

## Balloon Dilation of the Eustachian Tube

Policy Number: M20230626037  
Effective Date: 8/1/2023  
Sponsoring Department: Health Care Services  
Impacted Department(s): Health Care Services

**Type of Policy:** ☐ Internal ☒ External

**Data Classification:** ☐ Confidential ☐ Restricted ☒ Public

### Applies to (Line of Business):

- ☐ Corporate (All)  
☒ State Products, if yes which plan(s): ☒ MediSource; ☒ MediSource Connect; ☒ Child Health Plus; ☒ Essential Plan  
☒ Medicare, if yes, which plan(s): ☒ MAPD; ☐ PDP; ☒ ISNP; ☒ CSNP  
☒ Commercial, if yes, which type: ☒ Large Group; ☒ Small Group; ☒ Individual  
☒ Self-Funded Services *(Refer to specific Summary Plan Descriptions (SPDs) to determine any pre-authorization or pre-certification requirements and coverage limitations. In the event of any conflict between this policy and the SPD of a Self-Funded Plan, the SPD shall supersede the policy.)*

### Excluded Products within the Selected Lines of Business (LOB)

N/A

**Applicable to Vendors?** Yes ☐ No ☒

### Purpose and Applicability:

To set forth Independent Health's medical necessity criteria for **balloon dilation of the eustachian tube (BDET)** for the treatment of **chronic eustachian tube dysfunction**.

### Policy:

#### Commercial, Self-Funded and Medicare Advantage:

Balloon dilation of the eustachian tube (BDET) is considered medically necessary in adults (18 years and older) when *all* the following criteria are met:

1. Diagnosis of chronic Eustachian tube dysfunction (ETD)\*; *and*
2. **Tympanogram type B or C**; *or*
3. If the member has a history of tympanostomy tube placement, symptoms of obstructive eustachian tube dysfunction improved while tubes were patent; *and*
4. Absence of a co-morbid condition that would be contraindicated for balloon dilation including but not limited to:
  1. Carotid abnormalities in the skull base; *or*
  2. Nasopharyngeal or skull base neoplasm; *or*
  3. Patulous eustachian tube; *or*
  4. Untreated allergic rhinitis, rhinosinusitis, laryngopharyngeal reflux.

\* Symptoms have been present for 3 months or longer; and have a significant effect on quality of life (QOL), or functional health status.

BDET is not covered for the following:

1. After initially successful BDET;
2. After unsuccessful BDET;
3. With tympanoplasty or other middle ear surgery.

#### **MediSource, MediSource Connect, Child Health Plus, and Essential Plan:**

MediSource, MediSource Connect, and Essential Plan covers balloon dilation of the eustachian tube utilizing the Commercial criteria above.

Balloon dilation of the eustachian tube is not medically necessary for members under 18 years of age; therefore, is not covered by Child Health Plus members under the age of 18 years of age .

#### **Background:**

Eustachian tube dysfunction (ETD) is the failure of the Eustachian tube (ET) in maintaining pressure equalization or mucociliary transport. This is categorized as either acute (less than 3 months presentation) or chronic ETD (more than 3 months). ETD affects 1% of the population, with symptoms including aural fullness or ‘popping sounds’, reduced hearing, tinnitus, autophony, otalgia, and imbalance.

Balloon dilation of the ET (BDET) is used to directly treat the pathology within the lumen of the ET lumen that is causing obstructive dysfunction. In this procedure, a balloon catheter is used to dilate the cartilaginous portion of the tube through a minimally invasive transnasal endoscopic approach. Once the balloon is correctly positioned in the eustachian tube, it is filled with saline up to a pressure of about 10 to 12 bars. Pressure is maintained for about 2 minutes. The balloon is then emptied and removed. Balloon dilation reduces inflammation within the lumen. BDET procedures may be sometimes performed in an operating room with the patient under general anesthesia or may be performed in-office with the use of local anesthesia.

UpToDate states “systematic reviews and meta-analyses of observational studies have shown benefit in improvement of all outcome measures, including patient-reported symptoms or ET function scores, otoscopy, tympanometry, and successful Valsalva maneuver. Four cases series have demonstrated the

durability of improvements.” An evaluation of the peer-reviewed scientific literature, including but not limited to subscription materials, has provided Independent Health the basis for its medical necessity coverage outlined above.

**Pre-Authorization Required?** Yes ☐ No ☒

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Pre-authorization not required. Criteria utilized upon retro-review.

## Definitions

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**Chronic Eustachian Tube Dysfunction** is the failure of the Eustachian tube in maintaining pressure equalization or mucociliary transport for greater than 3 months.

**Balloon dilation of the eustachian tube (BDET)** is a procedure where a balloon catheter is used to dilate the cartilaginous portion of the tube through a minimally invasive transnasal endoscopic approach.

### Tympanogram types:

- Type A – Normal middle ear pressure
- Type B – Little or no mobility, suggestive of fluid behind the tympanic membrane
- Type C – Negative pressure in the middle ear suggestive of a retracted tympanic membrane
- Type AS – A very stiff middle ear system that may be due to myringosclerosis or otosclerosis
- Type AD – A highly compliant TM usually seen in ossicular chain discontinuity

## References

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### Related Policies, Processes and Other Documents

N/A

### Non-Regulatory references

Cutler JL, Meyer TA, Nguyen SA, O'Malley EM, Thackeray L, Slater PW. Long-term Outcomes of Balloon Dilation for Persistent Eustachian Tube Dysfunction. *Otol Neurotol*. 2019 Dec;40(10):1322-1325

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National Institute for Clinical Excellence (NICE) [web site]. Balloon dilation for chronic eustachian tube dysfunction. December 19, 2019. Available at: <https://www.nice.org.uk/guidance/ipg665/resources/balloon-dilation-for-chronic-eustachian-tube-dysfunction-pdf-1899874226187205> Accessed May 21, 2024.

Poe D, Corrales CE. Eustachian tube dysfunction. In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. (Accessed May 21, 2024).

Ramakrishnan N, D'Souza R, Kadambi P. A Systematic Literature Review of the Safety and Efficacy of Eustachian Balloon Tuboplasty in Patients with Chronic Eustachian Tube Dysfunction. Indian J Otolaryngol Head Neck Surg. 2019 Sep;71(3):406-412.

Tucci DL, McCoul ED, Rosenfeld RM, et al. Clinical Consensus Statement: Balloon Dilation of the Eustachian Tube. Otolaryngol Head Neck Surg. 2019 Jul;161(1):6-17.

Weber PC. Evaluation of hearing loss in adults. In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. (Accessed May 21, 2024).

### Regulatory References

New York State Department of Health [web site]. New York State Medicaid Program Physician Procedure Codes. Section 5 – Surgery. April 2024. Available at: <https://www.emedny.org/ProviderManuals/Physician/PDFS/Physician%20Procedure%20Codes%20Sect5.pdf> Accessed: May 21, 2024.

***This policy contains medical necessity criteria that apply for this service. Please note that payment for covered services is subject to eligibility criteria, contract exclusions and the limitations noted in the member's contract at the time the services are rendered.***

### Version Control

Signature / Approval on File? Yes ☒ No ☐

Revision Date	Owner	Notes
8/1/2024	Health Care Services	Revised
1/1/2024	Health Care Services	Revised