards Current service accreditation

The CQC essential standard of quality and safety	As in CQC standards
National institute of clinical excellence: Guidance on the use of electro convulsive therapy.	NICE ECT guidelines

1.6 FLOWCHART - There are three flow charts within the appendices of the policy.

Appendix 3: Bilateral Stimulus Dosing Protocol
Appendix 4: Unilateral Stimulus Dosing Protocol
Appendix 6: Consent procedure for ECT

1.7 CORE PRINCIPLES OF NHS CONSTITUTION – See page 68 for completed assessment.

1.7.1 Duties within the Organization

1.7.2 LPT Board

The Trust Board has a legal responsibility for Trust policies and for ensuring that they are carried out effectively.

1.7.3 Quality and Safety Group (Q&S)

To assess assurances received related to the implementation of National Guidance, and LPT policies.

1.7.4 ECT and Related treatments Steering Group

There is one nominated Lead Psychiatrist who oversees the service. This is appraised annually.

To oversee the ECT clinical service and the implementation of this policy

To facilitate ECT developments through collective clinical discussion and to ensure that any amendments to the policy are properly consulted on and ratified.

1.7.5 Lead Consultant Psychiatrists for ECT

To provide specialist clinical advice and support in the delivery of ECT

To ensure that junior medical staff assigned to the ECT Rota are trained in line with the Training in the Administration of ECT tool, Appendix 2.

To facilitate ECT developments through collective clinical discussion and to ensure that any amendments to the policy are properly consulted on and ratified.

To provide specialist advice on the suitability of ECT to those patients who fall outside of the NICE guidance on use of ECT (2003).

1.7.6 ECT Lead Anaesthetist

To provide specialist clinical advice and intervention in the safe delivery of Anaesthetics within the ECT service.

To ensure that all patients undergoing this treatment are appropriately assessed and to advise on any clinical condition that requires additional clinical intervention prior to commencement of ECT.

To facilitate ECT developments through collective clinical discussion and to ensure that any amendments to the policy are properly consulted on and ratified.

1.7.7 Lead Nurse

To provide specialist nursing guidance on the delivery of ECT

To ensure that all nursing staff involved within the service are appropriately trained to work within this environment.

To ensure the clinical environment and relevant equipment is fit for purpose.

1.7.8 Staff

Staff working with patients undergoing ECT treatment are responsible for following this policy and to immediately escalate any difficulties in implementing this policy to their line manager and via the **E-IRF** reporting process.

1.7.9 Service Manager, Team Manager & Clinical Matron

Managers are responsible for ensuring this policy is implemented and monitored within their area of responsibility and remain responsible for the support and supervision of their staff.

1.8 TRAINING IN ECT

All Psychiatric trainees will receive training in ECT during their rotation. The training will be by the Lead consultants for ECT or a trained SpR.

The trainee's supervisor (i.e., the consultant they work for) needs to ensure that trainees prepare patients for ECT according to the protocol, and their competence in this area remains with the educational supervisor. As part of their induction, new entrants to the training scheme are asked to access a brief introduction to ECT and the Trust ECT Policy on the LPT intra-net.

There is a need for training identified within this policy. In accordance with the classification of training outlined in the Trust Learning and Development Strategy this training has been identified as (delete as appropriate): mandatory training / role development training / personal development training.

Training Needs Analysis

Training topic:	Nurse Training in ECT
Type of training: (see study leave policy)	☐ Role specific ☐ Personal development
Division(s) to which the training is applicable:	☐ Adult Mental Health
Staff groups who require the training:	Qualified ART nursing practitioners
Regularity of Update requirement:	Ongoing
Who is responsible for delivery of this training?	ECTAS and Royal College of Psychiatrists with specific input from National Association of Lead Nurses in ECT.
Have resources been identified?	Yes (ECT Foundation Course for Nurses – New Team Members, Experienced Nurse ECT Course, Nurse Administration of ECT - Desirable)
Has a training plan been agreed?	Yes (According to locally agreed timelines for staff dependent of their stage of engagement with service)
Where will completion of this training be recorded?	☐ Other (please specify) Certificates of attendance and completed Nurse competencies.
How is this training going to be monitored?	Via Lead nurses for ECT and ECT and related treatments steering group.

Training topic:	**Peer Support Worker (PSW) Training**
Type of training: (see study leave policy)	☐ Role specific ☐ Personal development

Division(s) to which the training is applicable:	☐ Adult Mental Health
Regularity of Update requirement:	Ongoing
Who is responsible for delivery of this training?	IMROC Training
Have resources been identified?	Yes
Has a training plan been agreed?	Yes
Where will completion of this training be recorded?	☐ Other (please specify) Certificates of attendance and completion of PSW Training.
How is this training going to be monitored?	Via Lead nurses for ECT and steering group.

Training Needs Analysis

Training topic:	Junior Doctors training in delivery of ECT.
Type of training: (see study leave policy)	☐ Role specific ☐ Personal development
Division(s) to which the training is applicable:	☐ Adult Mental Health
Staff groups who require the training:	Psychiatric trainees during their rotation.
Regularity of Update requirement:	As per ECT rota

Who is responsible for delivery of this training?	Lead Consultants for ECT, or trained SPR.
Have resources been identified?	Royal College of Psychiatrists ECT handbook Direct Observation of Procedural Skills-DOPS 5-7 attendances at ECT suite
Has a training plan been agreed?	Yes
Where will completion of this training be recorded?	☐ Other (please specify) Trainee Portfolio (DOLS)
How is this training going to be monitored?	Lead Consultants for ECT.

Training Needs Analysis

Training topic:	Lead Psychiatrist updates
Type of training: (see study leave policy)	☐ Role specific ☐ Personal development
Division(s) to which the training is applicable:	☐ Adult Mental Health
Staff groups who require the training:	Lead Psychiatrist for ECT.
Regularity of Update requirement:	Every 2 years
Who is responsible for delivery of this training?	ECTAS/Royal College of Psychiatrists
Have resources been identified?	Annual attendance at training event
Has a training plan been agreed?	Yes

Where will completion of this training be recorded?	☐ Other (please specify) Attendance Certificate from Royal College
How is this training going to be monitored?	Consultant Appraisal and ECT and related treatments steering group

1.8.1 Training in the Administration of ECT

Trainees will be allocated a 5-7 ECT sessions slot on the ECT administration rota. During this period, trainees will need to make themselves available to administer ECT twice weekly. Very occasionally, they may be asked to do an emergency ECT at other times. All trainees new to the trust will receive training in the administration of ECT. Trainees who have administered ECT in other trusts will still need to undergo this training.

The training will cover the theoretical background to ECT, the ECT protocol, and Introduction to the ECT machine and the ECT suite. The trainees are expected to read the Royal College of Psychiatrist's Handbook on ECT (2013). The technique of ECT administration will be demonstrated to them during their training and they will be supervised during their first three lists. Their competency will be assessed (using Direct Observation of Procedural Skills-DOPS) and the record will be kept in the trainee's logbook. The trainer will retain a copy of the competency certificate (Appendix 8).

When trainees are scheduled to administer ECT in future rotas, they may wish to update their training or request further supervision from the ECT Lead Consultants. If they choose to have an update, they should discuss this with the Lead consultant in advance of their scheduled date on the rota. (Appendix 9)

The administration of ECT on the assigned dates is the responsibility of the trainee. If he or she is unable to fulfil that commitment, they should swap it with a colleague and inform the Lead Nurse and Lead Consultant of the swap.

Trainees are encouraged to undertake an audit project or a research project on ECT. Supervision and support will be available for the project from the Lead consultants.

1.8.2 ST4 - 6 Doctors

The specialist registrars and associate specialists are encouraged to participate in the ECT rota to improve their skills in ECT administration and to train the junior doctors. This is usually through attending ECT as a special interest session weekly over 6 months, although individual trainee requirements may vary. During this period ST4-6 doctors gain significant skills in delivering ECT and supervising junior colleagues. Once deemed competent they can choose to remain on the ECT rota after the special interest period is complete and can provide cover if required. These trainees are provided with regular refresher sessions on ECT and encouraged to attend the Clinical Governance Forum on ECT.

All Psychiatric trainees will receive training in ECT during their rotation. The training will be by the Lead consultants for ECT or a trained SPR. The Trained SPRs who have agreed to provide cover in absence of Lead Psychiatrist will be on a contact list held by the ECT service if required to provide cover.

In this scenario a lead Psychiatrist will be available by phone if required.

1.9 COMPETENCY AND TRAINING REQUIREMENTS

The following competency and training requirements are the minimum required for core ECT staff to working within ECT.

1.9.1 Lead Psychiatrists

The Lead Psychiatrist should be able to demonstrate the following Minimum requirements to demonstrate their competencies as ECT Leads.

1. Attendance at the annual training day offered by the Royal College of Psychiatrists at least every two years and / or
2. Be evaluated by another ECT Lead against the competencies suggested by the Royal College of Psychiatrists.
3. It is expected that the Leads will be able to demonstrate their teaching competence by attendance at courses, evaluation by peers and feedback from their pupils
4. They should have regular appraisals as required by the Trust/ GMC which would also consider their demonstrated contribution to ECT and their general ability to teach.

1.9.2 Anaesthetic Requirements

In order to comply with the list below the Anaesthetist rostered to cover ECT must have attended five Consultant supervised opportunities in order to familiarize and receive training within the last 3 months.

1. Must be FRCA or more senior
2. Must be competent to work in a remote location.
3. Must be able to work within the broader MDT team within ECT
4. Must have knowledge of the process of ECT and be able to manage patients who may have limited communication and co-morbidities.

1.9.3 Lead Nurse

The lead Nurse will be able to demonstrate clinical understanding and management of the ECT service and development of the Nursing Team within the service. In addition, the Lead Nurse will have;

1. Attended the ECTAS nurse training course
2. Attend the Royal College of Psychiatrists training day at least every 2 years or send a nominated deputy
3. Have current ECT competencies completed
4. Up to date with mandatory training
5. Attend at least twice yearly the Special Interest Group (SIG)
6. Feed into, or attend, NALNECT meetings.

1.9.4 ECT Nurses

The following requirements are the minimum for ECT nurses.

1. Attendance at the ECTAS nurse training course
2. ECT competencies
3. Up to date with mandatory training
4. Be registered Mental Health Nurses or registered Practitioner
5. Roistered attendance at the Royal College of Psychiatrists training day.

1.9.5 Recovery Nurses

The following is the minimum requirement for the recovery nurses to Work within ECT.

1. Qualified Registered Nurse
2. Completed band 5 competency package
3. Achieved recovery or critical care module on degree pathway
4. Adheres to AAGBI (Association of Anaesthetist Great Britain and Ireland) recovery criteria
5. Up to date with mandatory and statutory training.

1.9.6 Operating Department Practitioners (ODPs)

The following is the minimum requirement for ODPs to work within ECT.

1. NVQ level 3 or Diploma in ODP.
2. BLS trained
3. Up to date with mandatory training.

SECTION TWO - Prescription and Consent

2.0 WHO IS ELIGIBLE TO RECEIVE ECT?

The National Institute of Clinical Excellence (NICE) 'Guidance on the use of Electro Convulsive Therapy' Technology Appraisal 59, April 2003, recommends that ECT is used only to achieve rapid and short-term Improvement of severe symptoms after an adequate trial of other treatment options has proven ineffective, and/or when the condition is considered to be potentially life threatening in individuals with:

- Severe Depressive Illness
- Catatonia
- A prolonged severe manic episode

Subject to the above.

- ECT should not be used routinely in cases of moderate Depressive Disorder: it should only be considered in cases where multiple drug treatments and psychological treatments have failed. (CG90-OCT 09)

- Repeat courses of ECT should only be considered in Severe Depressive Disorder where a previous course of ECT was effective. In cases where previous ECT didn't achieve a response, it should only be proposed after all other options have been considered & discussed with the patient & if appropriate their carer/advocate. (CG90-OCT 09)

- ECT should be considered in Depressive Disorder in pregnancy demonstrating treatment – resistance to adequate trials of single antidepressants before combination drug treatments are considered.
  (CG45-FEB 07)

- ECT should not be given to children between the ages of 5yrs and 11yrs. (CG28-SEPT 05)
- Any young person 12yrs and above referred for ECT will have a professionals meeting of respective relevant professionals involved in their care, including parents, legal guardians/ carers to consider each referral on a case-by-case basis. Paediatric training professional booked if required.

2.1 PRESCRIBING ECT

Having determined that the patient meets the criteria for ECT the Consultant should document, as recommended by NICE, that the following have occurred:

- An assessment of the risks and potential benefits to the patient, including risks associated with Anaesthesia.
- Current co-morbidity
- Assessment of physical and communication needs including first language, hearing difficulties, visual impairment, cultural and faith requirements.
- Anticipated adverse events, particularly cognitive impairment.
- An explanation of the risks of not having ECT.
- Patients relative / carer's involvement in discussion about ECT treatment unless the patient has objected.

2.2 INTEGRATED CARE PATHWAY RECORD (ICRP) FOR ECT ON SYSTM1

The ECT documentation is contained within the Systm1 (S1) patient record system. It can be found on the Patients portal.

Prior to treatment commencing, the referring team are required to complete the First prescription form and pre-anaesthetic form along with patient consent form as appropriate. Once completed the ECT team will review the forms and book the patient on for ECT as long as the Anaesthetist has confirmed that the patients' medical presentation is safe to commence treatment.

At the same time the ECT team will provide the referrer with the ECT pack which contains the Patient information leaflet(s) and the clinical assessment tools: Hamilton Depression Rating Scale (HDRS) as well as the Montreal Cognitive Assessment (MOCA) tool. These are to be completed pre-treatment and as directed within the pack.

Once the ECT course is underway the referring team is expected to complete the ongoing prescription form on S1 for each individual treatment prior to the treatment next ECT treatment. Following each treatment the psychiatrist will make a note on the S1 progress notes that ECT was administered and to refer for details on the ECT Treatment Record on ECT unless he has to convey specific instructions to the prescribing team.

The ECT team will complete, for each treatment, the required forms:

- ECT reception
- Anaesthetic treatment record
- Psychiatric treatment record
- Recovery form

These forms will then chronologically create a complete ECT record for each individual.

Ward transfer form will be completed by the ward staff to handover to the ECT Team by the escorting staff.
The ECT team will add any adverse reactions/ events, meals/ fluids, and medication administered at ECT suite.
The escorting staff will take this back to the ward and handover to the Nurse in Charge.

2.3 REVIEWING DURING ECT

2.3.1 Clinical Assessment (Psychiatric Assessment)

The NICE guidelines recommend that clinical status should be assessed following each. ECT session. Patients should be reviewed after each ECT session, either by the Consultant or the junior doctor. The use of a more formal instrument assessing depression like the Hamilton Depression Rating Scale (HDRS) or the Geriatric Depression Scale is encouraged at periodic intervals. HDRS is included in the ECT pack for completion prior to treatment one and then after every 2nd treatment. The referring team will also complete the CGI rating scale prior to treatment one and then at each subsequent treatment. Failure to complete the necessary scales may delay the treatment and the prescribing consultant will be informed. Sustained non-compliance issues are addressed through prescribing consultant line management system.

