1.0 OVERVIEW

The purpose of this policy is to facilitate a smooth and safe operational process for ECT that will ensure all patients requiring this treatment will be managed in accordance with acceptable standards. An acceptable standard is defined as one that meets the current guidelines for both anaesthetic and psychiatric practice. The Royal Australian & New Zealand College of Psychiatrists (RANZCP) and the Australian & New Zealand College of Anaesthetists (ANZCA) have each produced recommendations about the practice of ECT, and these guidelines should be read in conjunction with these documents. [1, 2]

2.0 POLICY DEVELOPMENT

This policy has been developed by the SESIH Mental Health Program in consultation with the Mental Health Executive, Medical Personnel, Senior Nurse Managers and Nurse Unit Managers. Policies from pre-amalgamation Illawarra, Prince of Wales, St George and Sutherland Mental Health Services were referred to in the writing of this policy.
3.0 DEFINITIONS

ECT: Electroconvulsive therapy involves the application of a brief electrical pulse to the scalp while the patient is under anaesthesia. This pulse excites the brain cells causing them to fire in unison and produces a seizure. A muscle relaxant is also administered to minimise the motor response of the induced seizure.

ECT Register: An official document that shows columns for date, classification and consent section under the Mental Health Act 1990. The register is open to inspection by the Mental Health Review Tribunal, Official Visitors and others who have authority under Section 196 (4) of the Mental Health Act 1990. The completion of Register documentation is the responsibility of staff of the Operating Theatres and MHS involved in the administration of ECT.

Maintenance ECT: Maintenance or continuation ECT occurs when ECT is given on a continuing basis over an extended period of time. A course of maintenance ECT may involve one treatment per week, fortnight or month over a number of months or years.

Mental Health Act: The Mental Health Act (2007) is a state law governing multiple aspects of legal procedures involved in mental health care and treatment provision.

MHRT: Mental Health Review Tribunal

MHU: Mental Health Unit

4.1 GUIDING PRINCIPLES

4.1.1 Indications for ECT

The principal indication for ECT is Major Depressive Disorder (DSM IV, 1994). Whilst most patients receiving ECT have associated features of melancholia and/or psychosis, it is important to note that all sub-types of major depression tend to respond to ECT.

ECT may be also given for:

- Mania, in particular if standard anti-manic medication is inadequate or inappropriate.

- Schizophrenia or schizoaffective disorder. The combination of ECT and antipsychotic medication may be more beneficial than either treatment alone in patients with acute episodic schizophrenia; its role in medication resistant chronic cases is unclear.

- Other indications, such as catatonia, where all neurological and systemic causes have been adequately assessed and managed, and neuroleptic malignant syndrome.

The RANZCP Clinical Memorandum on ECT states "The principal indications for ECT will always be based on a thorough physical and psychological evaluation of the individual patient, taking into account the illness, degree of suffering of the
patient, the expected therapeutic effect and the prognosis if such treatment is withheld." [1]

4.1.2 Prescription of ECT

- The decision to commence ECT should be made by the Consultant Psychiatrist responsible for the care of the patient, who should state the rationale for ECT in the case notes. It should be determined initially whether the course will commence as a unilateral or bilateral course.

- Bilateral ECT may be given either using the bifrontotemporal electrode placement or the bifrontal electrode placement, provided the prescribing and treating psychiatrists are familiar with the use of these. There is limited evidence regarding the efficacy and side effects of bifrontal ECT to date. However the clinical trials available suggest that the efficacy of bifrontal ECT may be similar to that of bifrontotemporal ECT, and that cognitive side effects may be similar or slightly reduced.

- There is limited data on the efficacy of unilateral ECT given with an ultra-brief (0.3ms) pulse width (e.g. at 6 times seizure threshold) and this approach should only be used in consultation with the psychiatrist chair of the ECT committee for that hospital. Only very preliminary results from research into unilateral ultrabrief pulsewidth ECT are available to date. These suggest that cognitive side effects might be substantially reduced when the ultrabrief pulsewidth is used. However it is unclear whether efficacy may also be reduced. The efficacy of bilateral ECT given with an ultrabrief pulsewidth is at present unclear.

- The ongoing prescription of specific doses of ECT is the responsibility of the treating team, which may be delegated to the registrar.

- If the treating psychiatrist chooses to seek a second opinion or is using ECT other than for a major depressive disorder then the treating psychiatrist should seek the opinion of another experienced psychiatrist, although the final decision rests with the treating psychiatrist.

- Patients must be reviewed after each treatment, and their condition recorded in the main body of their medical file.

- A medical officer should order ECT on the prescription sheet, with no more than one treatment dose being prescribed in advance.

- Usually ECT treatments should be given two to three times per week.

- A process of regular medical review should be instituted with a second consultant psychiatrist reviewing the progress of any patient receiving at least 12 treatments. If the course of ECT is to extend beyond 20 treatments, the decision to continue treatment should again be reviewed in a peer review setting, such as a Case Conference.

4.1.3 ECT Consent
• It is essential to discuss the use of ECT with the patient, and their family or carers, where appropriate. Both written and videotape information (where available) of ECT should be provided. Details of education provided to the patient and their family are to be documented in the medical record. See Appendix 4 for SESIH MH Program ECT Information Sheet.

• It is the responsibility of the MHS clinician to ensure that legal consent is obtained prior to transfer to the operating theatre.

• All voluntary patients should provide written consent on the prescribed form, which must be witnessed by a medical officer.

In the case of voluntary patients where it is uncertain as to the patient’s capacity to give informed consent, application may be made to the MHRT to determine that issue.

• For all involuntary patients, application must be made to the MHRT to determine whether the person is capable of and/or has given informed consent.

• Two medical practitioners, at least one of whom must be a psychiatrist, must document that ECT is a “reasonable and proper treatment … necessary or desirable for the safety or welfare of the patient.” (If MHRT finds that the patient is capable of giving informed consent, then that is the end of the tribunal’s formal role.)

Refer to Appendix 3 for MHRT Guidelines for Electro Convulsive Therapy.

• Maintenance ECT patients are to provide updated consent every six months.

4.1.4 Emergency ECT

Emergency ECT may not be administered without the prior written consent of the MHRT. Where ECT is deemed an urgent clinical necessity, a MHRT hearing within that working day must be requested (see above).

4.1.5 Equipment for ECT

• The ECT machine must be kept in working order, should be electrically and mechanically reviewed at least every 6 months as a minimum by a person competent to detect and remedy faults that may arise. Maintenance records for the ECT machine should remain attached to the machine or on the ECT trolley, and be reviewed by the local ECT Committee. The ‘position/persons’ responsible for ensuring that this occurs is to be in local procedure documents.

• The local ECT Committee is responsible for ensuring that the ECT machine should be kept under constant review and either replaced or updated to provide the best possible treatment in the light of current research evidence.

