



# Electroconvulsive Therapy (ECT)

Policy Number: BH727ECTSCC082023  
Annual Review Date: August 22, 2023  
Interim Review Date: December 12, 2023

Table of Contents	Page
<a href="#">Introduction &amp; Instructions for Use</a> .....	<a href="#">1</a>
<a href="#">Benefit Considerations</a> .....	<a href="#">2</a>
<a href="#">Description of Service</a> .....	<a href="#">2</a>
<a href="#">Coverage Rationale</a> .....	<a href="#">2</a>
<a href="#">References</a> .....	<a href="#">2</a>
<a href="#">Revision History</a> .....	<a href="#">3</a>
<a href="#">Appendix</a> .....	<a href="#">3</a>

## Introduction & Instructions for Use

### Introduction

Supplemental Clinical Criteria are a set of objective and evidence-based behavioral health criteria used by medical necessity plans to standardize coverage determinations, promote evidence-based practices, and support members’ recovery, resiliency, and wellbeing for behavioral health benefit plans that are managed by Optum®.

### Instructions for Use

This guideline is used to make coverage determinations as well as to inform discussions about evidence-based practices and discharge planning for behavioral health benefit plans managed by Optum. When deciding coverage, the member’s specific benefits must be referenced.

All reviewers must first identify member eligibility, the member-specific benefit plan coverage, and any federal or state regulatory requirements that supersede the member’s benefits prior to using this guideline. In the event that the requested service or procedure is limited or excluded from the benefit, is defined differently or there is otherwise a conflict between this guideline and the member’s specific benefit, the member’s specific benefit supersedes this guideline. Other clinical criteria may apply. Optum reserves the right, in its sole discretion, to modify its clinical criteria as necessary using the process described in Clinical Criteria. This guideline is provided for informational purposes. It does not constitute medical advice.

Optum may also use tools developed by third parties that are intended to be used in connection with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice. Optum may develop clinical criteria or adopt externally developed clinical criteria that supersede this guideline when required to do so by contract or regulation.

## Benefit Considerations

This Supplemental Clinical Criteria only applies in select states or markets. Before using this policy, please check the member-specific benefit plan document and any federal or state mandates regarding prior authorization requirements.

### Prior Authorization and Pre-Service Notification

- For inpatient admissions that require prior authorization or notification for pre-service scheduled treatment, these notifications must occur at least five (5) business days before admission. Notification of unscheduled treatment (including Emergency admissions) should occur as soon as is reasonably possible. In the event that Optum is not notified of an inpatient admission with ECT, benefits may be reduced. Check the member's specific benefit plan document for the applicable penalty and allowance of a grace period before applying a penalty for failure to notify Optum as required.

## Description of Service

Electroconvulsive therapy (ECT) is a treatment device used for treating severe psychiatric illness by applying a brief intense electrical current to precise locations on the head to induce a seizure that lasts less than one minute. ECT is delivered in inpatient or outpatient settings and administered by a skilled psychiatrist privileged to perform ECT along with an anesthesiologist, and a nurse or physician assistant. ECT has been extensively studied with the longest history of use (Quevedo et al., 2022; American Psychiatric Association [APA], 2022).

## Coverage Rationale

- ECT is medically necessary to treat severe, treatment-resistant depression, and may also be useful in treating individuals with bipolar disorder and schizophrenia that have not responded to other treatments (APA, 2022; Quevedo et al., 2022; VA/DoD, 2022).
- ECT is not medically necessary for any of the following:
  - Multiple-seizure electroconvulsive therapy (MECT). The efficacy of ECT for these indications has not been verified by in well-designed controlled trials. In addition, studies have demonstrated an increased risk of adverse effects with multiple seizures (CMS NCD, 2003).
  - Other diagnoses in the absence of major depressive disorder, bipolar disorder, or schizophrenia disorder, including, but not limited to any of the following:
    - Substance use disorders (VA/DoD, 2021);
    - Autism spectrum disorders (National Autism Center, 2022; National Autism Association, 2023);
    - Obsessive-compulsive disorder (APA, 2007; Anxiety & Depression Association of America, 2015);
    - Posttraumatic stress disorder (VA/DoD, 2023).
- The requested service or procedure must be reviewed against the language in the member's benefit document. When the requested service or procedure is limited or excluded from the member's benefit document, or is otherwise defined differently, it is the terms of the member's benefit document that prevails.
- Per the specific requirements of the plan, health care services or supplies may not be covered when inconsistent with evidence-based clinical guidelines.

