## Electroconvulsive Therapy (ECT) for Inpatients and Outpatients

**Reference Number:**
NHSCT/12/595

**Target audience:**
This policy is directed to all staff within the Mental Health Directorate.

**Sources of advice in relation to this document:**
Trevor Fleming, Head of Mental Health (Acute & Hospital Services)
Oscar Donnelly, Director of Mental Health Services
Dr Gerard Lynch, Clinical Director

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**Approved by:**
Oscar Donnelly, Director of Mental Health Services
Dr G Lynch, Clinical Director

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20 August 2012

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**NHSCT Mission Statement**
To provide for all the quality of services we would expect for our families and ourselves
Mental Health and Disability Services

Operational Policy

Electroconvulsive Therapy (ECT)
For Inpatients and Outpatients

March 2012
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Electroconvulsive Therapy for Inpatients and Outpatients

1.0 Background

Electroconvulsive Therapy (ECT) has been used since the 1930’s for the treatment of severe depressive illness. The commencement of dual channel monitoring combined with stimulus dose titration ensures the safest and most effective delivery of ECT. Our ECT practice has developed over the years and will continue to be reviewed to ensure best practice. As of 5th October 2011 Holywell clinic has received accreditation with excellence from RCPsych ECTAS (ECT Accreditation Service).

1.1 Policy Aims

This policy and accompanying procedures, guidelines and protocols aim to clearly identify the action to be taken in all instances of a patient requiring Electroconvulsive Therapy (ECT). This includes:

- Guidelines for patient preparation at ward level
- Protocol for Electroconvulsant Therapy using The Spectrum 5000M
- Protocol for the Management of Problematic Treatments
- Protocol for ECT in the Elderly
- Protocol for ECT in people with learning disability
- Protocol for ECT in young people
- Protocol for maintenance/continuation ECT
- Protocol for discontinuation of ECT
- Guidelines for prescribing outpatient ECT
- Guidelines for ECT session management
- Guidelines for Medical Staff Administrating ECT
- Guidelines for Nursing Staff for ECT
- Protocol for ECT in Antrim Area Hospital

This policy is to be read in conjunction with the following guidelines and policies:-

- Operational Guidelines for Consent in Mental Health Care.
- Infection Control Policy
- COSHH Guidelines
• Policy for Untoward Events

1.2 Policy

• All patients will follow an integrated care pathway

• All patients will have dual channel EEG monitoring during each ECT treatment

• All non emergency ECT patients will follow the dose titration protocol

• Written and verbal information will be given to each patient prior to the commencement of treatment with ECT

• All medical and nursing staff will receive training and be suitably qualified/experienced to their designated role

• The ECT nurse and backup team will be trained to Basic Life Support (BLS) plus intermediate Life Support (ILS) or Advanced Life Support (ALS)

• All medical/nursing staff will be trained to BLS

• Staff will have a knowledge of the legal status and consent of each patient prior to treatment

• All staff will follow the accompanying procedural guidelines and protocols for the delivery of ECT for Inpatients and Outpatients

• All patients will wear an identity bracelet during ECT treatment

• Outcome audit will be kept on all patients receiving ECT

• Equipment will be checked daily and records maintained

• The policy refers to both voluntary and detained patients

• This policy applies to the inpatient wards of Holywell Hospital and Ross Thompson Unit, Coleraine

• Training/Education sessions for staff will be provided/coordinated by the ECT manager

1.3 Target Audience
This policy is directed to all staff within the Mental Health Directorate.

1.4 **Equality, Human Rights and DDA**

The policy is purely clinical/technical in nature and will have no bearing in terms of its likely impact on equality of opportunity or good relations for people within the equality and good relations categories.

1.5 **Policy Team**

Dr H Malone, ECT Specialty Doctor  
Sr S McLean, ECT Manager  
Dr A Collins, Consultant Psychiatrist  
S/N Joan Fox, ECT Back up Nurse  
Dr K Scott, Consultant Anaesthetist  
Dr L Campbell, Senior Registrar

1.6 **Consultation**

Hospital Management Team  
Consultant Psychiatrists  
Dr T Leeman, Causeway Trust  
Mrs D Martin, Nursing Services Manager

1.7 **References**

Mental Health (Northern Ireland) Order 1986.  
ECT Handbook 2nd edition  
Royal College of Psychiatrists 2005  
ECTAS Standards 9th edition (Dec 2011)  
NICE Guidance on the use of ECT (update 2010)

1.8 **Policy Agreed**

Policy accepted and agreed by

Signature of Director Mental Health and Disability: Mr Oscar Donnelly  
Date: 20th August 2012
2.0 Northern Health and Social Care Trust Guidelines for Patient Preparation at Ward Level

2.1 Patient Information

The patient will be provided with an ECT information leaflet (based on the fact-sheet in the RCPsych guidelines), and staff will respond promptly to any further enquiry from the patient and when, appropriate, relatives. Outpatients will be supplied with appropriate information leaflets.

