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
The conventional treatment for abdominal aortic aneurysms (AAA) has been open surgical repair. Open surgical repair involves transabdominal surgery, exposure of the aneurysm, cross-clamping the aorta, resection of the aneurysm, and placement of graft prosthesis. Endovascular AAA repair developed as a minimally invasive alternative to open surgical repair in patients with suitable anatomy. Endovascular repair of infrarenal abdominal or aortoiliac AAA has demonstrated reduced rates of perioperative mortality and morbidity compared to open surgical repair, with equivalent long-term aneurysm-related mortality, although this approach is associated with higher rates of reintervention, and requires long-term radiological monitoring. Endovascular repair may be a reasonable option for selected patients with suitable anatomy for whom the risk/benefit ratio favors endovascular repair.

The use of fenestrated grafts (e.g., Zenith® Fenestrated AAA Endovascular Graft) has been investigated for the treatment of patients with AAA involving the visceral arteries. These grafts include fenestrations, or scallops, in the graft material that allow the proximal edge of the material to be placed above the renal arteries while permitting blood flow to vessels accommodated by the fenestrations. Evidence published in the medical literature consists primarily of registry data, small feasibility studies, and case series with limited outcome data. Additional evidence is needed to determine the safety, efficacy, and long-term outcomes of this procedure and to determine how this approach compares to surgical repair.

U.S. Food and Drug Administration (FDA)
A number of devices have received approval through the FDA Premarket Approval (PMA) process for endovascular treatment of AAA, including the following:

- AneuRx® Stent Graft System (Medtronic Vascular, Santa Rosa, CA)
- Zenith® AAA Endovascular Graft and H&L-B One-Shot™ Introduction System (Cook Incorporated, Bloomington, IN)
- EXCLUDER™ Bifurcated Endoprosthesis (W.L. Gore & Associates, Inc., Flagstaff, AZ)
- Endologix PowerLink® System (Endologix, Inc., Irvine, CA)
- Talent™ Abdominal Stent Graft System (Medtronic Vascular, Santa Rosa, CA)
- Endurant Stent Graft System (Medtronic Vascular, Santa Rosa, CA)

The Zenith® Fenestrated AAA Endovascular Graft (with the adjunctive Zenith Alignment Stent) received FDA PMA approval on December 22, 2011. The Zenith Alignment Stent is indicated for use as an adjunct to the Zenith Fenestrated AAA Endovascular Graft to secure positive alignment of fenestrations or scallops with the orifice of aortic branch vessels having diameters ranging from 3 to 8 mm. Unlike the standard Zenith AAA Endovascular Graft, the Zenith Fenestrated AAA graft has fenestrations or scallops in the graft material, which allow the proximal edge of graft material to be placed above the renal arteries while still permitting blood flow to vessels accommodated by the fenestrations or scallops. In order to account for anatomical variation, each proximal body graft is made to order for a specific patient. The Zenith fenestrated graft has been available outside the U.S. since 2002.

POLICY
The use of FDA approved endovascular/endoluminal stent graft devices does not require prior authorization for all product lines.

The use of fenestrated and branched endovascular/endoluminal stent graft devices (34839, 34841-34848) is non-covered for HMO, PPO, Individual Marketplace, & Elite.

The use of fenestrated and branched endovascular/endoluminal stent graft devices (34839, 34841-34848) requires prior authorization for Advantage.
The use of FDA approved endovascular/endoluminal stent graft devices is considered medically necessary for individuals with ANY of the following indications:

- Abdominal aortic aneurysm
- Aortoiliac aneurysm
- Descending thoracic aortic aneurysm
- Complicated Type B descending thoracic aortic dissection when distal to the aortic arch
- Treatment of traumatic thoracic aortic transection

The use of non-FDA approved endovascular/endoluminal stent graft devices is considered investigational and not medically necessary.

The use of endovascular/endoluminal stent graft devices for all other indications not noted above is considered investigational and not medically necessary including, but not limited to, the treatment of thoracic aortic arch aneurysms and Type A aortic dissections.

**HMO, PPO, Individual Marketplace, Elite**
Paramount has determined that the use of fenestrated and branched endovascular/endoluminal stent graft devices (34839, 34841-34848) is experimental and investigational and therefore non-covered because there is insufficient evidence in the peer-reviewed medical literature of the effectiveness of this procedure.