The Consultant should ensure that the prescription for ECT record is completed prior to each treatment. Failure to do so may delay the next administration of ECT. This may be filled in by the junior doctor on the ward.

After a patient has had twelve treatments, and the Consultant feels the patient should have further ECT, a new prescription form for ECT must be commenced and signed. The re-commencement of the new prescription form is a timely opportunity to review the diagnosis, the need for further ECT, the type of ECT, the dose of ECT, consent for ECT, cognitive status of patient, other medication and review of communication and any disability needs.

Patient should be reviewed by the referring team at least once a month for the 3 months following their acute course of ECT. The HDRS and MOCA should be administered at one week, and 2 months follow-up by the ECT service.

2.3.2 Cognitive Assessment

Cognitive Assessment should at a minimum be assessed at the beginning, after treatment one and at the middle and end of each course. If the patient's mental state does not allow for this assessment this should be documented in the medical notes

NICE does not specify what the cognitive assessment might entail, and this may range from an enquiry of the patient's subjective perception of memory disturbance to the Autobiographical Memory Interview. A cognitive assessment tool (MOCA) is included in the ECT pack to be completed prior to treatment one, after treatment one and then for review after every 6th therefore where feasible a baseline assessment prior to ECT should be done.

Retrograde treatment and Anterograde memories are both affected by ECT, especially memory for events surrounding the course of ECT. More worrying is gaps in personal memory which may affect memory for events that happened years ago, e.g. a patient may forget a neighbour's name or completely forget the wedding of a close relative. The patient

may not be able to recall the event even after being prompted or shown photographs of the event. A patient may also forget how to do a particular task he/she has done for years.

There is some evidence that time to re-orientation is predictive of retrograde amnesia following ECT (Squire, 1986). Essentially this is the time from being given ECT to being orientated to 4 out of 5 questions . Patients who take a long time to re- orientate or who take an increasingly longer time to re-orientate may be the ones who are more likely to have retrograde amnesia. As retrograde amnesia is less with non-dominant unilateral ECT, time to re-orientate may be useful in determining if a patient should be switched to unilateral ECT. For example, if a patient with major depression is started on Bilateral ECT, after the third treatment it is clear the patient is taking longer to re-orientate and clinically the patient is improving it may be advisable to administer non dominant unilateral ECT, which has a lower risk of memory disturbance. This is a clinical decision that should be made by the prescribing Consultant.

The cognitive assessment of the patient (by the ECT team) is also carried out at 1 week and 2 months post treatment.

2.4 REPEAT COURSES OF ECT

If there is a break in treatment longer than 28 days any further prescription of ECT would be considered as a new course. It is expected that new documentation would be completed including the consent form and Treatment Record form.

Within the LPT, in accordance with the NICE recommendations (CG90-OCT 09) a repeat course of ECT should be considered only for individuals who have severe depressive illness, Catatonia or Mania, and who have previously responded well to ECT. In patients who are experiencing an acute episode, but have not previously responded, a repeat trial of ECT should be undertaken only after all other options have been considered, and following discussion of the risks and benefits with the individual and/or where appropriate their carer/relative. This will include addressing any communication or disability needs to enable the patient to make an informed decision regarding the recommencement of treatment.

2.5 CONSENT TO ECT

2.5.1 Person Authorised to Take Consent

It is a requirement that written consent is obtained by a Consultant assessed to be competent and capable of advising the patient about the treatment / intervention. Leicestershire Partnership NHS Trust policy for consent to examination or treatment.
Consent must be voluntary and informed, and the person consenting must have the capacity to make the decision.

In the event that the patient`s capacity to consent is in doubt, clinical staff must ensure that a mental capacity assessment is completed and recorded. Someone with an impairment of or a disturbance in the functioning of the mind or brain is thought to lack the mental capacity to give informed consent if they cannot do one of the following:

- Understand information about the decision.
- Remember that information.
- Use the information to make the decision.
- Communicate the decision.

If the Responsible Clinician is not available then consent can be obtained by a doctor, acting

for the Consultant Psychiatrist, who has full Membership of the Royal College of Psychiatrists (MRCPsych) or equivalent. The acting doctor should inform the patient's own consultant at the earliest opportunity.

It should be noted that full Membership of the Royal College of Psychiatrists (MRCPsych) or equivalent is the minimum qualification Leicestershire Partnership NHS Trust requires for consultant medical staff. Therefore the person taking the consent will have the same minimum qualifications as a consultant psychiatrist and will satisfy the competency and capability requirement of the consent policy.
NOTE: Any change to the above must be expressly agreed with the trust Medical Director.

2.5.2 Consent to Treatment (see algorithm in appendix 1)

ECT treatment is only possible;

- With consent of a capable patient (S 58A (3))
- Following certification by a SOAD where patient incapable of consent (and there is not a refusal in the form of an Advance Decision, or by a Lasting Power of Attorney or Court – Appointed Deputy or conflicting Court of Protection decision) (S 58A (5))
- In an emergency (to save life or prevent serious deterioration) ECT could be considered under section 62 for patients under the Mental Health Act. Please discuss with ECT team and Trust legal team for further information.
- For under 18s (other than in an emergency), whether or not they are detained, with SOAD certificate and a valid consent (from the child, if competent, or if not, someone with parental responsibility (S 58A), (S 62(1) (A))

2.5.3 The Patient who is Incapable of Consenting

If a patient incapable of consenting requires ECT he/she needs to be on a section of the Mental Health Act (usually section 3) and SOAD opinion sought. If this is delayed (and ECT deemed to be urgent), the patient may proceed for ECT with a section 62 (C6) form that has been signed by the RC. If a SOAD hasn't been even after 2 treatments of ECT have been given, the RC could sign another section 62 form and the patient could have further ECT pending the opinion by the SOAD.

2.5.4 Provision of Information

It is the responsibility of the patient's Consultant Psychiatrist, or the designated person as specified in 5.2 above to discuss the treatment / intervention with the patient and to seek written consent. Sufficient information should be communicated in a format that is accessible to the patient and given as early as possible to allow them to have sufficient time to decide. This might include the use of an interpreter, accredited British Sign Language interpreters, or the use of loop systems for people with hearing difficulties, communication appropriate for people with learning disabilities. LPT provides a 24/7 interpreter services. Details are available on the staff website.
Patients should be provided with the 'ECT information leaflet' such as the NICE or the Trust ECT leaflet.

A written record should be made of the assessment of competence and details of the process of consent.

The patient should be given the opportunity to ask any questions about the treatment / interventions. The patient should be made aware of local arrangements in place for them to ask further questions including from someone else, if necessary.

The patient should be informed about how to obtain additional information and how to access independent advocacy.

The patient must be given sufficient information to ensure that they are able to understand:

- The nature of their condition
- The type and complexity of the treatment / intervention proposed.
- The risks associated with the treatment or intervention and their severity.
- The benefits and anticipated outcome of the treatment / intervention
- Alternative treatments / intervention (including the option not to treat)
- Possible consequences of the proposed treatment / intervention
- The person taking consent should involve the patient in the decision whether to have unilateral or bilateral ECT.
- Possible consequences of not accepting the proposed treatment / intervention.

Where possible, with the consent of the patient, always involve carers in decision making.

2.5.5 Documenting Informed Consent

The amended Department of Health consent form 1 (ECT pack) must be used to document informed consent.

If treatment is being provided under the authority of part IV of the Mental Health Act (1983), and the patient has consented to ECT, and has been considered to have capacity to consent then a form T4 should be completed. Please refer to the trust policy for consent to examination or treatment (document reference M027 May2012) section IX for details.

2.5.6 Confirmation of Consent

After providing the patient with the relevant information there should be a confirmation stage to check that he/she still wants to proceed with the proposed treatment. This is particularly important when there has been sometime between the giving of the information and the arrival for treatment. The patient must feel that they have been given the opportunity to change their mind.

Patients will be asked to confirm their consent before each treatment and asked to sign the consent form (ECT pack); this will be witnessed by an ECT nurse.

Consent Form and Legal Paperwork copies are to be present in the ECT pack at each treatment session and checked by the clinicians.

SECTION THREE – Anaesthesia

3.0 ROLE OF THE ANAESTHETIST WITHIN ECT

The Anaesthetist is central to safe ECT practice and Consultant Anaesthetist input is essential. The Trust has a Service Level Agreement with University Hospitals of Leicester NHS Trust to provide Anaesthetic cover for ECT.

The Anaesthetist duties include to:

- Safely anaesthetise patients for ECT
- Advice regarding drugs required to manage medical complications pre, during and post ECT.
- Advice regarding monitoring equipment
- Advice regarding staffing and the environment within the ECT suite.

The Anaesthetist is ultimately responsible, not only for determining the dose of induction agent and muscle relaxant, but also the dosage of any necessary pre-medication for existing medical conditions and if required medications administered to the patient prior to/during the ECT treatment.

3.1 ROLE OF OPERATING DEPARTMENT PRACTITIONER (ODP)

ODP will assist the Anaesthetist in safe administration during ECT and will be part of the ECT team. ODP will assist in: - maintaining the patient's airway during the treatment and in emergency situations; setting up and checking of Anaesthetic and monitoring equipment; preparation of drugs required for the Anaesthetic; placement of the cannula; monitoring the patient with ECG, pulse oximeter and blood pressure throughout the treatment and into recovery.

3.2 PRE-ECT WORK UP

It is **NOT** the Anaesthetist`s sole responsibility to investigate the patient's medical history or, indeed, their current medical status. It is essential that all patients attending for ECT will have a full physical examination.

Safe treatment of the patient in the ECT Suite is the responsibility of the prescribing Consultant. The Anaesthetist must be provided with **FULL** information.

1. Patient's current medical status.
2. Previous medical history.
3. History of adverse side effects/reactions to Anaesthetic agents.
4. Allergy or suspicion of the same, with as much detail as possible, e.g. Urticarial rash and wheezing in association with drug X.
5. Family history is relevant and should always be available. If the patient is not in a position to offer this then one should make attempts to discuss this with family/close friends and, of course, with any other treating doctor (especially the G.P).

NOTE: If there is no relevant family medical history then this should clearly be stated, e.g. "No family medical history on enquiry".

It is the prescribing Consultant and / or ECT nursing team's responsibility to inform the Anaesthetist of any disability and communication needs.

There will be instances when the opinion of an Anaesthetist will be desirable prior to the day of treatment and this can be obtained by contacting the **Anaesthetic Office LGH 0116 2584661 or direct dial 73-4661.** The current protocol is that the anaesthetist in

ECT suite will review the notes of new starters before they are listed and request any additional information or investigations if needed.

All patients who satisfy the criteria for ASA Grade III should be referred in advance for an anaesthetic opinion/consultation. Patients in this category have “systemic disease with functional limitations of lifestyle”.

Based on the patient’s condition/risk, the Anaesthetist could consider administering ECT in the theatre within Glenfield Hospital on UHL premises. In such case he/she will inform the ECT Lead Nurse providing who would then coordinate with the Theatre Co-coordinator at the Glenfield General Hospital.

All patients prescribed ECT will be seen by the Anaesthetist on the day of the first treatment to ensure that they are medically fit for the treatment.

3.3 PHYSICAL EXAMINATION

Medical staff must be vigilant for evidence of (this is not an exclusive list):

- Raised intracranial pressure (ICP)
- Heart failure
- Significant valvular disease
- Unstable dysrhythmias
- Uncontrolled hypertension
- Significant infection
- Cachexia
- Dental problems
- Pulmonary disease
- Glaucoma
- Arthritis
- Osteoporosis
- Any significant metabolic or endocrinological disorder

3.4 SIGNIFICANT MEDICAL CONDITIONS

Medical staff must use their knowledge when evaluating any patient with respect to a potential anaesthetic consultation (pre-treatment) such as:

- Raised ICP
- Angina, recent myocardial infarction (particularly if arrhythmic, thrombotic or
- Myocardial / septal weakness has been suggested by previous investigations)
- Stroke (specify whether haemorrhagic or ischaemic)
- **Diabetes mellitus** (especially Insulin-dependent diabetes):
- BM pre-ECT, on the day every treatment and omit anti- diabetic agents **on the morning** of ECT.
- Hypertension
- Hiatus hernia – consider Lansoprazole.
- Drug allergies
- Previous adverse reaction to anaesthesia
- Osteoporosis/arthritis
- Significant dental work / abnormalities / loose teeth. (See dental considerations)
- Abnormal body weight (obesity or anorexia)
- Renal impairment
- Asthma/ COPD
- COVID-19/ Infectious symptoms

3.5 NECESSARY INVESTIGATIONS

- **Weight and BMI** calculation (notify Anaesthetist if extreme deviation from norm)
- Always document cigarette, alcohol, and illicit drug use.
- **FBC + U & E + blood glucose** (or, at least, urine analysis if blood glucose not available. Serum urea and electrolytes are measured for patients on diuretics, lithium, or other vaso-active/ cardiac drugs, and those with diuretics or with known renal disease.
- **A haemoglobin** level for all patients. For those suffering from diabetes, blood sugar levels are assessed immediately before each treatment.
- Sickle-cell test for all Afro-Caribbean, Middle Eastern, Asian, and Eastern Mediterranean patients, unless previously investigated/known.
- **ECG** – in all patients with cardiovascular, respiratory, renal disease, irregular pulse, heart murmur, hypertension, diabetics aged > 40, all males > 45 years, all females >55 years.
- **Chest x-ray** in all relevant high-risk groups (not uncomplicated asthma). Patients who have suffered recent falls and/or physical restraint.
- Hepatitis B and C in all high-risk groups
- **LFT's** – particularly in cachexic states, drug, or alcohol misuse, confusional states (acute or chronic), recent overdoses (intentional or otherwise).
- **INR** - patients with clotting disorders or anti-coagulant therapy
- Echo cardiogram – not routinely used but may be requested by Anaesthetist.
- **Be wary** of scars or masses on the thorax indicating implanted pacemakers / cardioverters –these should be discussed with the Anaesthetist and cardiologist if necessary.
- Consider pregnancy testing of females within the appropriate age range, who have no recent menstruation (i.e., take a menstrual history). There have been reports of patients in the third trimester having concealed / unknown pregnancies in psychiatric units, undetected by the medical attendants.

The **Pre-Anaesthetic Assessment form** (ICPR) should be filled in. It should be noted that, on the page there is space to record a physical examination, relevant blood tests and other investigations and a list of all current and recent medication together with allergies and previous Anaesthetic complications.

It is the responsibility of the patient's team (particularly the junior doctors) to notify and up-date the Anaesthetist of any relevant developments, including the need for physical review and/or investigations during the course of treatment if clinically indicated. Any relevant results to be included in the SYSTMONE progress notes and in the ongoing ECT prescription form for the next treatment.

3.6 CONCURRENT MEDICATIONS THAT MAY COMPLICATE ECT / ECT ANAESTHESIA

In principle, any medication which impacts on heart rate, blood pressure, seizure threshold, respiratory status or interacts with the commonly used Anaesthetic agents (Propofol, Etomidate or, rarely, barbiturates) and paralysing agents (usually, but not exclusively, Suxamethonium) should be considered. If you are in any doubt about the relevance of medications to the aforementioned classes, then use the BNF (British National Formulary) which has a comprehensive 'interactions' section.