## References

American Psychiatric Association. (2007). Practice guideline for the treatment of patients with obsessive compulsive disorder. American Psychiatric Association.

American Psychiatric Association. (2022). What is Electroconvulsive therapy (ECT)? APA website: <https://www.psychiatry.org/patients-families/ect>.

Anxiety & Depression Association of America. (2015). Clinical Practice Overview for OCD. ADAA website: <https://adaa.org/resources-professionals/practice-guidelines-ocd>.

Centers for Medicare & Medicaid Services. (2003). *National coverage determination (NCD) for multiple electroconvulsive therapy (MECT) (160.25)*. CMS website: <https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=278&ncdver=1&DocID=160.25&bc=gAAAAAgAAAA&>.

Department of Veterans Affairs and Department of Defense (VA/DoD). (2022). Clinical Practice Guidelines for the Management of Major Depressive Disorder. U.S. Department of Veterans Affairs website: <https://www.healthquality.va.gov/guidelines/MH/mdd/>.

Department of Veterans Affairs/Department of Defense (VA/DoD) Group. (2023). VA/DOD clinical practice guideline for the management of posttraumatic stress disorder and acute stress disorder, Version 4.0. U.S. Department of Veterans Affairs website: <https://www.healthquality.va.gov/guidelines/MH/ptsd/>.

Department of Veterans Affairs/Department of Defense (VA/DoD) and the Management of Substance Use Disorders Work Group. (2021). U.S. Department of Veterans Affairs website: <https://www.healthquality.va.gov/guidelines/mh/sud/index.asp>.

National Autism Association. (2023). Autism therapies. NAA website: <https://nationalautismassociation.org/about-autism/autism-treatment-2/therapies/>.

National Autism Center. (2022). National Standards Project, Phase 1: 2009 and Phase 2: 2015. National Autism Center website: <https://www.nationalautismcenter.org/national-standards-project/>.

Quevedo, J., Riva-Posse, P., & Bobo, W.V. (2022). ECT for Treatment-Resistant Depression. In Drake & Maixner (Eds.), *Managing treatment-resistant depression* (pp. 293-308). Elsevier Publishing.

## Revision History

Date	Summary of Changes
10/21/2019	New: Supplemental Clinical Criteria
07/20/2020	Annual review
07/20/2021	Annual review
08/23/2022	Annual review
08/22/2023	Annual Review
09/19/2023	Removal of Applicable Codes section
12/12/2023	Interim Update: updated language in Benefit Considerations section

## Appendix

Additional resources considered in support of this document:

American Academy of Child & Adolescent Psychiatry. (2007). Practice parameter for the assessment and treatment of children and adolescents with bipolar disorder. *Journal of American Academy Child and Adolescent Psychiatry*, 46(1), 107-125.

American Academy of Child & Adolescent Psychiatry. (2004). Practice parameter for use of electroconvulsive therapy with adolescents. *Journal of American Academy Child and Adolescent Psychiatry*, 43(12), 1521-1539.

American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders (5th ed.)*, Text Revision. American Psychiatric Association.

American Psychiatric Association. (2003). Practice guideline for the assessment and treatment of patients with suicidal behaviors. American Psychiatric Association.

American Psychiatric Association. (2002). Practice guideline for the treatment of patients with bipolar disorder (2<sup>nd</sup> edition). American Psychiatric Association.

American Psychiatric Association. (2010). Practice guideline for the treatment of patients with major depressive disorder (3<sup>rd</sup> edition). American Psychiatric Publishing.

American Psychiatric Association. (2021). Practice guideline for the treatment of patients with schizophrenia (3rd edition). American Psychiatric Association.

American Psychiatric Association. (2001). The practice of electroconvulsive therapy: Recommendations for treatment, training, and privileging (2nd edition). American Psychiatric Association.

Assessment and Management of Risk for Suicide Working Group. (2013). VA/DOD clinical practice guideline for assessment and management of patients at risk for suicide, version 1.0. Veterans Health Administration and Department of Defense.

