Electroconvulsive Therapy

Guideline Responsibilities and Authorisation

Department Responsible for Guideline	Mental Health and Addictions
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Document Facilitator Title	Specialist
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Document Owner Title	Director of Clinical Services
Target Audience	Staff involved in the care of patients having ECT
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Guideline Review History

Version	Updated by	Date Updated	Summary of Changes
07	Matthew Jenkins	August 2019	Changed to Guideline template Inclusion of online referral Inclusion of maximum of one outpatient per day Inclusion of unilateral standard for ECT Changes made based on consultation process
08	Teresa Carroll	August 2023	Changed to Te Whatu Ora template Availability changed to be in line with service delivery Changes to preparation for ECT Wait time post PARS brought in line with other outpatient clinics Inclusion of requirement for a second opinion if needing a 3rd course of treatment Outpatient management updated

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Contents

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1 Overview

1.1 Purpose

This guideline outlines how Electroconvulsive Therapy (ECT) is to be delivered in a safe and professional manner by clinical staff in the Mental Health and Addictions service.

1.2 Staff group

This guideline should be used by

- prescribers of ECT
- treating medical staff
- anaesthetic technicians
- registered nurses

1.3 Patient / client group

ECT is prescribed by senior medical staff (psychiatrists, MOSSs and authorised registrars), and is available to all patients within the Te Whatu Ora Waikato region for the treatment of appropriate psychiatric disorders. Clinical indications for ECT include: depressive disorders, bipolar disorder, treatment-resistant schizophrenia, schizoaffective disorder, catatonia and neuroleptic malignant syndrome. ECT can be considered a first-line option when rapid clinical improvement is required, for example, when there is medical compromise due to poor oral intake, high suicide risk or previous positive response to ECT.

1.4 Exceptions / contraindications

ECT is not provided to tāngata whaiora (henceforth described as patients) who are under the age of 18 except in exceptional circumstances and following full consultation with all key stakeholders including whānau. ECT may be withheld at the discretion of the ECT provider or ECT anaesthetist. ECT is not provided on weekends or public holidays.

ECT is not a treatment modality for those exclusively with personality disorders or where personality disorders are the predominating clinical concern at the time of referral. It is accepted that personality disorders might be a co-morbid diagnosis when a primary indicator for ECT is well established

1.5 Definitions and acronyms

Responsible clinician	The clinician in charge of the treatment of a patient subject to the Mental Health (Compulsory Assessment and Treatment) Act 1992.
Second opinion	The opinion supplied by an approved Psychiatrist not being the patient's Responsible Clinician, regarding treatment of a patient with ECT under Section 60(b) of the Mental Health (Compulsory Assessment and Treatment) Act 1992.
MOSS	Medical Officer Special Scale

2 Clinical management

2.1 Roles and responsibilities

All clinicians will perform their duties in line with their scope of practice and specific role within the ECT team:

ECT Clinical Nurse Specialist (CNS)

- To coordinate the ECT service
- To be a resource for advice and support for clinicians

PACU assigned nurse

- To recover the patient from anaesthesia until PARS (post anaesthetic recovery score) is met. To oversee and provide support for the escorting registered nurses

ECT designated registered nurse/ward assigned registered nurses

- Nursing cares pre and post treatment as per the ECT nursing procedure
- Completing pre and post ECT documentation
- Following direction from ECT CNS, PACU registered nurse, anaesthetist or treating Dr

ECT Anaesthetic Technician

- Assisting the ECT anaesthetist(s) in preparing the patient for general anaesthesia
- Assisting with airway management during the treatment session

Charge Nurse Manager

- The line manager for the ECT team attends operational multidisciplinary ECT team meetings and escalates any issues

Observers

- Any staff member or trainee wishing to observe a treatment must coordinate this with the ECT Clinical Nurse Specialist or ECT nurse prior to the day of treatment, and must obtain the patient's consent, preferably the day before treatment.

2.2 Competency required

All responsible clinicians will have the knowledge they require to refer to / prescribe ECT.

All ECT providers will have attended a specialised ECT service training prior to delivering treatments. New ECT providers will undergo a period of supervision prior to independently providing ECT treatments. ECT providers will attend a specialised ECT training at least every five years.

All anaesthetic and post anaesthetic care staff will have completed the appropriate training in line with their scope of practice. The ECT clinical lead anaesthetist will have attended specialised ECT training and maintain currency in general anaesthesia in relation to ECT.