With regard to interactions, one should also consider that Atropine and a beta-blocker, calcium channel blocker or Lignocaine may be used in the acute context (see below). Psychotropics which are of particular relevance to ECT anaesthesia would include anti-convulsant mood stabilisers, Lithium, MAOIs (mono-amine oxidase inhibitors), Benzodiazepines and SSRIs (e.g., Venlafaxine, which may cause hypertension) and

Clozapine.
Remember, ECT is very good at getting people better, but they can relapse unless protected by anti-depressants and/ or mood stabilizer.

NOTE: If a patient has recently discontinued or had an abrupt change of dosage of any psychotropic agent, this should be clearly stated, especially with regard to MAOIs.

3.7 INDUCTION AGENTS AND MUSCLE RELAXANT FOR ECT

Propofol (0.75 – 2.5 mg/kg) and etomidate (0.15 – 0.3 mg/kg) are routinely used as intravenous induction agents. The selection of this will be at the discretion of the Anaesthetist. Whenever induction agent is chosen, it is probably unwise to alter that choice in the middle of a course of treatment without full consultation between the members of the ECT team. On occasions it may not be possible to secure an intravenous cannula with the patient being awake in which case the patient is put to sleep by breathing anaesthetic vapour Sevoflurane (gas induction)

Muscle relaxants are used to ameliorate the convulsive muscle activity during stimulation and the subsequent seizure and reduce the risk of injury. In most cases it is not desirable to ablate all visible signs of muscular activity since this is a useful indicator of seizure induction. Muscle relaxation is usually achieved with suxamethonium (0.5 – 1 mg/kg), but if this is contraindicated a short-acting non-depolarising agent (such as atracurium 0.3 – 0.5 mg/kg) can be used. In such cases neuromuscular nerve stimulator is used to ascertain both the adequacy of the block and its subsequent safe reversal.

3.8 PRE-TREATMENT

Appropriate communication must be used to inform the patient of the requirements regarding general Anaesthesia.

1. The patient should be fasted for 6 hours prior to treatment. Usually this is from midnight the night before.
2. Omit all medications except those needed for cardiac conditions, asthma, and proton- pump inhibitors.
3. Avoid anti-diabetic drugs but needs to be discussed with the Anaesthetist in unstable diabetes.
4. If any patient has physical health condition that may increase the risk of anaesthesia during ECT, the prescribing team needs to liaise with the ECT treatment nurse who will arrange for pre anaesthetic discussion/review with the Anaesthetist.

3.9 POST ANAESTHESIA

Current monitoring recommendations for the anaesthetised patient:

- Blood pressure
- ECG
- Pulse oximetry
- Respiratory rate
- Temperature

3.10 SPECIFIC PHYSIOLOGICAL CONSIDERATIONS PERTAINING TO ECT TREATMENT / ANAESTHESIA

Before proceeding to outline specific medical and iatrogenic potential complications of ECT anaesthesia, some basic physiological parameters associated with ECT administration must be taken into consideration.

3.11 VAGAL CVS EFFECTS

The ECT stimulus gives rise to a bradycardia and on occasion transient asystole which reduces blood flow, therefore in hypo-dynamic circulatory states; this is a potentially dangerous period of treatment but is usually temporary.

Seizure activity corresponds to a rise in intracranial and systemic blood pressure in association with an increase in heart rate. This effect is a consequence both of direct stimulation of brain stem areas and endocrine effects consequent upon seizure induction.

3.12 POTENTIAL PROBLEMS

In the pre-seizure stage, a prolonged asystole of over thirty seconds can occur, particularly in patients with pre-existing bradycardia and in patients who are recipients of sub-threshold stimuli (i.e., those who do not demonstrate seizure activity). Clearly repeating the administration of the electrical stimulus may further compound the vagal stimulation which leads to the bradycardic state.

NOTE: Anaesthetic agents can also contribute to bradycardic states, as can Suxamethonium, on repeated administration.

In LPT stimulus dosage titration is routinely offered. When this is practiced, the potential for multiple sub-convulsive stimuli is obviously high and the risk of problems increased.

Pre-treatment with beta-blockers can further compound the situation. Atropine 0.6mg is often helpful in eradicating this problem in vulnerable individuals but is not routinely given as it may theoretically increase post-ECT confusion. A good alternative is Glycopyrrolate, given in increments of 0.2mg, because it does not cross the blood brain barrier. In situations where pre-treatment with beta-blockers is desired, some authorities do strongly recommend co-administration of Atropine (see below).

In the event of an adverse incident during ECT in the Bradgate ECT suite, the Consultant Anaesthetist involved with the care of the patient will contact CDU/CCU at Glenfield Hospital for cardiorespiratory issues or Emergency Department at Leicester Royal Infirmary for other issues where ongoing clinical care is deemed necessary and where it is considered unsafe to leave the patient on a mental health ward.
Please see Appendix 13.

3.13 IMPLANTED CARDIOVERTERS

Staff should seek an opinion, from a specialist (e.g., the Cardiologist caring for the patient), as to the risks associated to the electrical stimulus of ECT and/or the physiological response to the stimulus, in relation to the device.

3.14 ACUTE HYPERTENSIVE STATES

In patients vulnerable either to hypertension or conditions that could be worsened by hypertension (e.g., aneurysms, cerebral space-occupying lesions) then intravenous pre-treatment beta-blockade is usually employed although, in some centres, sublingual GTN or sublingual Nifedipine (calcium channel blocker) have been successfully employed.

3.15 RAISED INTRA-CRANIAL PRESSURE

Any intra-cranial lesions, particularly those that are still evolving and/or rapidly expanding raise particular issues and individual cases should be discussed with the Anaesthetist and physician if required. In less acute situations, the main potential physiological problem is an increase in peri-lesion oedema (e.g., tumours, subdural haemorrhages) which can, to some degree, be countered by steroid administration. This is clearly a decision that should be made ahead of the acute treatment situation.

The decision to offer ECT post-CVA should be carefully considered and discussed with the Anaesthetist.

3.16 INTRA-OCULAR PRESSURE

There is inconsistency in findings pertaining to this, but in severe glaucoma, discussion with an ophthalmologist is advisable, pre-treatment with Atropine can cause outlet obstruction.

3.17 TACHYARRHYTHMIAS

Most commonly ventricular premature contractions (VPC) can occur late in the seizure or in the immediate post - ictal. Isolated ones are of no relevance but an increased frequency or multi-focal origins of the VPC's are a cause for concern (if they coincide with the apex of the t-wave, then they may precipitate VT or even VF.)

If greater than 5 VPC per minute, notify Anaesthetist.

NOTE: Decisions on treatment of the above complications/potential complications are ultimately taken by the Anaesthetist.

3.18 MALIGANT HYPERTHERMIA

This is an Anaesthetic emergency, and the management of this condition is highlighted within each of the clinics treatment rooms as described by the AAGBI. (Association of Anaesthetists of Great Britain and Ireland). Should this occur the Anaesthetist is responsible for directing staff's response and calling for appropriately experienced help, including additional staff from UHL and arranging transfer to an intensive care environment.

3.19 ICTAL EFFECTS OF ECT IN EPILEPSY

Perhaps paradoxically, ECT may confer a protective effect on idiopathic epilepsy (and historically was used as a treatment of penultimate resource, ahead of brain surgery, in intractable epilepsy).

Patients requiring anti-convulsant therapy should be maintained on this and due consideration given when determining the dosage and laterality of ECT administration. There is no indication for routinely instituting anti-convulsant treatment in patients with a history of epilepsy who are not currently on anti-convulsant.

The induction of a generalised seizure is associated with an acute elevation of oxytocin which, obviously, can induce uterine contractions. Consultation with an obstetrician would be advisable and the anaesthetist will usually wish to perform the ECT in a facility which allows safe delivery (i.e. with respect to both equipment and personnel!) in the event of induction of early labour.

The risks of reflux always need to be weighed against the possibility of Laryngeal / tracheal sympathetic reflexes, when intubating, inducing tachycardia or pressor responses.

3.20 DENTAL CONSIDERATIONS

Patient's dentition must be assessed pre-ECT. Problems include the following;

- Damaged / chipped / cracked teeth- risk of damage
- Veneers / Caps / Crowns / Bridges – risk of damage
- Loose teeth- usually due to periodontal disease
  - risk of loss
  - risk of aspiration into respiratory tract during general anaesthesia

The patient should be warned of potential damage / loss of abnormal teeth during ECT, and that this might occur despite all efforts to protect dentition. The Psychiatrist should attempt to highlight and document the risks that have been discussed with the patient where practicable.

The Anaesthetist is ultimately responsible for the patient's airway during Anaesthesia. If a patient is found to have extremely loose teeth which endanger the airway it may be necessary to obtain a dental opinion for consideration of extraction prior to commencing ECT. Should a non-capacitant patient be found to have significantly loose teeth, the Anaesthetist may have to weigh up the risks/benefits of extraction at time of anaesthesia to preserve patient safety. All clinical management relating to dentition must be documented in the medical notes and explained to the patient.

3.21 ADDITIONAL READING

For a concise over-view of current issues in ECT-related anaesthesia, refer to:

- **ECT Handbook**, published by Royal College of Psychiatrists (CR176 – Council Report), 3rd ed. Published 2013.

- **Electro-Convulsive Therapy – 4th ed. Abrams,** published 2002. Although not specifically pertaining to anaesthetic issues in ECT, this is the most thoroughly researched text available and has very detailed but lucid explanations of all aspects of ECT theory and practice, with particularly relevant sections on physiological principles of ECT and research pertaining to co-morbid medical conditions and drug treatments.

SECTION FOUR - Administration of ECT

4.0 CASE NOTES AND ECT RECORDING

The patient's case notes and the ECT Treatment record must be checked prior to each treatment and any instructions from the Responsible Consultant regarding the next treatment noted. Following treatment, the outcome of the treatment will be recorded within SystmOne and any additional comments for the referring team should be recorded.

4.1 SETTING UP THE APPARATUS

The Thymatron IV ECT machine will be set up by the clinic staff prior to treatment commencing. The EEG leads will be applied to each patient and a baseline EEG will be gained by requesting the patient lay still with eyes closed until the machine indicates that the baseline has been recorded (the Thymatron will indicate this by reading 'ready'). Once anaesthetised the treating doctor will apply the treatment paddles in either the uni-lateral or bi-lateral position.
At this point to ensure appropriate impedance range, there needs to be a reading of between151 to 2999 Ohms when the treatment can be administered.

4.2 ELECTRODE PLACEMENT

The choice of electrode placement is at the discretion of the prescribing psychiatrist and the patient. Unilateral ECT should be encouraged in view of fewer cognitive side effects in comparison to bilateral ECT.

In case of bilateral ECT (bifrontotemporal positioning) the centre of the electrode should be 4 cm above, and perpendicular to, the mid-point of a line between the lateral angle of the eye and the tragus of the ear. The electrodes are placed on both sides of the head in a similar position.

In case of unilateral ECT (temporoparietal or d'Elia positioning), a flat electrode is in the same position as in the bilateral and the other concave electrode is applied over the parietal surface of the scalp inside the midline. The exact position on the parietal arc is not crucial; the aims are to maximise the distance between electrodes and to choose a site on the same side of the head where electrodes can be applied firmly against the scalp. Unilateral ECT is given to the non-dominant hemisphere.

4.3 BILATERAL ECT IS CHOSEN WHERE:

a. The rate of clinical improvement and completeness of response have priority.
b. The index episode of illness or an earlier episode of illness had not been treated adequately by unilateral ECT.
c. Determining cerebral dominance is difficult.
d. Patient has mania.

4.4 UNILATERAL ECT IS CHOSEN WHERE:

a. Minimizing the cognitive adverse effects has priority.
b. The rate of clinical improvement is not critical.
c. There is history of recovery with unilateral ECT.

4.5 STIMULUS DOSING

Stimulus dosing is the selection of electrical dose for the individual patient. It is important

to find out the seizure threshold for every patient so that appropriate dose can be given to them in order to reduce cognitive impairment while maintaining efficacy. Seizure threshold (ST) is the minimum electrical dose required to induce generalized cerebral seizure. We aim to find out ST for all patients during the first two or three sessions and then give therapeutically appropriate dose in subsequent sessions. Stimulus dosing is different for bilateral and unilateral ECTs and so will be discussed separately (Appendix 3 & 4)

a) Adequate seizure –one that produces generalised cerebral seizure activity. Seizure is characterised on the EEG by widespread high frequency spike waves (polyspike activity) followed by slower spike and wave complexes, typically around 3 cycles per second. The typical generalised cerebral seizure is followed by a phase of relative or complete suppression of electrical activity (post-ictal suppression). The hallmark of generalised cerebral seizure activity is the tonic-clonic, or grandmal convulsion. After an initial tonic contraction of the muscles, there is a longer clonic phase of rhythmic alternating contraction and relaxation of muscles of the limbs on both sides of the body.
b) Calculating the stimulus dose – Once the ST is assessed, the treatment dose should be set at 1.5 X ST in bilateral ECT and 6 X ST in unilateral ECT.
c) Re-stimulation – In case of re-stimulation either during estimation of ST or during the course of ECT, wait for at least 20 seconds before each re-stimulation in case of no seizure. In case of inadequate seizure (i.e. few seconds of EEG or focal motor seizure) re-stimulate after 45-90 seconds. Only up to two re-stimulations are allowed in each ECT session. Hyperventilate the patient between re-stimulations.

4.6 BILATERAL ECT:

For patients to be given bilateral ECT, start with a dose of 15%
If the patient has a seizure at 15% in the first session, we give an electrical dose of 5% in the second session. If the patient has a seizure, we presume that the patient has a seizure threshold of 5%. If the patient does not have a seizure on 5%, re-stimulate with 10%. It is advisable to wait for 20 seconds before re-stimulation because some patients may have a latent period between the end of electrical stimulation and the onset of seizure. If the patient has seizure at 10%, we presume that the seizure threshold is 10%; if the patient does not have a seizure at 10%, we presume that the patient has a seizure threshold of 15% and re-stimulate the patient with a dose of 25% which is the therapeutic dose.

If the patient does not have a seizure at 15% in the first session, re-stimulate with 30%. If the patient has seizure at 30%, give a dose of 20% in the second session. If the patient has a seizure, we presume that the patient has a seizure threshold of 20%. If the patient does not have a seizure on 20%, re-stimulate with 25%. If the patient has seizure at 25%, we presume that the seizure threshold is 25%; if the patient does not have a seizure at 25%, we presume that the patient has a seizure threshold of 30% and re-stimulate the %. Patient with a dose of 45% which is the therapeutic dose.

If the patient does not have a seizure at 30% in the first session, re-stimulate with 60%. If the patient has seizure at 60%, we give a dose of 40% in the second session. If the patient has a seizure, we presume that the patient has a seizure threshold of 40%. If the patient does not have a seizure on 40%, re-stimulate with 50%. If the patient has seizure at 50%, we presume that the seizure threshold is 50%; if the patient does not have a seizure at 50%, we presume that the patient has a seizure threshold of 60% and re-stimulate the patient with a dose of 90% which is the therapeutic dose.