4.2 GENERIC REQUIREMENTS

4.2.1 ECT will be provided to patients as prescribed by their treating Consultant Psychiatrist / Psychiatric Registrar in a safe, respectful and effective manner.
4.2.2 ECT will be a coordinated treatment procedure jointly managed by the Inpatient Mental Health Units and Operating Theatres of the SESIH.

4.2.3 Anaesthetic consultation is a pre-requisite to the patient commencing a course of ECT. Anaesthetic review is also required whenever there is a significant change in patient medical condition / or when more than three (3) months has elapsed between treatments.

4.2.4 The Mental Health Service is responsible for arranging anaesthetic consultations for ECT Patients.

4.3 GUIDELINES FOR THE MANAGEMENT OF ECT

4.3.1 Pre-treatment evaluation

- All patients must receive standard physical evaluation, including FBC, EUC, and ECG in addition to other investigations as indicated in consultation with the anaesthetist. The results of these investigations, medical and anaesthetic history and medications must be recorded in the patient’s medical record.

- All patients must be administered the Mini Mental State Examination before the commencement of ECT and within 3 days of completion of the course of ECT in order to assess cognition. It should then be repeated again 2 – 4 weeks following the completion of treatment.

A suitable rating scale for assessing symptom severity should be administered before commencing the ECT course and at the completion. It may also be useful to complete this scale during the treatment course to monitor progress. The Montgomery-Asberg Depression Rating Scale (MADRS) is recommended, but other depression rating scales may be used if preferred. The CGI should also be completed at these time-points.

When using ECT for indications other than major depression, another appropriate rating scale specific to the condition should be used (eg Young Mania Rating Scale).

- All patients prescribed ECT should be referred to the Anaesthetic Department for pre-anaesthetic assessment. In general, this should occur two working days before the first treatment wherever possible. The results of all appropriate pathological investigations should be available for the anaesthetist at the time of consultation. Anaesthetic consults should be conducted prior to the day of ECT treatment. They ought not to be carried out in the operating theatre on the day of ECT.

4.3.2 Medications during ECT

Antidepressants

Many patients with depression receive ECT because of the failure of antidepressant medication and clinicians may thus wish to withdraw these medications prior to ECT, with the aim of commencing the patient on a different antidepressant after ECT. There is recent and preliminary evidence that the concurrent use of antidepressants may improve the efficacy of ECT for some patients, though this
issue needs to be clarified by further research. Usually, maintenance post-ECT pharmacotherapy should be commenced towards the end of a course of treatment. Although there are case reports of the safe administration of irreversible monoamine oxidase inhibitors (MAOIs) during ECT, this practice should only occur if there are good clinical reasons for concurrent use of the MAOI, and the anaesthetist should be made aware of the MAOI medication at each ECT treatment session.

Benzodiazepines
Benzodiazepine tranquillisers and hypnotics including the shorter acting compounds, are not recommended during ECT, given their anti-convulsant nature. It would be advisable to withdraw completely, or at least minimise the total dosage of these medications before the course of ECT.

Mood Stabilisers
Both carbamazepine and sodium valproate increase seizure threshold. If they are used for mood stabilisation consider reducing or ceasing these medicines in the early phase of treatment as that will minimise the stimulus doses needed. They may be recommenced at the end of treatment.

In contrast, patients with epilepsy should continue to receive their anti-epileptic medication, though it is advisable and may be possible to temporarily reduce the dose during the course of ECT.

Lithium prolongs the neuromuscular blockade of succinylcholine and has been reported to increase the risk of post-ECT delirium, though there are also reports of the safe co-administration of lithium during ECT. There is not a contraindication to the concomitant administration of lithium during a course of ECT, but it should be noted that some patients on lithium (even at low dose) become very confused with ECT. The general principle is that lithium be suspended during ECT unless there is a good reason for its continuation. For example, some bipolar patients who are well controlled on lithium may run the risk of ECT-induced mania if lithium is discontinued.

4.3.3 Booking & Scheduling of ECT

- For patients in the MHUs requiring ECT treatment, the Consultant Psychiatrist / Psychiatric Registrar will notify the relevant NUM and MHU Administration Assistant of the following details before treatment commences.
  - Name
  - Age
  - Legal status
  - Frequency of treatments

- Each MHU will have an established administrative procedure for booking ECT with the hospital Operating Theatre / Admission Office. In accordance with local theatre protocols, sufficient notice will be given to the Operating Theatre including patient details and date of ECT for compilation of the next ECT Theatre list.

- Changes to the Theatre list:
Each site will have local protocols for managing late additions to the ECT list or cancellations from the list, including appropriate notification of theatres and relevant clinical and administrative staff in mental health.

4.3.3 Nursing Management of ECT Patients in the MHU

Evening Shift prior to ECT, Nursing staff will:

- Ensure that Inpatients are in the ward the evening prior to ECT. Outpatients receiving ECT should present to the unit (or theatres) a minimum of 'x' hours prior to ECT, according to local protocols.
- At the commencement of a course of ECT, ensure the ECT procedure has been explained to the patient by the Medical Officer, written information has been provided to the patient and that this is documented in the patient’s notes.
- Check that the anaesthetic consultation has been completed. If patient is attending initial ECT, ensure that old medical records are on the ward for the anaesthetist and that ECG, chest x-ray and blood tests have been completed.
- Check that an appropriate ECT consent form (either voluntary or via the Mental Health Review Tribunal) is present in the file. Ensure that the voluntary consent form is signed by the patient and the medical officer.
- Ensure that sufficient Patient Labels are available with the patient’s medical record.
- Assess the Care Level of the patient for the requirement for nurse escort throughout the procedure.
- Ensure that patient is aware of fasting period prior to anaesthetic.
- Where possible, ECT patients are to have their hair washed the night prior to ECT with shampoo for normal or oily hair.

Night Staff will:

- The patient must fast for at least 8 hours before each treatment. Therefore the patient will fast from 12 midnight. In the event the patient is to receive ECT during the afternoon, a light breakfast will be provided at 6:00am prior to fasting.
- Place documentation for ECT in the front of the patient’s file including:
  - Consent form
  - ECT Pre-op Checklist Form
  - Observation chart
  - ECT Record Form / ECT prescription
  - Medication Chart
  - Patient Labels
  - Anaesthetic consult
- Ensure that the results of investigations performed are readily accessible in the patient file.
**DAY Staff attending nurse will:**

- Complete patient showers, ensuring the patient is free of make-up, jewellery and nail polish. Place valuables in ward safe, completing appropriate documentation.
- Ensure one armband to wrist, one band to ankle and two allergy bands (if required) are applied on the patient.
- Apply tape around rings that cannot be removed.
- Complete the Pre-Operative Checklist and verify patient identification as per the NSW Health Policy Directive PD2007 - Correct patient, correct procedure, correct site.
- If the patient has dentures: Leave dentures in and place a denture container on the bed.
- Ensure the patient is wearing short sleeved top and loose fitting or short pants (short nighties with short sleeves are acceptable).
- Patients with type 1 & type 2 diabetes mellitus will have their blood sugar level (BSL) monitored and recorded whilst fasting and will have their level taken just prior to treatment. Diabetic medications will be withheld at this time, until after the ECT session has been completed. If difficulties with this process are anticipated, an endocrine consult should be sought.
- Cardiac medications can be given, as charted, with a small sip of water.
- The level of escort and mental health support will be based on the risk assessment and care level policy. The patient will be accompanied to the Operating Theatre as per site protocol.

