



SPEECH LANGUAGE PATHOLOGY SERVICES INCLUDE:

LSVT LOUD PROGRAM: is an effective speech treatment for individuals with Parkinson's Disease (PD) and other neurological conditions. LSVT LOUD improves vocal loudness by stimulating the muscles of the larynx and speech mechanism through a systematic hierarchy of exercises. Treatment not only stimulates the motor system but also incorporates sensory awareness training. Treatment is administered in about 16 sessions over 4 consecutive weeks (four individual 60 minute sessions per week).

[**LSVT BIG PROGRAM** by Physical Therapy is also offered onsite]

DEEP PHARYNGEAL NEUROMUSCULAR STIMULATION (DPNS): Use of frozen lemon glycerin swabs to stimulate specific sites within the oral cavity to address the following:

- Increase salivation for digestion and lubrication
- Improve lingual coordination for mastication, bolus (food or drink in the mouth) transfer.
- Restore pressure/thermal/taste sensory receptors on the tongue to elicit needed movement for mastication and bolus transfer.
- Improve palatal reflex for restoration of velopharyngeal closure and to maintain closure during each swallow to complete each swallow with appropriate cessation of respiration (eliminate inhalation during the swallow) and to eliminate aspiration risk.
- Increase laryngeal elevation/suprahoid muscle strength to increase epiglottal range of motion to eliminate aspiration risk.
- Improve pharyngeal contractibility to propel food/liquid boluses to the esophagus.

NEUROMUSCULAR ELECTRICAL STIMULATION (NMES):

3 different NMES devices: EMS-2C (Facial E-stim), Vital Stim (Pharyngeal Constriction and Laryngeal range of motion), and Intellistim (Suprahoid Muscles for increased laryngeal elevation). Vital Stim and Intellistim are FDA approved.

These devices are used simultaneously with DPNS or multiple devices at the same time (for e.g. facial e-stim placement with Vital Stim and Intellistim on Suprahoidal muscles) for muscle re-education, and to prevent disuse atrophy to address facial weakness or droop as well as laryngeal range of motion.

MYOFASCIAL RELEASE: To increase buccinators (cheek), obicularis oris (lips), and neck muscle tone and range of motion. This modality is addressed to improve swallowing and speech production.

MODIFIED BARIUM SWALLOW STUDY: We complete MBS studies onsite to assess swallowing difficulties. Patients will receive a DVD copy of the study for their personal medical record on the day of the study. The Speech Pathologist will review the DVD and discuss the results of the study on the same day of the study, and a written report will be faxed to the referring physician within a few days. Appointment time: ~60 minutes.

FOR FURTHER QUESTIONS PLEASE CONTACT:

CHRISTINA PORTELL, M.S. CCC/SLP. christina.portell@uhsinc.com