PURPOSE: To establish a standard protocol and ensure quality therapeutic intervention for patients using the Passy-Muir Tracheostomy Speaking Valve (PMTSV).

EXCEPTIONS: Do not use when patient is asleep.

DEFINITION(S): The PMTSV is a one-way valve with a flexible diaphragm that allows for inspiration through the tracheostomy tube and expiration through the larynx, thus allowing vocalization.

PROCEDURE: 1. Physician order required for placement of PMTSV.
   a. Order sent to speech-language pathology services via computer.
   b. Speech-language pathologist (SLP) notifies patient’s respiratory therapist (RT) of order.
   c. The speech-language pathologist will provide the PMTSV and charging for the valve through documentation via medilinks.

   2. Screening of patient by SLP and RT to determine appropriateness for placement using following selection criteria:
   a. Minimum of 48 hours time lapse post tracheostomy placement.
   b. Without severe tracheal or laryngeal deviations.
   c. Without severe risk of aspiration if cuff is deflated (do not use with inflated cuffs).
   d. The patient should be Awake and showing some receptive or expressive communication attempts (do not use when sleeping).
   e. Stable vital sign (HR, RR, BP, oxygen saturation).
   f. Consideration of ventilator settings at time of placement, (Rate, PS, Oxygen %, PEEP) or if off ventilator, oxygen needs met via tracheostomy collar at time of placement.
3. **Placement of Patients**

**Initial (first time use of valve) placement:** Initial (for patients using the valve for the first time) placement of the PMTSV will be limited to patients in the critical care unit, Neuro Progressive Care Unit, the Trauma Progressive Care Unit, and the Medical Respiratory Unit. There would have to be a mutual decision by any other nursing unit and the Speech Therapists in regards to continued use of the PMTSV before the patient would be transferred from ICU, CVICU, Neuro Progressive Care Unit, Trauma Progressive Care Unit, or the Medical-Respiratory Unit. The patient’s current care needs would be a factor. Once discharged from acute care, patients may transfer to IRF. Initial placement will be performed with both SLP and RT present. If patient has already been using the PMTSV prior to transfer to IRF, both SLP and RT is not required to be present. SLP and RT will provide instructions for usage. The patient’s nurse will assist as needed and be involved in the plan of care.

**Patients admitted from home with valve:** If a patient is admitted with prior use of the PMTSV, they may be placed on any nursing unit based upon their current care needs/requirements. An order from the physician needs to be obtained to continue/discontinue the PMTSV while in the hospital. If the MD orders the PMTSV to be continued, consult with both SLP and RT. The RN will initiate the plan of care to include the PMTSV patient care needs.

a. For the initial placement of the PMTSV, RT takes primary responsibility for equipment operation related to respiratory needs. Basic steps include suctioning patient, deflating the cuff, and either placement of the valve with flex tube in line with the ventilator, or if vent not required, placement of valve onto the trach hub, with the trach collar (when present) reattached. Speech Therapy will place a “Caution” sign above the bed that states the trach cuff must be deflated when passy-muir valve in use. Other considerations include manipulation of ventilator settings, oxygen %, etc. Documentation of patient’s respiratory status through pulse oximetry prior to the initiation of the
valve and during weaning of the valve as tolerated. Nursing or RT to document in SCM when valve is in place and when it is taken off. ST will provide documentation in the Rehab documentation. Patient tolerance should be included.

b. For the initial placement of the PMTSV, SLP takes primary responsibility for establishing phonation, once easy, relaxed breathing is established. Type of speech task, length of utterance, etc., is considered in terms of providing speaking success. Vocal quality is considered and techniques used to improve it.

c. If difficulties encountered by patient regarding breathing and/or speaking, subsequent joint sessions with SLP and RT continue and/or consultation with a pulmonologist or an otolaryngologist is suggested.

d. If the patient experiences success using the valve, placement of the valve can be made by the nurse and SLP, with SLP emphasizing increased length of time the valve is used as appropriate, and use of the valve in various communicative contexts (with family/friends, with medical staff, on the telephone, etc.). RT may do the same individually when the opportunities are available.

e. Education of medical staff and families regarding valve usage is the prime responsibility of the SLP and RT. Continued teaching may be needed as the patient changes units, nurses, or therapists within the hospital or as family members alternate their stays at the hospital. The Nurse Educator from the nursing units that initiate the use of the PMTSV can be a resource also.

f. Continued usage of the valve prn, with Nursing taking primary responsibility for placing the valve and for monitoring the patient’s status during usage.

1) When suggested by the SLP, the patient may wear the valve in other therapies, with that therapist monitoring the patient’s status. Family members who have been educated and have demonstrated knowledge of the PMTSV can monitor the patient’s usage under nursing supervision.

g. Cleaning Process: The valve is packaged one per package. The valve should be cleaned daily by nursing personnel. Swish PMTSV in soapy, warm water. Rinse thoroughly in warm running water. Allow PMTSV to air dry thoroughly before placing in storage container. Do not apply heat to dry PMTSV. Do NOT use hot water, brushes, cotton swabs, peroxide, bleach, or alcohol to clean this device as it can cause damage to the PMTSV. Single patient use only.

h. If the patient develops respiratory distress using the valve, contact respiratory therapy

i. Certain patients who require prolonged or permanent trachs or ventilator support may be taught to independently place the valve and use it prn, and monitor their respiratory status upon hospital discharge.
j. Storage of the valve when not in use: Valves should be placed in a clearly marked container and stored in a cool, dry place. (Labeled with the patient’s name, admission number, date initiated, and that the valve is to remain with the patient upon transfer to another unit.)

k. All documentation regarding the patient’s progress/status/maintenance is to be documented in the electronic medical record.

RESPONSIBILITY: It will be the responsibility of the department directors to ensure that personnel are aware of, and adhere to, this policy.

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