**Nursing Management on return to the MHU post-ECT:**

- The MHU nurse will accompany the patient on return from Recovery as per site protocol.
- The patient’s vital signs (blood pressure, heart rate, respiratory rate, temperature and oxygen saturations), level of consciousness, orientation, memory loss and mental state will be monitored for 4 hours post-ECT treatment (including hourly for 2 hours and then as required). Observations will be recorded in the medical record. Diabetic patients will be BSL taken & recorded. The Medical Officer will be informed of changes in observations.
- The patient's return time is to be documented in the medical record.
- The patient will be offered food, fluid and medication as appropriate when fully conscious.
- All patients must remain on the ward for a minimum of 4 hours following return from Recovery.
- If the patient is to be discharged or placed on leave following ECT treatment the allocated team nurse will arrange for the patient to have appropriate
physical and mental state examinations prior to leaving the ward. If there are any concerns, a medical officer should be contacted to review the patient.

- The patient should be given an appointment card indicating the date of the next treatment.
- The patient and his/her carer or family member is to be given the ‘Post-ECT Information Sheet’ (see Appendix 5) and instructions / advise regarding post-ECT safety precautions including instruction not to drive a vehicle for 24 hours.

4.3.4 ECT in the Operating Theatre

- ECT is administered in the theatre suites of nominated SESIH Hospitals. SESIH Hospitals provide the Mental Health Service with theatre time and anaesthetic services for ECT according to site service agreements.
- All necessary resuscitation equipment should always be available. The milieu of the ECT facility should seek to settle patients’ apprehension about the procedures, and respect their privacy.
- Should it be necessary to rearrange times or cancel the programmed ECT session, Operating Theatres will provide the relevant Mental Health Unit NUM with timely notification.
- The Mental Health Inpatient NUM or their delegate will notify Operating Theatres of any potential problems, which could affect the smooth running of an ECT session.
- Verification process for patient, site & procedure identification (as per SESIH Patient Identification Policy 060) will apply to ECT patients prior to the commencement of anaesthetic or medication that could affect the patient’s cognitive function.
- Operating Theatre staff will verify the consent form including name of the procedure & name of patient from the accompanying documentation, and check patient identification by asking the patient to verify name, date of birth & name of procedure to be received.
- Operating Theatre policies will apply to all personnel attending ECT sessions.
- The attending Nurse and Medical Officer will complete the ECT register.

4.3.5 Administration of ECT

- The practice of anaesthesia for ECT should follow the guidelines of the Australian & New Zealand College of Anaesthetists. In all cases, at least one medical practitioner skilled in the administration of anaesthesia must be present.
- ECT is administered by a Psychiatrist or a Psychiatric Registrar under the supervision of a Psychiatrist. Psychiatry Trainees & CMOs shall satisfy the RANZCP training requirements for administering ECT.
• Nursing staff shall receive adequate training in anaesthetic and recovery procedures prior to participating in the practice of ECT.

• ECT will be administered as per the Consultant Psychiatrist/Registrar prescription and in accordance with the ECT administration guidelines – refer to appendix one.

• Credentialing requirements for ECT will be met as per SESIH MH ECT Credentialing Guidelines (see appendix 6)

• Monitoring of seizure activity will be undertaken as per site protocol.

• The patient will be recovered as per the hospital’s Operating Theatre protocol.

4.3.6 ECT Register Protocol

• The ECT Register will be kept in SESIH Hospital Operating Theatres or MHUs as per site protocol.

• The ECT Register will be completed by the attending Nurse and the Psychiatric Registrar after each patient receives treatment.

• The ECT Register will have all sections completed accurately.

• The ECT Register will be checked and signed monthly by the MHU Medical Superintendent or delegate.

• The ECT Register will be made available to the Official Visitors during their visits to the Mental Health Services.

• The site / network ECT Committee will ensure that the ECT Registers are maintained, and that the procedures for the administration of ECT are being followed.

4.3.7 Outpatient ECT & Continuation / Maintenance ECT

• It is advisable that patients for whom an index course of ECT is proposed on an outpatient basis are selected carefully. Such patients should meet the following criteria:
  - Low risk of suicide
  - No impairment of nutrition or hydration
  - Absence of unstable concurrent medical illness
  - Low anaesthetic risk
  - Adequate family / carer support, including providing transport to and from hospital
  - Adequate ability to comply with pre-ECT procedures such as fasting
  - Minimal cognitive impairment during treatment, unless clear procedures are in place to manage this.

• The purpose of continuation and maintenance ECT is to preserve patient well-being and to prevent illness recurrence. The following criteria are suggested when considering maintenance ECT:
- The patient must be suffering from a primary psychiatric or neuropsychiatric disorder for which ECT is an appropriate treatment.
- The patient must have shown a clear and significant response to ECT in the most recent acute episode of the illness.
- The patient must have proven resistance to adequate pharmacotherapy and/or psychosocial treatments; or, the benefits of pharmacotherapy are limited in duration; or, the patient is unable to tolerate appropriate pharmacotherapy.
- The treating psychiatrist must document in the patient file a clear rationale for recommending maintenance ECT. A second psychiatrist opinion must be obtained before commencing maintenance ECT.

The frequency of maintenance treatments is based on individual case response and clinical need. However it is recommended that the first maintenance treatment occur one week after completion of the index course of ECT, and attempts be made to reduce frequency thereafter. This requires regular consultant review. The total duration of maintenance ECT will vary with the individual patient. The plan for ECT should be documented in patient’s notes.

Each patient will have a nominated mental health treating team, including a designated consultant psychiatrist, during the period of their treatment. They will also receive a regular psychiatric review, which may not necessarily occur in proximity to the ECT. The electrode placement and dose of ECT used in the index course of treatment should guide that used for the maintenance course.

- The patient’s physical state will be reviewed and documented in the medical record at each treatment as per pre-anaesthetic checklist.

