

## Policy: MP211

## **Section: Medical Benefit Policy**

## Subject: Endovascular Repair of Intracranial Aneurysms

## Applicable line of business:

Commercial	Medicaid	
Medicare	ACA	
CHIP		

I. Policy: Endovascular Repair of Intracranial Aneurysms

II. Purpose/Objective: To provide a policy of coverage regarding Endovascular Repair of Intracranial Aneurysms

#### III. Responsibility:

- A. Medical Directors
- **B.** Medical Management

## **IV. Required Definitions**

- 1. Attachment a supporting document that is developed and maintained by the policy writer or department requiring/authoring the policy.
- 2. Exhibit a supporting document developed and maintained in a department other than the department requiring/authoring the policy.
- 3. Devised the date the policy was implemented.
- 4. Revised the date of every revision to the policy, including typographical and grammatical changes.
- 5. Reviewed the date documenting the annual review if the policy has no revisions necessary.

#### Commercial

Geisinger Health Plan may refer collectively to health care coverage sponsors Geisinger Health Plan, Geisinger Quality Options, Inc., and Geisinger Indemnity Insurance Company, unless otherwise noted. Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.

#### Medicare

Geisinger Gold Medicare Advantage HMO, PPO, and HMO D-SNP plans are offered by Geisinger Health Plan/Geisinger Indemnity Insurance Company, health plans with a Medicare contract. Continued enrollment in Geisinger Gold depends on contract renewal. Geisinger Health Plan/Geisinger Indemnity Insurance Company are part of Geisinger, an integrated health care delivery and coverage organization.

#### CHIP

Geisinger Health Plan Kids (GHP Kids) is a Children's Health Insurance Program (CHIP) offered by Geisinger Health Plan in conjunction with the Pennsylvania Department of Human Services (DHS). Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.

#### Medicaid

Geisinger Health Plan Family (GHP Family) is a Medical Assistance (Medicaid) insurance program offered by Geisinger Health Plan in conjunction with the Pennsylvania Department of Human Services (DHS). Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.

## V. Additional Definitions

Medical Necessity or Medically Necessary means Covered Services rendered by a Health Care Provider that the Plan determines are:

- a. appropriate for the symptoms and diagnosis or treatment of the Member's condition, illness, disease or injury;
- b. provided for the diagnosis, and the direct care and treatment of the Member's condition, illness disease or injury;
- c. in accordance with current standards of good medical treatment practiced by the general medical community.
- d. not primarily for the convenience of the Member, or the Member's Health Care Provider; and

the most appropriate source or level of service that can safely be provided to the Member. When applied to hospitalization, this further means that the Member requires acute care as an inpatient due to the nature of the services rendered or the Member's condition, and the Member cannot receive safe or adequate care as an outpatient

## **Medicaid Business Segment**

Medically Necessary — A service, item, procedure, or level of care that is necessary for the proper treatment or management of an illness, injury, or disability is one that:

- Will, or is reasonably expected to, prevent the onset of an illness, condition, injury or disability.
- Will, or is reasonably expected to, reduce or ameliorate the physical, mental or developmental effects of an illness, condition, injury or disability.
- Will assist the Member to achieve or maintain maximum functional capacity in performing daily activities, taking into account both the functional capacity of the Member and those functional capacities that are appropriate for Members of the same age.

## **DESCRIPTION:**

Endovascular repair of intracranial aneurysms, also called coil embolization, is intended as a less invasive alternative to surgical clipping. The objective is to occlude blood flow to the vascular lesion by using electrolytically detachable coils and/or stents that are percutaneously deployed within the aneurysm.

## INDICATIONS:

Endovascular repair of intracranial aneurysms is considered medically necessary for the following indications:

- Ruptured intracranial aneurysm or pseudoaneurysm
- Unruptured intracranial aneurysm or pseudoaneurysm when size, location or other characteristics make surgical repair technically more difficult, unfeasible, or contraindicated.
- The device has FDA approval specific to the indication.

The following devices have received FDA approval for humanitarian use with embolic coils in the treatment of unruptured wide-neck intracranial aneurysms:

- The Neuroform<sup>™</sup> Microdelivery Stent System
- The Enterprise™ Vascular Reconstruction Device and Delivery System
- The LVIS® or LVIS® Jr. Low-Profile Visualized Intraluminal Support Device

The use of an intracranial stent in conjunction with endovascular coil embolization of a wide-neck intracranial aneurysm is considered medically necessary.

The Pipeline® Embolization Device or flow-diverting stent, received FDA premarket approval for endovascular treatment of large or giant wide-necked intracranial aneurysms in the internal carotid artery in adult patients aged 22 years or older. It is considered medically necessary when standard endovascular techniques do not allow for complete isolation of the aneurysm, e.g., wide-neck aneurysm (4 mm or more) or sack-to-neck ratio less than 2:1.

See Also: MP184 Intracranial Percutaneous Transluminal Angioplasty

# Medicaid Business Segment:

Any requests for services, that do not meet criteria set in the PARP, may be evaluated on a case by case basis.

Note: A complete description of the process by which a given technology or service is evaluated and determined to be experimental, investigational or unproven is outlined in MP 15 - Experimental Investigational or Unproven Services or Treatment

## CODING ASSOCIATED WITH:

The following codes are included below for informational purposes and may not be all inclusive. Inclusion of a procedure or device code(s) does not constitute or imply coverage nor does it imply or guarantee provider

reimbursement. Coverage is determined by the member specific benefit plan document and any applicable laws regarding coverage of specific services. Please note that per Medicare coverage rules, only specific CPT/HCPCS Codes may be covered for the Medicare Business Segment. Please consult the CMS website at <a href="http://www.cms.gov">www.cms.gov</a> or the local Medicare Administrative Carrier (MAC) for more information on Medicare coverage and coding requirements.

