

TRANSCATHETER CLOSURE OF SEPTAL DEFECTS**Effective Date:** January 1, 2018**Review Dates:** 4/07, 4/08, 4/09, 4/10, 4/11, 4/12, 4/13,
5/14, 5/15, 5/16, 5/17, 5/18, 5/19, 5/20, 5/21, 5/22,
5/23, 5/24**Date Of Origin:** April 11, 2007**Status:** Current**I. POLICY/CRITERIA**

- A. Transcatheter closure of septal defects using FDA approved devices may be considered medically necessary for any of the following:
1. Secundum atrial septal defects (ASDs)
 2. Patent ductus arteriosus (PDA)
 3. Fenestration following a Fontan procedure
- B. Transcatheter closure of patent foramen ovale (PFO) may be considered medically necessary for associated cryptogenic stroke, transient ischemic attack, or arterial embolism due to presumed paradoxical embolism through the PFO, when conventional drug therapy (one or more antithrombotics) has failed. The device must be FDA approved (e.g., Amplatzer PFO Occluder) and used as labelled.
- C. Transcatheter closure of septal defects is considered not medically necessary for all other indications including, but not limited to:
1. Ventricular septal defects
 2. When any of the following conditions are present:
 - Multiple defects that cannot be adequately covered by the device
 - Associated congenital cardiac anomalies that require cardiac surgery
 - Ostium primum atrial septal defects
 - Sinus venosus atrial septal defects
 - Partial anomalous pulmonary venous drainage
 - Pulmonary hypertension
 - Congestive heart failure
 - Sepsis
 - Coagulation disorders in patients who are unable to take antiplatelet or anticoagulant therapy
 3. Migraine prophylaxis
 4. Transmyocardial (periventricular) transcatheter closure of VSDs
 5. Obstructive Sleep Apnea

II. MEDICAL NECESSITY REVIEW

Prior authorization for certain drug, services, and procedures may or may not be required. In cases where prior authorization is required, providers will submit a request demonstrating that a drug, service, or procedure is medically necessary. For more information, please refer to the [Priority Health Provider Manual](#).

III. APPLICATION TO PRODUCTS

Coverage is subject to member's specific benefits. Group specific policy will supersede this policy when applicable.

- ❖ **HMO/EPO:** *This policy applies to insured HMO/EPO plans.*
- ❖ **POS:** *This policy applies to insured POS plans.*
- ❖ **PPO:** *This policy applies to insured PPO plans. Consult individual plan documents as state mandated benefits may apply. If there is a conflict between this policy and a plan document, the provisions of the plan document will govern.*
- ❖ **ASO:** *For self-funded plans, consult individual plan documents. If there is a conflict between this policy and a self-funded plan document, the provisions of the plan document will govern.*
- ❖ **INDIVIDUAL:** *For individual policies, consult the individual insurance policy. If there is a conflict between this medical policy and the individual insurance policy document, the provisions of the individual insurance policy will govern.*
- ❖ **MEDICARE:**
- ❖ *Coverage is determined by the Centers for Medicare and Medicaid Services (CMS) and/or the Evidence of Coverage (EOC); if a coverage determination has not been adopted by CMS, this policy applies.*
- ❖ **MEDICAID/HEALTHY MICHIGAN PLAN:** *For Medicaid/Healthy Michigan Plan members, this policy will apply. Coverage is based on medical necessity criteria being met and the appropriate code(s) from the coding section of this policy being included on the Michigan Medicaid Fee Schedule located at: http://www.michigan.gov/mdch/0,1607,7-132-2945_42542_42543_42546_42551-159815--,00.html. If there is a discrepancy between this policy and the Michigan Medicaid Provider Manual located at: http://www.michigan.gov/mdch/0,1607,7-132-2945_5100-87572--,00.html, the Michigan Medicaid Provider Manual will govern. If there is a discrepancy or lack of guidance in the Michigan Medicaid Provider Manual, the Priority Health contract with Michigan Medicaid will govern. For Medical Supplies/DME/Prosthetics and Orthotics, please refer to the Michigan Medicaid Fee Schedule to verify coverage.*

IV. DESCRIPTION

Background

Transcatheter septal occlusion devices are implantable devices that are used to repair septal wall defects. Atrial or ventricular defects in the septal wall of the heart can have a number of adverse consequences, including abnormal ventricular volume load, ventricular pressure load, mixing of unoxygenated and oxygenated

blood and inadequate systemic cardiac output. These abnormalities can lead to cardiac enlargement, pulmonary hypertension, rhythm disturbance, and stroke. Conventional open-heart surgical repair of septal defects carries some risk, especially in patients in whom heart or pulmonary function may be compromised. In addition, there is considerable morbidity associated with open-heart surgery. Moreover, some types of ventricular septal defects (VSDs) are difficult to repair surgically due to their location or orientation. Consequently, there has been considerable interest in the development of a transcatheter method of repairing septal lesions. Access to the defect is achieved through the venous system via the internal jugular vein or femoral vein in the groin.