- Consent
  - The Department of Health does not have a specific consent form for maintenance ECT, therefore it is reasonable to use the standard consent form for ECT.
  - When a decision is made to proceed with maintenance ECT, a new consent form should be obtained. This should be reviewed every 6 months if ECT is to be continued. There is no requirement for the patient to consent for each individual maintenance treatment. Voluntary consent is not invalidated by discharge or extended leave from the inpatient unit.
  - For all involuntary patients receiving maintenance ECT, the ECT consent is renewed every 6 months (ideally at the same time as getting the Involuntary Treatment order renewed). It should be noted that there is currently no capacity for involuntary ECT to be authorised under the conditions of a Community Treatment Order.
  - Each MH facility carrying out ECT will ensure mechanisms are in place to monitor and flag patients requiring review of ECT consent.
  - A 2nd opinion from another consultant psychiatrist is required after the initial 6 months of maintenance ECT, thence annually thereafter.
- The prescription of maintenance ECT should occur no more than 4 treatment sessions in advance

- Routine investigations for General Anaesthetic will be taken at minimum 6-monthly and as indicated by clinical need.

- Mental Health Review / Assessment will be undertaken by the patient’s treating team at 13-week intervals (as per MHOAT Guidelines) and as required according to clinical needs.

- Patients receiving ECT as an outpatient will have the same preparation for ECT as inpatients, with respect to investigations, documentation and fasting.

- Following treatment and recovery period, the patient will spend a minimum of 4 hours in post-operative care, prior to medical clearance for return home.

- The patient is to be accompanied home by a responsible adult following treatment and medical clearance. Alternatively, appropriate provision should be made for safe transport home.

- The treating team will ensure the following documentation is in the patient’s file:
  - Initial ECT order form
  - Maintenance ECT consent form
  - 3-monthly review form, which gives subsequent ECT orders (dose, electrode placement and frequency)
  - MHOAT Review Form
  - Documentation of pre & post ECT monitoring and assessment (including physical observations and mental state assessment).

### 4.3.8 Training & Accreditation of Medical Officers to perform ECT

- ECT is to be administered by a Medical Officer who is appropriately trained and accredited in the use of the ECT Machine and the indications for ECT. Adequate and ongoing training of all staff involved in the practice of ECT is an essential requirement.

- It is the responsibility of the Medical Officers to ensure that they are aware of the theory and practices of ECT and the proper assessment of patients for whom ECT has been recommended. Education and supervision of ECT should be provided through the Psychiatric Registrar Program.

- Each site within SESIH accredited to perform ECT must have a consultant psychiatrist as the designated ECT co-ordinator.

- The psychiatrist designated as ECT coordinator is to provide the Operating Theatre with an up-to-date list of registrars accredited to perform ECT without requiring the presence of a psychiatrist. This list will need to be updated every 6 months when the registrars change terms.

- Psychiatry trainees should attend and participate in a minimum of 10 ECT treatments under the direct instruction and supervision of a psychiatrist who has been formally credentialed to conduct and supervise ECT (or in the interim
period has been evaluated by the site ECT co-ordinator as having reached an adequate level of competence). Supervision must continue until the supervisor determines that the trainee is able to administer ECT independently. Trainees must supply documented evidence of their training experience in ECT, verified by their supervisor.

Direct supervision during administration of ECT should occur until the registrar is competent to administer ECT independently. However, supervision does not end with treatment sessions, and registrars and psychiatrists should ask the credentialed ECT consultant(s) to review EEGs and treatment courses for all patients on a regular basis.

- All nursing staff involved in the administration of ECT should receive adequate skills and procedure training prior to participating in the practice of ECT. The use of a specialist anaesthetic nurse is preferred.
- All anaesthetic registrars should be introduced to the practice of ECT by a senior colleague, with particular emphasis on adequacy of both anaesthetic and muscle relaxation procedures.
- All consultant psychiatrists providing supervision and delivery of ECT need to be credentialed by the site / network ECT Committee Chair.

5.0 QUALITY IMPROVEMENT

- The ECT register will be made available for 6-monthly ACHS clinical indicator reporting. The clinical indicators report the number of treatments and complications relating to E.C.T.
- These indicators focus on the appropriateness of the number of E.C.T. treatments given during a defined course and all patients undergoing any E.C.T. treatment who experience a major medical complication.
- For the purpose of these indicators:
  - Major medical complications include the following examples: myocardial infarct, damage to teeth, bone fracture, inhalation, significant arrhythmia, C.V.A. or a serious anaesthetic complication. This is not an exclusive listing.
  - Day patient admissions are included.
  - The figure of 12 treatments has been based on historical acceptance that 8-12 treatments of E.C.T. is an average and treatment plans should be reviewed if 12 treatments of E.C.T. is exceeded.
- Indicator data format:

<table>
<thead>
<tr>
<th>CI 4.1</th>
<th>Numerator</th>
<th>The number of patients undergoing more than twelve treatments of E.C.T. during the time period under study.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Denominator</td>
<td>The total number of patients undergoing a course of E.C.T., during the time period under study.</td>
</tr>
<tr>
<td>Cl 4.2</td>
<td>Numerator</td>
<td>The number of patients experiencing major medical complications while undergoing E.C.T during the time period under study.</td>
</tr>
<tr>
<td>--------</td>
<td>-----------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Denominator</td>
<td>The total number of patients undergoing E.C.T. during the time period under study.</td>
</tr>
</tbody>
</table>

- Each site / network ECT Committee will meet on a regular basis, at least every 2 months, and maintain written records of meetings and of monitoring procedures. The Committee will consist of at least one Consultant Psychiatrist (Chairperson), one psychiatry registrar, consultant anaesthetist, senior nursing staff from the psychiatry unit and operating theatres.

- Critical incidents may be raised via the SESIH incident monitoring system (IIMS) and discussed / reviewed at ECT committee meetings.

- Complaints by patients and relatives should be initially managed by the treating psychiatrist. The ECT Committee and the unit director should be given written notification of complaints by the treating psychiatrist.

- Nursing standards should be reviewed by Nurse Unit Managers, and guidelines for nursing practice should be reviewed at regular intervals.

6.0 DOCUMENTATION
ECT Register
Consent Form
Patient medical notes, medical orders and documents under the Mental Health Act
Operating Theatre ECT List
MHOAT Review Form

All ECT Registers must be kept by the Mental Health Inpatient Units for 7 years.

7.0 RESPONSIBILITY
This policy applies to all Medical Officers in the SESIH Mental Health Program, Registered Nurses in the SESIH MHS & Operating Theatres and Administrative Personnel involved in the administering and management of ECT.

8.0 APPENDICES
Appendix One: Guidelines for the Administration of ECT
Appendix Two: Mental Health Review Tribunal Guidelines for ECT
Appendix Three: ECT Information Sheet
Appendix Four: Post-ECT information for patients going home on the same day as treatment
Appendix Five: Credentialing for ECT

9.0 REFERENCES


**Acknowledgements:**

St George Division of Mental Health ECT Policy; Prince of Wales Hospital ECT Policy and Illawarra Mental Health ECT Policy
APPENDIX ONE:

Guidelines for the Administration of ECT

1. Application of Electrodes

Clean the area to which the stimulus electrodes will be applied. The stimulus electrodes should be suitably moistened with gel. The inter-electrode area should be dry. The electrodes should be applied very firmly. This firm pressure should be continued throughout the passage of current. The person administering ECT should have dry hands, and all personnel should avoid direct contact with metallic parts of the electrodes and the ECT trolley.