- 61623 Endovascular temporary balloon arterial occlusion, head or neck (extracranial/intracranial) including selective catheterization of vessel to be occluded, positioning and inflation of occlusion balloon, concomitant neurological monitoring, and radiologic supervision and interpretation of all angiography required for balloon occlusion and to exclude vascular injuring post occlusion
- 61624 Transcatheter permanent occlusion or embolization (e.g., for tumor destruction, to achieve hemostasis, to occlude a vascular malformation), percutaneous, any method; central nervous system (intracranial, spinal cord)

75894 Transcatheter therapy, embolization, any method, radiological supervision and interpretation

Current Procedural Terminology (CPT®) © American Medical Association: Chicago, IL

## LINE OF BUSINESS:

Eligibility and contract specific benefits, limitations and/or exclusions will apply. Coverage statements found in the line of business specific benefit document will supersede this policy. For Medicare, applicable LCD's and NCD's will supercede this policy. For PA Medicaid Business segment, this policy applies as written.

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Johnston SC, Higashida RT, Barrow DL, et al. AHA Scientific Statement. Recommendations for the endovascular treatment of intracranial aneurysms. Stroke 2002;33:2536-2544.

Zenteno M, Freitas JMM, Alburto-Murieta Y, et. al. Balloon-expandable stenting with and without coiling for wide-neck and complex aneurysms. Surgical neurology 2006;66:603-610.

Pandey AS, Koebbe C, Rosenwasser R, Veznedaroglu E. Endovascular coil embolization of ruptured and unruptured posyerior circulation aneurysms: review of a 10-year experience. Neurosurgery 2007;60(4):626-636.

Winifred S. Hayes. Hayes Inc. Online. Endovascular Therapy for Intracranial Aneurysms. Mar. 13, 2006.

Brooks, NP, Turk, AS, Niemann, DB, agaard-Kienitz, B, Pulfer, K, and Cook, T. Frequency of thromboembolic events associated with endovascular aneurysm treatment: retrospective case series. *J Neurosurg*. 2008;108(6):1095-1100.

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Saatci I, Yavuz K, et al. Treatment of Intracranial Aneurysms Using the Pipeline Flow-Diverter Embolization Device: A Single-Center Experience with Long-Term Follow-Up Results. Am J Neuroradiol2012;33:1436-1446.

Withers K, Carolan-Rees G, Dale M. Pipeline<sup>™</sup> Embolization Device for the Treatment of Complex Intracranial Aneurysms. Applied health economics and health Policy. 2013; 11(1):5-13.

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Agarwal A, Gokhale S, Gupta J, et al. Use of pipeline flow diverting stents for wide neck intracranial aneurysms: A retrospective institutional review. Asian J Neurosurg. 2014 Jan;9(1):3-6.

Chung J, Lim YC, Suh SH, et al. Stent-assisted coil embolization of ruptured wide-necked aneurysms in the acute period: incidence of and risk factors for periprocedural complications. J Neurosurg. 2014 Jul;121(1):4-11

Zaidat O, Castonguay A, Puri A, et al. E-001 TARGET Intracranial Aneurysm Coiling Prospective Multicenter Registry: Initial Periprocedural Results in 120 Patients. J Neurointerv Surg. 2014 Jul;6 Suppl 1:A38.

Nossek E, Chalif D, Lombardo K, Setton A. P-003 endovascular concurrent use of coils and pipeline embolization device for intracranial aneurysms: clinical and angiographic results. J Neurointerv Surg. 2014 Jul;6 Suppl 1:A22.

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Hanel RA, Cortez GM, Coon AL, et al. Surpass Intracranial Aneurysm Embolization System Pivotal Trial to Treat Large or Giant Wide-Neck Aneurysms - SCENT: 3-year outcomes. J Neurointerv Surg. Nov 14 2022.

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This policy will be revised as necessary and reviewed no less than annually.

#### Devised: 1/08

Revised: 2/15 (added pipeline embolization device); 1/16 (added FDA approved stent info); 1/21 (refine criteria)

Reviewed: 1/09, 1/10, 2/11, 2/12, 2/13, 2/14, 2/17, 1/18, 1/19, 1/20, 1/22, 1/23, 1/24, 1/25

### CMS UM Oversight Committee Approval: 12/23, 5/24, 02/25

Geisinger Health Plan may refer collectively to health care coverage sponsors Geisinger Health Plan, Geisinger Quality Options, Inc., and Geisinger Indemnity Insurance Company, unless otherwise noted. Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.

Coverage for experimental or investigational treatments, services and procedures is specifically excluded under the member's certificate with Geisinger Health Plan. Unproven services outside of an approved clinical trial are also specifically excluded under the member's certificate with Geisinger Health Plan. This policy does not expand coverage to services or items specifically excluded from coverage in the member's certificate with Geisinger Health Plan. Additional information can be found in MP015 Experimental, Investigational or Unproven Services.

Prior authorization and/or pre-certification requirements for services or items may apply. Pre-certification lists may be found in the member's contract specific benefit document. Prior authorization requirements can be found at https://www.geisinger.org/health-plan/providers/ghp-clinical-policies

Please be advised that the use of the logos, service marks or names of Geisinger Health Plan, Geisinger Quality Options, Inc. and Geisinger Indemnity Insurance Company on a marketing, press releases or any communication piece regarding the contents of this medical policy is strictly prohibited without the prior written consent of Geisinger Health Plan. Additionally, the above medical policy does not confer any endorsement by Geisinger Health Plan, Geisinger Quality Options, Inc. and Geisinger Indemnity Insurance Company regarding the medical service, medical device or medical lab test described under this medical policy.