If the patient does not have a seizure even at 60% in the first session, terminate the

session. The referring team should be requested to re-look at the medication (particularly the ones that can alter the seizure threshold) prescribed and adjust the medication/ dosage if possible. The anaesthetic agent can also be changed if possible. In the second session, these patients should be given a dose of 90%.

If the patient has seizure at 90%, we give a dose of 70% in the third session. If the patient has a seizure, we presume that the patient has a seizure threshold of 70%. If the patient does not have a seizure on 70%, re-stimulate with 80%. If the patient has seizure at 80%, we presume that the seizure threshold is 80%; if the patient does not have a seizure at 80%, we presume that the patient has a seizure threshold of 90% and re-stimulate the patient with a dose of 140% which is the therapeutic dose.

If the patient does not have a seizure at 90% in the second session, re-stimulate with 120%. If the patient has seizure at 120%, we give a dose of 100% in the third session. If the patient has a seizure, we presume that the patient has a seizure threshold of 100%. If the patient does not have a seizure on 100%, we presume that the seizure threshold is 120% and re-stimulate the patient with a dose of 180% which is the therapeutic dose.

If the patient does not have a seizure at 120% in the second session, re-stimulate with 200%. If the patient has seizure at this dose, continue the course of ECTs at the same dose. If the patient does not have seizure at 200%, terminate the course of ECTs.

4.7 UNILATERAL ECT

For patients to be given unilateral ECT also, we start with a dose of 5%.

If the patient has a seizure at 5% in the first session, we know that the seizure threshold is 5% and so in the second session the patient can be given the appropriate dose of 30% (6xST).

If the patient does not have a seizure at 5% in the first session, re-stimulate with 10%. If the patient has a seizure at 10% we know the seizure threshold is 10% and so in the second session the patient can be given the appropriate dose of 60% (6xST).

If the patient does not have a seizure at 10% in the first session, re-stimulate with 25%. If the patient has a seizure at 25%, we know that the seizure threshold is between 15% to 25%. So, in the second session we start with a dose of 15%, we know that the seizure threshold is 15% and in the third session, the patient can be given a dose of 90%. However, if in the second session, the patient does not have a seizure at 15%, we can re-stimulate with 20% and so in the third session we can give the appropriate dose of 120%. If in the second session, patient does not have a seizure at 20%, we know that the seizure threshold is 25% and so in the third session we can give the appropriate dose of 150%

If the patient does not have a seizure even at 25% in the first session, terminate the session. The referring team should be requested to re-look at the medication (particularly the ones that can alter seizure threshold) prescribed and adjust the medication / dosage if possible. The anaesthetic agent can also be changed if necessary. In the second session these patients should be given a dose of 30%. If the patient has a seizure at this dose, we know that the seizure threshold is 30% and then can be given the appropriate dose of 180% in the third session. If the patient does not have a seizure at 30% in the second session, we can re-stimulate with 40%. If the patient has a seizure, we know that the ST is 40% and then the patient can be given stimulus at 200% in the third session. If the patient does not have a seizure at 40% in the second session, we can re-stimulate with 50%. If the patient has a seizure, we know the ST is 50% and the patient can be given 200% in

subsequent sessions. If the patient does not have a seizure even at 50% the course of unilateral ECTs should be terminated and bilateral ECT should be considered.

If the seizure threshold for a patient is more than 40% it should be explained to the patient what other options are available as therapeutically it is less likely to work.

4.8 TREATMENT DOSE

Once we have found out the seizure threshold for a patient, the dose for subsequent treatments is one and a half times of the threshold for bilateral ECTs and six times the threshold for unilateral ECTs. In other words, the dose would be 1.5 times the ST for bilateral ECTs and 6 times the ST for unilateral ECTs.

4.9 SEIZURE DURATION DURING THE COURSE OF ECT

For some patients, the ST may go up during the course of ECTs and the seizure duration may shorten. However, there is no reliable way to recognise such patients. Hence the dose should be increased during the course of ECTs based predominantly on clinical response (i.e., nonresponse) though dramatically shortening seizure durations particularly if accompanied by inadequate EEG seizures maybe considered for a dose increase.

a) No response after 4 ECTs
If the patient does not respond after 4 ECTs, review the ECT course, medication, cognition etc and consider increasing the dose by up to 11/2 times the dose last used. The administrating doctor or the prescribing doctor may decide on changes outside of these guidelines, but he/she should state the reasons underpinning the decision in the treatment sheet.

b) Missed seizure.
During the course of ECT treatment the seizure threshold may increase, and some may have a missed seizure (i.e. no seizure). Reasons for missed seizure like setting lower stimulus dose, high impedance, premature stimulus termination, hypercarbia, dehydration, medications etc needs to be considered. In such cases, ensure adequate electrode positioning, hyperoxygenate the patient and re-stimulate at one and a half times the treatment dose just used. If the seizure still is not observed or EEG seizure, increase the dose again by 1 ½ times and re-stimulate. No more than 2 re-stimulations should be used in this situation. For future treatments, patient is reviewed for medications, check U & E's and consider a decrease in anaesthetic dose/change of anaesthetic (propofol to etomidate).

c) Shortening seizure duration/ inadequate EEG seizure activity
An EEG seizure that does not show polyspike activity followed by spike and wave forms running at 3-5 Hertz ending in post ictal suppression may be considered an inadequate EEG seizure. If there is an inadequate EEG seizure and the observed fit is less than 15 seconds, consider re- stimulation at 1 ½ times the dose just used, especially if the response has been poor. For inadequate seizures, only one re-stimulation to be done per session. For patients who have shorter/inadequate seizures later in the treatment course but are continuing to have satisfactory clinical improvement, re-stimulation is not necessary. Instead consider increasing the dose by up to 1 ½ times the next time they present. If the fit had been more than 15 seconds but less than 25 seconds consider increasing the dose by up to 1 ½ times the dose last used, depending on response, confusion, laterality etc the next time patient

presents for ECT.

d) Change from bilateral to unilateral ECT or vice versa

If a patient on unilateral ECT fails to respond after 6 ECTs and the referring psychiatrist wants to change to bilateral ECT, we need to find out seizure threshold for bilateral ECT as at the beginning of a course of ECTs so that the patient can be given the appropriate dose.

Similarly, if a patient has been on a course of bilateral ECTs and we need to change to unilateral ECT, we should find out the seizure threshold for unilateral ECT as in the beginning of the course. This would help us give the appropriate dose to the patient. However, whilst we are trying to gauge the threshold for the new laterality the ECT treatment course may be considered to be 'suspended' as the doses being used maybe inadequate for treatment especially when changing over to unilateral. Where it is undesirable to 'suspend' a course of ECT as the patient maybe very ill and the ECT treatment is urgent, the treating psychiatrist may attempt to estimate the likely threshold after considering the original threshold, the laterality (unilateral tend to have a lower threshold) any shortening of the duration of fits etc. This estimated threshold would need to be converted to a treatment dose as per the usual convention described in section 4.8

Significant cognitive impairment would be an indication to either reduce the dose or change over to unilateral ECT.

4.10 Urgent ECT

Usually, this treatment would be under Section 62 MHA. The prescribing psychiatrist needs to contact the Consultant Psychiatrist and the ECT Lead Nurse who should be satisfied that the patient warrants such treatment.

4.11 PROLONGED SEIZURE

1. A prolonged seizure is one that lasts two minutes or more, should be terminated immediately, either by further dose of induction agent or by intravenous administration of a benzodiazepine drug. Prolonged convulsions must be terminated promptly in consultation with the anaesthetist. Adequate oxygenation is maintained during this process and EEG is monitored all through. Patient's reorientation (recovery) time and memory disturbances are closely monitored following the ECT. This may merit reviewing the medication, anaesthetic drugs, any pre-exiting medical conditions such as electrolyte imbalance and liaising with the prescribing team. Consider reducing the stimulus dose in subsequent ECT sessions if prolonged seizure is persistent.

2. When a prolonged seizure (i.e., EEG > 120 seconds) occurs with first stimulation during the dose titration process, the seizure should be terminated according to standard protocol. In the second session, dose titration should be performed in the normal way, but starting from 25mC (5%). The treatment dose is calculated according to the standard protocol once the threshold dose has been determined, except where this would be equal to or exceed the dose that gave rise to the prolonged seizure. In this case, the treatment dose is the minimum dose required to establish an adequate seizure, i.e., > 25 seconds.

3. Where the patient had prolonged seizure at 25mC (5%), an anaesthetic agent associated with increased seizure threshold should be used during the second and subsequent sessions, e.g., propofol. The stimulus dosing protocol should

then be followed in the normal way.

4. When a prolonged seizure occurs with the administration of a treatment dose appropriate for a newly determined seizure threshold (i.e. 1.5 x ST for B/L ECT; 6.0 x ST for U/L ECT), a dose halfway between the threshold dose and the treatment dose should be given. Where this gives rise to an adequate seizure, it should be considered the new treatment dose. Where it does not give rise to an adequate seizure, it should be increased incrementally until an adequate seizure is obtained.

4.12 MOTOR SEIZURE MONITORING

Motor seizure should be generalized during the ECT treatment i.e. after an initial tonic contraction of the muscles a longer clonic phase of rhythmic alternating contraction and relaxation of the muscles of the limbs on both sides of the body. The motor seizure duration should be timed from the end of electrical stimulation to the end of generalized activity. This should be at least 15 seconds. This is recorded using the timer on the ECT machine.

4.13 EEG SEIZURE MONITORING

EEG is the most direct available means of measuring cerebral seizure activity which is essential during ECT. At least 2-channel EEG (bifrontal) is recorded for all patients in all the ECT sessions. The EEG electrodes are placed on both sides of the frontals above the eyebrows, both mastoids and another (central) electrode is placed on the chest over the clavicular bone or the forehead. Once the electrodes are in place, prior to inducing anaesthesia, baseline EEG is recorded on the ECT machine and this is shown as a flat line on the EEG record (a rhythm 8-12 Hz). Just before the ECT stimulus is delivered, the impedance is checked and the stimulus is delivered only if the impedance is in the range of 151 to 2999 ohms.

Once the ECT stimulus is delivered, EEG is automatically recorded which has different stages: 1) Following a brief artifact at the end of the electrical stimulation, there is a low-amplitude, high-frequency ‘polyspike activity’ for few seconds. 2) Then there is increase in amplitude of EEG polyspike and gradual slowing of frequency. 3) This will be followed by classic 3 Hz ‘spike and wave’ activity with gradual loss of spike and wave pattern after which 4) EEG tracing has lower amplitude and frequency than at the baseline (‘postictal suppression’).

As a guideline one needs to ensure EEG seizure duration of 25 seconds, if not, this should be clinically interpreted before a re-stimulation is considered. The EEG records are filed in the ICPR.

4.14 WHEN TO STOP ECT

1. When an adequate response has been achieved.
2. No response to treatment.
3. Patient develops serious/untoward adverse effects.
4. Patient withdraws consent.

4.15 OUTPATIENT ECT

ECT may be provided on an outpatient basis. During the pre-ECT evaluation the prescribing psychiatrist should determine the appropriate delivery of ECT treatment, determining if this needs to be as an inpatient, an outpatient, or a combination of inpatient and then outpatient. Disability and communication needs should be assessed and considered in regard to receiving ECT as an out-patient.

Outpatient ECT would be appropriate if:

a) The type and seriousness of the patient's mental illness did not present significant risk to management of the patient.
b) Anticipated risks associated with ECT were detectable and manageable both during ECT and at home.
c) Caregiver/ significant other is identified and has agreed to be available throughout the ECT course to assist with patient safety, including accompanying of the patient to and from treatment and monitoring compliance with treatment regimen. The carer is expected to stay with the patient for at least 24 hours post treatment.
d) The patient was capable and willing, with caregiver assistance to follow pre and post ECT requirements.
e) The psychiatrist should also take into consideration patients past experience with ECT.

Patient preference should be taken into consideration when determining the best setting for the delivery of ECT. The psychiatrist should discuss the risks and benefits of outpatient ECT in comparison to inpatient treatment. This should be documented in the patient's record.

The prescribing psychiatrist would maintain overall responsibility for the patient during the ECT treatment period. The psychiatrist should inform the patient's general practitioner of the treatment plan.

The psychiatrists should refer the patient to the ECT team before their treatment and discuss any concerns or problems. The prescribing psychiatrist should ensure that the medical notes are available to the ECT team. The pre ECT evaluation (consent procedure, investigation), and the RIO record for ECT should be completed prior to sending the patient for ECT.

The ECT teams are able to offer an appointment to the patient and the carer to discuss the treatment and go over any concerns or worries, before beginning the course of treatment. Leaflets are available informing patients on outpatient ECT (i.e., Trust ECT leaflet and Patient ECT Information leaflet).

Patients should be observed following ECT in the post-recovery room for a sufficient period of time (2 hours) or until the patient is alert and capable of managing independently. Those receiving ECT on an outpatient basis, they will be provided with outpatient discharge card detailing dos and don'ts following ECT and this should be signed by the patient and the responsible adult.

Before being discharged from the ECT suite, all patients will be assessed using the pre-discharge checklist. If any concerns are raised and/or if the patient is not willing to stay for observation as suggested by the staff, the staff will discuss this with the junior doctor on ECT who they would decide to assess the patient.

The medical team following the assessment may consider that the patient may be required to stay as an inpatient on the ward overnight if their recovery is not satisfactory after liaising with the respective team. If the doctor feels that the patient is not medically fit to be discharged from hospital, but the patient insists on going home, then the patient should be asked to sign an 'ECT disclaimer' discharge form. If the doctor feels that the patient is not psychiatrically fit to be discharged, he should liaise with the respective team to consider compulsory admission under the appropriate Mental Health Act.

All patients receiving out-patient ECT must have each treatment prescribed. Patient adherence to behavioural limitations and the decision to continue with outpatient ECT should be reassessed on a treatment-by-treatment basis with consideration given to patient preference.

The ECT team must be informed of any significant changes in clinical status, such as the emergence of suicidal intent or psychosis or the lack of a reliable caregiver to accompany the patient, which may necessitate a switch to inpatient care. If the ECT team feels that the patient had any unexpected untoward adverse effects due to ECT (for example, severe delirium, prolonged recovery post ECT, severe cognitive impairment) which increased the risks associated with ECT in the outpatient setting, these should be communicated to the prescribing psychiatrist and a decision may be made to switch to inpatient ECT.

At the end of the course of treatment, the psychiatrist should inform the general practitioner detailing the treatment and outcome

4.16 CARER'S VIEWS

Every effort should be made to capture a carer's views and opinions when the person they care for receives treatment. The attached letter (Appendix 7) should be completed either by the referring team

4.17 ECT FOR SPECIAL GROUPS

4.17.1 Children

ECT will not, generally, be given to children under 18 (also see 2.0 – "Who should be given ECT").

- ECT should not be given to children between the ages of 5yrs and 11yrs. (CG28- SEPT 05)

ECT treatment is only possible for under 18's (other than in an emergency), whether or not they are detained, with a SOAD certificate and a valid consent (from the child, if they are competent or not, someone with parental responsibility. (S58A), (S62(1) (A)).