2. Test Static Impedance

With both ECT treatment electrodes firmly applied, press the front panel "INSTANT IMPEDANCE TEST" switch and observe the impedance meter display. A number ranging from 0 to 3 000, representing the static impedance in ohms, will appear when this switch is pressed, and disappear when it is released. [NOTE: If the automatic EEG feature has been enabled, the word “ready” will appear several seconds after the "IMPEDANCE TEST" switch is released, indicating successful collection of the baseline EEG sample].

Checking the static impedance tests the quality of the skin-to-electrode contact and also depends on how widely the electrodes are placed. With the Thymatron System IV, the static impedance should be at least 100 ohms and less than 3,000 ohms before the treatment stimulus is administered.

An impedance of under 100 ohms suggests the possibility of a short circuit, either in the cable, or between the two electrodes, as formed by wet hair, electrode gel, or saline solution. This is corrected by a) washing and drying the skin and scalp, and b) using less gel or solution on the electrodes.

An impedance of 3,000 ohms should be reduced by the following steps:

- Inspect each electrical connection in the treatment lead circuit - they may be loose, dirty or corroded. As needed, clean the connecting surfaces and reconnect.
- Check the electrodes have not slipped or twisted.
- Check that there is adequate gel under electrodes
- Reposition electrodes to minimise the amount of hair underneath.
- Increase pressure on the treatment electrodes by tightening the rubber head strap and/or pressing harder with the electrode handle(s).
- Gently clean the skin under the stimulus electrodes with a gauze swab just enough to remove the top layer of dead cells and sebum and reattach the stimulus electrodes exactly as before. BE CAREFUL NOT TO RUB THE SKIN TOO HARD AS THIS MAY LEAD TO SKIN BURNS
- If Thymapads are being used, switch to metal electrodes, as Thymapads have an intrinsically higher impedance.
If the impedance reading remains at 3,000 ohms after the above procedures have been carried out, treatment may be given, but the cause of the problem should be investigated prior to the next treatment. If high impedance >3000 does not appear due to the operator’s technique, the ECT equipment should be sent for servicing (e.g. to biomedical engineering) to check the integrity of the treatment circuit.

3. Monitoring Seizure Adequacy

Measurement of the duration of the motor seizure using the isolated limb technique is recommended, although EEG quality is a more accurate measure of seizure adequacy. However, EEG seizure activity may be difficult to determine when seizure threshold is being determined, so that adjunctive observation of the motor seizure is particularly useful at such sessions.

EEG monitoring is essential, as explained below. Obtain a brief baseline EEG recording prior to the stimulus – this is started with the "START/STOP" switch on the front panel. EEG recording commences automatically after the stimulus is applied, and continues until terminated with the "START/STOP" switch. The end-of-treatment report is then printed with details of seizure duration and EEG quality (of which post-ictal suppression is the most useful index). Details of the treatment session are to be recorded in the official ECT Register (a legal necessity), in the ECT treatment summary sheet, and also the main body of the patient’s medical file.

4. The efficacy of unilateral ECT is related to the use of at least moderately suprathreshold dosing $\geq 3$ times seizure threshold. High dose unilateral ECT (e.g. 5 times seizure threshold) has greater efficacy but also more cognitive side effects than moderate dose unilateral ECT (approximately 3.5 times seizure threshold in this protocol). This should be taken into account in a clinical decision to use moderate or high dose unilateral ECT.

Seizure threshold is the minimum charge required to produce an adequate seizure in an individual. Many factors affect individual seizure threshold (see table), and the protocol which follows is used to estimate seizure threshold at the initial treatment session, from which a suprathreshold dose is derived.

Non-dominant hemisphere unilateral electrode placement (d’Elia position) is recommended.

5. For standard pulsewidth ECT, it is recommended that pulsewidths of approximately 1.0 milliseconds are used. The efficacy of bilateral ECT at shorter pulsewidths e.g. $\leq 0.5$ milliseconds is uncertain.
### Titration Chart – Starting Levels

<table>
<thead>
<tr>
<th>Gender</th>
<th>Electrode Placement</th>
<th>Age</th>
<th>Starting Level for Titration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Unilateral</td>
<td>&lt; 50</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 50</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Bilateral</td>
<td>&lt; 50</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 50</td>
<td>3</td>
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<tr>
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<td>Unilateral</td>
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<td></td>
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<td>3</td>
</tr>
<tr>
<td></td>
<td>Bilateral</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

### Starting Level for Titration:
- For starting levels for seizure threshold titration, see titration table – level depends on patient gender, age and unilateral (UL) or bilateral (BL) electrode placement
- If the patient’s seizure threshold is likely to be higher than indicated on the chart above, as judged from past/recent ECT courses, then titration may commence from a higher level. This should be authorised by an ECT consultant or the ECT committee chair.

### Procedure for Titration:
- Increase by one level if re-stimulation is necessary.
- If there is no adequate seizure after 3 stimulations increase TWO levels for the fourth stimulus and if successful drop one level for the first stimulus at the next treatment session to continue titration, before proceeding to treatment dose
- If no seizure after four stimuli, abort session and increase by one level for first stimulus at next session to continue titration.
- An adequate seizure has spike and wave activity present in the EEG leads bilaterally.
# Thymatron ECT machine – Dose Chart

<table>
<thead>
<tr>
<th>Level</th>
<th>% energy</th>
<th>Millicoulombs (mC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
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<td>140</td>
<td>705</td>
</tr>
<tr>
<td>10</td>
<td>200</td>
<td>1008</td>
</tr>
</tbody>
</table>
Treatments after Titration
For UL ECT, titration can be followed by a treatment at a suprathreshold dose (see below), within the titration session, if possible (ie if seizure threshold has been established within 3 stimuli).

Suprathreshold Dosing:
After establishing lowest level needed to produce an adequate seizure increase dose as follows:

- **Moderate dose UL** (approx 3.5 x ST) - increase by 3 levels (except L1→L3)
- **High dose UL** (approx 5 x ST) – increase 4 levels (except L1→L4)
- **Low dose BL** (approx 1.5 x ST) – increase 1 level

*In clinical emergencies it may be appropriate to commence with high dose BL ECT:
- High dose BL (approx 2.25 x ST) – increase by 2 levels

Whenever further increases in stimuli are indicated increase by ONE level

Notes:
ST= seizure threshold
BL = bilateral ECT = bifrontotemporal (bitemporal) or bifrontal

Switching between electrode placements:
- Bitemporal ↔ Bifrontal: continue at same dose
- UL ↔ Bitemporal/ Bifrontal: either retitrate (starting 1 level higher than indicated in the Titration Chart), or consult ECT consultant/ chair

Inadequate Seizures
This may occur during ECT as a result of a rise in seizure threshold or inadequate initial dosing.

