ALPHAVAC

MULTIPURPOSE MECHANICAL ASPIRATION

2025 Coding and Reimbursement Guidelines for The AlphaVac Multipurpose Mechanical Aspiration (MMA) System

EFFECTIVE JANUARY 1, 2025

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angiodynamics

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MULTIPURPOSE MECHANICAL ASPIRATION

AngioDynamics' AlphaVac Multipurpose Mechanical Aspiration (MMA) F22^{20} and F22^{180} System Indications for Use:

- **the non-surgical removal of thrombi or emboli from the vasculature.**
- **aspiration of contrast media and other fluids from the vasculature.**

The Cannula is intended for use in the venous system.

AlphaVac MMA F18^{85} System Indications for Use:

- **the non-surgical removal of thrombi or emboli from the vasculature**
- **aspiration of contrast media and other fluids from the vasculature**

The Cannula is intended for use in the venous system and for the treatment of pulmonary embolism.

The Handle is indicated as a vacuum source for the AlphaVac Multipurpose Mechanical Aspiration System.

The information in the following pages is general reimbursement information only and is intended to assist you to comply with complex and changing reimbursement policies. It is not legal advice, nor is it advice about how to code, complete, or submit any particular claim for payment. It is not intended to increase or maximize reimbursement by any third-party payor. This information has been gathered from third-party sources and was correct at the time of publication. It is subject to change without notice. It is the provider's responsibility to exercise independent clinical judgment to determine appropriate coding and charges that accurately reflect all the patient's conditions and services provided. These conditions and services must be recorded in the patient's medical records. All devices should be used consistently with FDA approvals or clearances. The information provided here is intended for informational purposes only and represents no statement, promise or guarantee by AngioDynamics concerning levels of reimbursement, payment, or charges. Payors may have different coding and reimbursement requirements. Providers should contact the payor to confirm current requirements and policies when needed. All decisions related to reimbursement, including amounts to bill, are exclusively that of the provider. The following tables provide only examples of hospital MS-DRGs and payment levels. They are not an all-inclusive list of MS-DRGs and payment levels that may apply to procedures using the AlphaVac System.

CPT® Codes for Physician Payment (January 2025 – December 2025)

Current Procedural Terminology (CPT®) Codes are used to document the procedures or medical services healthcare professionals provide. The listed CPT® codes in the table below are examples that may apply to percutaneous peripheral vascular interventions. Coding for the physician procedures varies widely, and must accurately reflect the services provided, especially if a combination of procedures is needed to treat a patient's specific needs.

CPT® Code[1]	CPT® Description[1]	Physician Fee Schedule[2]			
		Non-Facility		Facility	
		RVUs	Fee	RVUs	Fee
37187	Percutaneous transluminal mechanical thrombectomy, vein(s), including intraprocedural pharmacological thrombolytic injections and fluoroscopic guidance	47.89	$1,549.07	11.53	$372.96
37188	Percutaneous transluminal mechanical thrombectomy, vein(s), including intraprocedural pharmacological thrombolytic injections and fluoroscopic guidance, repeat treatment on subsequent day during course of thrombolytic therapy	41.13	$1,330.41	8.23	$266.21

(NOTE: Do not report 37187 or 37188 in conjunction with 76000, 96375).

HCPCS Codes

Healthcare Common Procedure Coding System (HCPCS) codes were developed to help categorize, document, and track the use of products, supplies, and services. While HCPCS codes do not generally result in additional payment, it is important for providers to use HCPCS codes as CMS uses the data collected from the codes and associated charges to help determine future payment rates. The HCPCS codes listed below may be used for AlphaVac System supplies used during percutaneous peripheral vascular interventions.

