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## Purpose and Scope:

To establish an interdisciplinary policy, procedure and standard of care for the initiation, and use of a one way speaking valve

## Policies:

An interdisciplinary team of competent staff will assess and plan management for patients who may benefit from the use of a speaking valve, within 72 hours of admission or post tracheostomy, per hospital protocol

- A. A written order from the physician for Speech Evaluation includes an assessment for Speaking Valve for patients with tracheostomy. This order will be transferred to the Speech Therapy department.
- B. The Speech-Language Pathologist (SLP) will coordinate the initial speaking valve evaluation with Respiratory Therapy (RT) and implement the Speaking Valve Protocol.
- C. The SLP will complete the speech and swallowing evaluation as indicated and provide recommendations.
- D. Documentation and recommendations for Speaking Valve use will be communicated to the physician and staff on the physician orders and in the Speech Therapy section of the patient chart.
- E. Based on the SLP-directed plan of care, the SLP or RT will in-service staff and/or family on appropriate speaking valve use and precautions.
- F. RT and SLP will follow speaking valve patients daily to ensure adequate compliance with prescribed recommendations and to collaborate/revise the treatment/management plan as necessary and communicate patient response to treatment to the physician.
- G. RT and SLP providing, recommending or modifying one-way speaking valve treatments will have completed facility clinical competency requirements.

## References:

American Speech-Language-Hearing Association (1933), The position statement and guideliens for the use of voice prostheses in tracheotomized persons with and without ventilator dependence. ASHA, 35 (March, Suppl. 10) 17-20

Buckwalter, J.A., Sasaki, C.T.: Effect of tracheostomy on laryngeal function. Otolaryngological Clinics of North America., 17, 41-48.1984

By ck, J.F. (1933) Improved communication with the Passy-Muir Valve: the aim of technology and result of training. Critical Care Medicine, 21(4), 483-484.

Dettelbach, M.A., Gross, R.D., Malhmann, J., and Eibling, D.E. (1955). The effects of the Passy-Muir valve on aspiration in patients with tracheostomy. Head & Neck, 17, 297-302

## Evaluation and Application Using a One Way Speaking Valve

**Role of Speech-Language Pathologist:** to evaluate the patient's swallowing abilities breath support for communication, voice production, language skills, speech articulation, and candidacy for communication devices which allows air to be directed through the glottis (such as a one-way speaking valve), dispense/apply the speaking valve and necessary adaptors, develop appropriate therapeutic goals, follow patient's progress and discontinue intervention if change in status occurs. The assessment includes the following:

1. Obtain pertinent medical history including diagnosis and information regarding the type of tracheostomy tube (cuffed/uncuffed/fenestrated/un-fenestrated). Determine the respiratory status and ventilator needs of each patient.

2. Record baseline, intra-trial and post-trial data regarding vital signs and tolerance of speaking valve.

3. Assess cognitive abilities to ensure that the patient has adequate alertness and basic mental abilities to participate with the plan of care.

4. Assess language abilities to determine if comprehension and expression skills are adequate for participation in the program.

5. Evaluate oral motor functioning with apraxia and/or dysarthria batteries if indicated.

6. Evaluate swallowing skills including secretion management, aspiration risk,

oropharyngeal strength and safety with PO presentations as indicated.

7. Evaluate voice including the patient's breath support for phonation and quality of voice as it relates to functional communication. If voice impairment is evident, determine possible physiological causes (generalized weakness, inadequate breath support, laryngeal pathology, trach tube too large, etc).

 8. If initial assessment with speaking valve is successful, obtain a prescription for communication device and communicate recommendations to physician and staff.
9. If initial assessment is not successful, determine barriers and consult appropriate physician to decrease those barriers (ENT/Pulmonology to rule out pathology or to downsize trach, etc).

10. Complete therapeutic assessments with speaking valve with graduated lengths of time working toward unsupervised trials, capping and decannulation protocol.

11. Collaborate with RT to determine the most appropriate device for assessment and treatment.

**Role of Respiratory Therapist:** to assess the respiratory status of the patient, make necessary adjustments to the ventilator after discussion with the pulmonologists, place/remove speaking valve according to recommendations made by SLP, and monitor status of the patient during inline speaking valve use in conjunction with the SLP. The assessment includes:

- 1. Assess airway status and monitor vital signs.
- 2. Assess oxygen and respiratory status.
- 3. Assess feasibility of communication device ordered.
- 5. Assess present medical regimen and stability.

During the speaking valve trial, the RT will:

- 1. Set up and/or apply the speaking device.
- 2. Adjust Fi02's (oxygen supply sources) as needed.
- 3. Adjust ventilator settings (if needed).
- 4. Communicate with pulmonologist about ventilator changes.
- 5. Maintain and monitor airway status.

6. Monitor oxygen saturation (monitor ABG status during longer periods of in-line speaking valve use).

7. Assist with position changes, clearing secretions, increasing airflow for

- communication, sighing the ventilator, giving extra breaths per the ventilator, etc.
- 8. Clean and maintain device.
- 9. Monitor maintenance sessions with communication device, per plan of care.