2.2 Consent

The following notes relate to the consent procedure in ECT using DHSSPS consent form 1. As the doctor obtaining consent it is your responsibility to:

- Explain what Electroconvulsive Therapy is, the reason for its use at this time, the desired benefits and any common or potentially serious problems that may arise.

<table>
<thead>
<tr>
<th>Side Effect</th>
<th>Rate</th>
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<tr>
<td>Muscle pain</td>
<td>8%</td>
</tr>
<tr>
<td>Headache</td>
<td>33%</td>
</tr>
<tr>
<td>Memory problems</td>
<td>20%</td>
</tr>
<tr>
<td>Confusion or dizziness</td>
<td>5%</td>
</tr>
<tr>
<td>Nausea or vomiting</td>
<td>1-2%</td>
</tr>
<tr>
<td>Death</td>
<td>1/10,000 over a 5yr period</td>
</tr>
</tbody>
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- Explain how the procedure is carried out, including the need for general anaesthesia.
- Explain the need for a course of treatments (of specified duration eg. up to maximum of 12 treatments) if necessary.
- Ascertain any particular medical problems which may pertain to the patient and discuss how these may affect the treatment or lead to complications.
- Allow the patient to ask questions and clarify any queries they may have.
- Record any instructions that may reasonably pertain to the treatment that the patient gives.
- Ensure that the patient has the capacity to consent to the procedure in that:
  - The patient understands the information given.
  - The patient can remember and retain that information.
  - The patient can weigh up the information given and come to a decision.
Capacity assessment form must be completed prior to each treatment.

You are reminded that:

- You should read the patient’s medical notes before starting the consent process and take into account any relevant information therein.

- Form 1 (see appendix 1) is a record that the consent process has taken place but not legal proof of the act of consent.

- The patient may withdraw their consent at any time.

- Patients who refuse treatment or are detained under the Mental Health Order (1986) must be discussed with their Responsible Medical Officer.

- You should make full use of any information for patients pertaining to the treatment that has been provided by your hospital.

- Consent should be recorded separately in the patient’s medical notes and a copy of form 1 also placed therein.

- Any problems with the consent process must be discussed with the patient’s responsible medical officer.

### 2.3 ECT and NICE Guidelines

The referring psychiatrist must state that the referral for ECT is within NICE guidelines or indicated the reason for any exception.

Before ECT is prescribed outside of NICE guidelines, the referring psychiatrist must discuss the case with the ECT consultant.

The patient must be informed if they have been prescribed ECT outside of NICE guidelines.

All decisions and information discussed should then be clearly documented in the patient’s notes/ICP.

### 2.4 Clinical Global Impression

Clinical Global Impression (CGI) is a brief clinical impression of the patients overall clinical state prior to, during and after initiating treatment. CGI form must be completed before each treatment and after the course has been completed.
2.5 Physical Investigations

1. Perform a full physical examination within 3 days of the first treatment session. Include a dental examination and obtain a dental opinion if necessary. A baseline cognitive assessment should be performed.

2. Check investigations:

- Urea and Electrolytes (U&E) within 3 days
- Full Blood Picture (FBP) within 3 months
- Thyroid Function Test (TFT) within 3 months
- Electrocardiogram (ECG) within 1 week
- Sickled cell Test for all Afro-Caribbean, Middle Eastern, Asian and Eastern Mediterranean patients
- HepB Status for patients known to abuse intravenous drugs
- Liver Function Test (LFT) for patients with cachexia, history of alcoholism, drug abuse or recent overdose
- Chest X Ray (CXR) for patients with suspected chest infection, cardiomegaly, cardiac failure, pulmonary embolism or recent falls.

Inform Anaesthetist

- The anaesthetist will be made aware, in advance, of any relevant past or present physical problems.