Example of HCPCS Code[3]		
HCPCS code	Code Description	AlphaVac Product/Item Number
C1757	Catheter, thrombectomy/embolectomy	AlphaVac System with F22[20] Cannula/H787253000
		AlphaVac System with F22[180] Cannula/H787253010
		AlphaVac System with F18[85] Cannula/H787253020

Codes for Physician and Outpatient Procedures for the Treatment of Pulmonary Embolism* (January 1, 2025 – December 31, 2025)

Medicare 2025 National Average Payment (Not Geographically Adjusted)							
Service Provided		Physician Fee Schedule[2]				Hospital OPPS Payment[3]	
CPT® Code[1]	CPT® Description (Procedure Codes)[1,13]	Non-Facility		Facility		APC *(Status Indicator)*	Payment
		RVU	Payment	RVU	Payment		
37184	Primary percutaneous transluminal mechanical thrombectomy, noncoronary, non-intracranial, arterial or arterial bypass graft, including fluoroscopic guidance and intraprocedural pharmacological thrombolytic injection(s); initial vessel	48.75	$1,576.90	12.62	$408.21	5194 (J1)[5]	$17,956.72
+37185	Primary percutaneous transluminal mechanical thrombectomy, noncoronary, non-intracranial, arterial or arterial bypass graft, including fluoroscopic guidance and intraprocedural pharmacological thrombolytic injection(s); second and all subsequent vessel(s) within the same vascular family (List separately in addition to code for primary mechanical thrombectomy procedure)	13.64	$441.21	4.76	$153.97	N/A	Packaged (N)
+37186	Secondary percutaneous transluminal thrombectomy (eg, nonprimary mechanical, snare basket, suction technique), noncoronary, non-intracranial, arterial or arterial bypass graft, including fluoroscopic guidance and intraprocedural pharmacological thrombolytic injections, provided in conjunction with another percutaneous intervention other than primary mechanical thrombectomy (List separately in addition to code for primary procedure)	33.84	$1,094.61	7.16	$231.60	N/A	Packaged (N)

* Only the AlphaVac F18[85] System is intended for use in the venous system and for the treatment of pulmonary embolism. The AlphaVac F22[20] and AlphaVac F22[180] are not indicated for the treatment of PE.

ICD-10-PCS Hospital Procedure Code(s)

Hospitals should ensure their coding is based on the most recent and up-to-date ICD-10-PCS codes. There are several sections of the ICD-10-PCS system which may be available to describe procedures associated with the AlphaVac System. The listed ICD-10-PCS procedure codes are examples of codes that may apply to venous extirpation procedures. Each ICD-10- PCS may be grouped under a Medicare Severity-Diagnosis Related Group (MS-DRGs). If significant additional procedures are performed during the same inpatient admission, other MS-DRGs may apply.

ICD-10-PCS Codes and MS-DRG Groups			
ICD-10-PCS[4]	**ICD-10-PCS Descriptor[4]**	**MS-DRG Numbers5**	**MS-DRG Category Descriptor5**
06C03ZZ	Extirpation of Matter from Inferior Vena Cava, Percutaneous Approach	270, 271, 272	OTHER MAJOR CARDIOVASCULAR PROCEDURES
02CV3ZZ	Extirpation of Matter from Superior Vena Cava, Percutaneous Approach	163, 164, 165	MAJOR CHEST PROCEDURES
		270, 271, 272	OTHER MAJOR CARDIOVASCULAR PROCEDURES
		907, 908, 909	OTHER O.R. PROCEDURES FOR INJURIES
		957, 958, 959	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA
02CJ3ZZ	Extirpation of Matter from Tricuspid Valve, Percutaneous Approach	270, 271, 272	OTHER MAJOR CARDIOVASCULAR PROCEDURES
02C63ZZ	Extirpation of Matter from Right Atrium, Percutaneous Approach	228, 229	OTHER CARDIOTHORACIC PROCEDURES
02CK3ZZ	Extirpation of Matter from Right Ventricle, Percutaneous Approach	228, 229	OTHER CARDIOTHORACIC PROCEDURES
06C93ZZ	Extirpation of Matter from Right Renal Vein, Percutaneous Approach	270, 271, 272	OTHER MAJOR CARDIOVASCULAR PROCEDURES
		673, 674, 675	OTHER KIDNEY & URINARY TRACT PROCEDURE
06CB3ZZ	Extirpation of Matter from Left Renal Vein, Percutaneous Approach	270, 271, 272	OTHER MAJOR CARDIOVASCULAR PROCEDURES
		673, 674, 675	OTHER KIDNEY & URINARY TRACT PROCEDURE
06CC3ZZ	Extirpation of Matter from Right Common Iliac Vein, Percutaneous Approach	270, 271, 272	OTHER MAJOR CARDIOVASCULAR PROCEDURES
06CD3ZZ	Extirpation of Matter from Left Common Iliac Vein, Percutaneous Approach	270, 271, 272	OTHER MAJOR CARDIOVASCULAR PROCEDURES
02CP3ZZ	Extirpation of Matter from Pulmonary Trunk, Percutaneous Approach	163, 164, 165	DISEASES AND DISORDERS OF THE RESPIRATORY SYSTEM
		270, 271, 272	DISEASES AND DISORDERS OF THE CIRCULATORY SYSTEM
02CQ3ZZ	Extirpation of Matter from Right Pulmonary Artery, Percutaneous Approach	163, 164, 165	DISEASES AND DISORDERS OF THE RESPIRATORY SYSTEM
		270, 271, 272	DISEASES AND DISORDERS OF THE CIRCULATORY SYSTEM
02CR3ZZ	Extirpation of Matter from Left Pulmonary Artery, Percutaneous Approach	163, 164, 165	DISEASES AND DISORDERS OF THE RESPIRATORY SYSTEM
		270, 271, 272	