**Advantage**
While there is insufficient evidence in the published medical literature to demonstrate the safety, efficacy and long-term outcomes of the use of fenestrated and branched endovascular/endoluminal stent graft devices (34839, 34841-34848), The Ohio Department of Medicaid requires this procedure/device be reviewed for medical necessity. Therefore it may be covered with a prior authorization for Advantage members.

The use of FDA approved fenestrated and branched endovascular/endoluminal stent graft devices (34839, 34841-34848) may be medically necessary for the endovascular treatment of patients with abdominal aortic or aortoiliac aneurysm having morphology suitable for endovascular repair, including:

- Adequate iliac/femoral access compatible with required introduction systems
- Nonaneurysmal infrarenal aortic segment (neck) proximal to the aneurysms with:
  - Length ≥ 4 mm and unsuitable for a non-fenestrated graft
  - Diameter ≤ 31 mm and ≥ 19 mm
  - Angle < 45 degrees relative to long axis of aneurysm
  - Angle < 45 degrees relative to axis of suprarenal aorta
- Ipsilateral iliac artery fixation site > 30 mm in length and between 9-21 mm in diameter
- Contralateral iliac artery distal fixation site >30 mm in length and between 7 – 21 mm in diameter

Medical records must reflect appropriate documentation and be provided upon request.