- Any young person 12yrs and above referred for ECT will have a professionals meeting of respective relevant professionals involved in their care, including parents, legal guardians/ carers to consider each referral on a case-by-case basis. Paediatric training professional booked if required.

4.17.2 Elderly

Elderly are more likely to be physically ill, be on multiple physical drugs and show some cognitive impairment. They would require a detailed medical history and a thorough physical examination to be recorded in the physical assessment form. Their physical drugs would need to be rationalised as far as possible. As per the anaesthesia chapter, their cardiac and gastric drugs should be given on the morning of ECT with no more than 30mls of water. They should have recent FBC, U&Es, RBS and ECG done. Other investigations maybe required depending on clinical need. There is a need to keep a closer eye on elderly patient's cognitive status during a course of ECT. Consider Unilateral ECT initially in elderly patients especially if there is cognitive impairment to begin with. For the same reason, capacity assessments need to be documented carefully. Elderly patients tend to have a higher threshold for ECT and consequently they may need a higher initial dose if threshold wasn't being determined at the start.

4.17.3 Learning Disabilities

Patients with Intellectual Disability

Historically, Intellectual disability patients have been prescribed ECT only on rare occasions. A back ground diagnosis of Intellectual Disability (ID) should not preclude a patient requiring ECT for a psychiatric condition known to be responsive to ECT from accessing this treatment. However, patients with LD present particular challenges when having ECT.

1. Diagnosis - The diagnosis of the psychiatric condition requiring ECT may be obscured by the learning disability e.g. Patients with ID having depression may somatise their symptoms or show a behavioural change rather than complaining of a mood change. It would be difficult to quantify the extent of depression using scales like the Hamilton scale. Or again, Catatonic symptoms might be due to other underlying conditions such autism spectrum disorder, autoimmune encephalitis (e.g. Anti NMDA encephalitis) or Vitamin B12 deficiency.

2. Monitoring - It might be difficult to monitor the benefits, side effects particularly cognitive side effects of ECT in this patient group. Methods used conventionally in other patient groups may not apply and the ID Consultant prescribing the ECT would need to state how he/she intends to monitor response when submitting a patient for ECT.

3. Consent - LD patients in the milder forms may possibly have capacity to consent to ECT but the majority of LD patients are not likely to have the capacity to consent. Capacity maybe enhanced with the help of Speech and Language therapist using pictorial material and the patient's communication passport. These patients would then need to be under a Section of the MHA and an opinion sought from a SOAD as with any other patient lacking capacity requiring ECT.

4. Co-morbidity - Controlled epilepsy is not a contra-indication for ECT. However, it would be difficult to induce a seizure in patients with Epilepsy who are on large doses of anti-epileptic medication. Patients may need to be monitored for recurrence of seizure activity post ECT. Poor dental care may be an issue.

5. Anaesthesia- Some ID patients with swallowing difficulties, excessive salivation, narrow airways, rigidity etc. may pose a challenge for the Anaesthetist. Patients with Downs's syndrome may be at risk for Atlanto-axial instability. Hence a formal pre-ECT anaesthetic review by a senior anaesthetist is advised for all ID patients. Some may require having their ECT in the main

theatres. If ECT is to be administered in the ECT suite, then the availability of Sevoflurane should be checked prior to ECT by the ECT team.

6. Preparing the patient- Anaesthesia and ECT could be quite a traumatic event for an ID patient. Explaining what is happening and why (even when they lack capacity), attending for ECT with a care worker they know and trust (like a ID acute liaison nurse), a visit to the ECT suite beforehand to familiarise the patient to the suite etc. would go a long way to ensure that ECT causes the least distress. Community ID nursing teams could help both in communication and monitoring their response to treatment.

7. Considering all these difficulties ID Consultants wishing to submit a patient for ECT may wish to discuss the patient with an ECT Lead Consultant before prescribing ECT.

4.18 ECT OUTSIDE NICE GUIDELINES

NICE does not recommend the use of ECT in the management of Schizophrenia. Within the Leicestershire Partnership Trust, ECT will be given only to patients meeting the criteria in section 1.1. However, in very exceptional circumstances a Responsible Consultant may wish to prescribe ECT to a patient not meeting the above criteria. He/she would then need to demonstrate.

(a) That the treatment is clearly in the patient's best interest. The Responsible Consultant needs to document the evidence for this with appropriate references.
(b) The Responsible Consultant needs to document that when the patient consented to have the treatment that he/she was aware that the NICE guidelines do not recommend the use of ECT for his/her condition, where appropriate their carer/ relative to be involved in decision making.
(c) The Responsible Consultant would need to demonstrate that ECT for that patient would be an acceptable option, to a group of peers and / or
(d) The Consultant is advised to seek the agreement of the Lead Consultants documenting the evidence, including any relevant references- if available- for the use of ECT under those clinical circumstances.

This may be done by letter, giving a clinical summary, and

1. Ensure documentation provides complete explanation why treatment is in the patient's best interest.
2. Enable the Consultant to demonstrate that such practice is acceptable to a group of peers.
3. Strengthen the autonomy of the doctors administering the ECT, as subsequently should the patient be dissatisfied with his/her treatment he/she may complain, or take legal action against the prescribing Responsible Consultant, administering doctor, and / or the Trust.

(e) Obtaining second opinion form ECT lead or a consultant colleague.

ECT will not be given to patients who do not meet these criteria. The Trust fully supports the administering doctor in refusing to give ECT to such patients.

4.19 CONTINUATION / MAINTENANCE ECT

ECT has been used to prevent the early relapse of the index episode of illness (Continuation ECT, conventionally in the first 6 months of remission) or to prevent further episodes or recurrences of illness (Maintenance ECT)

NICE does not recommend the use of ECT as Continuation or Maintenance ECT. Subsequent to publication of NICE revised guidelines on depression in Adults (CG90-OCT 09) research evidence to support continuation ECT has been published (ODEBERG J. ECT AUG 08).

Within the Leicestershire Partnership Trust ECT will be used, in the main, to produce a rapid response. Prior to giving Continuation or Maintenance ECT the Responsible Consultant would need to demonstrate:

1. The patient responded to a conventional course of ECT.
2. The patient failed to maintain the improvement gained through ECT with maintenance drug therapy that included a trial of at least two antidepressants (in series) and Lithium, or another mood stabiliser has been tried or is contraindicated.
3. The processes (a) to (d) above need to be followed.
4. Obtaining second opinion from ECT lead/ Consultant Colleague.

When a patient starts on Continuation or Maintenance ECT, it would be prudent to start on unilateral ECT even if the original course of ECT was bilateral. If the unilateral Continuation / Maintenance ECT was not effective in maintaining the patient's improvement, then consider bilateral ECT. ECT may be given at 2 - 4week intervals or even less frequently. Where the mental state is maintained at the lower interval, the interval should be increased by a week to see if the patient could be maintained at a longer interval between treatments.

The patient's mental state should be reviewed after each treatment and his/her cognitive functions should be monitored throughout the maintenance phase. HDRS and MOCA should be completed after each maintenance treatment. If the cognitive functions are deteriorating, the Responsible Consultant should review the need to continue with maintenance ECT.

The Responsible Consultant should consider discontinuing maintenance ECT after a block of 12 ECT's or 6 months, whichever is sooner. If the Responsible Consultant considers continuing beyond this period, he/she should be able to give evidence / demonstrate that further maintenance ECT is required to maintain the patient's mental state. He / She should reconsider other treatment options and review the patient's cognitive functions. He/she should review the patient's informed consent and request a second opinion from the lead consultants, prior to continuing with further maintenance ECT.

4.20 COMPLETION OF TREATMENT AND DATA STORAGE

Once treatment has completed the ECT team will arrange follow-up to complete the required one week after completion and two months after completion Hamilton and MOCA assessment tools.

At the same time the completed ECT folders will be collected from the inpatient wards and returned to the ECT department whereby they will be scanned onto systm1 under letters and correspondence.

Outpatient files are automatically kept within the ECT department and will be scanned

accordingly.

SECTION 5 - Nursing guidelines

5.1 NURSING GUIDELINES FOR ECT

The role of the ECT nurse has continued to expand and develop over recent years and it is now recognised as an essential role within the core ECT team.

This section outlines guidelines for best practice and provides a description of the main responsibilities of the ECT nurse.

The role requires specific core skills that should be developed through both external and internal training. Each nurse will have the ECT competencies assessed and will receive in-house training including mandatory training such as Immediate Life Support. Additionally the opportunity to attend the ECTAS ECT nurse training days will be given to each nurse.

At least one nurse from the team will attend the Royal College of Psychiatrists ECT training day each year and attendance at the NALNECT ECT nurse conference (every two years).

Attendance at the midlands Special Interest Group (SIG) is expected of the Band 6 / 7 and membership of NALNECT (National Association of Lead Nurses in ECT) is evidence of good professional development and practice.

Each nurse should also be familiar with the equipment used within the clinic and be competent in its use and function within the scope of the individual's specific role. They are also responsible for post clinic clean down and reporting any faulty equipment.

Should any incident occur then a nominated nurse should follow the Trust guidelines and complete an E-IRF.

It is mandatory for the core team to attend the pre-treatment handover.

5.2 THE ACCOMPANYING NURSE (Ward Nurse)

The escort nurse will be a permanent member of the ward team and have a good knowledge of the patient. The allocated escort nurse will comply with the LPT- escort policy. Typically, the nurse will attend with the patient at the agreed time ensuring that they bring the relevant documentation with them such as the ECT folder.

Prior to attending the clinic with the patient, the nurse will ensure that essential physical observations have been carried out. These include the patients' blood pressure, their temperature and if diabetic their blood sugar reading for that day and once completed they should be added in the red ECT folder under ward observations. The nurse may be required to provide some clinical information if required as requested by one of the ECT team.

One main aspect of the escort duties is to provide support and re-assurance to the patient as typically when they attend they may be anxious and distressed. The escort nurse will also if required act as an advocate for the patient should this role be necessary.

The nurse will be familiar with the patient's legal status and fully accept the responsibility that this brings with it.

Post treatment the accompanying nurse is required to handover to the ward team any concerns and initiate observations as required for 24 hours post Anaesthetic procedure.

5.3 THE ECT RECEPTION NURSE

The ECT reception nurse will be a qualified nurse at band 5 or above and be assessed as competent to carry out this role (ECT nurse competencies, in house training).

Prior to the day of treatment the reception nurse will determine which patients are due for treatment and create a clinic list for treatment. They will be responsible for ensuring that the required documentation (ECT prescription, Mental Health Act paperwork or consent paperwork) is present and complete. They will also ensure that the MOCA and the Hamilton Depression Rating Scale (if due) are also completed.

The additional scope of the role will be to liaise with the prescribing team to clarify any outstanding issue or to provide advice if required.

The Reception Nurse completes ECT Reception Form on S1.

On the day of treatment.

- Set up the reception area for that day's clinic.
- Clarify with the ward team or if outpatient with the patient the time of the appointment.
- Provide a clinical handover to the ECT team prior to commencement of Treatment (9am)
- Receive each patient as they attend.
- Complete the pre-treatment electronic notes form which includes the pre-anaesthetic questions, orientation questions and the WHO checklist.
- Prepare the patient including taking physical observations if outpatient, applying skin cleaning solution and impedance gel.
- If patient has capacity, to take consent for that day's treatment.
- Check MHA act paperwork is correct, and a copy is present.
- Confirm current COVID status is available.
- Patient ID white wristband is on patient, and red allergy status wristband is present if required.
- Once all tasks have been completed, they will take the clinical notes into the treatment room and clinically handover patient to the treating team. Confirm that the notes / patient's identity has been checked.
- The nurse will assist as required with any additional role if necessary.

5.4 THE ECT TREATMENT NURSE

The nurse in ECT treatment will be a qualified Nurse of band 5 or above and will have completed the ECT nurse competencies, and additional task requirements for the role.

- The treatment nurse receives the patient and assists them onto the ECT trolley.
- Provide support and reassurance to the patient.
- They apply the EEG stickers to the patient's head area.
- Once the treating Doctor has set the prescribed dosage into the ECT machine the Doctor will verbally confirm dose and laterality with the nurse.
- The ECT paddles are then prepared by applying impedance gel onto them for

either bilateral or unilateral as per prescription.

- The nurse prior to treatment being administered asks the patient to lay still with eyes closed so that the EEG baseline can be achieved.
- Once the patient is anaesthetised and ready for treatment the Doctor applies the paddles for either bilateral or unilateral treatment (as per prescription) and the nurse will check for impedance range. Once within range (150-2999) the ECT machine will confirm this with a static number reading within the range highlighted above. The nurse will then verbally confirm that it is within range and then press the treatment button until the treatment noise stops.
- Nurse to ensure patient ID is confirmed with the wider treating team by reading outpatient name, DOB and NHS number.

5.5 THE RECOVERY NURSE

The recovery nurses (two is the required number per clinic) will be fully trained recovery staff. The minimum number of qualified (B5 or above) in the area is two.

The recovery nurses will:

- Receive the patient from treatment and immediately provide oxygen, take blood pressure, and heart rate and temperature. They will monitor patients ECG.
- Carry out any additional intervention as requested by the Anaesthetist within the scope of the individual's practice.
- Record this data clearly in the recovery section of the electronic notes.
- They will monitor the recovery of the patient and be competent in life support interventions.
- Be aware of location of the emergency trolley and how to summon immediate help if required.
- Maintain a safe environment.
- Monitor patient orientation and record this information.
- Be capable in moving and handling skills and utilise these skills in moving the patient on trolleys.
- Discharge outpatients back to their escort.
- Orientate and support the patient until they are ready to leave.
- Complete all required systm1 electronic paperwork.
- Communicate any concerns to either the Anaesthetist or Psychiatrist or to the accompanying nurse / carer if necessary.
- Ensure each patient is given food and fluids once recovered.

5.6 ECT FOLLOW UP MONITORING

Post completion the ECT follow-up will be done by the ECT Nurse at 1 week and 2 months post completion and scores added to the Follow-up section on S1.

The completion of the ECTAS Data set will also be done by the ECT Nurse.

5.7 ECT SUPPORT WORKER (support for patients and carers)

Patients and carers will have access to safe and confidential support before, during and after treatment from a support worker with lived experience of ECT. This will be face to face within the clinic, on the wards or via telephone.

They will provide support, signposting to sources of relevant information and a

chance to reflect on treatment.

Confidential feedback on the experience of patients and carers will be collected for the purpose of QI.

6.0 SECTION SIX – Infection Prevention and Control

6.1 CURRENT INFECTION CONTROL MEASURES

ECT treatment will only be administered if there are locally agreed infection control measures in place (IPC)

IPC controls such as environmental concerns, individual responsibilities, use of PPE and safety of patients and staff will be adhered to.

References and Associated Documentation

This policy was drafted with reference to the following:

1. Abrahms, R (2002) Electroconvulsive Therapy (4th ed). Oxford University Press.

2. Department of Health, (2008) Code of Practice, Mental Health Act 1983 London TSO

3. NICE Technology appraisal 59, National Institute for Clinical Excellence, (2003). Guidance on the use of Electroconvulsive Therapy.