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Medicare Severity Diagnoses Related Groups (October 2024 – September 2025)

The following MS-DRGs may apply to percutaneous peripheral vascular interventions for Medicare patients depending on the ICD-10-PCS code used. ICD-10-PCS codes can group into different MS-DRGs depending upon all procedures performed and the patient's diagnoses. This chart presents examples of MS-DRGs and associated payment amounts for Medicare patients in 2025 (effective October 1, 2024). Payment amounts are based on a National Operating and Capital amount for 2025 = $7,116.03[7].

Examples of Diagnosis Related Group (DRG) Codes & Base Rates			
MS-DRG Number[5]	**MS-DRG Descriptor[5]**	**Weight[6]**	**Payment[6]**
163	MAJOR CHEST PROCEDURES WITH MCC	4.6092	$32,799.21
164	MAJOR CHEST PROCEDURES WITH CC	2.5170	$17,911.05
165	MAJOR CHEST PROCEDURES WITHOUT CC/MCC	1.8640	$13,264.28
228	OTHER CARDIOTHORACIC PROCEDURES W MCC	4.9833	$35,461.31
229	OTHER CARDIOTHORACIC PROCEDURES W/O MCC	3.1063	$22,104.52
270	OTHER MAJOR CARDIOVASCULAR PROCEDURES WITH MCC	5.1330	$36,526.53
271	OTHER MAJOR CARDIOVASCULAR PROCEDURES WITH CC	3.4444	$24,507.60
272	OTHER MAJOR CARDIOVASCULAR PROCEDURES WITHOUT CC/MCC	2.5022	$17,805.73
673	OTHER KIDNEY & URINARY TRACT PROCEDURES W MCC	4.1896	$29,813.32
674	OTHER KIDNEY & URINARY TRACT PROCEDURES W CC	2.3084	$16,426.64
675	OTHER KIDNEY & URINARY TRACT PROCEDURES W/O CC/MCC	1.5653	$11,138.72
907	OTHER O.R. PROCEDURES FOR INJURIES WITH MCC	3.9837	$28,348.13
908	OTHER O.R. PROCEDURES FOR INJURIES WITH CC	2.0171	$14,353.74
909	OTHER O.R. PROCEDURES FOR INJURIES WITHOUT CC/MCC	1.2683	$9,025.26
957	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA W MCC	7.4642	$53,115.47
958	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA W CC	4.1098	$29,245.46
959	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA W/O CC/MCC	2.6439	$18,814.07

ICD-10-CM Diagnosis Code(s)

Diagnosis codes should accurately reflect the patient's medical condition, should be reported in the patient's medical records, and should be consistent with payor requirements.

