

Clinical Policy: Extracorporeal Membrane Oxygenation Therapy

Reference Number: WA.CP.MP.514

Date of Last Revision: 07/24

Effective Date: 09/01/24

[Coding Implications](#)

[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

Description

This policy describes the medical necessity guidelines for extracorporeal membrane oxygenation therapy (ECMO).

Policy/Criteria

- I. It is the policy of Coordinated Care of Washington, Inc., in accordance with the Health Care Authority’s Health Technology Assessment and Health Care Authority Billing Guidelines, that ECMO is considered **medically necessary** when any of the following criteria are met.
 - A. Members/Enrollees with severe life-threatening, but potentially reversible, acute respiratory or cardiac dysfunction unresponsive to conventional management,
 - B. Bridging therapy for patients in pulmonary failure who are on a pulmonary transplant list,
 - C. Bridging therapy for patients in cardiac failure who are eligible for a ventricular assist device or cardiac transplantation
- II. Procedures must be performed at a facility participating in the Extracorporeal Life Support Organization (ELSO) case registry.

Background

This policy is based entirely on Washington State Health Care Authority (HCA) Health Technology Assessment (HTA) and Health Care Authority Billing Guidelines.

Coding Implications

This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2019, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

CPT® Codes	Description
33946	Extracorporeal membrane oxygenation (ECMO)/extracorporeal life support (ECLS) provided by physician; initiation, veno-venous
33947	ECMO/ECLS provided by physician, initiation, veno-arterial
33948	ECMO/ECLS provided by physician, daily management, each day, veno-venous
33949	ECMO/ECLS provided by physician, daily management, each day, veno-arterial

CPT® Codes	Description
33951	ECMO/ECLS provided by physician, insertion of peripheral cannula percutaneous, birth through 5 years of age
33952	ECMO/ECLS provided by physician, insertion of peripheral cannula, percutaneous, 6 years and older
33953	ECMO/ECLS provided by physician, insertion of peripheral cannula open, birth through 5 years of age
33954	ECMO/ECLS provided by physician, insertion of peripheral cannula, open 6 years and older
33955	ECMO/ECLS provided by physician, insertion of central cannula by sternotomy or thoracotomy, birth through 5 years of age
33956	ECMO/ECLS provided by physician, insertion of central cannula by sternotomy or thoracotomy, 6 years and older
33957	ECMO/ECLS provided by physician, reposition of peripheral cannula, percutaneous, birth through 5 years of age
33958	ECMO/ECLS provided by physician, reposition peripheral cannula, percutaneous, 6 years and older
33959	ECMO/ECLS provided by physician, reposition peripheral cannula, open, birth through 5 years of age
33962	ECMO/ECLS provided by physician, reposition peripheral cannula, open, 6 years and older
33963	ECMO/ECLS provided by physician, reposition of central cannula by sternotomy or thoracotomy, birth through 5 years of age
33964	ECMO/ECLS provided by physician, reposition central cannula by sternotomy or thoracotomy, 6 years and older
33965	ECMO/ECLS provided by physician, removal of peripheral cannula, percutaneous, birth through 5 years of age
33966	ECMO/ECLS provided by physician, removal of peripheral cannula, percutaneous, 6 years and older
33969	ECMO/ECLS provided by physician, removal of peripheral cannula, open, birth through 5 years of age
33984	ECMO/ECLS provided by physician, removal of peripheral cannula, open, 6 years of age and older
33985	ECMO/ECLS provided by physician, removal of central cannula by sternotomy or thoracotomy, birth through 5 years of age
33986	ECMO/ECLS provided by physician, removal of central cannula by sternotomy or thoracotomy, 6 years and older
33987	Arterial exposure with creation of graft conduit to facilitate arterial perfusion for ECMO/ECLS
33988	Insertion of left heart vent by thoracic incision for ECMO/ECLS
33989	Removal of left heart vent by thoracic incision for ECMO/ECLS

Reviews, Revisions, and Approvals	Revision Date	Approval Date
Policy developed.	08/19	08/19
Annual review. References updated	08/20	09/20
Annual review. References updated. “Members” replaced with “Members/Enrollees”	08/21	09/21
Annual review. References updated.	08/22	08/22
Annual review. References updated.	08/23	08/23
Annual review. References updated.	07/24	07/24

References

1. Travers, K., Russo, E., Synnot, P., Chapman, R., Pearson, S., Ollendorf, D. (Institute for Clinical and Economic Review). Extracorporeal Membrane Oxygenation. Washington Health Technology Assessment. February 12, 2016.
2. Washington State Health Care Authority. Physician-related Services/Health Care Billing Guide. <https://www.hca.wa.gov/assets/billers-and-providers/Physician-related-services-bg-20240701.pdf>. Revision effective July 1, 2024.

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members/enrollees. This clinical policy is not intended to recommend treatment for members/enrollees. Members/enrollees should consult with their treating physician in connection with diagnosis and treatment decisions.

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Note: For Medicaid members/enrollees, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

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