V. CODING INFORMATION

ICD-10 Codes that may apply:

G45.0 – G45.9 Transient cerebral ischemic attacks and related syndromes

I23.1 Atrial septal defect as current complication following acute myocardial infarction

I51.0 Cardiac septal defect, acquired

I63.9 Cerebral infarction, unspecified

Q21.10-Q21.19 Atrial septal defect

Q21.20-Q21.23 Atrioventricular septal defect

Q25.0 Patent ductus arteriosus

CPT Codes:

93580 Percutaneous transcatheter closure of congenital interatrial communication (i.e., Fontan fenestration, atrial septal defect) with implant

93582 Percutaneous transcatheter closure of patent ductus arteriosus

HCPCS Codes:

C1817 Septal defect implant system, intracardiac

C2628 Catheter, occlusion

Not Covered

93581 Percutaneous transcatheter closure of a congenital ventricular septal defect with implant

93799 Unlisted cardiovascular service or procedure (*for transcatheter ventricular septal defect procedure – explanatory notes must accompany claim*)

VI. REFERENCES

1. Carminati, M., Butera, G., et al., Transcatheter Closure of Congenital Ventricular Septal Defect with Amplatzer Septal Occluders, American Journal of Cardiology, Vol. 96, Issue 12, suppl, 52L-58L, Dec 19, 2005
2. Cigna. Medical Coverage Policy Number 0011. [Transcatheter Closure of Cardiovascular Defects.](#)

3. Carroll JD, Saver JL, Thaler DE, Smalling RW, Berry S, MacDonald LA, Marks DS, Tirschwell DL; RESPECT Investigators. Closure of patent foramen ovale versus medical therapy after cryptogenic stroke. *N Engl J Med*. 2013 Mar 21;368(12):1092-100.
4. Hayes, Inc. Medical Technology Directory, Transcatheter Closure of Septal Defects, Lansdale, PA: HAYES, Inc., February 12, 2002 and annual updates
5. Hayes, Inc. Transcatheter closure of Ventricular Septal Defects, July, 2008 and annual updates.
6. Hayes, Inc. Transcatheter Closure of Patent Foramen Ovale for Prevention of Stroke, January 8, 2015
7. Hayes, Inc. Health Technology Assessment. Transcatheter Closure of Patent Foramen Ovale for Prevention of Recurrent Cryptogenic Stroke. May 31, 2018. Annual Review June 7, 2022.
8. Furlan, A. J., Reisman, M. et.al. for the CLOSURE I Investigators. Closure or Medical Therapy for Cryptogenic Stroke with Patent Foramen Ovale. *N Engl J Med* 2012; 366:991-999
9. Kapadia, S., Patent Foramen Ovale Closure: Historical Perspective, *Cardiology Clinics*, Vol. 23, 73-83, 2005.
10. Johnston, S. C. Patent Foramen Ovale Closure — Closing the Door Except for Trials *N Engl J Med* 2012; 366:1048-1050
11. Latson, L., Jones, T., et al., Analysis of Factors related to successful transcatheter closure of secundum atrial septal defects using the HELEX septal occluder, *American Heart Journal*, Vol. 151, Issue 5, 1136.e7-1136.e11, May 2006.
12. Meier B, Kalesan B, Mattle HP, Khattab AA, Hildick-Smith D, Dudek D, Andersen G, Ibrahim R, Schuler G, Walton AS, Wahl A, Windecker S, Jüni P; PC Trial Investigators. Percutaneous closure of patent foramen ovale in cryptogenic embolism. *N Engl J Med*. 2013 Mar 21;368(12):1083-91.
13. Messé SR, Kent DM. Still no closure on the question of PFO closure. *N Engl J Med*. 2013 Mar 21;368(12):1152-3.
14. Rome, J., and J. Kreutzer, Pediatric interventional catheterization: reasonable expectations and outcomes, *Pediatric Clinics of North America*, Vol. 51, Issue 6, 1589-1610, December 2004.
15. Wang, J., Shen, T., et al., Short- and intermediate-term results of transcatheter closure of atrial septal defect with the Amplatzer Septal Occluder, *American Heart Journal*, 511-517, September 2004.
16. Wisconsin Physicians Service (WPS), Intraoperative Transesophageal Echocardiography, Local Coverage Decision (LCD) CV-034, Original effective date: 01/15/2002, Revision date: 10/01/2005.
17. Wisconsin Physicians Service (WPS), Medical Devices, Local Coverage Decision (LCD), PHY 067, Original effective date: 09/01/1996, Revision date: 01/01/2005.
18. Wisconsin Physicians Service (WPS), Transesophageal Echocardiography, Local Coverage Decision (LCD) CV-007, Original effective date: 02/15/1996, Revision date: 10/01/2005.

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