General Classes of ICD-10-CM Diagnosis Codes[7]	
I82.0	Other venous embolism and thrombosis

Examples of ICD-10-CM Diagnosis Code(s)[7]	
Code	Code Description
I82.220	Acute embolism and thrombosis of inferior vena cava
I82.210	Acute embolism and thrombosis of superior vena cava
I82.290	Acute embolism and thrombosis of other thoracic veins
I82.441	Acute embolism and thrombosis of right tibial vein
I82.442	Acute embolism and thrombosis of left tibial vein
I82.443	Acute embolism and thrombosis of tibial vein, bilateral
I82.449	Acute embolism and thrombosis of unspecified tibial vein
I82.491	Acute embolism and thrombosis of other specified deep vein of right lower extremity
I82.492	Acute embolism and thrombosis of other specified deep vein of left lower extremity
I82.493	Acute embolism and thrombosis of other specified deep vein of lower extremity, bilateral
I82.499	Acute embolism and thrombosis of other specified deep vein of unspecified lower extremity
I82.4Z1	Acute embolism and thrombosis of unspecified deep veins of right distal lower extremity
I82.4Z2	Acute embolism and thrombosis of unspecified deep veins of left distal extremity
I82.4Z3	Acute embolism and thrombosis of unspecified deep veins of distal lower extremity, bilateral
I82.4Z9	Acute embolism and thrombosis of unspecified deep veins of unspecified distal lower extremity
I82.890	Acute embolism and thrombosis of other specified veins
I82.90	Acute embolism and thrombosis of unspecified vein

General Classes of ICD-10-CM Diagnosis Codes[7]	
I26.0	Pulmonary embolism

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Examples of ICD-10-CM Diagnosis Code(s)[7]	
Code	Code Description
I26.0	Pulmonary embolism with acute cor pulmonale
I26.01	Septic pulmonary embolism with acute cor pulmonale
I26.02	Saddle embolus of pulmonary artery with actue cor pulmonale
I26.09	Other pulmonary embolism with acute cor pulmonale
I26.9	Pulmonary embolism without acute cor pulmonale
I26.90	Septic pulmonary embolism without acute cor pulmonale
I26.92	Saddle embolus of pulmonary artery without acute cor pulmonale
I26.93	Single subsegmental pulmonary embolism without acute cor pulmonale
I26.94	Multiple subsegmental pulmonary embolism without acute cor pulmonale
I26.99	Other pulmonary embolism without acute cor pulmonale

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References

1. CPT © 2024 Professional. American Medical Association (AMA). All rights reserved. CPT® is a registered trademark of the AMA. No fee schedules, basic units, relative values or related listings are included in CPT® including for Category 3 codes. Inclusion of a CPT® code does not represent AMA endorsement or imply any coverage or reimbursement policy. Reimbursement information here is from the Centers for Medicare and Medicaid Services (CMS), see sources below. Applicable FARS/DFARS restrictions apply to Government Use.
2. Physician fee schedule rates were calculated using Conversion Factor (32.3465) multiplied by Total Facility & Non-Facility RVUs. CMS, CMS 1784-F: Medicare and Medicaid Programs; CY2024 Payment Policies under the Physician Fee Schedule and Other Changes to Part B Payment and Coverage Policies; Medicare Shared Savings Program Requirements; Medicare Advantage; Medicare and Medicaid Provider and Supplier Enrollment Policies; and Basic Health Program https://federalregister.gov/d/2024-25382. Published November 1, 2024. Effective January 1, 2025. Accessed December 11, 2024
3. AAPC. 2024 HCPCS Level II Expert: Service Supply Codes for Caregivers and Suppliers. American Academy of Professional Coders; 2024.
4. CMS, 2024 ICD-10 Procedure Coding System (ICD-10-PCS). https://www.cms.gov/medicare/coding-billing/icd- 10-codes/2024-icd-10-pcs. Accessed September 3, 2024. AAPC Codify, Cross-Reference "ICD-10-PCS - MS-DRG" Accessed September 3, 2024.
5. CMS, [CMS-1808-F] 2025 Medicare Hospital Inpatient Prospective Payment System (IPPS) Final Rule; Federal Register. https://www.cms.gov/medicare/payment/prospective-payment-systems/acute-inpatient-pps/fy-2025-ipps-final-rule-home-page. Payment is calculated based on the national adjusted standardized amount $7,116.03. Actual Medicare payment rates will vary from adjustments by Wage Index and Geographic Adjustment Factor depending on geographic locality. Also note that any applicable coinsurance, deductible, and other amounts that are patient obligations are included in the payment amount shown. Accessed October 7, 2024
6. Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS). 2022 release of International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM). https://www.cdc.gov/nchs/icd/icd-10-cm.htm. Updated June 7, 2024. Accessed September 3, 2024.

