

Medtronic

Extracorporeal membrane oxygenation (ECMO)

2025 reimbursement reference guide

Inpatient payment

The MS-DRG shown reflect possible MS-DRG assignments based on the procedural coding submitted.

Definitions:

- **Veno-arterial ECMO:** ECMO cannulation is done percutaneously via the peripheral vasculature system (e.g., femoral artery/vein). A venous cannula is placed in the right or left femoral vein for drainage and right or left femoral artery for infusion.
- **Veno-venous ECMO:** ECMO cannulation is done percutaneously via the peripheral vasculature system (e.g., femoral artery/vein). A venous cannula is placed in the right or left femoral vein for drainage and right or left femoral vein for infusion.
- **Central ECMO:** ECMO cannulation is done by open exposure via the central vasculature system (e.g., ascending aorta); usually achieved through a sternotomy.

Hospital coding and payment

ECMO is reimbursed as an inpatient-only procedure.

ECMO duration	MS-DRG	MS-DRG description	FY2025 Medicare National Unadjusted Payment ¹ (Eff. Oct. 1, 2024 to Sept. 30, 2025)
Continuous ECMO	003	ECMO or Trach with MV > 96 hrs or PDX exc. Face, mouth, and neck with Maj O.R.	\$152,947
Intraoperative ECMO [†]	Varies	Reimbursed as part of the principal surgical procedure MS-DRG	Varies

[†] Intraoperative use of ECMO is billed to capture services where ECMO is used during a procedure for intraprocedural support where the patient is only on ECMO for the duration of the procedure.

ECMO reimbursement: Reimbursement for the ECMO supplies (e.g., cannulae, oxygenator) is encompassed in the major procedures (e.g., extracorporeal membrane oxygenation, heart valve procedure, or CABG) in which the supplies are used.

Inpatient coding: ICD-10 PCS codes

Please refer to clinical documentation for appropriate ICD-10 PCS code selection.

Type of ECMO	ICD-10 PCS procedure code ¹	ICD-10 PCS code description ¹
Continuous ECMO is used as life support by providing continual oxygenation to organs and tissues in patients with cardiopulmonary insufficiency.		
Central ECMO	5A1522F	Extracorporeal Oxygenation, Membrane, Central
Veno-arterial extracorporeal membrane oxygenation (VA-ECMO)	5A1522G	Extracorporeal Oxygenation, Membrane, Peripheral Veno-arterial
Veno-venous extracorporeal membrane oxygenation (VV-ECMO)	5A1522H	Extracorporeal Oxygenation, Membrane, Peripheral Veno-venous
Intraoperative ECMO is used for circulatory support during an operative episode, e.g., in the OR or cardiac catheterization lab, only for the duration of the procedure.		
Intraoperative ECMO, Central	5A15A2F	Extracorporeal Oxygenation, Membrane, Central, Intraoperative
Intraoperative VA-ECMO	5A15A2G	Extracorporeal Oxygenation, Membrane, Peripheral Veno-arterial, Intraoperative
Intraoperative VV-ECMO	5A15A2H	Extracorporeal Oxygenation, Membrane, Peripheral Veno-venous, Intraoperative

HCPCS coding (C-codes)

- There are no C-codes for ECMO supplies.
- The ECMO procedure is reimbursed as an inpatient-only procedure.

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Physician coding and payment

- There are multiple physician codes associated with the ECMO procedure that describe ECMO initiation, ECMO continuation, patient age, insertion site, removal, and repositioning of cannula.
- Refer to the CPT code book for guidelines on these codes.