Medication

- Review medications prior to commencing ECT course
- Omit night time sedation
- If overweight or history of gastroesophageal reflux – commence Ranitidine 150mg bd if not already prescribed a similar preparation.
- All medications should be given as usual at 8.00am with a sip of water on the morning prior to ECT except hypnotics and anticonvulsant medication.
- Instructions should be made on the medicine kardex for the nursing staff to inform them which medicines should be given or omitted prior to ECT.
- If you are unsure ask the anaesthetist.
ECT Care Pathway and List

- All relevant sections of the ECT Care Pathway to be completed before treatment. Book a place on the ECT list for the appropriate date.

Electrode Placement

Bilateral placement is preferable when:

- The rate of clinical improvement and completeness of response have priority.
- An earlier episode of illness has not been treated adequately by unilateral ECT.
- Determination of cerebral dominance is difficult.
- Treating mania

Unilateral placement is preferable when:

- Minimising the cognitive adverse effects has priority
- The rate of clinical improvement is not critical
- There is a history of recovery with unilateral ECT

Stimulus Dose Titration

- The aim of stimulus dosing is to determine the seizure threshold and to then give the treatment dose appropriate to the electrode placement.
- The determination of threshold is done at the first session and should be achievable using no more than three stimulations. The ideal seizure is 20-70 seconds.
- If there is a missed /absent seizure (5 seconds or less) after the third stimulation, go to level 4 at the next treatment for age <65y and to level 5 if aged 65 or over.
- If switching from bilateral to unilateral, go to the next level on the unilateral table.
Emergency ECT

It should be discussed with the patient’s consultant if an emergency protocol should be followed. Bilateral treatment should be given. Follow the emergency ECT protocol (appendix 3).

3.0 Northern Health and Social Care Trust Protocol for Electroconvulsive Therapy using The Spectrum 50000M

3.1 Treatment

• Turn on the master switch at least 5 minutes prior to treatment to allow the Capacitors to charge fully.

• Establish if this is new treatment course. If yes select the appropriate stimulus level (see appendix 2). If no, continue the dose given the previous time unless a dose is stated on the ECT form.

• Adjust treatment dial to the prescribed dose.

• Prepare the electrode sites with alcohol wipes.

• Attach EEG electrodes. Pad 1 is placed 1cm above mid-point of eyebrow and pad 2 on ipsilateral mastoid. Grey pads on the right and brown pads on the left.

• Perform EEG test strip.

• The anaesthetist delivers the induction agent and muscle relaxant.

• The anaesthetist pre-oxygenates the patient and inserts disposable mouth guard.

• Cover electrodes with gel and place them according to the RCPsych guidelines. For unilateral ECT use the d’Elia position on the non-dominant side (determined by the consultant team). Press with firm, consistent pressure, with a slight oscillating rotation.

• The nurse states “impedance within range” and the dose to be delivered.

• Doctor states “treating” and presses the stimulus button on the handset. The button must be held down for the duration of the three beeps and the following tone, otherwise the treatment will be aborted.
• Observe for a seizure. A technically adequate treatment should produce a generalised tonic clonic seizure. Time the peripheral seizure activity from the end of the last tone until the end of obvious motor activity. Read the EEG print out to determine the end of cerebral activity.

• To stop the EEG print out press the “Done” button on the monitor. This will enable the treatment parameters to be printed out automatically. Record peripheral and EEG seizure length and dose delivered.

• Any problems encountered during the treatment must be recorded in the communication section of the care pathway.

3.2 Post-Treatment

Immediate Duties

• The psychiatrist giving ECT and the anaesthetist must remain in the ECT suite until all patients regain consciousness and no other significant problems remain which might require attention. The referring clinical team should be informed of any significant problems which should be documented in the patient’s health record.

Review of patients during ECT course

• Cognitive assessment should be performed after each treatment (10 question orientation score completed 90 mins after treatment).

• MMSE should be completed weekly by the referring team.

• Complete CGI form after each treatment

• Enquire about side effects of ECT.

• Assess medical fitness for further General Anaesthetic + ECT. Repeat physical examination, U&E, ECG etc. as appropriate.

• Problems should be addressed at the referring team’s meeting and also reported to the ECT clinic staff. In addition notes should be made in the patient’s health record.

• Follow any instructions left by the anaesthetist.
4.0 Northern Health and Social Care Trust Protocol for the Management of Problematic Treatments

4.1 Self test failure

If the equipment self test fails because:

- The impedance is too low, this suggests a short circuit. Make sure that the inter-electrode scalp area is dry and free from excess conduction gel or hair preparations. Another possibility is electrode failure.

- The impedance is too high, scalp-electrode contact is poor, so apply more gel to the electrodes, prepare the scalp with more scrub, and apply the electrodes with greater pressure.