4. Leicestershire Partnership NHS Trust, policy for consent to examination or treatment (M027 May2012)

5. Mental Capacity Act (2005) Code of Practice, London TSO

6. NICE guidelines; Depression: Treatment and Management of Depression in Adults (update) CG90-OCT 09 Antenatal and Postnatal Health – CG45 – FEB 07. Depression in Children and Younger People – CG28-SEPT 05

7. Diana Rose et al. Patients' Perspective on electroconvulsive therapy: systematic review. BMJ 2003;326:1363

8. (2014) Electroconvulsive Therapy Accreditation Service (ECTAS) available at www.ectas.org.uk Royal College of Psychiatrists

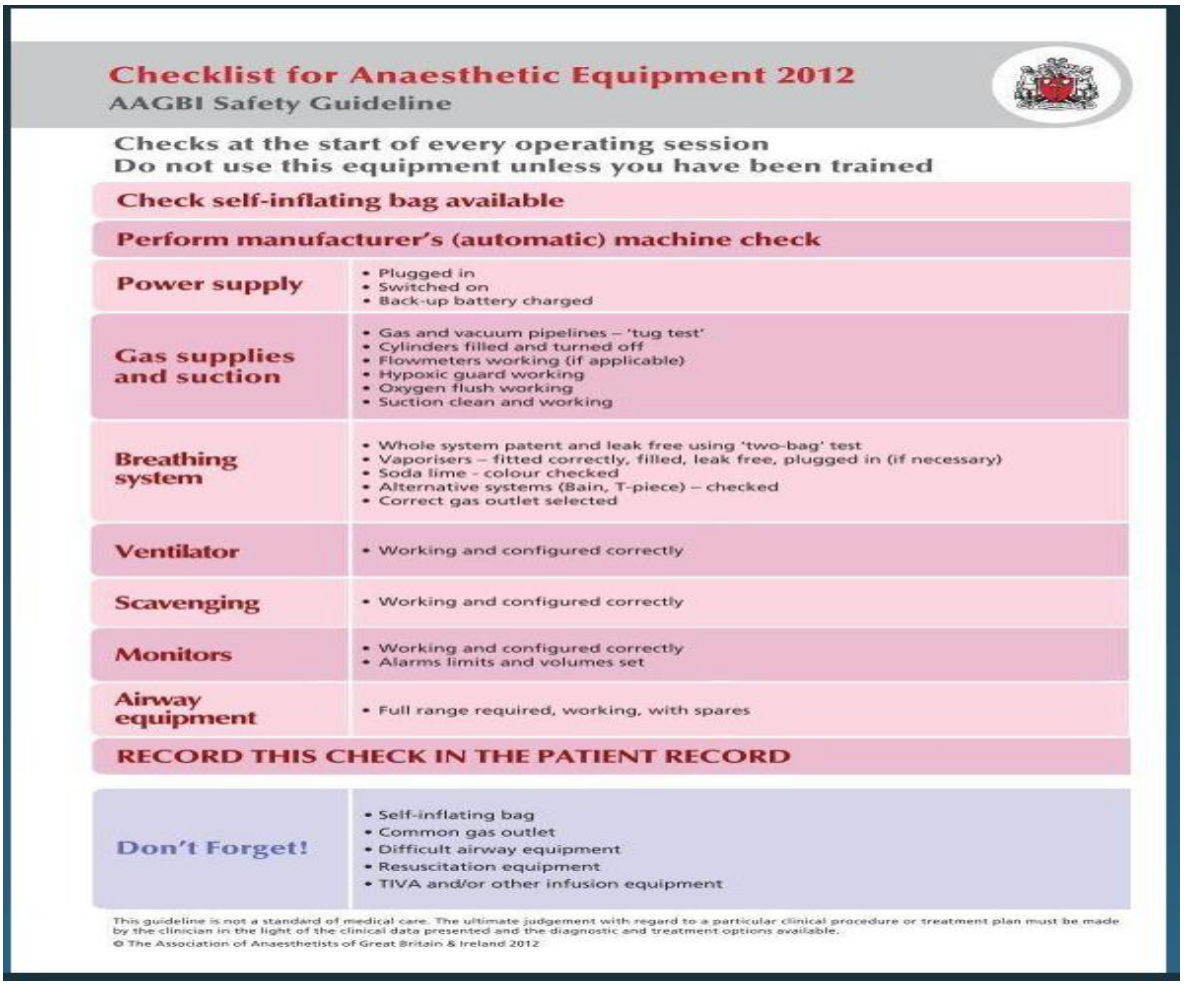
9. Squire, L.R. (1986) Memory functions as affected by ECT. Ann N Y Acad Sci 462:307-

10. The Association of Anaesthetists of Great Britain and Ireland (2004).Checklist for Anaesthetic equipment.

11. (2013) The ECT Handbook – 3rd Ed. College report CR176 Royal College of Psychiatrists

Appendix 1

Checklist for Anaesthetic Equipment 2012



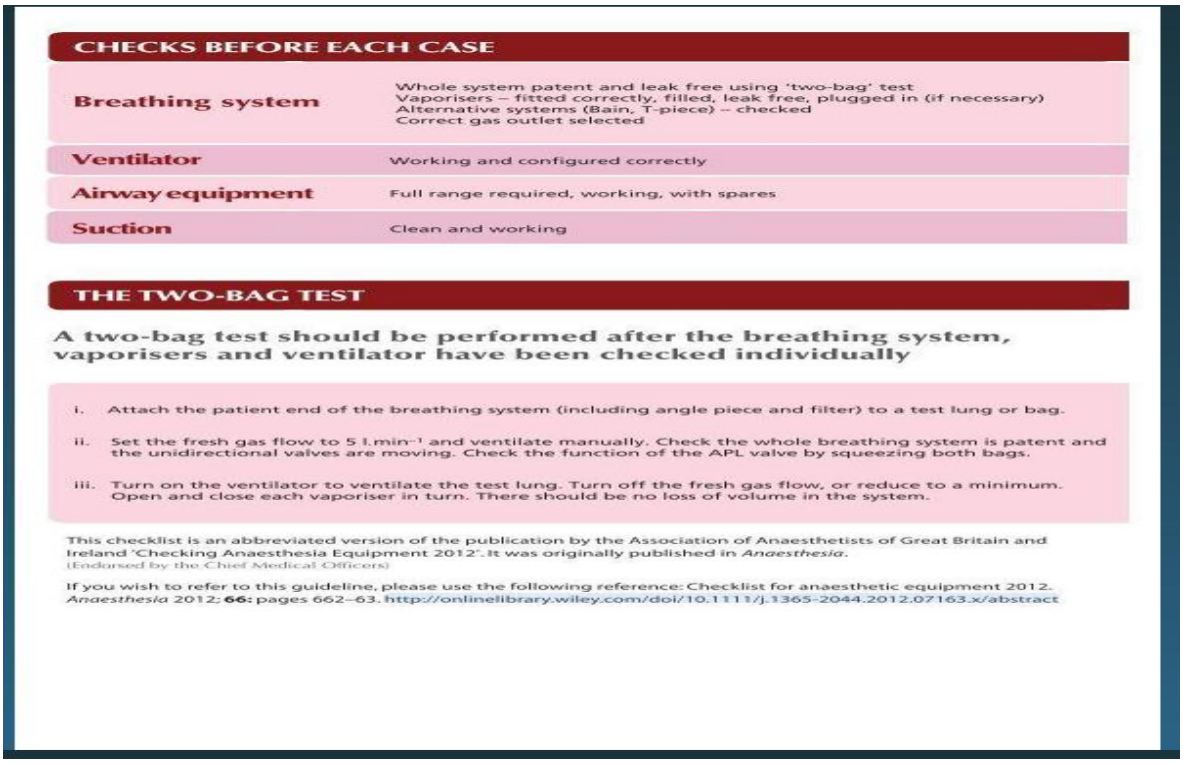
Checklist for Anaesthetic Equipment 2012

AAGBI Safety Guideline

Checks at the start of every operating session
Do not use this equipment unless you have been trained

Check self-inflating bag available	
Perform manufacturer's (automatic) machine check	
Power supply	• Plugged in • Switched on • Back-up battery charged
Gas supplies and suction	• Gas and vacuum pipelines – 'tug test' • Cylinders filled and turned off • Flowmeters working (if applicable) • Hypoxic guard working • Oxygen flush working • Suction clean and working
Breathing system	• Whole system patent and leak free using 'two-bag' test • Vaporisers – fitted correctly, filled, leak free, plugged in (if necessary) • Soda lime - colour checked • Alternative systems (Bain, T-piece) – checked • Correct gas outlet selected
Ventilator	• Working and configured correctly
Scavenging	• Working and configured correctly
Monitors	• Working and configured correctly • Alarms limits and volumes set
Airway equipment	• Full range required, working, with spares
RECORD THIS CHECK IN THE PATIENT RECORD	
Don't Forget!	• Self-inflating bag • Common gas outlet • Difficult airway equipment • Resuscitation equipment • TIVA and/or other infusion equipment

This guideline is not a standard of medical care. The ultimate judgement with regard to a particular clinical procedure or treatment plan must be made by the clinician in the light of the clinical data presented and the diagnostic and treatment options available.
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CHECKS BEFORE EACH CASE

Breathing system	Whole system patent and leak free using 'two-bag' test Vaporisers – fitted correctly, filled, leak free, plugged in (if necessary) Alternative systems (Bain, T-piece) – checked Correct gas outlet selected
Ventilator	Working and configured correctly
Airway equipment	Full range required, working, with spares
Suction	Clean and working

THE TWO-BAG TEST

A two-bag test should be performed after the breathing system, vaporisers and ventilator have been checked individually

i. Attach the patient end of the breathing system (including angle piece and filter) to a test lung or bag.

ii. Set the fresh gas flow to 5 l.min^{-1} and ventilate manually. Check the whole breathing system is patent and the unidirectional valves are moving. Check the function of the APL valve by squeezing both bags.

iii. Turn on the ventilator to ventilate the test lung. Turn off the fresh gas flow, or reduce to a minimum. Open and close each vaporiser in turn. There should be no loss of volume in the system.

This checklist is an abbreviated version of the publication by the Association of Anaesthetists of Great Britain and Ireland 'Checking Anaesthesia Equipment 2012'. It was originally published in *Anaesthesia*.
(Endorsed by the Chief Medical Officers)

If you wish to refer to this guideline, please use the following reference: Checklist for anaesthetic equipment 2012. *Anaesthesia* 2012; **66:** pages 662–63. http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2044.2012.07163.x/abstract

Appendix 2

Certificate of Training in the Administration of ECT

All Psychiatric trainees will receive training in ECT during their rotation. This will be at the Bradgate Unit site by a named ECT Lead Consultant.

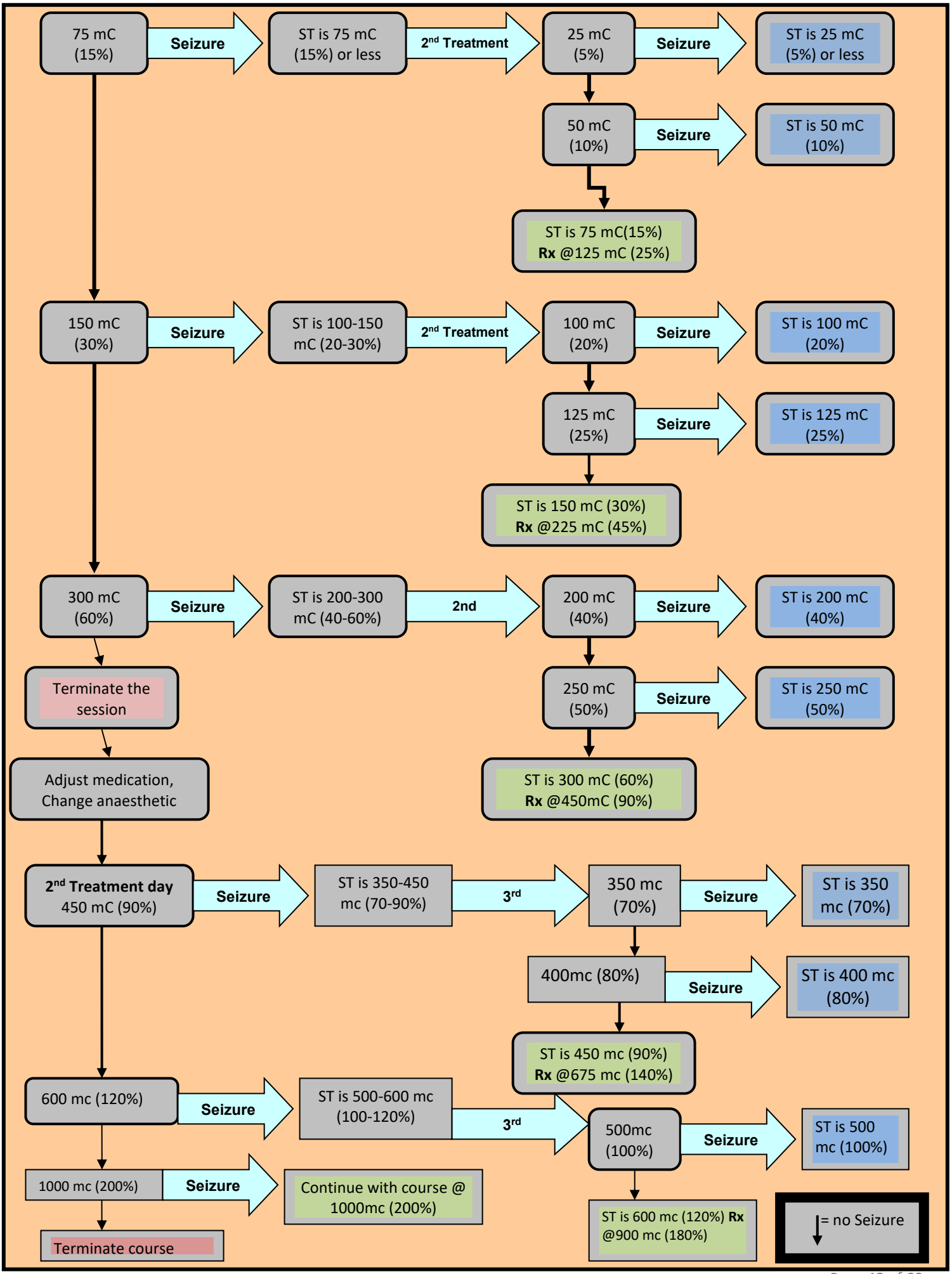
Module	Date	Signature of Trainer	Signature of Trainee
Theoretical background to ECT			
The ECT protocol			
Introduction to the ECT machine and ECT Suite			
Read the relevant chapters of the Royal College of Psychiatrists handbook			
1st demonstration and supervised training during an ECT list			
2nd demonstration and supervised training during an ECT list			
3rd demonstration and supervised training during an ECT list.			