Frequently Asked Questions

Q. Is the AlphaVac Multipurpose Mechanical Aspiration (MMA) System FDA cleared?

A. Yes, FDA clearance was granted on June 4, 2021 for the AlphaVac Multipurpose Mechanical Aspiration (MMA) System F22[20] and F22[180]. The AlphaVac Multipurpose Mechanical Aspiration (MMA) System F18[85] was cleared by FDA on April 4, 2022. The AlphaVac Multipurpose Mechanical Aspiration (MMA) System F18[85] was expanded to include the treatment of pulmonary embolism on April 1, 2024.
AlphaVac F22[20] and F22[180]: https://www.accessdata.fda.gov/cdrh_docs/pdf21/K211081.pdf
AlphaVac F18[85]: https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm?ID=K240397

Q. What is the AlphaVac System's intended use?

A. AlphaVac F22[20] and F22[180] Multipurpose Mechanical Aspiration (MMA) System is indicated for the non-surgical removal of:

- thrombi or emboli from the vasculature
- aspiration of contrast media and other fluids from the vasculature.

The Cannula is intended for use in the venous system.
The Handle is indicated as a vacuum source for the AlphaVac Multipurpose Mechanical Aspiration System.

AlphaVac MMA F18[85] System is indicated for the non-surgical removal of:

- thrombi or emboli from the vasculature
- aspiration of contrast media and other fluids from the vasculature

The Cannula is intended for use in the venous system and for the treatment pulmonary embolism.
The Handle is indicated as a vacuum source for the AlphaVac Multipurpose Mechanical Aspiration System.

Q. What is the procedure code when the AlphaVac System is used for the removal of thrombus from the venous system?

A. There are specific CPT® codes available for physicians to bill for percutaneous venous transluminal mechanical thrombectomy (37187 – 37188).
For inpatient facility coding, there are ICD-10 PCS codes available to describe the percutaneous extirpation of matter, based on location.

Q. How should hospitals code when the AlphaVac System is used?

A. Coding for use of the AlphaVac System will depend on how it is used, described in the documentation, and consistent with payor requirements.

Q. What if I need additional assistance? Who should I contact?

A. If you have questions or require additional resources, email the Reimbursement Support team at reimbursement@angiodynamics.com.

Risk Information
AlphaVac MMA F22[20] and F22[180] System Indications for Use:
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- aspiration of contrast media and other fluids from the vasculature.

The Cannula is intended for use in the venous system.
The Handle is indicated as a vacuum source for the AlphaVac Multipurpose Mechanical Aspiration System. Contraindications:
Contraindications: The following contraindications are applicable: -The device is contraindicated in the removal of chronic firmly adherent intravascular material (e.g., atherosclerotic plaque, chronic pulmonary embolism). -The device is contraindicated for use in the right heart during active cardiopulmonary resuscitation. -The device is contraindicated for blood storage and infusion back into the patient.

AlphaVac MMA F18[85] System Indications for Use:
The Cannula is indicated for:

- the non-surgical removal of thrombi or emboli from the vasculature
- aspiration of contrast media and other fluids from the vasculature

The Cannula is intended for use in the venous system and for the treatment of pulmonary embolism.
The Handle is indicated as a vacuum source for the AlphaVac Multipurpose Mechanical Aspiration System.
Contraindications: The following contraindications are applicable: -The device is contraindicated in the removal of chronic firmly adherent intravascular material. -The device is contraindicated for use in the right heart or pulmonary arteries during active cardiopulmonary resuscitation. -The device is contraindicated for blood storage and infusion back into the patient.
Refer to Directions for Use and/or User Manual provided with the product for complete Instructions, Warnings, Precautions, Possible Adverse Effects and Contraindications prior to use of the product.
CAUTION: Federal law (USA) restricts this device to sale by or on the order of a physician.

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