4.2 Failed Seizures

- A failed seizure is when there is no evidence of a generalised tonic clonic seizure or a seizure lasting less than 5 secs. Ask the anaesthetist to continue ventilation with oxygen and, if necessary, to augment anaesthesia. Increase the dose by 25% and re-stimulate. If the response to re-stimulation is inadequate, do not re-stimulate again at this session. Report the incident to the patient’s consultant.

- If from review of the patient the problem seems to be due to remediable factors (eg drugs, electrode placement etc.) modify these before the next treatment and make no adjustment to the original stimulus level selected at the previous treatment. If remedial factors do not appear to be the cause go to the next level on the dosing schedule. If this does not produce a seizure, re-stimulate at this session repeating the above procedure.

- For missed or absent seizures there must be a minimum of 20 seconds interval before re-stimulation which is addressed by the machine recalibrating after a stimulus is delivered.

- If the seizure shortens during the treatment course by more than 25% or to below 10 seconds, increase the current by 25%.

- If the patient fails to improve after 2-3 treatments increase the current by 25%. Consider changing the pulse width.

- The dose should not be increased over 3 times the seizure threshold for short seizures with bilateral treatment. For unilateral treatment, 8
times the seizure threshold should not be exceeded. Consider other strategies such as changing the anaesthetic agent.

4.3 Prolonged Seizures

- For long seizures, 70-120 seconds, reduce the dose by 50mC.
- For seizures longer than 120 secs terminate with an initial dose of 4mg of lorazepam IV. Report the incident to the patient’s clinical team for a full review of further treatment. If treatment is to continue reduce the charge at next treatment by at least 25%.

4.4 Marked Cognitive Impairment

- Report the incident to the patient’s clinical team for a full review of further treatment. If the treatment is to continue reduce the charge at the next treatment by at least 25%. Consider unilateral ECT. Review the patient’s capacity to consent.

4.5 Untoward Events

- Follow appropriate guidelines for initial management.
- Arrange transfer of patient to the appropriate unit at Antrim Area Hospital.
- Inform sector team and ward of origin.
- Complete incident form.
- Arrange meeting for critical incident analysis and debriefing.

5.0 Guidelines for ECT Session Management

Aim – Ensure patient safety and provide adequate staffing level to facilitate safety

There will be a maximum of eight patients per session.

If a referral is made while the ECT list is at capacity, a waiting list will be created. Referrals will then be placed in chronological order on this list.
5.1 Waiting list management

In the event of an urgent referral, priority will be based on clinical need. This will be discussed with the referring team, however the final decision re prioritising patients on the waiting list will be made by the ECT team. It is the responsibility of the referring team to put in place an alternative management plan whilst awaiting ECT. Reference may be made to NICE guidelines on the use of electroconvulsive therapy.

If a patient requires ECT urgently whilst the ECT list is at capacity, the following are alternative options to consider:

1. Treating nine patients – to be discussed with anaesthetist and evaluation of risks/benefits of breaching capacity required.
2. Use of RTU ECT Dept
3. Discontinue or omit another patients treatment. This will be discussed with the referring team.
4. Treat at AAH on emergency theatre list
5. Treatment on Monday and Thursday
6. Consideration may be given to ECR referral to another Trust for treatment.

6.0 Northern Health and Social Care Trust Protocol for ECT in the Elderly

- Age is not a contraindication for ECT
- All coexisting medical or surgical conditions should be stabilised prior to ECT.
- Treatment will take into account the increased likelihood of high seizure thresholds among elderly people
- Older people are at increased risk of cognitive impairment associated with ECT. Unilateral ECT should be the treatment of choice for those with pre-existing cognitive impairment.
- Assess cognitive function at least 24 hours after the administration of ECT.

7.0 Northern Health and Social Care Trust Protocol for ECT in people with learning disability

ECT should be used only in carefully selected patients with learning disability, usually when –

- Psychiatric illness has proved refractory to medical treatment
- There are intolerable adverse effects of medication
- The patient’s clinical condition has severely deteriorated
There are no absolute contraindications to the use of ECT in patients with a learning disability.

