GUIDELINES
This policy does not certify benefits or authorization of benefits, which is designated by each individual policyholder contract. Paramount applies coding edits to all medical claims through coding logic software to evaluate the accuracy and adherence to accepted national standards. This guideline is solely for explaining correct procedure reporting and does not imply coverage and reimbursement.

DESCRIPTION
Minimally invasive procedures for closure of the left atrial appendage (LAA) have been developed for the purpose of prevention of stroke. In an individual with atrial fibrillation (AF), it is a potential source for blood clots to form that lead to stroke. Percutaneous LAA closure devices are a nonpharmacologic alternative to anticoagulation for stroke prevention in AF. It is theorized that the devices may prevent thrombus formation and stroke by occluding the LAA.

The Watchman™ Left Atrial Appendage Closure Device (Boston Scientific, Maple Grove, MN) is a self-expanding nickel-titanium system. Implantation is performed percutaneously with a catheter delivery system, with venous access and trans-septal puncture to enter the left atrium. After implantation of device, patients receive anticoagulation with warfarin or other agents for approximately one to two months. During this acute period of time, anticoagulation may be necessary due to risk of thrombus formation related to altered blood flow around the implant. Patients are monitored with transesophageal echocardiography to assess blood flow and complete LAA closure (LAAC). After this period, patients will receive antiplatelet agents (e.g., aspirin and/or clopidogrel) indefinitely.

Other available devices that have not received FDA approval for the use of LAA closure include:
- The Amplatzer™ Cardiac Plug (St. Jude Medical, Minneapolis, MN) is approved for LAAC in Europe. The device closes off the LAA in a manner similar to the Watchman. The technique for implanting this device is also similar to that of the Watchman™ system.
- The Lariat® Loop Applicator is a suture delivery device that is designed to close a variety of surgical wounds in addition to LAAC. The technical approach differs from that of the Watchman system. The Lariat suture loop ligates the LAA from the epicardial space, with assistance of catheters and balloons in the left atrium.

POLICY
Percutaneous Left Atrial Appendage Closure (LAAC) (33340) does not require prior authorization.

HMO, PPO, Individual Marketplace, Advantage, Elite
Paramount has determined that Percutaneous Left Atrial Appendage Closure (LAAC) devices are covered when the device has received Food and Drug Administration (FDA) Premarket Approval (PMA) for that device’s FDA-approved indication and meet all of the conditions specified below:

The patient must have:
- A CHADS2 score ≥ 2 (Congestive heart failure, Hypertension, Age >75, Diabetes, Stroke/transient ischemia attack/thromboembolism) or CHA2DS2-VASc score ≥ 3 (Congestive heart failure, Hypertension, Age ≥ 65, Diabetes, Stroke/transient ischemia attack/thromboembolism, Vascular disease, Sex category)
- A formal shared decision making interaction with an independent non-interventional physician using an evidence-based decision tool on oral anticoagulation in patients with non-valvular atrial fibrillation (NVAF) prior to LAAC. Additionally, the shared decision making interaction must be documented in the medical record.
- A suitability for short-term warfarin but deemed unable to take long term oral anticoagulation following the conclusion of shared decision making, as LAAC is only covered as a second line therapy to oral anticoagulants. The patient (preoperatively and postoperatively) is under the care of a cohesive, multidisciplinary team (MDT) of medical professionals. The procedure must be furnished in a hospital with an established structural heart disease (SHD) and/or electrophysiology (EP) program.

The procedure must be performed by an interventional cardiologist(s), electrophysiologist(s) or cardiovascular surgeon(s) that meet the following criteria:
- Has received training prescribed by the manufacturer on the safe and effective use of the device prior to performing LAAC; and
- Has performed $\geq 25$ interventional cardiac procedures that involve transeptal puncture through an intact septum; and
- Continues to perform $\geq 25$ interventional cardiac procedures that involve transeptal puncture through an intact septum, of which at least 12 are LAAC, over a two year period.

CODING/BILLING INFORMATION
The appearance of a code in this section does not necessarily indicate coverage. Codes that are covered may have selection criteria that must be met. Payment for supplies may be included in payment for other services rendered.

<table>
<thead>
<tr>
<th>CPT CODE</th>
<th>Description</th>
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<tbody>
<tr>
<td>33340</td>
<td>Percutaneous transcatheter closure of the left atrial appendage with endocardial implant, including fluoroscopy, transseptal puncture, catheter placement(s), left atrial angiography, left atrial appendage angiography, when performed, and radiological supervision and interpretation (New code effective 01/01/2017)</td>
</tr>
<tr>
<td>0281T</td>
<td>Percutaneous transcatheter closure of the left atrial appendage with implant, including fluoroscopy, transseptal puncture, catheter placement(s), left atrial angiography, left atrial appendage angiography, radiological supervision and interpretation (Deleted code effective 12/31/16)</td>
</tr>
</tbody>
</table>

TAWG REVIEW DATES: 04/22/2016, 01/27/2017

REVISION HISTORY EXPLANATION
04/22/16: Policy created to reflect most current clinical evidence per The Technology Assessment Working Group (TAWG).
01/27/17: Effective 12/31/16 deleted code 0281T. Added effective 01/01/17 new code 33340. Percutaneous Left Atrial Appendage Closure (LAAC) (33340) is now covered for Advantage. Percutaneous Left Atrial Appendage Closure (LAAC) (33340) no longer requires prior authorization. Policy reviewed and updated to reflect most current clinical evidence per The Technology Assessment Working Group (TAWG).

REFERENCES/RESOURCES
Centers for Medicare and Medicaid Services, CMS Manual System and other CMS publications and services
Ohio Department of Medicaid [http://jfs.ohio.gov/](http://jfs.ohio.gov/)
Centers for Medicare and Medicaid Services, Healthcare Common Procedure Coding System, HCPCS Release and Code Sets
Industry Standard Review
Hayes, Inc.