

**Department of Hearing & Speech Sciences  
Vanderbilt University Medical Center  
Clinical Protocol**

**Protocol Title: Speaking Valve Placement for a Patient on Tracheostomy Collar**

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**Providers:** ASHA-Certified and state licensed speech-language pathologists

**I. Policy Statement:**

Speech-language pathologists (SLPs) in the medical setting work with many patients with tracheostomy, both with and without ventilator dependence. Patients with artificial airways, along with complex medical conditions/co-morbidities, may not be able to effectively communicate without intervention by a SLP. For patients on tracheostomy collar, placement of a Passy Muir® speaking valve offers an excellent option to re-establish verbal communication, facilitate secretion management, and improve swallowing.

**II. Equipment and Supplies:**

- a. Passy-Muir® speaking valve
- b. Sign for head of bed (HOB) and on pilot line to indicate need for full cuff deflation prior to speaking valve placement.
- c. 10 mL syringe with Luer Lok tip

**III. Protocol(s):**

A combined method of augmentative communication and oral means of communication is important to establish for patients with tracheostomy. Given that patients may not always be able to communicate via tracheostomy tube, backup non-verbal/augmentative communication is important to allow the patient access to communication at all times.

Augmentative communication options may include: writing, texting, signing (sign language, gestures), tablet and/or phone apps, low-tech augmentative and alternative communication (AAC), and high-tech AAC.

Verbal communication options may include: mouthing of words, use of leak speech with full cuff deflation, and use of purple Passy Muir™ speaking valve.

**IV. Procedures:**

1. Obtain a physician's order for speaking valve evaluation and treatment.
2. Complete thorough chart review.
3. Discuss status of patient, including frequency of suctioning and quality of secretions with patient's nurse.
4. Determine brand, size, and cuff status of tracheostomy tube.
5. Evaluate patient's alertness and responsiveness.
6. Evaluate patient's oral motor skills.
7. Observe and record vital signs: HR, RR, SpO2.
8. Determine most appropriate and efficient means of non-oral communication as a backup system.

9. If tracheostomy tube is cuffed, provide suctioning as needed and proceed with cuff deflation. Ensure patient tolerance of cuff deflation while maintaining adequate RR and SpO2. Provide additional suctioning as needed.
10. Provide patient and family education, using visual aids as needed.
11. Complete finger occlusion trial as mental status allows.
12. Proceed with Passy Muir® valve (PMV) placement, if glottis is patent (based on finger occlusion trials).
13. Place PMV on the hub of the tracheostomy by gently stabilizing the tracheostomy tube with one hand and attaching the PMV with the other hand.
14. After placement, continually evaluate patient's respiratory status looking for signs of fatigue, hemodynamic changes, patient report of discomfort, and SpO2 changes. If patient is unable to tolerate PMV, patient may need further downsize of tracheostomy tube. Follow up with primary team to discuss medical feasibility and timing of downsize.
15. Monitor time of tolerance of speaking valve.
16. Elicit verbalizations/vocalizations and evaluate quality of voicing and speech.
17. At the end of the trial, SLP will remove the PMV by placing one hand on the tracheostomy neck plate and with the other hand will gently pull PMV off the hub of the tracheostomy tube. If needed due to poor tolerance or respiratory status, reinflate cuff of tracheostomy tube.
18. Passy Muir® Speaking Valve Care and Cleaning:
  - a. PMV should be cleaned as needed
  - b. Wash in pure soap and tepid water
  - c. Rinse thoroughly with cool to tepid water
  - d. Set aside to air dry
  - e. Single patient use ONLY. With proper use and care, PMV will last 2 months

**CAUTION: DO NOT USE hot water, peroxide, bleach, vinegar or alcohol as they will damage the silastic membrane. Also, do not autoclave, use ETO or radiation sterilization. DO NOT wipe or brush valve. Thoroughly rinse all residue to prevent valve from sticking.**

19. Review findings and recommendations with patient nurse and medical team. Provide additional education to staff, as needed.
20. Place warning signs indicating need for full cuff deflation at head of bed and on pilot line of tracheostomy tube.
21. If patient's mental status allows and cuff of tracheostomy tube is NOT CUFFED, provide education to patient and/or family regarding how to place/remove and clean speaking valve.