All registered nurses will have completed the appropriate level of training in relation to their specific role in ECT delivery and resuscitation training as per the Te Whatu Ora Waikato Resuscitation policy (Ref. 1970).

2.3 Equipment

- ECT machine, back up ECT machine, electrodes, paddles and conduction gel / liquid
- Computer/monitor with Genie (software) and Clinical Workstation (software)
- General anaesthesia medications, monitoring system and equipment
- Emergency equipment
- Room and bed for the delivery of ECT
- Room, beds and equipment for post anaesthetic recovery and nursing monitoring
- The ECT CNS or ECT designated nurse will ensure a portable duress alarm and a Radio Transmitter (RT) is available in the ECT suite to summon immediate assistance in the event of an emergency.

ECT documents available electronically and in hard copy format

1. **ECT Information Booklet** (G202MHP) for patients and family/whānau
2. **Anaesthetic & PACU record + anaesthesia consent forms** (HP247 –W140)
3. **Electroconvulsive Therapy (ECT) electronic referral on the clinical workstation**
4. **Electroconvulsive Therapy (ECT) Consent Form** (T1565MHF)
5. **The Mini-Ace (Mini-Addenbrooke's Cognitive Examination)**
6. **Montgomery & Asberg Depression Rating Scale (MADRS)** (A1641MHF)
7. **Compulsory Treatment Section 60(b) Mental Health Act 1992** (T1565MHF)
8. **ECT Treatment Record** (T1564MHF)
9. **ECT pre/post Treatment Checklist** (T1566MHF)
10. **PACU Observation Chart** (A1717HWF)

2.4 Guideline

Availability of ECT treatment

- ECT will be administered in the ECT suite, Level 2 Henry Rongomau Bennett Centre, from 0830hrs- 1230hrs on a Tuesday and Friday. Treatment may be administered in the general theatres for medical reasons.
- A maximum of ten (10) patients will receive treatment each morning. In exceptional circumstances additional patients may be negotiated with the PACU and Anaesthetic Departments, and treating psychiatrist. Alternatively an additional treating day may be negotiated.
- Bookings and cancellations of patients will be coordinated through the ECT CNS
- Each patient shall have an assigned registered nurse to escort and recover
- Treatment will not be available on weekends or public holidays unless in exceptional circumstances when special arrangements must be made with anaesthetists and the post anaesthetic care unit (PACU). Where a treating day falls on a public holiday, the list may be moved to the previous or following day, as negotiated with the Anaesthetic department and PACU in advance.

- The standard for ECT is Bifrontal delivery. Bitemporal and unilateral delivery is available if there is clear rationale provided.
- Although it is standard practice to administer two treatments per week, there are evidence based criteria to administer three under certain conditions albeit short term, before reverting back to twice per week.

Clinical responsibility

- The responsibility for prescribing ECT and education of the patient and whānau lies with the Psychiatrist responsible for the patient's care. Every patient who is to have ECT shall receive written information about ECT and the opportunity to discuss its content.
- Patients must have a documented psychiatric examination by the prescribing doctor (or delegate) prior to commencing a course of ECT
- Review / triage of all cases by the ECT CNS in the first instance, +/- involvement of the ECT MDT and ECT Clinical lead if determined by the ECT CNS
- The Responsible Clinician shall ensure that when a 'second opinion' is required for patients subject to the Mental Health (Compulsory Assessment and Treatment) Act 1992, section 60(b), it is documented in the clinical record and on the second opinion form (T1565MHF) A second opinion is obligatory when a patient is said to require more than 2 courses of 12 treatments and/or at the request of the ECT service.
- A summary of discussion with whānau must be recorded on section 60(b) document
- Wherever possible the second opinion psychiatrist should be a member of the ECT service; the second opinion psychiatrist should not be a member of the same treating team as the patient.
- Informed, written consent must be obtained from the patient by the treating team (refer Te Whatu Ora Waikato Informed Consent policy (Ref. 1969)). This is compulsory for any patients who are not been treated under the Mental Health Act.
- No more than two (2) treatments should be prescribed at a time and the patient should have a clinical review at least after every second treatment unless receiving maintenance ECT. (refer information on maintenance ECT). Treatment reviews should include the relevant rating scales.
- A course of ECT must be booked through the online referral process
- The ECT CNS or designated ECT nurse will arrange an appointment for patients to be assessed for anaesthesia
- The ECT CNS or designated ECT nurse will book the first and subsequent treatments on the iPM system no later than midday on the day before treatment.