Adequacy is defined by EEG quality, not seizure duration. An “ideal” EEG is associated with shorter interval (< 10 secs) from stimulus to onset of spike and wave activity, higher amplitude, greater post-ictal suppression, regular morphology and good interhemispheric coherence. In the elderly, seizures may be of poor quality despite the use of adequate doses.

For each individual patient, seizure quality should be compared with that of previous treatments rather than an ideal “textbook” example, as there is large inter-individual variation in seizure quality. For example, the first treatment given at an optimal suprathreshold dose (after determination of seizure threshold but prior to any rise of threshold) may be a useful indicator of good seizure quality for that patient. Seizure duration is not correlated with dose or treatment efficacy and should not be used as a guide to dosing.

An inadequate seizure should lead to an increase of electrical dose as above. In addition, the next steps should be followed:
a) Check with other members of the ECT team that no signs of the seizure occurred. If a unilateral or localised seizure was induced it may have been seen by other observers.
b) Check dose of both the anaesthetic (thiopentone) and relaxant given.
c) Ask the anaesthetist to hyperventilate the patient, to lower the seizure threshold.
d) Check static and dynamic impedance – if too high or too low.
e) Check that the electrode treatment sites are well prepared, especially if the patient's hair is greasy or lacquered.
f) Check that the inter-electrode area is dry, and that the electrodes are placed sufficiently far apart.
g) Reapply the electrodes with firm pressure, and then repeat the electrical stimulus.
h) If there is still no seizure, repeat the stimulus at the next higher level; make a clear note in the ECT record that no seizure occurred at the prescribed level.
i) Ask the treating team to review any medication that may be increasing seizure threshold, eg benzodiazepines.

Prolonged seizures
Seizure duration is longest close to seizure threshold. Prolonged seizures are uncommon. Seizures longer than 120 seconds should be terminated immediately by appropriate pharmacological means. Do not lower the dose at the next session. D'Elia and Bifrontal Electrode Placements

Bitemporal  Unilateral  Bifrontal
(=Bifrontotemporal)
# Settings for MECTA ECT Machine

<table>
<thead>
<tr>
<th>Stimulation Level</th>
<th>Millicoulombs</th>
<th>Pulse Width (ms)</th>
<th>Frequency (Hz)</th>
<th>Duration (sec)</th>
<th>Current (amp)</th>
</tr>
</thead>
<tbody>
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<td>120</td>
<td>6</td>
<td>0.8</td>
</tr>
</tbody>
</table>
MHRT Guidelines for Electro Convulsive Therapy

When is an application required?

The Mental Health Review Tribunal becomes involved in decisions about ECT in the following circumstances:

- When the hospital is uncertain of a voluntary (informal) patient’s capacity to give consent to treatment with ECT; and
- When the hospital proposes ECT for an involuntary patient. For this purpose, this includes detained patients who have not been brought before a Magistrate, patients on a Magistrate’s adjournment, temporary and continued treatment patients, and forensic patients.

Voluntary patients

If a voluntary patient can give informed consent to ECT and does so in writing, then the hospital may administer ECT treatment. There is no need to apply to the Tribunal.

Nevertheless, two medical practitioners (at least one of whom is a psychiatrist) must have:

- Considered the clinical condition of the patient, the history of treatment and any appropriate alternatives; and
- Certified in writing that ECT is a reasonable and proper treatment to be administered to the patient, and is necessary or desirable for his or her safety or welfare.

If the Medical Superintendent is unsure whether or not a voluntary patient is capable of giving informed consent, the Medical Superintendent may apply to the Tribunal to determine that issue.

The Medical Superintendent must do everything reasonably practicable to give notice in writing to the nearest relative of the person, their guardian or personal friends about the application for ECT. However, in the case of a voluntary patient, the Medical Superintendent must not give this notice unless the patient has consented to it.

What is Informed Consent?

A patient can give informed consent if he or she understands the nature, purpose and effect of the proposed treatment. Section 91 of the Mental Health Act 2007 sets out a number of requirements for obtaining informed consent. These include:

- An explanation of the procedure;
- A full description of the possible risks and expected benefits;
- Information about alternative treatments;
- A reply to the person’s questions about the procedure in appropriate terms;
- Notice of the right to obtain legal and medical advice before giving consent and the right to withdraw consent at any time; and
- Full disclosure is made to the person of any financial relationship between the person proposing the treatment or the administering medical practitioner (or both) and the facility in which it is proposed to administer the treatment.

The patient’s consent must be free, voluntary and in writing.

The Tribunal’s role is limited to deciding whether the voluntary patient:

- Is capable of giving informed consent to ECT; and
- Has given that consent.
If the Tribunal decides that the person can consent and the person has given consent in writing, then the hospital may administer ECT treatment.

If the Tribunal decides that the person lacks capacity, or if the person has capacity but refuses treatment, then the hospital may not administer ECT while the person is a voluntary patient.

**Involuntary patients**

The following material concerns all involuntary patients, including detained patients who have not been brought before a Magistrate, patients on a Magistrate’s adjournment, temporary and continued treatment patients, and forensic patients.

If a hospital intends to administer ECT to any of these involuntary patients, the Medical Superintendent must first apply to the Mental Health Review Tribunal. The Medical Superintendent must do everything reasonably practicable to give notice in writing to the nearest relative of the person, their guardian or personal friends about the application for ECT.

The Tribunal will first determine whether or not an involuntary patient:
- Is capable of giving informed consent to ECT; and
- Has given that consent.

If the Tribunal determines that the patient can consent, and has done so, then the hospital may administer the ECT treatment.

If the Tribunal determines that the patient is:
- Incapable of giving informed consent; or
- Is capable of giving informed consent but has refused; or
- Has neither consented nor refused,
the Tribunal must then determine whether the specific course of ECT that had been the subject of the application, is a reasonable and proper treatment, and is necessary or desirable for the safety or welfare of the patient.

It will need information on the duration and frequency of treatments.

**Legal issues the Tribunal must address**

- Is the ECT a reasonable and proper treatment in the circumstances? and
- Is the ECT necessary or desirable for the safety or welfare of the patient?

Before it may make this determination, the Tribunal must have evidence from two medical practitioners, at least one of whom is a psychiatrist: These medical practitioners must have:
- Considered the clinical condition of the patient; the history of treatment and any appropriate alternatives; and
- Certified in writing that the specific course of ECT is a reasonable and proper treatment to be administered to the patient, and is necessary or desirable for his or her safety or welfare. Any substantial change to the specific course of treatment will require further consideration by the Tribunal.

**Applications for long term patients**

Sometimes there is a need for a continued treatment patient to have maintenance ECT on an ongoing basis. The Act does not specify when a new application should be made to the Tribunal. It is appropriate to make a fresh application when you apply for a review of the Electroconvulsive Therapy Management.
patient’s continued treatment status every 6 months. If there has been an interruption to maintenance ECT, you should make a fresh application.