Contraindications to PMV placement:

- a. Patient with a foam cuffed tracheostomy tube
- b. Patient that is unable to tolerate cuff deflation
- c. Severe upper airway obstruction
- d. Medical instability
- e. Severe aspiration risk

## **V. Required Clinician Education/Supervision to Ensure Competency:**

All new clinicians or clinicians new to a clinical service are required to complete a focused evaluation of clinical practice with an assigned senior clinician. The senior clinician will work with the supervisor to establish competency.

The SLP must have appropriate training and demonstrate competency prior to completing speaking valve evaluations. If the clinician has had recent experience completing speaking valve evaluations, defined as within the prior 12 months, then they are supervised completing evaluations on patients with a cuffed and non-cuffed tracheostomy tube. They are required to complete at least 1 evaluation on each patient type (one cuffed, one noncuffed tracheostomy tube). Competency is established when the supervised clinician demonstrates appropriate decision making for tolerance of speaking valve, adequate training and education to patient, family and team, and determines the need for a change in size of tracheostomy tube. Clinician must also complete thorough and accurate documentation. At that point, they are deemed competent to complete independent speaking valve evaluations which may occur within the duration of the focused evaluation of clinical practice. If the clinician does not demonstrate competency, then they continue with supervision of speaking valve evaluation until the supervising SLP feels that competency has been met. If this is not achieved within the 6 months of focused evaluation, the supervisor may choose to remove the clinician from this service or continue with supervised training to develop competency.

If a clinician does not have recent experience completing speaking valve evaluations, then they must first complete prescribed readings and then observe at least 2 speaking valve evaluations (one cuffed, one noncuffed tracheostomy tube) with the supervising SLP. Following completion of readings and observations, they then proceed through steps as outlined above with supervised speaking valve evaluation to establish competency.

Annual competency is maintained through participation in continuing education, chart review, and/or direct observation by supervisor or peer.

## **VI. Documentation:**

Results are interpreted and documented in a written report in eStar.

Documentation includes:

1. Medical History
2. Subjective observations, including patient's tolerance of and response to communication trials.
3. Objective Findings, including:
  - a. Brand, size, and cuff status of tracheostomy tube
  - b. Oral motor skills
  - c. Non-verbal communication options, as needed
  - d. Record of vital signs: HR, RR, SpO2
  - e. Record time tolerated
  - f. Patient's response to PMV placement

- g. Assessment of voice quality and speech intelligibility.
- h. Assessment statement including diagnosis, best means of verbal and non-verbal communication, prognosis, and recommendations for speaking valve placement
- 4. If patient is going to be followed for therapy, goals are clearly documented
- 5. Billing and Coding:
  - a. CPT: 92597 Voice Prosthetic Evaluation; Use 92507 Speech/Language Treatment for subsequent treatments (do not bill for evaluation and treatment during initial placement)
  - b. ICD-10: Treatment diagnosis - R49.1 Aphonia; Medical diagnosis - Z93.0 Tracheostomy; Additionally, can use medical diagnosis which resulted in tracheostomy tube, such as J96.01 - Acute respiratory failure with hypoxia.

**VII. References:**

American Speech-Language-Hearing Association. *Practice Portal: Tracheostomy and Ventilator Dependence*. [Tracheostomy and Ventilator Dependence \(asha.org\)](http://asha.org)

Passy Muir, Clinical Resources: [passymuir.us](http://passymuir.us)

Joint Commission: [r3-report-issue-1-20111.pdf \(jointcommission.org\)](http://jointcommission.org)

VUMC Patient Bill of Rights and Responsibilities: [Patient Rights and Responsibilities \(vanderbilthealth.com\)](http://vanderbilthealth.com)

**VIII. Approval:**

*Barbara H. Jacobson, PhD CCC-SLP*

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Associate Division Director

3/30/2022

**Date**



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Vice Chair, Clinical Operations

4/4/2022

**Date**