Medical assessment and work up

- The appropriate screening tools (as per online referral) must be completed as part of the medical assessment process and should be completed at appropriate intervals throughout treatment
- Routine haematology must include: full blood count, urea and electrolytes and others as indicated. These should be performed within five (5) days prior to first treatment. An ECG must have been performed in the previous two weeks.
- A chest x-ray should be performed if indicated
- All inpatients about to undergo a course of ECT will receive an anaesthetic assessment organised with the ECT Anaesthetist by the ECT CNS– usually following the treatment list. Urgent assessments outside these times are arranged with the duty anaesthetist, by the treating team.
- The anaesthetist will complete an Anaesthetic Assessment v2 CWS electronic form and obtain patient consent to anaesthesia or follow processes in the Te Whatu Ora Waikato Informed Consent policy (Ref. 1969) if the patient is not competent to consent
- Consultations with other specialties, for example, cardiology regarding pacemaker, will be arranged by the treating team as indicated
- Before the first ECT treatment for a woman who is pregnant, there must be consultation between the treating team, ECT CNS and the neonatal service to ensure monitoring of the foetus before and after each treatment, and to seek other advice as appropriate.
- The doctor prescribing ECT shall review the patient's medications prior to first treatment to ensure that anticonvulsant medications are rationalised. If the patient is on lithium then a clear statement of the decision to either stop or continue with this medication should be made. Aside from anticonvulsants and Lithium, benzodiazepines should also be discontinued; or as a minimum, switched to short-acting variants with doses withheld from 12 hours before ECT. Non-benzodiazepine sedatives should also be discontinued where possible.
- Other medications might need to be rationalised and this can be discussed with the ECT CNS/ECT Clinical Lead if there are queries.

Other consultations

- A cultural consultation should be requested by the treating team for any Māori patient being considered for, or prescribed ECT
- An interpreter will be provided if requested or required
- A Ministry of Health video explaining ECT is available on request and patients and whānau will be informed

Documentation

- All documents shall have a patient label attached as per TE Whatu Ora Clinical Record Policy (0182)
- All requests for a course of ECT shall be signed by a consultant psychiatrist, MOSS or authorised psychiatric registrar
- Patient consent must be gained and documented and the required form signed by the patient unless a second opinion under the Mental Health Act is required (T1565MHF).
- This consent can be witnessed by a psychiatrist, MOSS or authorised psychiatric registrar.
- Name, address and phone number of support person who will be staying with an outpatient for twenty-four hours once discharged after treatment, must be noted in the clinical record
- All documentation will be available to the anaesthetist and treating psychiatrist / registrar prior to each treatment
- All necessary documentation should be available to be checked by the ECT nurse on the day prior to the first treatment.
- Treatment and recovery to be documented sequentially in the patient's ECT record held in the clinical record (T1564MHF), and in the progress notes, including rationale for postponed or abandoned treatments
- The ECT CNS or designated ECT registered nurse will ensure patients receiving outpatient ECT are given the written carer information sheet, and the outpatient information sheet which will contain emergency contact names and phone numbers in case of post anaesthetic complications

Preparation for ECT

- The ECT CNS or ECT designated nurse will contact the relevant ward CNMs / ACNMs up to the day prior to treatment to confirm details of where and when to attend
- Patients shall be required to fast eight (8) hours prior to ECT treatment but can drink small amounts of clear fluids up to 2 hours before treatment
- Oral medications are given or withheld prior to treatment as directed by the anaesthetist / anaesthetic review and specified by the responsible clinician
- Each patient will have an escorting nurse who will follow the ECT nursing process
- The anaesthetist needs to be informed of any specific problem or hazard by the medical and / or nursing staff prior to induction
- Whānau may support the patient into the ECT treatment area, as negotiated with the wider ECT treating team, but will leave before the treatment commences and can wait in the waiting room.

Acute course ECT treatment sessions

- Acute courses of ECT will include treatment sessions scheduled twice weekly, unless by other arrangement.
- Six to twelve ECT treatments are a standard course, however clinical response determines the total number of treatments required. Treatment could be stopped at any stage if indicated for medical or psychological reasons or by the patient / whānau / medical teams.
- The ECT CNS leads a team safety meeting prior to the commencement of ECT treatments. The safety meeting will include introductions of all staff members and observers, discussion of relevant medical or safety concerns for each patient, management plans for identified issues, ECT electrode placement and ECT treatment number.
- The ECT provider(s) determine the treatment dose for each patient based on the dose titration protocol, electrode placement, stimulus parameters, quality of the seizure produced and response to treatment and in keeping with local, national and international best practices.