**8.0 Northern Health and Social Care Trust Protocol for the ECT in Young People**

- For those under 16 two independent opinions should be available from child and adolescent psychiatrists
- For 16-17 year olds, one opinion from a child and adolescent psychiatrist is required
- All non essential medications should be stopped during ECT because of reports of long seizures and post ECT convulsions
- Stimulus dosing should take into account the lower seizure threshold in younger people. Initial treatment should be with a dose of 25mC
- Parents and the child should be involved in the consent process. Where it is not possible to obtain informed consent, ECT should be given only when the patient’s life is at risk from suicide or physical debilitation because of depressive illness

**9.0 Northern Health and Social Care Trust Protocol for Maintenance/Continuation ECT**

Continuation ECT is the use of ECT to prevent relapse – maintenance ECT is the use of ECT to prevent further episodes

Continuation ECT should be considered when

- The index episode of illness responded well to ECT
- There is early (0-6 months) post ECT relapse not controlled by medication
- There is later recurrence (6-12 months) not controlled by medication
- There is an inability to tolerate prophylactic medication
- There is repeated relapse because of poor compliance
- The patient requests it

Maintenance ECT should be considered for those whose illness recurs after continuation ECT.

Assessment for continuation ECT

- Review the case to ensure the diagnosis is correct
- ECT has been proven to be of benefit
- Alternative options have been explored
- Obtain the patients informed consent
• Perform a full medical screening and examination, ideally in collaboration with an experienced anaesthetist
• Complete investigations as appropriate e.g. Bloods, ECG, CXR.
• Perform baseline standardised assessment of illness severity
• Obtain a second opinion from a consultant with experience in ECT
• Review concurrent medication
• A treatment plan should be clearly documented in the notes.

ECT Procedure –
• Follow protocol as for acute ECT
• Outpatient treatment can be given once recovery is achieved
• Electrode placement would normally be the same as used during the acute phase
• Stimulus dosing should be used
• Clinical response will indicate efficacy and determine if the dose should be increased
• Once clinical recovery has occurred, reduce the frequency of ECT to the minimum required to maintain clinical response.

Example:

- give as acute ECT until clinical response is achieved
- reduce to weekly
- reduce to every 10 days
- reduce to every 2 weeks
- reduce to every 3 weeks
- reduce to monthly

• In patients who are not commencing continuation ECT immediately after acute ECT it may be possible to start at a lower frequency of every 2 weeks.

• Review efficacy after every 2 sessions.

• Review frequency monthly.

• Once established, review may be possible less often.

• Feedback from carers is essential.

• Deterioration in the mental state that suggests the return of depressive disorder should result in a return to the previous level of frequency until improvement is re-established.
• Once initial recovery has been achieved, a full baseline psychometric assessment should be performed.

• Complete cognitive assessment monthly.

• Review by a senior anaesthetist every 6 months.

• Repeat psychometric assessment every 12 months.

Stopping continuation ECT

• Since relapse is most likely within the first 12 months of recovery, continuation ECT should be given for at least one year after recovery.

• After one year, review the need for long term ECT.

• For continuation ECT it is reasonable to consider terminating the course at this stage.

• Consider maintenance ECT if there is return of symptoms.

• For maintenance ECT the course should be continued indefinitely

10.0 Northern Health and Social Care Trust Protocol for the Discontinuation of ECT

10.1 Overview

The prescribing and discontinuation of ECT are the decision of the patients Consultant/RMO. However, the decision to discontinue ECT may also take place in the context of discussion with the ECT Consultant and/or Anaesthetist in the light of adverse reactions to ECT such as cognitive problems or anaesthetic problems.

Discontinuation may also take place because of poor efficacy or, most importantly, because the patient has withdrawn consent.

The clinical status of a patient should always be assessed between each ECT session and treatment should be stopped when a response has been achieved.

A patient should not receive more treatments than is required to achieve an adequate response, even if more have been prescribed, hence the patient must be reviewed after each treatment during the treatment course.
10.2 Recommendations (from ECT Handbook, 2005)

A set course of treatments should not be prescribed – the need for further treatments should be assessed after each individual treatment.

**Bilateral ECT**

If no clinical improvement at all is seen after six properly-given bilateral treatments, then the course should be abandoned.

It may be worth continuing up to 12 bilateral treatments before abandoning ECT in patients who have shown definite but slight or temporary improvement with early treatments.

**Unilateral ECT**

For patients who do not respond to unilateral ECT, consideration should be given to switching to bilateral treatment. It will be necessary to retitrate seizure threshold in this case.

11.0 Northern Health and Social Care Trust Guidelines for Medical Staff Administering ECT

11.1 Duties of Responsible Medical Officer (RMO)

- Be responsible for prescribing, reviewing and terminating a course of ECT.

- Be responsible for all issues relating to informed consent or the use of legislation.

- Make sure that there is adequate review of the patient’s physical health and the communication of this and other relevant information to the treating anaesthetist.