(Name of Trainee) ……. has completed a training course on ECT within Leicestershire Partnership NHS Trust

Signed: …… Lead Consultant for ECT

Appendix 3

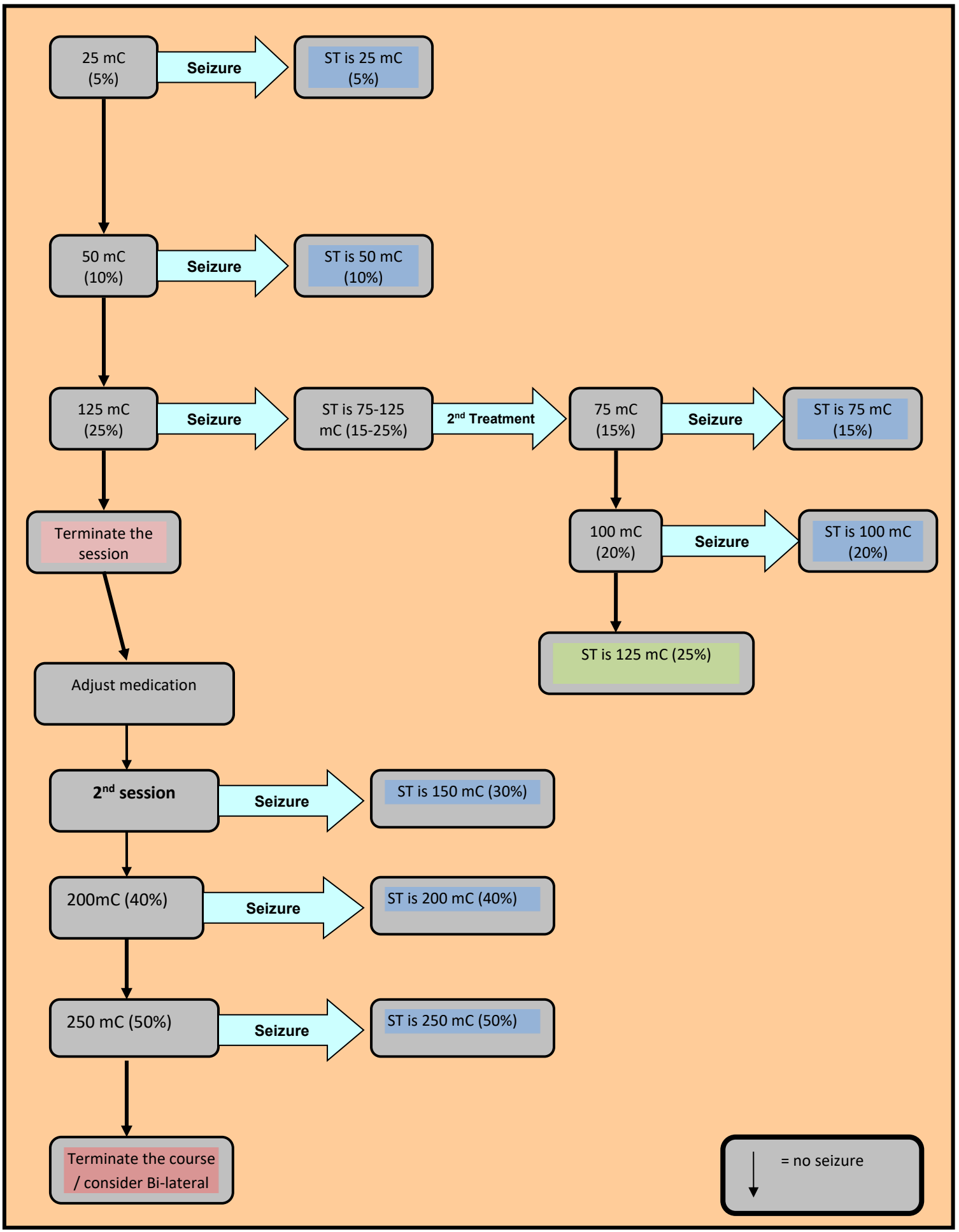
Bilateral stimulus dosing
Determining Seizure Threshold for Bi- lateral ECT (then Treat (Rx) @ 1.5 x threshold)



Appendix 4

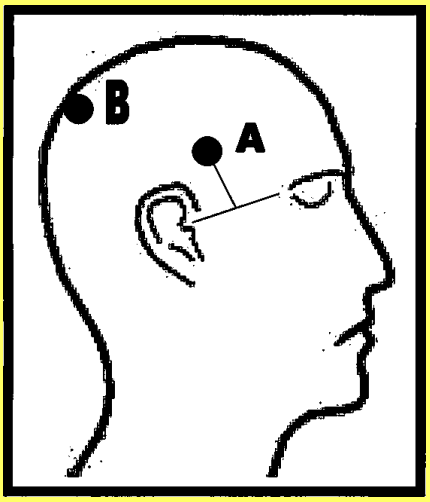
Uni-Lateral Stimulus Dosing

Determining Seizure Threshold for Uni-lateral ECT (then Treat (Rx) @ 6 x threshold)



Electrode Positions

Electrode Positions



Point A. Draw a straight line between the Tragus of the ear and the lateral angle of the eye. Find the midpoint of this line. Point A lies 4 cm above on a perpendicular from this midpoint.

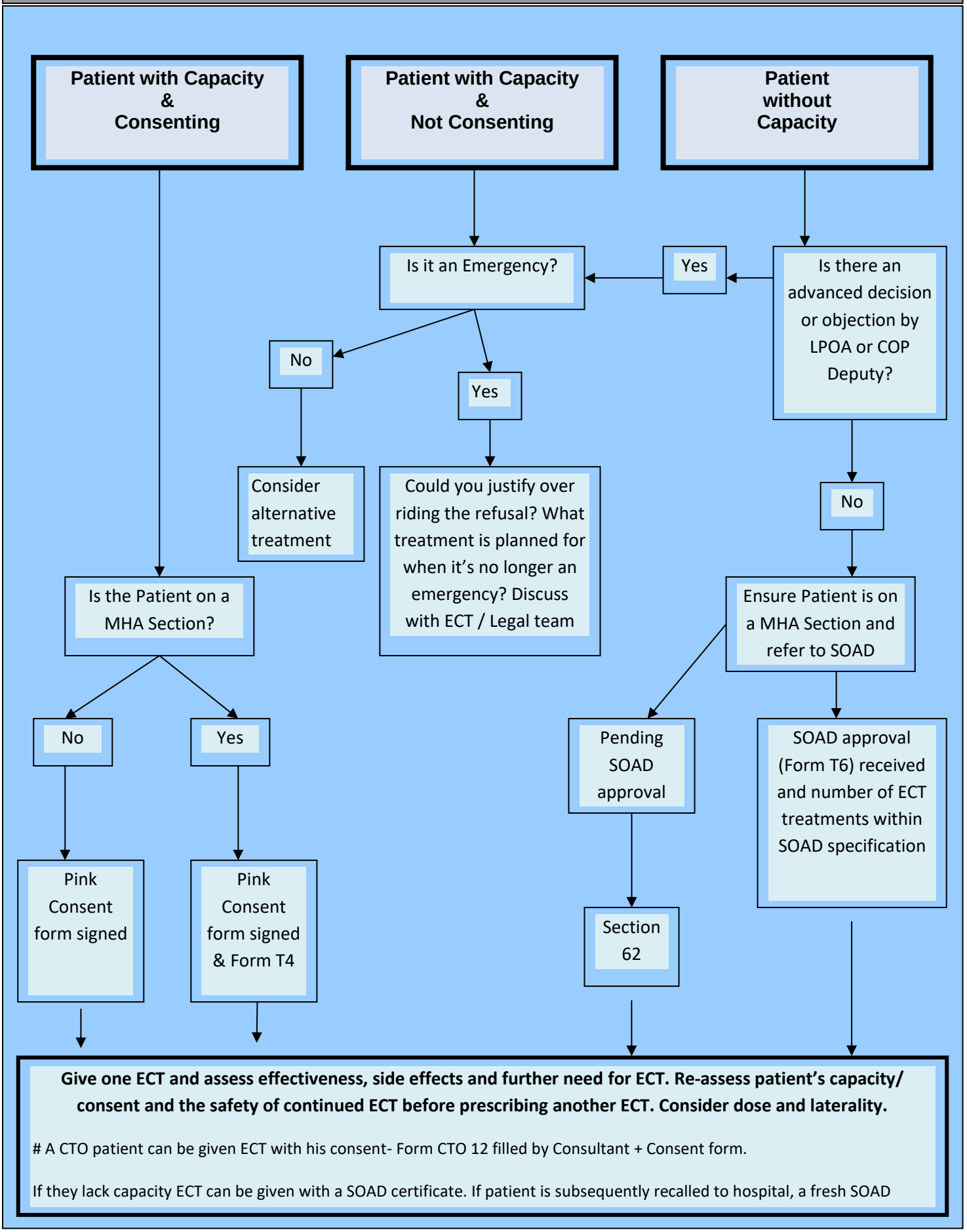
Point B. Just lateral to midline on right side and slightly posterior to the vertex. The exact point is not critical but getting good contact through the hair is important.

Bi-lateral ECT Apply the 'flat electrodes' to point A on both sides.

Uni-lateral ECT usually given on the Right side irrespective of handedness. (If immediate post ictal dysphasia is a problem, consider switching to Left Unilateral ECT). Place the 'flat electrode' on Point A and the concave electrode on point B on the same side- usually Right.

Consent Procedure for ECT

Consent Procedure for ECT



Tasks for ECT Administering Doctor

All 3 tasks have to be completed before administering ECT to any patient.

1. Is the Consent / Section Papers / SOAD opinion etc correct and up to date?

See Appendix 1. The first blue prescription sheet is the best guide for new patients but check all the individual forms for yourself including section papers, paying particular attention to dates. Beware of the number of treatments permitted by the SOAD – this number cannot be exceeded under any circumstance. Up to 2 ECT administrations maybe allowed on a single Section 62 Form. Proceed to the next step only if you are satisfied that all the papers are correct and in order.

2. What laterality has been prescribed?

Has the patient agreed to this type of electrode placement –check pink Consent Form. See Appendix 4 for electrode placements for each laterality. A change in laterality during a course of treatment, would require an adjustment of ECT dosage (consult an ECT Lead if you are unsure how to proceed).

3. What is the dose for ECT?

This may be prescribed by the prescriber. If not, the ECT administering doctor may need to set the dose according to our protocol. Remember, there are two separate processes that need to be followed:

A) **Establishing Threshold.** This needs to be determined for all patients starting ECT unless the prescriber has decided on the starting dose and don't want to establish the threshold. The process for determining threshold depends on whether Unilateral ECT (see Appendix 4) or Bilateral ECT (see Appendix 3) is being used. ***Up to 2 re-stimulations maybe used to determine threshold in one session.***

B) **Treating dose of ECT.** Once the threshold is established, the treating dose has to be calculated (1 ½ times threshold in case of Bilateral ECT, 6 times the threshold for Unilateral ECT). This is the Treating dose. If, following a treatment dose, no EEG or physical fit is observed, re-stimulate at 1 ½ times the dose just used. If there still isn't a seizure increase the dose by 1 ½ times again and re-stimulate. ***Only two re-stimulations to be done in one session.*** If there is an inadequate EEG seizure and the observed fit is less than 15 seconds, consider re-stimulation at 1 ½ times the dose used initially, especially if the response has been poor. ***For inadequate seizures, only one re-stimulation to be done per session.*** For patients who have shorter/inadequate seizures later in the treatment course but are continuing to have satisfactory clinical improvement, re-stimulation is not necessary. Instead consider increasing the dose by up to 1 ½ times the next time they present. If the fit had been more than 15 seconds but less than 25 seconds consider increasing the dose by up to 1 ½ times the dose used, depending on response, confusion, laterality, etc. the next time patient presents for ECT.

The prescriber or ECT lead consultant may increase the dose even if the seizure duration is more than 25 seconds if there is a poor response and after considering the re-orientation times etc. (see protocol)

These prompts are not a substitute for reading the ECT policy

The ECT Policy is available on the LPT website: LPT Home Page/ Key Documents /

Click "find a publication" to search for the policy (Electro Convulsive Therapy).

It is mandatory to read the policy before administering ECT.

Appendix 8

Trainee Refresher Session on ECT

Trainees are expected to maintain their competencies in administering ECT. They will have the opportunity to take part in the ECT rota throughout their training period.

Prior to undertaking further slots on the ECT rota, trainees may wish to have a refresher session on ECT. They may request this from the Lead Consultant.

Module	Date	Signature of Trainer	Signature of Trainee
1st refresher training session			
2nd refresher training session			

Appendix 9

Changing Thymatron Settings and Placement Changing Thymatron Settings

For x 2 dose:

Select programmes on main display.

Press Flexidial (shows low 0.5)

Turn Flexidial to show 2x dose.

Press Flexidial (now 2x dose)

Display now returns to programmes.

For 0.5 dose:

Select programmes

Press Flexidial (shows 2x dose)

Turn Flexidial to show 0.5 dose

Press Flexidial (now 0.5 dose)

Display now returns to programmes

Change from 4 channels to 2 channels:

Main display turns Flexidial until you get to Channel 3

Press Flexidial

Turn Flexidial until you locate G3 – OFF Press flexidial.

Then press P3 – AUTO

Turn Flexidial to get channel 4

Turn to locate G4 – OFF press flexidial.

Then press P4 – AUTO

Display then returns to channel 4 (change complete)

Press start/stop button and printout given to show:
Channel 3 off / P3 Auto
Channel 4 off / p4 Auto

Correct Positioning of Thymatron ECT Machine

The Thymatron machine is to be positioned at a height that allows the treating Doctor to clearly see the front of the machine regardless of the individual's height.

The treating Doctor should be able to see and adjust the settings on the Thymatron without compromising patient safety by not having a clear view of the dosage set. This should also be readable to the ECT Nurse in treatment (in order to verbally confirm dosage and laterality) and any other Psychiatric medic present at that time.

Therefore, the Thymatron should be on a suitable trolley which offers both correct visual confirmation of dosage and the settings and is accessible.

The back-up machine is located within the same trolley and if required should be positioned exactly the same as the current machine.

Clinic Process Pathway

Clinical Handover

There will be a clinical handover of all patients expected for treatment that day. The handover will commence at 9am and take place within the treatment room using the patient's information board.

The individual responsible for this handover will be the reception nurse for that day. It is expected that each member of the ECT team will be present.

The content of the handover should include the person's identity, what treatment number they are on, whether they have capacity or not (including confirmation of relevant MHA paperwork) and whether there are any clinical / managerial risks with this person. The handover will also, if required include any issues previously encountered with their ECT and whether they are on any level of observation.

There should be information of any physical change in the person's presentation and whether on previous treatments any additional intervention was given i.e.: anti–sickness medication etc.

The patient's treatment laterality will be recorded on the patient information board.

De-brief

Following the completion of the treatment session core ECT team members meet for a de-brief which will include any issues for that person encountered on that day commencing reception, treatment and recovery.

If there is information that requires feeding back prior to the next ECT session for that person then this forms part of the clinical handover when the person is next due.