ECT – outpatient

- Outpatient ECT will be available for patients as clinically indicated
- The consent, physical examination and routine investigations will be the responsibility of the responsible clinician supervising outpatient treatment
- Patients must arrive at the ECT suite at the proposed time as advised by the ECT CNS or ECT designated nurse. An outpatient must have a relative, friend or responsible adult stay with them for twenty-four (24) hours post treatment.
- An ECT CNS or designated ECT nurse will complete the pre ECT checklist
- The ECT CNS or designated ECT nurse will escort the patient to ECT. A registered nurse with post anaesthetic care unit experience will be responsible for recovering the patient from anaesthesia after which the ECT CNS or designated nurse will continue monitoring the patient until s/he is fit to be discharged. The nurse will record observations in the patient's clinical record following each treatment.
- During an acute course of ECT the patient should be reviewed on a weekly basis by the consultant or delegate prescribing the ECT, and no more than two (2) treatments should be prescribed at any one time
- The ECT CNS or designated ECT nurse will ensure all outpatients receiving ECT are given an appointment with the date of their next treatment. Written outpatient ECT and carer's information sheets are given to the patient and carer at the start of a course of treatment. In case of post anaesthetic complications emergency contact phone numbers and names are identified in the written information provided.
- Outpatients, and inpatients who may be going on leave or who are discharged following that day's ECT, are to be told not to drive or operate machinery or electrical equipment for twenty-four (24) hours after treatment because the effects of

anaesthetics and / or drugs administered, and this is to be documented in the clinical record.

ECT – anaesthetic, stimulus and recovery

- Anaesthetic and muscle relaxant will be administered according to the relevant Australian and New Zealand College of Anaesthetists Guidelines
- ECT will only be administered either by a psychiatrist with appropriate training and experience, a registrar under the direct supervision of such a consultant or a registrar who has satisfactorily completed training as per RANZCP recommendations
- In exceptional circumstances, the patient may need to be admitted medically.
- ECT stimulation, re-stimulation and seizure termination protocol should be followed. A PDF copy of the EEG will be uploaded to clinical documents.
- Any adverse events occurring during treatment or during recovery will be managed according to the Royal Australian and Royal New Zealand College of Anaesthetists Guidelines. If the anaesthetist is no longer present it may be necessary to call the crash team or the anaesthetic emergency team on 99777.

Maintenance ECT

- Some patients may require maintenance ECT. This would normally vary between weekly and four (4) weekly. The patient should be reviewed at least every three (3) months, and have full blood count, urea, electrolytes and ECG at least every six (6) months or earlier if indicated. Re-consent from the patient should be obtained every six (6) months, or when the number of ECTs consented has expired, should this occur before six months has elapsed.

2.5 After care

- Post anaesthetic care unit procedures will be followed
- Patient will be offered a drink and light snack
- In-patients are returned to the ward by their assigned registered nurse using a wheelchair
- The responsible ward nurse will monitor patient for post ECT confusion or other medical complications in accordance with the Post Anaesthetic Nursing Responsibilities in Electroconvulsive Therapy (ECT) Suite procedure (Ref. 2506)
- In-patients must remain on the ward or other suitable recovery area for at least one hour post meeting PARS following ECT / anaesthesia. If a patient needs to leave the ward during this time a nurse escort must be provided.
- An in- patient requesting to leave the ward later than one hour post PARS but with 24 hours of ECT / anaesthetic must be accompanied by a responsible adult.

- Out- patients must remain in the ECT suite for at least one hour post meeting PARS following ECT / anaesthesia.
- The ECT CNS or ECT designated nurse will monitor the out-patient for post ECT confusion or other medical complications in accordance with the Post Anaesthetic Nursing Responsibilities in Electroconvulsive Therapy (ECT) Suite procedure (Ref. 2506)
- Out-patients should have another responsible adult at home with them for twenty four (24) hours post ECT, in case of complications, and be reminded not to drive or operate machinery
- Any withheld regular morning medication is to be given on return to the ward, or prior to going home if an outpatient (Refer to Te Whatu Ora Waikato Medicines Management policy (Ref. 0138)). Medications and valuables will be returned to the outpatient.
- The patient's responsible clinician or delegate must monitor progress weekly or after two ECTs during an acute course and change treatment requirements as necessary.