- Make sure that the patient’s cognitive status is established prior to the first treatment and reviewed weekly thereafter.

- Make sure that all relevant sections of the local ECT record form are completed before the patient is sent for treatment.

- Make sure Capacity Assessment is completed within 24 hours before each treatment.
• Make sure Clinical Global Impression is completed before each treatment and at the end of the ECT course.

• Review patients at 3 and 6 months after ECT course.

11.2 The ECT Department Consultant will:

• In consultation with management, make sure that procedures, equipment and facilities comply with Royal College of Psychiatrist (RCPsych) guidelines.

• Make sure that there is a reliable procedure to communicate information to the referring team about any treatment problems.

• Arrange training for medical staff in the indications and delivery of ECT.

11.3 Training and Supervision

Doctors new to the ECT rota should be assessed and trained even if they’ve had ECT training elsewhere.

Training should include:

• Theoretical basis of ECT treatment
• Familiarity with protocol and clinic layout
• Observation before administering
• Supervision 3 times before administering alone
• Supervision directly or through examination of treatment charts once weekly
• Opportunity to appraise papers on ECT eg through journal club

12.0 Northern Health and Social Care Trust Guidelines for Nursing Staff for ECT

12.1 The ECT Nurse manager/Back Up Team

• The nurse responsible for the running of the ECT clinic should be a designated person who is primarily employed as an ECT nurse or seconded to this role, (it should not be left to a nurse drafted in from a ward who is available on the day of treatment). There should be a fully trained deputy who regularly attends ECT.
• The nurse should have protected time to carry out all the duties required and should not be expected to cover a ward or other responsibilities on the days of treatment.

12.2 Areas of Responsibility

• Spend time with patients and relatives in order to provide support and information.
• Liaising with prescribing teams and ECT team.
• Assisting in treatment sessions.
• Updating of protocols and policies.
• Performing audit and risk assessment.
• Training (staff and personal)

The ECT nurse should have a good working knowledge of the ECT procedure. Complications and possible side effects, both common and rare. He/she will also need to be aware of the required routine investigations and the significance of their results.

• Both written and verbal information on ECT should be given to all patients and specific day-case information should be given to those attending for day-case ECT.

12.3 Before the Treatment Session the ECT nurse should:

• Liaise with wards and prescribing team to ensure all relevant investigations have been carried out before treatment.

• Organise and schedule times for both in-patients and day-case patients to minimise waiting times where possible.

• Provide information and support for patients, relatives and staff.

12.4 During A Treatment Session

During a treatment session the ECT nurse should:

• Carry out and record routine pre ECT nursing checks, or delegate this task to a suitably trained deputy.

• Check patients legal status and consent.

• Ensure that any concerns re patients are passed onto relevant members of the ECT team.
• Provide support and reassurance for patients.
• Ensure the safety throughout the treatment.
• Introduce the ECT team to the patient.
• Carry out any required preparation of patient e.g. EEG Monitoring.
• Assist the psychiatrist with the timing, in accordance with local protocol.
• Observe patient throughout treatment and record observations.
• Assist with placing patient in recovery position.
• Escort the patient through to recovery area.
• Prepare the treatment room for the next patient.
• Discuss the treatment of the next patient with the ECT team.
• The nurse should be fully conversant with the use of the particular ECT machine in the clinic.
• The ECT nurse should not administer the treatment, but check the dose and confirm verbally with the psychiatrist.
• There should be a minimum of two trained nurses in the treatment room.
• The ECT nurse should have knowledge of the actions required in the event of a medical emergency, e.g. Suxamethonium apnoea, malignant hyperpyrexia.
• The ECT nurse should have knowledge of the drugs used for ECT.
• The local protocol for termination of prolonged seizures and have required drugs available.

12.5 After Treatment

• The ECT nurse should ensure that out patients are not discharged until fully recovered. They should be seen by a doctor before hand.
• Out patients must be collected by a responsible adult and advised to follow information advice sheet.

• It is advantageous to visit patients in the afternoon following their treatment. This gives the opportunity to observe side effects and address any concerns or anxieties they may have and helps to rebuild therapeutic relationships.

12.6 Administrative Duties the ECT nurse should:

• Know local and national guidelines and update protocols and policies accordingly.

• Complete ECT records according to local protocol

• Carry out audits of practice and patient care.

12.7 Maintenance/Environment

The ECT nurse should:

• Ensure the ECT clinic is safe for both patients and staff.