**Patient’s views**

In considering any application for ECT, the Tribunal must take into account the views of the person and the effect if any, of medication on the person’s ability to communicate.

*From: Mental Health Review Tribunal, ECT Policy – Appendix: Provisions governing the Tribunal’s determination for ECT, August 2006*
APPENDIX THREE: INFORMATION ON ECT (Electroconvulsive Therapy)

This information sheet will try to answer some of the questions you may have about Electroconvulsive Therapy (ECT). Your psychiatrist will discuss with you why ECT has been recommended for you.

What is ECT and why is it given?
ECT is a modern psychiatric treatment that is effective for a range of mental illnesses, including major depression, mania, some forms of schizophrenia and a small number of other mental and neurological disorders.

It might be used when medications have not worked or other forms of treatment are ineffective. It might also be used for people who have serious side effects from medications or whose medical condition means they can’t take medications safely.

A general anaesthetic and muscle relaxant is given. When these have taken full effect, i.e. when you are asleep, a brief, carefully controlled electrical current is passed through the brain, inducing a seizure. You will awaken after five to ten minutes, much as you would from minor surgery.

ECT usually consists of six to 12 treatments given 2 to 3 times a week over about a month. The total number of treatments needed to get a person better varies between individuals and your psychiatrist will discuss with you how many treatments you are likely to need. While most people show some improvement after 3 to 4 sessions, it takes on average 9 treatments to achieve recovery and some patients may need more than 12 treatments.

There is evidence that ECT is effective in improving depressive and psychotic symptoms. Approximately eight out of 10 patients who undergo ECT will experience dramatic improvement.

How Does ECT Work?
A lot of research has been done into the changes that occur within the brain after ECT treatment. It is known that after ECT the activity levels of different parts of the brain are changed, hormones are released, and signalling between brain cells is modified. The latest research studies suggest that ECT may even result in the growth of new brain cells, possibly a process to “repair” impaired brain circuits that may be responsible for depression. There is no single unified theory about how ECT works, leading some to claim that ECT is unscientific, or to reject it as a treatment. However, it is important to note that we know as much about how ECT works as about some other treatments in medicine, for example, anaesthesia.

When will your doctor order ECT treatment?
The decision to administer ECT is based on a thorough physical and psychiatric evaluation of the person, taking into account the type of illness, the degree of suffering, the expected result and the prognosis for the person if the treatment is not given. When the risk of suicide is high or when a seriously ill person is unable to eat or drink, ECT can be life-saving.

Prior to your treatment
Before your first ECT treatment, you will be examined to make sure you are fit to have a short general anaesthetic and ECT.

You must not eat or drink any fluid or water for at least 6 hours before the ECT treatment to make sure your stomach is empty. This is called ‘fasting’. If you eat or drink anything within the fasting period, you must tell the nursing or medical staff before the treatment. Some medication might be given early on the morning of ECT treatment, but only with a tiny sip of water.
How is ECT given?

In the operating theatre of the hospital the staff will attach the following to you:

- Blood pressure cuff on your arm or leg or both
- Small device over one of your fingers to check pulse and oxygen levels in your blood
- Small stick-on electrodes on your forehead and behind your ears to record the brain’s electrical activity during the treatment
- Face mask over your nose and mouth to give you oxygen. This is to prepare your body and brain for the extra activity that will happen briefly with the treatment.

You will have a short general anaesthetic so that you will be asleep and not feel or remember the treatment. The anaesthetic medication will be injected into a vein to make it work quickly and well. An anaesthetist will be present and give the anaesthetic. You will also be given a muscle relaxant. You won’t feel the convulsion because of the anaesthesia, and any muscle movement during ECT will be minimal because of the muscle relaxants.

A doctor who has specialised training in ECT will administer the treatment. The doctor puts small electrodes on your scalp and passes a measured amount of electricity to a part of the brain to cause a seizure (fit). Depending on the patient, one or both sides of the head will be stimulated, known as unilateral or bilateral ECT respectively. The seizure will last up to two minutes.

During the treatment, the anaesthetist will continue to give you oxygen via the face mask and monitor your heart rate and oxygen level. The anaesthetist will give you any medications necessary to adjust your heart rate etc during and after the treatment.

You will not feel or remember any of the actual treatment because you will be asleep due to the anaesthetic medication. Within a few minutes after the treatment, the anaesthetic will have worn off and you will wake up. During this time, you will be moved to the recovery room where you will be looked after until you are awake enough to return to your ward. If you are having day procedure ECT, you might need to wait in the recovery room or a ward for up to several hours to make sure you are ready to go home. After you wake up, the anaesthetic medication and the seizure will make you groggy for a while.

Is it safe? What are the benefits of ECT? What about side-effects?

ECT is regarded as a very safe treatment. Research has shown that ECT doesn’t cause brain damage or changes in personality because the amount of electricity used is too small to harm tissue.

Your psychiatrist will discuss with you the expected benefits of ECT. These will vary depending on the nature and seriousness of your illness, but ECT will generally improve your ability to think and return your emotions to a healthier state.

All treatments have risks and side effects—even no treatment has risks. The risks and side effects of ECT include:

- Side effects from the anaesthetic, such as headache, nausea or queasiness, vomiting. You should tell the staff looking after you and they will be able to give you some medication to help.
- You might get muscle soreness after the ECT as a result of the muscle relaxants.
- The anaesthetic will affect your judgment for the first 24 hours. During this time you must not:
  - Drive any type of vehicle
  - Operate machinery, including cooking implements
- Make important decisions or sign a legal document
- Drink alcohol, take other mind-altering substances or smoke because they might react with the anaesthetic medication.

- **A common and significant side-effect is confusion and memory impairment.**
- Many people report difficulty with memory which usually clears up shortly after the end of treatment. For some it may persist for a while longer (eg weeks to months) but improves with time.
- Immediately after ECT most people have a short period of confusion and do not remember the actual treatment.
- Over the course of ECT, it might be more difficult to remember newly learned information, eg events that occurred during the weeks you were having ECT.
- Some people also report a patchy loss of memory of events that occurred during the days, weeks and months before the ECT. Memory for recent events, dates, names of friends etc. may not be as good. In most patients the memory problems go away over the days, weeks or months following completion of the course of ECT. Uncommonly, there may be permanent loss of isolated memories from your past.
- Many people will find that their memories are somewhat hazy for the time that they were ill. The same problem is frequently experienced by depressed patients who do not receive ECT.
- Although specific memories from around the time you had ECT might not return, your overall memory should work better in the weeks to months after treatment. Many patients report subjectively that their memory improved after a course of ECT.

- **Some other side effects are less common and some are extremely rare:**
- There is a less common risk of medical complications, such as irregular heart rate and rhythm. There might be a temporary rise in blood pressure and heart rate followed by a slowing of the heart rate.
- As with any general anaesthetic, there is a very small risk of death, but with modern ECT and a short anaesthetic, this risk is now extremely rare (approximately 1:80,000).
- Heart attack, stroke or injury related to muscle spasms are also extremely rare.
- Resuscitation equipment and emergency procedures are immediately available if anything should go wrong.

