DESCRIPTION
The Eccovision™ Acoustic Reflection Pharyngometer (Hood Laboratories, Pembroke, MA) provides a non-invasive assessment of the dimensions, structure and physiological behavior of the upper airway from the oral cavity to the hypopharynx while the patient breathes. This device is marketed as a screening method to quickly assess a patient for potential sites of sleep related upper-airway obstruction, and to better determine whether an oral appliance or CPAP is more appropriate for the patient.

The SNAP Testing System (SNAP Laboratories, Wheeling, IL) is another type of reflective acoustic device marketed as a screening and analysis system to locate the source of snoring and detect sleep apnea conditions. These devices were approved by the FDA based on 510(k) premarket notifications; thus, the manufacturers were not required to submit the evidence of efficacy necessary to support a premarket approval application.

POLICY
Acoustic pharyngometry (e.g., Eccovision™ Acoustic Pharyngometer), and versions of the SNAP™ Testing System using fewer than 3 channels are considered experimental and investigational for screening, diagnosis, or treatment planning in persons with suspected or known obstructive sleep apnea (OSA) and for all other indications.

RATIONALE
Hatzakis et al (2003) found that the Eccovision pharyngometer does not reliably assess pharyngeal volumes in a pediatric population. Gelardi et al (2007) assessed variations of pharyngometric parameters in patients with sleep disorders. The authors concluded that although not a standardized test, acoustic pharyngometry was proved to be a useful method both in the diagnosis and severity of OSA, and in post-operative monitoring of upper airway surgery in patients with sleep disorders. The findings of this study need to be validated by well-designed studies.
There is insufficient evidence that versions of the home SNAP testing device using fewer than three channels are as good as conventional sleep studies for diagnosis and treatment planning in patients with OSA.

Liesching, et al. (2004) compared the SNAP testing system to standard polysomnography to determine the accuracy of the SNAP testing system in detecting OSA. The investigators concluded that SNAP studies do not appear to accurately assess the severity of OSA.

Galer, et al. (2007) examined the clinical significance of the acoustic data channel (single channel) recorded by the SNAP home polysomnography system.

The investigators concluded that their findings suggest that analysis of snoring has limited utility in the evaluation of the patient with sleep apnea but may be able to select patients who would benefit from palatal procedures to reduce snoring.

Guidelines on the use of portable monitoring devices for the diagnosis of obstructive sleep apnea from the American Academy of Sleep Medicine, the American Thoracic Society, and the American College of Chest Physicians (Chesson, et al., 2004) state that type 4 monitoring devices are not recommended in the attended or unattended setting. The guideline definition of type 4 monitoring devices would include the SNAP Testing System using less than 3 channels and acoustic pharyngometry.

**CODING**

The following codes for treatment and procedures applicable to this policy are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement. Please refer to the member’s contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

**CPT/HCPCS**

There are no specific codes for acoustic pharyngometry or SNAP testing system less than 3 channels.

**DIAGNOSIS**

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<tr>
<th>Code</th>
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<td>Primary atelectasis</td>
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<td>Apnea</td>
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<td>786.09</td>
<td>Dyspnea and respiratory abnormalities; other</td>
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REFERENCES