Bauer, M., Pfennig, A., Severus, E., Whybrow, P.C., Angst, J., & Moller, H. (2013). World Federation of Societies of Biological Psychiatry (WFSBP) guidelines for biological treatment of unipolar depressive disorders, part 1: Update 2013 on the acute and continuation treatment of unipolar depressive disorders. *The World Journal of Biological Psychiatry*, 14,334-385.

Dierckx, B., Heijnen, W.T., van den Broek, W.W., & Birkenhager, T.K. (2012). Efficacy of electroconvulsive therapy in bipolar versus unipolar major depression: A meta-analysis. *Bipolar Disorders*, 14,146-150.

Food and Drug Administration. (2018). *FDA In Brief: FDA takes action to ensure regulation of electroconvulsive therapy devices better protects patients, reflects current understanding of safety and effectiveness*. Retrieved from: <https://www.fda.gov/news-events/fda-brief/fda-brief-fda-takes-action-ensure-regulation-electroconvulsive-therapy-devices-better-protects>.

Heijnen, W.T., Birkenhager, T.K., Wierdsma, A.I., & van den Broek, W.W. (2010). Antidepressant pharmacotherapy failure and response to subsequent electroconvulsive therapy: A meta-analysis. *Journal of Clinical Psychopharmacology*, 30(5),616-619.

Husain, M.M., McClintock, S.M., Rush, A.J., Knapp, R.G., Fink, M., Rummans, T.A., . . . & Kellner, C.H. (2008). The efficacy of acute electroconvulsive therapy in atypical depression. *Journal of Clinical Psychiatry*, 69(3),406-411.

Husain, M.M., Rush, A.J., Fink, M., Knapp, R., Petrides, G., Rummans, T., . . . Kellner, C.H. (2004). Speed of response and remission in major depressive disorder with acute electroconvulsive therapy (ECT): A consortium for research in ECT (CORE) report. *Journal of Clinical Psychiatry*, 65(4),485-491.

Kellner, C.H., Fink, M., Knapp, R., Petrides, G., Husain, M., Rummans, T., . . . Malur, C. (2005). Relief of expressed suicidal intent by ECT: A consortium for research in ECT study. *American Journal of Psychiatry*, 162(5),977-982.

Kellner, C.H., Greenberg, R.M., Murrough, J.W., Bryson, E.O., Briggs, M.C., & Pasculli, R.M. (2012). ECT in treatment-resistant depression. *American Journal of Psychiatry*, 169,1238-1244.

Lin, C.-Y., Chen, I.-M., Tsai, H.-J., Wu, C.-S., & Liao, S.-C. (2020). Effectiveness of electroconvulsive therapy on treatment-resistant depressive disorder: A population-based mirror-image study. *Journal of Psychiatric Research*, 21, 101-107.

McClellan, J., Stock, S., & the American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues (CQI). (2013). Practice parameter for the assessment and treatment of children and adolescents with schizophrenia. *Journal of American Academy Child and Adolescent Psychiatry*, 52(9),976-990.

National Institute for Health and Care Excellence. (2009, Reaffirmed 2014). Guidance on the use of electroconvulsive therapy. Retrieved from: <https://www.nice.org.uk/guidance/ta59>.

Pagnin, D., de Queiroz, V., Pini, S., & Cassano, G.B. (2004). Efficacy of ECT in depression: A meta-analytic review. *Journal of ECT*, 20(1),13-20.

Rasmussen, K.G. (2019). Principles and practice of electroconvulsive therapy. American Psychiatric Association.

Sinclair, D.J.M., Zhao, S., F, Q., Nyakyoma, K., Kwong, J.S.W., & Adams, C.E. (2019). Electroconvulsive therapy for treatment-resistant schizophrenia. *Cochrane Database of Systematic Reviews*, Issue 3, Art. No.: CD011847, DOI: 10.1002/14651858.CD011847.pub2.

UK ECT Review Group. (2003). Efficacy and safety of electroconvulsive therapy in depressive disorders: A systematic review and meta-analysis. *The Lancet*, 361,799-808.

Weiss, A., Hussain, S., Ng, B., Sarma, S., Tiller, J., Waite, S., & Loo, C. (2019). Royal Australian and New Zealand College of Psychiatrists professional practice guidelines for the administration of electroconvulsive therapy. *Australian & New Zealand Journal of Psychiatry*, 1-15.