**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.

**CPT CODES**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>33880</td>
<td>Endovascular repair of descending thoracic aorta (eg, aneurysm, pseudoaneurysm, dissection; penetrating ulcer, intramural hematoma, or traumatic disruption); involving coverage of left subclavian artery origin, initial endoprosthesis plus descending thoracic aortic extension(s), if required, to level of celiac artery origin</td>
</tr>
<tr>
<td>33881</td>
<td>Endovascular repair of descending thoracic aorta (eg, aneurysm, pseudoaneurysm, dissection; penetrating ulcer, intramural hematoma, or traumatic disruption); not involving coverage of left subclavian artery origin, initial endoprosthesis plus descending thoracic aortic extension(s), if required, to level of celiac artery origin</td>
</tr>
<tr>
<td>33883</td>
<td>Placement of proximal extension prosthesis for endovascular repair of descending thoracic aorta (eg, aneurysm, pseudoaneurysm, dissection, penetrating ulcer, intramural hematoma, or traumatic disruption); initial extension</td>
</tr>
<tr>
<td>33884</td>
<td>Placement of proximal extension prosthesis for endovascular repair of descending thoracic aorta (eg, aneurysm, pseudoaneurysm, dissection; penetrating ulcer, intramural hematoma, or traumatic disruption); each additional extension</td>
</tr>
<tr>
<td>33886</td>
<td>Placement of distal extension prosthesis(s) delayed after endovascular repair of descending thoracic aorta</td>
</tr>
<tr>
<td>33889</td>
<td>Open subclavian to carotid artery transposition performed in conjunction with endovascular repair of descending thoracic aorta, by neck incision, unilateral</td>
</tr>
<tr>
<td>33891</td>
<td>Bypass graft, with other than vein, transcervical retropharyngeal carotid-carotid, performed in conjunction with endovascular repair of descending thoracic aorta, by neck incision</td>
</tr>
<tr>
<td>34701</td>
<td>Endovascular repair of infrarenal aorta by deployment of an aorto-aortic tube endograft including pre-procedure sizing</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
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<tr>
<td>34702</td>
<td>Endovascular repair of infrarenal aorta by deployment of an aorto-aortic tube endograft including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, all endograft extension(s) placed in the aorta from the level of the renal arteries to the aortic bifurcation, and all angioplasty/stenting performed from the level of the renal arteries to the aortic bifurcation; for other than rupture (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer)</td>
</tr>
<tr>
<td>34703</td>
<td>Endovascular repair of infrarenal aorta and/or iliac artery(ies) by deployment of an aorto-uni-iliac endograft including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, all endograft extension(s) placed in the aorta from the level of the renal arteries to the iliac bifurcation, and all angioplasty/stenting performed from the level of the renal arteries to the iliac bifurcation; for rupture including temporary aortic and/or iliac balloon occlusion, when performed (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer, traumatic disruption)</td>
</tr>
<tr>
<td>34704</td>
<td>Endovascular repair of infrarenal aorta and/or iliac artery(ies) by deployment of an aorto-uni-iliac endograft including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, all endograft extension(s) placed in the aorta from the level of the renal arteries to the iliac bifurcation, and all angioplasty/stenting performed from the level of the renal arteries to the iliac bifurcation; for other than rupture (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer)</td>
</tr>
<tr>
<td>34705</td>
<td>Endovascular repair of infrarenal aorta and/or iliac artery(ies) by deployment of an aorto-bi-iliac endograft including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, all endograft extension(s) placed in the aorta from the level of the renal arteries to the iliac bifurcation, and all angioplasty/stenting performed from the level of the renal arteries to the iliac bifurcation; for other than rupture (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer)</td>
</tr>
<tr>
<td>34706</td>
<td>Endovascular repair of infrarenal aorta and/or iliac artery(ies) by deployment of an aorto-bi-iliac endograft including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, all endograft extension(s) placed in the aorta from the level of the renal arteries to the iliac bifurcation, and all angioplasty/stenting performed from the level of the renal arteries to the iliac bifurcation; for rupture including temporary aortic and/or iliac balloon occlusion, when performed (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer, traumatic disruption)</td>
</tr>
<tr>
<td>34709</td>
<td>Placement of extension prosthesis(es) distal to the common iliac artery(ies) or proximal to the renal artery(ies) for endovascular repair of infrarenal abdominal aortic or iliac aneurysm, false aneurysm, dissection, penetrating ulcer, including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, and treatment zone angioplasty/stenting, when performed, per vessel treated</td>
</tr>
<tr>
<td>34710</td>
<td>Delayed placement of distal or proximal extension prosthesis for endovascular repair of infrarenal abdominal aortic or iliac aneurysm, false aneurysm, dissection, endoleak, or endograft migration, including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, and treatment zone angioplasty/stenting, when performed; initial vessel treated</td>
</tr>
<tr>
<td>34711</td>
<td>Delayed placement of distal or proximal extension prosthesis for endovascular repair of infrarenal abdominal aortic or iliac aneurysm, false aneurysm, dissection, endoleak, or endograft migration, including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, and treatment zone angioplasty/stenting, when performed; each additional vessel treated</td>
</tr>
<tr>
<td>34712</td>
<td>Transcatheter delivery of enhanced fixation device(s) to the endograft (eg, anchor, screw, tack) and all associated radiological supervision and interpretation</td>
</tr>
<tr>
<td>34808</td>
<td>Endovascular placement of iliac artery occlusion device</td>
</tr>
<tr>
<td>34812</td>
<td>Open femoral artery exposure for delivery of endovascular prosthesis, by groin incision, unilateral</td>
</tr>
<tr>
<td>34813</td>
<td>Placement of femoral-femoral prosthetic graft during endovascular aortic aneurysm repair</td>
</tr>
<tr>
<td>34820</td>
<td>Open iliac artery exposure for delivery of endovascular prosthesis or iliac occlusion during endovascular therapy, by abdominal or retroperitoneal incision, unilateral</td>
</tr>
<tr>
<td>34839</td>
<td>Physician planning of a patient-specific fenestrated visceral aortic endograft requiring a minimum of 90 minutes of physician time</td>
</tr>
<tr>
<td>34841</td>
<td>Endovascular repair of visceral aorta (eg, aneurysm, pseudoaneurysm, dissection, penetrating ulcer, intramural hematoma, or traumatic disruption) by deployment of a fenestrated visceral aortic endograft and all associated radiological supervision and interpretation, including target zone angioplasty, when performed; including one visceral artery endoprosthesis (superior mesenteric, celiac or renal artery)</td>
</tr>
<tr>
<td>34842</td>
<td>Endovascular repair of visceral aorta (eg, aneurysm, pseudoaneurysm, dissection, penetrating ulcer, intramural hematoma, or traumatic disruption) by deployment of a fenestrated visceral aortic endograft and all associated radiological supervision and interpretation, including target zone angioplasty, when performed; including two visceral artery endoprostheses (superior mesenteric, celiac or renal artery[s])</td>
</tr>
<tr>
<td>34843</td>
<td>Endovascular repair of visceral aorta (eg, aneurysm, pseudoaneurysm, dissection, penetrating ulcer, intramural hematoma, or traumatic disruption) by deployment of a fenestrated visceral aortic endograft and all associated radiological supervision and interpretation, including target zone angioplasty, when performed; including three visceral artery endoprostheses (superior mesenteric, celiac or renal artery[s])</td>
</tr>
</tbody>
</table>
### 34844
Endovascular repair of visceral aorta (eg, aneurysm, pseudoaneurysm, dissection, penetrating ulcer, intramural hematoma, or traumatic disruption) by deployment of a fenestrated visceral aortic endograft and all associated radiological supervision and interpretation, including target zone angioplasty, when performed; including four or more visceral artery endoprostheses (superior mesenteric, celiac or renal artery[s])

