

## Medical Coverage Policy | Rhinomanometry and Acoustic|Optical Rhinometry



**EFFECTIVE DATE:** 12|01|2008

**POLICY LAST UPDATED:** 02|21|2017

### OVERVIEW

Rhinomanometry, acoustic rhinometry, and optical rhinometry are techniques to objectively measure nasal patency. Several clinical applications are proposed including allergy testing, evaluation of obstructive sleep apnea, and patient assessment prior to nasal surgery.

### MEDICAL CRITERIA

None

### PRIOR AUTHORIZATION

Not applicable

### POLICY STATEMENT

#### BlueCHiP for Medicare and Commercial Products

Rhinomanometry and acoustic/optical rhinometry are considered not medically necessary as there is insufficient peer-reviewed scientific literature that demonstrates that the procedure/service is effective.

### COVERAGE

Benefits may vary between groups and contracts. Please refer to the appropriate Benefit Booklet, Evidence of Coverage, or Subscriber Agreement for applicable medically necessary benefits/coverage.

### BACKGROUND

Rhinomanometry, acoustic rhinometry, and optical rhinometry are techniques to objectively measure nasal patency. Several clinical applications are proposed including allergy testing, evaluation of obstructive sleep apnea, and patient assessment prior to nasal surgery.

Nasal patency is a complex clinical issue that can involve mucosal, structural, and psychological factors. The perception of nasal obstruction is subjective and does not always correlate with clinical examination of the nasal cavity, making it difficult to determine which therapy might be most likely to restore satisfactory nasal breathing. Therefore, procedures that objectively measure nasal patency have been sought. Three techniques that could potentially be useful in measuring nasal patency are as follows:

1. Rhinomanometry is a test of nasal function that measures air pressure and the rate of airflow in the nasal airway during respiration. These findings are used to calculate nasal airway resistance. Rhinomanometry is intended to be an objective quantification of nasal airway patency.
2. Acoustic rhinometry is a technique intended for assessment of the geometry of the nasal cavity and nasopharynx and for evaluating nasal obstruction. The technique is based on an analysis of sound waves reflected from the nasal cavities.
3. Optical rhinometry uses an emitter and a detector placed at opposite sides of the nose and can detect relative changes in nasal congestion by the change in transmitted light. This technique is based on the absorption of red/near-infrared light by hemoglobin and the endonasal swelling-associated increase in local blood volume.

Overall, the scientific evidence does not permit conclusions about the effect of rhinomanometry, acoustic rhinometry, or optical rhinometry on health outcomes. To date, no studies have been published that evaluate the clinical utility of these tests. None of the studies identified have prospectively compared patient outcomes with and without the use of one or more of these tests for any clinical condition. Therefore, the technologies are considered not medically necessary as there is no proven efficacy.

## **CODING**

### **BlueCHiP for Medicare and Commercial Products**

The following code is considered not medically necessary:

**92512** Nasal function studies (e.g., rhinomanometry)

## **RELATED POLICIES**

None

## **PUBLISHED**

Provider Update, April 2017

Provider Update, June 2016

Provider Update, December 2015

Provider Update, January 2015

Provider Update, August 2013

Provider Update, August 2012

Provider Update, December 2011

Provider Update, March 2011

Provider Update, August 2009

Provider Update, September 2008

Policy Update, July 2007

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2. Andre RF, Vuyk HD, Ahmed A et al. Correlation between subjective and objective evaluation of the nasal airway. A systematic review of the highest level of evidence. *Clin Otolaryngol* 2009; 34(6):518-25.
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