• Regular maintenance of equipment and keeps detailed record on this.

• Carry out and keep updated risk assessments.

• Be familiar with the use of all the equipment in the ECT clinic.

• Check expiry dates on all disposable equipment and maintain stock.

• Check expiry dates on all drugs and order as appropriate.

12.8 Staff Training and Personal Development

The ECT nurse should:

• Have a good knowledge of possible drug interactions, side effects and the required treatment.

• Undertake regular training in Basic Life Support (BLS) and Immediate Life Support (ILS) to meet requirements of protocols.

• Provide training and support to escort and ward nurses.
• Have a reasonable level of training and experience of airway management.

• Have knowledge of legal status and consent.

• Organise teaching sessions for students and new staff.
• Attend CPR training day.

12.9 Role of the Escort Nurse

• The escorting nurse should always be a trained nurse.

• Each patient should be individually escorted.

• On arrival to ECT Suite, check the details on, and attach identity bracelet to the patient’s wrist.

12.10 The Escort Nurse Should Have:

• Up to date training in basic life support and be competent in it.

• Good knowledge of the ECT process, the side effects and the action required if they occur.

• Be familiar with the clinic environment and the location of emergency equipment.

• The escorting nurse should know the patients they are escorting, be aware of their legal status, consent and medical complications/history.

• They should carry out pre ECT nursing checks and ensure all relevant documentation is available.

• They should ensure safekeeping of patients valuables.

• He/She should check the patient in recovery in accordance with local protocol.

• The nurse should ensure the patients safety within the recovery room, remain with them, providing support and orientation until their return to the ward or are collected by a responsible adult.
12.11 The Role of Nurse in Charge of Recovery

- There should be one trained nurse with overall responsibility in the recovery room. This should not be the ECT or Escort nurse.

- There should be a minimum of two trained nurses in recovery.

12.12 The Recovery Nurse should:

- Have a good knowledge of the ECT process.

- Be familiar with the ECT clinic and location of emergency equipment.

- Be competent in all aspects of the BLS and ILS.

- Have received training in recovery procedures, e.g. airway management.

- Receive a handover from anaesthetist.

- Provide a safe environment for both staff and patients while in recovery area.

- Alert the anaesthetist to any concerns or adverse events.

- Orientate patients to their situation and environment.

- Complete relevant documentation.

- Ensure that patients are not discharged back to the ward until fully recovered.

- Remind all out patients to follow the information sheet given to them.

13.0 Northern Health and Social Care Trust Protocol for ECT in Antrim Area Hospital

13.1 Duties of Psychiatrist

- ECT in AAH to be performed by a psychiatrist competent in administering ECT.

- SHO of the named patient is to organise ECT in Antrim Area Hospital (AAH).
• Phone theatres to place the patient on the emergency list (for 2.00pm).

• Inform the anaesthetist responsible for the emergency list for that day.

• Contact the bed manager who will book a bed in the Day Procedure Unit (DPU) or alternative bed if none unavailable in DPU.

13.2 Duties of Nursing Staff

• Ensure the patient has a light breakfast at 7.00am

• Organise transport to Antrim Area Hospital (AAH).

• Bring patient’s notes with valid consent and completed care pathway to Antrim Area Hospital (AAH) with the patient. Ensure ECG, blood results and medicine kardex are included.

14.0 Northern Health and Social Care Trust Guidelines for Prescribing Outpatient ECT

Serious consideration should be given prior to prescribing a course of outpatient ECT.

Factors that should influence the decision:

• Past and present medical condition – cardiac and respiratory problems.

• Previous anaesthetic complications.

• Previous complications or side effects with ECT.

• Domestic situation – Do they live alone? Is support at home available for 24 hours post treatment and between treatments?

• Reliability in taking or omitting medication as prescribed.

• Ability to retain information given to them – to fast from 12 Midnight.

• Any history of suicidal ideation. Be aware that suicidal risk may increase in the early stages of treatment as level of depression may remain static but volition may improve.
• Employment situation – Do they intend to carry on working during their course of treatment? Consider what their job is and how they are going to get there the day after treatment, as they are not insured to drive for 24 hours post anaesthetic.

If all these factors have been considered and it is felt appropriate to go ahead with outpatient ECT then the following protocol should be followed.

15.0 Northern Health and Social Care Trust Protocol for Outpatient ECT at Holywell Hospital

• Follow procedure as for inpatient ECT.

• In addition to the patient fact-sheet, an outpatient ECT information leaflet should also be supplied.