Appendix 10

Due Regard Screening Template

Section 1	
Name of activity/proposal	ECT (Electro - convulsive therapy)
Date screening commenced	16-10-24(updated)
Directorate/Service carrying out the assessment	Adult Inpatient Services
Name and role of person undertaking this Due Regard (Equality Analysis)	Andy Thompson, Morolayo Okubanjo, Madanha Mwaramba
Give an overview of the aims, objectives and purpose of the proposal:	
AIMS: To ensure the service has Due Regard for all its users.	
OBJECTIVES: 1. The service will have valid and up to date Due Regard assessment 2. Any areas of concern are highlighted and minimised	
PURPOSE: **To safely treat any patient who requires this service and seek to overcome any due regard barriers that may exist.**	

Section 2		
Protected Characteristic	**Could the proposal have a positive impact? Yes or No (give details)**	**Could the proposal have a negative impact? Yes or No (give details)**
Age	All service users will be treated with dignity and respect irrespective of their protected characteristics.	No
Disability		Reasonable adjustments will be made to ensure no service user is disadvantaged including those service users with learning disabilities
Gender reassignment		No
Marriage and Civil Partnership		No
Pregnancy & Maternity		No
Race		Information needs to be made available in alternative language on request for example a qualified interpreter will be made available to ensure all information is provided in the most effective manner
Religion & Belief		No
Sex		No
Sexual Orientation		No
Other equality groups		No

Section 3

Does this activity propose major changes in terms of scale or significance for LPT? For example, is there a clear indication that, although the proposal is minor it is likely to have a major affect for people from an equality group(s)?
Please tick appropriate box below.

Yes		No	
High risk: Complete a full EIA starting.		Low risk: Go to Section 4	✓

Section 4

It this proposal is low risk please give evidence or justification for how you reached this decision:

The policy has identified all associated risks with appropriate remedies and actions such as access to interpretation and translation services. Appliance of the trusts equality diversity and human rights policy and associated policies will ensure any future risks will be dealt with effectively to reduce the likelihood of any negative or adverse impact to service users based on any relevant protected characteristics**.**

Signed by reviewer/assessor	Andy Thompson, Morolayo Okubanjo, Madanha Mwaramba	**Date**	16-10-24
Sign off that this proposal is low risk and does not require a full Equality Analysis			
Head of Service Signed	Dr G Kunjithapatham ECT Lead Consultant	**Date**	16-10-24

Appendix 11

LPT ECT and Related Treatments steering group. Terms of Reference			
			References to "the group" will mean the Trust ECT and Related Treatments steering Group
1.	**Purpose of Group**	1.1	To oversee the provision of ECT within LPT.
		1.2	To ensure that the service maintains its ECTAS accreditation (3 yearly cycle) by reviewing the current ECTAS standards in relation to ECT within LPT.
		1.3	To provide appropriate training and support to junior medical staff.
		1.4	To review and develop the service in light of any clinical developments and ensure any developments are included within the ECT policy.
		1.5	To Monitor any incidents within ECT and develop robust approaches to minimising recurrent events.
		1.6	To Review the ECT policy as required and to ensure that any amendments are consulted on and ratified by the ECTSG.
		1.7	To ensure there is patient representative within the ECTSG
2.	**Training**	2.1	To facilitate the training of junior medical staff allocated to the ECT rota. Clinical staff to participate in Clinical Governance forums every 2 years. All clinical staff to participate in regular ECT training updates run by the Royal College of Psychiatrists.
3.	**Clinical Audit**	3.1	Any clinical audit to be sanctioned by the ECT steering group (ECGSG)

			Any current audit will be monitored by the ECTSG. Members of the ECTSG are encouraged to develop and participate in clinical audit.
4.	**Operational Focus and Engagement**	4.1 4.2	To lead on ECT Clinical Service for LPT. To review and amend if necessary, the ECT Clinical Policy every 3 years
5.	**Authority**	5.1	Royal College of Psychiatrists ECTAS accreditation service
6.	**Membership**	6.1	The membership of the group will reflect senior managerial and clinical representation: Consultant Psychiatrist leads. Consultant Anaesthetist Lead Lead Nurse and or Deputies for ECT. Clinical Audit representation ART team manager Patient representative Team administrator (minutes)
7.	**Admin Support**	7.1	Team Administrator
8.	**Quorum**	8.1	5 members including the chair to be present. In the absence of the Chairperson, meeting to go ahead with Group to appoint a chairperson.
9.	**Frequency of Meetings**	9.1	The group will meet at least every two months.
11.	**Notice of Meetings**	11.1	Dates of the meeting will be agreed and the agenda with associated papers circulated in advance. Members will be requested to confirm their attendance or send apologies.
12.	**Minutes of meetings**	12.1	To include action points, responsible person, and time scale for action to be completed.

		12.2	Minutes will be circulated to all members of the group.: Quarterly overview report to be submitted to The Clinical Effectiveness
13.	**Duties**	13.1	To ensure that all ECT treatments comply with policy and procedures as agreed by the group.
14.	**Reporting Responsibilities**	14.1	Outcomes from the group will report to: Clinical Effectiveness Group (CEG)
15.	**Group Review**	15.1	The group will be reviewed annually and include review of TOR, membership, achievements, and future goals and will be summarised.
16.	**Risk Responsibility**	16.1	The group will identify and report to Clinical Effectiveness Group any issues relating to the delivery of ECT which present a risk to Trust services.
17.	**Chairperson**	17.1	All clinicians to chair the group for duration of 6 months at a time.

Appendix 12

DATA PRIVACY IMPACT ASSESSMENT SCREENING

Data Privacy impact assessment (DPIAs) are a tool which can help organisations identify the most effective way to comply with their data protection obligations and meet Individual's expectations of privacy.
The following screening questions will help the Trust determine if there are any privacy issues associated with the implementation of the Policy. Answering 'yes' to any of these questions is an indication that a DPIA may be a useful exercise. An explanation for the answers will assist with the determination as to whether a full DPIA is required which will require senior management support, at this stage the Head of Data Privacy must be involved.

Name of Document:	**Policy and Procedure for Administration of ECT**	
Completed by:	**Andy Thompson, Morolayo Okubanjo, Madanha Mwaramba**	
Job title	**ART Managers**	**Date: 16/10/24**

Screening Questions	**Yes / No**	**Explanatory Note**
1. Will the process described in the document involve the collection of new information about individuals? This is information in excess of what is required to carry out the process described within the document.	No	
2. Will the process described in the document compel individuals to provide information about them? This is information in excess of what is required to carry out the process described within the document.	No	
3. Will information about individuals be disclosed to organisations or people who have not previously had routine access to the information as part of the process described in this document?	No	
4. Are you using information about individuals for a purpose it is not currently used for, or in a way it is not currently used?	No	
5. Does the process outlined in this document involve the use of new technology which might be perceived as being privacy intrusive? For example, the use of biometrics.	No	
6. Will the process outlined in this document result in decisions being made or action taken against individuals in ways which can have a significant impact on them?	No	
7. As part of the process outlined in this document, is the information about individuals of a kind particularly likely to raise privacy concerns or expectations? For examples, health records, criminal records or other information that people would consider to be particularly private.	No	
8. Will the process require you to contact individuals in ways which they may find intrusive?	No	

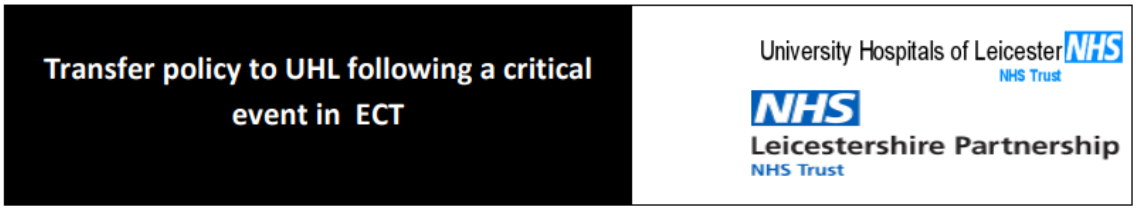
If the answer to any of these questions is 'Yes' please contact the Data Privacy Team via Lpt-dataprivacy@leicspart.secure.nhs.uk
In this case, ratification of a procedural document will not take place until review by the Head of Data Privacy.

Data Privacy approval name:	
Date of approval	

Acknowledgement: This is based on the work of Princess Alexandra Hospital NHS Trust

Appendix 13

Transfer Policy to UHL following a critical event in ECT



1. Introduction

Electroconvulsive Therapy (ECT) is a specialised form of invasive treatment that involves passing small doses of electricity through the brain for treatment of severe mental illness mainly depression. This results in therapeutic generalised tonic-clonic convulsions for about 20-60 seconds.

Currently this treatment is provided at the LPT Bradgate Mental Health unit at the ECT suite which is co-located at the Glenfield Hospital site. The ECT treatment is administered under general anaesthesia which is supported by a UHL anaesthetist and the recovery team. The ECT suite has access to the latest ECT equipment and emergency trolley. However, there is no emergency back up in case complications during anaesthesia or ECT.

In majority of patients ECT is uneventful. Patients are discharged either back into the community as day care or to inpatients wards at Bradgate Unit.

Occasionally patient during ECT can develop side effects such as persistent low oxygen saturation, cardiac arrhythmias, respiratory complications (aspiration) that need further interventions from an inpatient care in in UHL.

Neither ECT suite nor Bradgate Unit have the facilities or expertise to provide ongoing care in such situations.

2. Scope

This policy covers the transfer of patients from LPT ECT suite at the Bradgate Unit to UHL receiving facilities. It covers the following clinical staff.

- Referrers - anaesthetists providing general anaesthesia for ECT at LPT'
- UHL receiving unit staff at the Emergency Department, CDU, CCU, LGH ITU, GGH ITU and LRI ITU.

3. Recommendations, Standards and Procedural Statements

In line with the ECTAS (ECT Accreditation Service) standards, patients not receiving ECT treatment in an acute site should have adequate procedures in place to manage in the event of ECT/Anaesthesia induced complications although rare. The Cardiac arrest Team from Glenfield Hospital is available for immediate help in such situations. This means transferring the care of this group of patients to UHL. There is therefore a need for an agreed pathway between the ECT anaesthetic cover team and the UHL clinical teams.

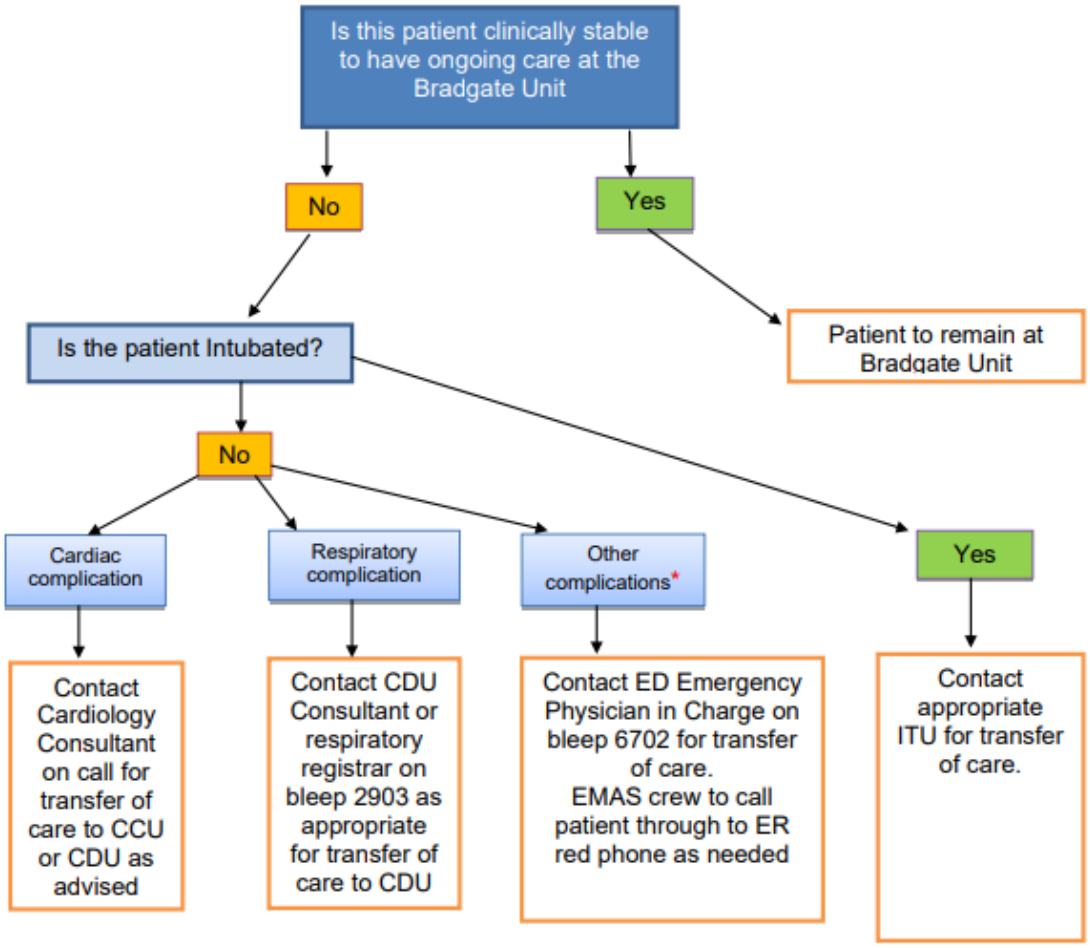
In the event of an adverse incident during ECT in the Bradgate ECT suite, the Consultant Anaesthetist involved with the care of the patient will contact CDU/CCU at Glenfield Hospital for cardiorespiratory issue or Emergency Department at Leicester Royal Infirmary for other issues where ongoing clinical care is deemed necessary and where it is considered unsafe to leave the patient on a mental health ward.

The Governance Arrangements will fall under the respective Clinical Governance teams at UHL and LPT.

There is agreement with East Midlands Ambulance Service to provide and transfer vehicle and crew on the basis of this situation being a category 1, 999 ambulance call.

The flow chart on page 2 provides the outline of transfer pathway. It is a joint decision between the

ECT Anaesthetist and the respective UHL clinician to identify the appropriate unit where the patient needs to be transferred and/or admitted.



*This includes conditions such as:

- Status epilepticus
- Severe Rhabdomyolysis
- Malignant hyperthermia
- Musculoskeletal Injuries

4. Education and Training

No new education or training requirements identified.

5. Monitoring and Audit Criteria

All untoward incidents during transfer will be audited by the Governance Arrangements within respective CMGs. ESM for ED, RRCV for CCU/CDU and ITAPS for Anaesthetics.

LPT will have its own clinical governance structure for ECTs conducted on its premises.

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 Key References

Not Applicable

8. Key Words

ECT, ECT suite, Transfer,

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

DEVELOPMENT AND APPROVAL RECORD FOR THIS DOCUMENT			
Author /Lead Officers:	G Kunjithapatham(LPT), P Gauthama (UHL Anaesthetics), A Kelkar (UHL Anaesthetics), V Pillai (UHL ED)		
Reviewed by:			
Approved by:	**Policy and Guideline Committee**		**Date Approved: 28.11.23**

REVIEW RECORD			
Date	**Issue Number**	**Reviewed By**	**Description of Changes (if Any)**

DISTRIBUTION RECORD:			
Date	**Name**	**Dept**	**Received**