### 34845
Endovascular repair of visceral aorta and infrarenal abdominal aorta (eg, aneurysm, pseudoaneurysm, dissection, penetrating ulcer, intramural hematoma, or traumatic disruption) with a fenestrated visceral aortic endograft and concomitant unibody or modular infrarenal aortic endograft and all associated radiological supervision and interpretation, including target zone angioplasty, when performed; including one visceral artery endoprosthesis (superior mesenteric, celiac or renal artery)

### 34846
Endovascular repair of visceral aorta and infrarenal abdominal aorta (eg, aneurysm, pseudoaneurysm, dissection, penetrating ulcer, intramural hematoma, or traumatic disruption) with a fenestrated visceral aortic endograft and concomitant unibody or modular infrarenal aortic endograft and all associated radiological supervision and interpretation, including target zone angioplasty, when performed; including two visceral artery endoprostheses (superior mesenteric, celiac or renal artery[s])

### 34847
Endovascular repair of visceral aorta and infrarenal abdominal aorta (eg, aneurysm, pseudoaneurysm, dissection, penetrating ulcer, intramural hematoma, or traumatic disruption) with a fenestrated visceral aortic endograft and concomitant unibody or modular infrarenal aortic endograft and all associated radiological supervision and interpretation, including target zone angioplasty, when performed; including three visceral artery endoprostheses (superior mesenteric, celiac or renal artery[s])

### 34848
Endovascular repair of visceral aorta and infrarenal abdominal aorta (eg, aneurysm, pseudoaneurysm, dissection, penetrating ulcer, intramural hematoma, or traumatic disruption) with a fenestrated visceral aortic endograft and concomitant unibody or modular infrarenal aortic endograft and all associated radiological supervision and interpretation, including target zone angioplasty, when performed; including four or more visceral artery endoprostheses (superior mesenteric, celiac or renal artery[s])

### 34839
Physician planning of a patient-specific fenestrated visceral aortic endograft requiring a minimum of 90 minutes of physician time

### 75956
Endovascular repair of descending thoracic aorta (eg, aneurysm, pseudoaneurysm, dissection, penetrating ulcer, intramural hematoma, or traumatic disruption); involving coverage of left subclavian artery origin, initial endoprosthesis plus descending thoracic aortic extension(s), if required, to level of celiac artery origin, radiological supervision and interpretation

### 75957
Endovascular repair of descending thoracic aorta (eg, aneurysm, pseudoaneurysm, dissection, penetrating ulcer, intramural hematoma, or traumatic disruption); not involving coverage of left subclavian artery origin, initial endoprosthesis plus descending thoracic aortic extension(s), if required, to level of celiac artery origin, radiological supervision and interpretation

### 75958
Placement of proximal extension prosthesis for endovascular repair of descending thoracic aorta (eg, aneurysm, pseudoaneurysm, dissection, penetrating ulcer, intramural hematoma, or traumatic disruption), radiological supervision and interpretation

### 75959
Placement of distal extension prosthesis(s) (delayed) after endovascular repair of descending thoracic aorta, as needed, to level of celiac origin, radiological supervision and interpretation

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**TAWG REVIEW DATES:** 10/25/2018

**REVISION HISTORY EXPLANATION 10/25/18:** The use of FDA approved endovascular/endoluminal stent graft devices does not require prior authorization for all product lines. The use of fenestrated and branched endovascular/endoluminal stent graft devices (34839, 34841-34848) is non-covered for HMO, PPO, Individual Marketplace, & Elite. The use of fenestrated and branched endovascular/endoluminal stent graft devices (34839, 34841-34848) requires prior authorization for Advantage per odm guidelines. Policy created 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.