• Included with the patient’s notes should be the consent form and completed ECT Care Pathway (including outpatient agreement form).

• Contact the ECT suite to place the patient’s name on the ECT list. The patient’s GP should also be informed.

• The evening prior to treatment the patient should fast from 12 midnight and take only the medication indicated by their consultant.

• The patient should arrive at the ECT suite at 9.30am.

• On arrival at the ward baseline observations should be recorded.

• Following treatment the patient must remain in the unit for a minimum of 90 minutes.

• Prior to discharge the patient must be reviewed by a doctor. The outpatient ECT discharge form must be completed after each session.

• The patient should be collected from the ECT Suite by a responsible adult. The patient must not drive. A responsible adult, who is aware of the procedure which the patient has undergone, should remain with them for 24 hours and sign the Outpatient Agreement Form.

• All patients receiving outpatient ECT should be reviewed before each session.
16.0 Protocol for ECT for Patients under the Care of NHSCT Home Treatment Team

- Patients under the care of Crisis Resolution Home Treatment can have ECT.

- Out Patient ECT for Home Treatment patients is on a Tuesday and a Friday.

- Prior to acceptance for ECT the patient will have treatment discussed by a Consultant with Home Treatment Team.

- They will be provided with written information on ECT (Royal College Factsheet and Outpatient Information Sheet).

- They will have the opportunity to consider ECT and discuss with their family.

- If ECT has been decided on, the patient will then be consented for treatment by the medical officer. This includes both the consent form and the outpatient agreement form.

- ECT care pathway is commenced – please see pages 4 and 5 of the pathway.

- ECT department will be contacted by the medical officer to arrange for the patient to be placed on the ECT list.

- Patients are asked to attend Home Treatment Team’s base at 9.00am on the day of ECT and will be accompanied to the ECT Suite by support workers from the CRHTT.

- CRHTT staff will remain with the patient until they leave the unit accompanied by carers.

- Capacity assessments and CGI scores to be completed as per ECT schedule.

- MMSE to be completed before, in the middle of and at the end of each ECT course.
17.0 Alternative formats

This document can be made available on request on disc, larger font, Braille, audio-cassette and in other minority languages to meet the needs of those who are not fluent in English.

18.0 Sources of Advice in relation to this document

The Policy Author, responsible Assistant Director or Director as detailed on the policy title page should be contacted with regard to any queries on the content of this policy.
Appendix 1

Statement of Healthcare Professional

Responsible healthcare professional………DR AN OTHER ………………… Job
Title…CONSULTANT PSYCHIATRIST
…………………………………………………………………………………………………………………………

Name of proposed procedure or course of treatment (include side of body or site and
brief explanation if medical term not clear)
COURSE OF BILATERAL/UNILATERAL ELECTROCONVULSIVE THERAPY UP TO A
MAXIMUM OF 12 TREATMENTS
…………………………………………………………………………………………………………………………

I have explained the procedure.  In particular I have explained:
PREPARATION FOR ANAESTHESIA AND TREATMENT INCLUDING FASTING,
CHANGES TO MEDICATION AND VENEPUNCTURE ANAESTHESIA TREATMENT,
MONITORING AND
RECOVERY…………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………

The intended benefits IMPROVEMENT OF DEPRESSION
…………………………………………………………………………………………………………………………
…………………………………………………………………………………………………………………………
…………………………………………………………………………………………………………………………

Serious or frequently occurring risks… MEMORY LOSS (POSSIBLY PERMANENT)
POST-TREATMENT CONFUSION, HEADACHE, MUSCLE, ACHES, NAUSEA,
FATIGUE…………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………

Possible additional procedures which may become necessary during the procedure.
Blood transfusion other procedure (please specify)…TREATMENT
OF PROLONGED SEIZURE ……………………………………………………………
…………………………………………………………………………………………………………………………

The procedure will involve general and/or regional anaesthesia/local anaesthesia

I have also discussed what the procedure is likely to involve, the benefits and
risks of any available alternative treatments (including no treatment), any samples
that may be taken any particular concerns of the individual.
The following leaflet/tape has been provided…………………………………………………………………………………………

Signed………………………………
Date………………………………
Name (Print)………………………………………………………………………………………………………………………………
JobTitle……………………………………………………………………………………………………………………………………
.
Contact details (if patient wishes to discuss options later)……………………………………………………………………………………………………
…………………………………………………………………………………………………………………………………………………..
### Appendix 2

**Stimulus Dosing Schedule for Spectrum 5000**

#### Bilateral Placement

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