**Giving permission for ECT**

Just as with any medical procedure, it is required that informed consent for ECT be obtained in writing. Informed consent is when you agree to have ECT after you have been told what ECT involves, including a full explanation of the ECT procedure, how it works, how it can help your illness, possible side effects, discomforts and risks of ECT and any beneficial alternative treatments.

You have the right to discuss your views about ECT with your psychiatrist and ask any questions about it.

You also have the right to:

- Obtain medical and legal advice
- Obtain a second opinion from a psychiatrist about the ECT. Your psychiatrist can arrange a second opinion from within the mental health service.
- Have a friend, family member, lawyer or an advocate represent you before you consent to ECT
If you agree to have ECT, you will be asked to sign a form to say you have given informed consent. This means if you are able to give informed consent, you have the right to refuse ECT.

If you are incapable of giving informed consent, or if your health professionals consider that ECT treatment is potentially life saving, then your psychiatrist will seek consent on your behalf through the Mental Health Review Tribunal, even if you don’t want the treatment.

The Mental Health Review Tribunal becomes involved in decisions about ECT when the hospital:
• is uncertain of a voluntary patient’s capacity to give consent to treatment with ECT; and
• proposes ECT for an involuntary patient.

Your psychiatrist must do everything reasonably practicable to give notice to your nearest relative, guardian or personal friends about the application for ECT.

If you agree to have ECT, but then change your mind, it is your right to withdraw your consent at any time and the treatments will be stopped, unless your psychiatrist believes you are unable to give informed consent. If you want to withdraw your consent, you should talk to your psychiatrist. Remember that you can have a friend, a family member, a lawyer or an advocate with you for support or to represent you.

Will I need further treatment?
While your illness might be treated with a course of ECT, the illness might come back once the course is finished. Some people need occasional continued ECT treatment, spread-out from around once a week to once a month. To help prevent relapse, your doctor will discuss with you any further treatment you might need after the course of ECT ends, such as medication, maintenance ECT, psychotherapy, counselling and / or rehabilitation.

References
SANE ECT Information Sheet: [http://www.sane.org/information/factsheets](http://www.sane.org/information/factsheets)
APPENDIX FOUR:

INFORMATION FOR PATIENTS GOING HOME ON THE SAME DAY OF ECT TREATMENT

The following information may assist you in your recovery from your ECT treatment today.

PRIOR TO LEAVING THE MENTAL HEALTH UNIT

After your treatment you will be returned to the ward where you must remain for 4 hours to ensure you are well enough to go home following the anaesthetic.

The nursing staff will ensure you see a doctor prior to leaving the ward.

You will be given an appointment card with the date of your next treatment.

WHAT TO EXPECT AFTER ECT TREATMENT

The anaesthetic will affect your judgment and you may feel a little light headed, slower to react or sleepy for the next 24 hours. During the 24 hours after ECT treatment you MUST NOT:

- Drive any type of vehicle (therefore, someone will need to pick you up from hospital)
- Operate machinery, including cooking implements
- Make important decisions or sign a legal document
- Drink alcohol, take other mind-altering substances or smoke because they might react with the anaesthetic medication
- Engage in heavy work or strenuous activities.

Managing side effects from ECT treatment & the anaesthetic

- Side effects from the ECT treatment may include headache. You may take medication such as paracetamol for a headache as directed by your doctor.
- Side effects from the anaesthetic may include nausea, queasiness or vomiting. A light diet is recommended after an anaesthetic. If you are experiencing nausea or vomiting, omit solid food and drink clear fluids only. Should nausea, vomiting continue tomorrow, contact your local doctor.
APPENDIX FIVE: CREDENTIALING FOR ECT

1. Responsibility for Credentialing

The Chair of the ECT Committee within each site / network will be responsible for assessing senior medical staff (staff specialists, clinical academics and VMPs) who wish to be credentialed for ECT. The chair will then recommend to the Chief Psychiatrist at that site / network which individuals meet the criteria for credentialing.

2. Initial Credentialing Process

Consultant psychiatrists can apply for credentialing in ECT at several points in time:
- At the commencement of employment as a staff specialist / clinical academic or a VMP contract
- At a routine performance appraisal, which are conducted regularly
- As the need arises within a local service (e.g. resignation of another ECT credentialed psychiatrist)

There will be three components to the initial credentialing process:

i. Completion of the SESIH ECT Course, or an equivalent recognised training course (e.g. Northside Clinic course) within the last five years.

ii. Evaluation for each individual:
- past education and training in ECT, including any continuing medical education activities;
- experience in ECT;
- past history of privileging in ECT at other centres (including private hospitals);
- any other relevant activities (e.g. teaching and supervising in ECT, development of local ECT protocols, reviewing or writing journal articles on ECT, etc)

iii. The evaluator (ECT Chair or nominee) will observe the psychiatrist giving at least 5 ECT treatments. The evaluator will need to establish that the psychiatrist meets adequate standards on the following:
- EEG monitoring and the cuff limb technique.
- All types of ECT (variations in electrode placement etc) relevant to the service.
- Titration of seizure threshold and stimulus dosing.
- Manipulation of all the ECT machine settings.
- Awareness of the anaesthetic aspects of the treatment.

The psychiatrist will be considered eligible for full clinical privileges if ALL 3 POINTS ARE ACHIEVED. Adequate completion of points 2 PLUS 3 without recent completion of a recognised training course may lead to the granting of privileges which will remain in place for up to 12 months. During this period, the psychiatrist will be expected to complete a recognised training course or else clinical privileges for ECT will be revoked.

Full clinical privileges include the capacity to deliver ECT without supervision, as well as to provide supervision to other consultants, registrars and CMOs in the delivery of ECT.

3. Ongoing Credentialing

Each doctor who has ECT privileges should be re-credentialed every two years. The re-credentialing process will take into account the following:
i. **Completion of at least twenty ECT treatments each year.** This should include;
   a. At least ten treatments which are personally performed by the doctor. The remainder can involve the supervision of a registrar / CMO performing ECT.
   b. At least ten treatments performed or supervised at the site for which they are being credentialed. Documentation should be provided for any treatments done at other sites (e.g. private hospitals).

ii. **Evidence of participation in CME activities relevant to ECT** to be provided to the Chair, Network ECT Committee.

iii. **Certification by the Chair, Network ECT Committee that appropriate clinical standards have been met over the last 2 years.** This may be evaluated by some of the following:
    a. Observation of doctor’s ECT treatment technique.
    b. Monitoring of clinical outcomes of patients treated, including complication rates.
    c. Review of patient case notes.
    d. Regular meetings of the credentialed ECT psychiatrists in the service to discuss issues of technique etc.