3 Patient information

- ECT Information Booklet (92024MHP)
- Review of Ministry of Health ECT video by patient / whānau

4 Audit

4.1 Indicators

- Clinical rating scales will be used routinely before, during and post-ECT treatment course
- There will not be unexpected adverse medical events attributable to ECT
- ECT referral documentation is accurate and complete
- Data from annual patient satisfaction surveys
- Staff education and training session feedback/surveys

4.2 Tools

- ECT Audit tool
- Patient satisfaction survey
- ECT training feedback documentation
- Incident management and Complaints systems

5 Evidence base

5.1 Bibliography / References

- Royal College of Psychiatrists Guidelines Position Statement 74 Electroconvulsive Therapy (ECT), August 2013
- The Royal Australian and New Zealand College of Psychiatrists Professional Practice Guideline Electroconvulsive Therapy (ECT) Draft 13.8 – September 2017
- Royal College of Psychiatrists ECT Accreditation Service (ECTASD) Standards for the administration of ECT Fourteenth edition revised: January 2019
- Royal Australian and New Zealand College of Psychiatrists Guidelines 1999
- American Psychiatric Association ECT Task Force recommendations 2001
- New Zealand Ministry of Health ECT Audit Report 2004
- PARS (Post-Anaesthetic Recovery Score) to aid discharge Procedure (Ref. 0176)

5.2 Associated Te Whatu Ora Waikato Documents

- ECT Information Booklet (92024MHP)
- ECT Checklist (for doctors and nurses) 92302MHF
- Anaesthetic & PACU record + anaesthesia consent forms (HP247 –W140)
- Electroconvulsive Therapy (ECT) Assessment Form (T1009MHF)
- Electroconvulsive Therapy (ECT) Consent Form (T1565MHF)
- Compulsory Treatment Section 60(b) Mental Health Act 1992 T1012 MH
- ECT Treatment Record (T1564MHF)
- ECT pre/post Treatment Checklist (T1566MHF)
- Observation Chart (A17117HWF)
- Clinical Records Management policy (Ref. 0182)
- Informed Consent policy (Ref. 1969)
- Interpreters and Translation policy (Ref. 0137)
- Medicines Management policy (Ref. 0138)
- Clinical Handover- Mental Health, Inpatient Wards procedure (Ref. 0451)
- Mental Health and Addictions Family / Whānau Inclusive Practice guideline (Ref. 5795)
- Mental Health and Addictions Working with Risk: Assessment and intervention for tāngata whaiora engaged with Mental Health and Addictions services who present at risk of harm to self or others (Ref. 5241)
- Mental Health and Addictions Use of Personal Restraint in Mental Health and Addictions Inpatient Setting procedure (Ref. 1865)
- PACU Post Anaesthetic Nursing Responsibilities in Electroconvulsive Suite (ECT) Suite guideline (Ref. 2506)

Te Whatu Ora
Health New Zealand
Waikato

Implementation Plan

ECT Guideline

Document Facilitator:	Matthew Jenkins	Date Prepared:	04/10/23

Actions	By Whom	By When	Resource	Evidence of Completion
Communication An email will be sent to the CNM ECT when the updated version of this guideline is loaded to the intranet. The CNM will then communicate with the ECT MDT at their peer review meeting and with the PACU department via email Availability of the updated guideline will be documented in the November Quality Improvement Newsletter for the Acute Adult and Forensic Service	CNM- ECT	By 30/10/23	Staff time	Email Meeting minutes
Orientation CNS's of AMHS and OPR1 wards will include this document as part of the orientation pack for registered nurses	AMHS and OPR1 CNS	By 30/10/23	Staff time	ECT guideline present in orientation packs
Education ECT CNS will include this document in their scheduled education sessions to Drs and registered nurses This guideline will be added to the Ko Awatea ECT education content CNS will provide 1:1 education on wards	ECT CNS ECT CNS ECT CNS	By 30/10/23 By 29/12/23 By 30/10/23	CNS time CNS time staff time	Education session content Ko Awatea content CNS education records
Additional Resource Required	Nil			

ECT Guideline

Audit Process				
CNS will visit wards to check knowledge of RNs using an audit tool and provide 1:1 education as required	CNS	29/12/23	Staff time	Audit tool records
Yearly patient satisfaction survey incorporating aspects of the guideline	CNS	29/12/23	Staff and patient time	Surveys sent and results received
Staff (RN and DR) education and training session feedback and surveys	CNS	29/12/23	Staff time	Feedback received and collated