CPT code	Description	2025 Medicare National Unadjusted Amount ²	2025 work RVUs ²	2025 total facility RVUs ²
Procedures involving extracorporeal membrane oxygenation (ECMO)/extracorporeal life support (ECLS) provided by physician				
Initiation				
33946	ECMO/ECLS initiation veno-venous	\$294	6.0	9.1
33947	ECMO/ECLS initiation veno-arterial	\$326	6.63	10.09
Note: Initiation encompasses daily management and repositioning of cannulae. They may not be coded or reported separately by the same or a different physician on the same day as initiation.				
Daily management				
33948	ECMO/ECLS, daily management, each day, veno-venous	\$228	4.73	7.04
33949	ECMO/ECLS, daily management, each day, veno-arterial	\$222	4.6	6.87
Note: Daily overall management may be coded and reported separately from E/M codes.				
Insertion of cannulae				
33951	ECMO/ECLS, insertion peripheral cannula(e), percutaneous, birth-5 years	\$401	8.15	12.39
33952	ECMO/ECLS, insertion peripheral cannula(e), percutaneous, 6+ years	\$405	8.15	12.51
33953	ECMO/ECLS, insertion peripheral cannula(e), open, birth-5 years	\$447	9.11	13.82
33954	ECMO/ECLS, insertion peripheral cannula(e), open, 6+ years	\$452	9.11	13.98
33955	ECMO/ECLS, insertion central cannula(e) by sternotomy/thoracotomy, birth-5 years	\$781	16.0	24.15
33956	ECMO/ECLS, insertion central cannula(e), by sternotomy/thoracotomy, 6+ years	\$791	16.0	24.46
Note: Replacement of cannulae in the same vessel is coded and reported using the insertion codes only.				
Repositioning of cannulae				
33957	ECMO/ECLS, reposition peripheral cannula(e), percutaneous, birth-5 years	\$175	3.51	5.4
33958	ECMO/ECLS, reposition peripheral cannula(e), percutaneous, 6+ years	\$175	3.51	5.4
33959	ECMO/ECLS, reposition peripheral cannula(e), open, birth-5 years	\$222	4.47	6.85
33962	ECMO/ECLS, reposition peripheral cannula(e), open, 6+ years	\$222	4.47	6.85
33963	ECMO/ECLS, reposition central cannula(e) by sternotomy/thoracotomy, birth-5 years	\$441	9.0	13.64
33964	ECMO/ECLS, reposition central cannula(e) by sternotomy/thoracotomy, 6+ years	\$465	9.5	14.38
Note: The repositioning codes include fluoroscopic guidance. Repositioning may not be coded or reported separately when performed at the same session as cannulae insertion.				
Removal of cannulae				
33965	ECMO/ECLS, removal peripheral cannula(e), percutaneous, birth-5 years	\$175	3.51	5.4
33966	ECMO/ECLS, removal peripheral cannula(e), percutaneous, 6+ years	\$225	4.5	6.95
33969	ECMO/ECLS, removal peripheral cannula(e), open, birth-5 years	\$257	5.22	7.94
33984	ECMO/ECLS, removal peripheral cannula(e), open, 6+ years	\$269	5.46	8.33
33985	ECMO/ECLS, removal central cannula(e) by sternotomy/thoracotomy, birth-5 years	\$484	9.89	14.97
33986	ECMO/ECLS, removal central cannula(e) by sternotomy/thoracotomy, 6+ years	\$498	10.0	15.41

Note: In cannulae replacement, removal can be coded separately with insertion if they involve two different vessels.

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Medtronic may not carry products used in all procedures.

1. FY 2025 IPPS Final Rule Home Page. Centers for Medicare & Medicaid Services. Available at: <https://www.cms.gov/medicare/payment/prospective-payment-systems/acute-inpatient-pps/fy-2025-ipp-pps-final-rule-home-page>. Accessed on December 3, 2024.
2. CY 2025 payment was calculated with the Conversion Factor (CF) of \$32.3465. CMS CY 2025 Medicare Physician Fee Schedule Final Rule. Available at: <https://www.federalregister.gov/public-inspection/2024-25382/medicare-and-medicare-programs-calendar-year-2025-payment-policies-under-the-physician-fee-schedule>. Accessed on November 24, 2024. CMS may make adjustments to any or all of the data inputs from time to time without notice.

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