


Name of Policy: <u>Polysomnography procedure</u> Policy Number: 3364-171-03-06 Department: Sleep Disorders Center Approving Officer: Senior Hospital Administrator Responsible Agent: Director, Sleep Disorders Scope: The University of Toledo Medical Center Pulmonary Services Department	 Effective Date: 03/17/2023 Initial Effective Date: 03/17/2023
<input checked="" type="checkbox"/> New policy proposal <input type="checkbox"/> Major revision of existing policy	<input type="checkbox"/> Minor/technical revision of existing policy <input type="checkbox"/> Reaffirmation of existing policy

(A) Policy Statement

All qualified and trained Polysomnographic Technologists are responsible for performing a polysomnographic test.

Possible indications for polysomnography include:

- Sleep-related breathing disorders
- Continuous positive airway pressure (CPAP) titration in patients with sleep-related breathing disorders
- Prior to a multiple sleep latency test in the evaluation of suspected narcolepsy
- In evaluating sleep-related behaviors that are violent or otherwise potentially injurious to the patient or others
- Certain atypical or unusual parasomnias
- Neuromuscular disorders and sleep related symptoms
- To assist in the diagnosis of paroxysmal arousals or other sleep disruptions thought to be seizure related
- In a presumed parasomnia or sleep related seizure disorder that does not respond to conventional therapy
- When there is a strong clinical suspicion of periodic limb movement disorder.

Application of electrodes, montages, filters, sensitivities, and scoring will be performed according to the *AASM Scoring Manual*.

(B) Purpose of Policy

Polysomnographic studies are performed on patients to diagnose a variety of sleep disorders when ordered by a sleep staff physician, or by another physician, with the approval of the Medical Director or an appropriately licensed medical staff member. The following protocol for polysomnography is consistent with the *AASM Practice Parameters for the Indications for Polysomnography and Related Procedures: An Update for 2005*.

(C) Procedure

1. Explain test/expectations to the patient
2. Apply electrodes. The use of polysomnography for evaluating SRBD includes:
 - a. Electroencephalogram (EEG)
 - b. Electro-oculogram (EOG)

- c. Chin electromyogram (EMG)
 - d. Pressure Transducer from Airflow (PTAF)
 - e. Airflow
 - f. Pulse Oximetry
 - g. Chest and abdomen Respiratory Inductance Plethysmography (RIP)
 - h. Electrocardiogram (ECG)
 - i. Anterior tibialis EMG is useful to assist in detecting movement arousals and may have the added benefit of assessing periodic limb movements, which for many patients co-exist with SRBDs.
 - j. Snore microphone
3. Also included in the Polysomnogram (PSG) are.
- a. Body position
 - b. Central Monopolar recording
 - c. Occipital Mono or Bipolar recording
4. Reports for PSG studies follow the American Academy of Sleep Medicine (AASM) recommendations.

Components Necessary During a PSG Study Include:

1. Patient education
2. Administer the Pre-Sleep Questionnaire
3. Patient hook-up
 - a. International 10-20 hook-up
 - b. Chin Electromyograph (EMG)
 - c. Eye Electrooculogram (EOG)
 - d. Anterior Tibialis leads right and left
 - e. Chest Respiratory Inductance Plethysmography (RIP) belts
 - f. Abdomen RIP belt
 - g. Oximeter
 - h. Snore microphone
4. Patient to bed
5. Lights out
6. Impedance check
7. Machine calibration
8. Patient calibration
9. Machine calibration
10. Lights on
11. Administer the Post-Sleep Questionnaire

See Procedure Polysomnography

Approved by:	Review/Revision Date: 03/23
<u>/s/</u> Michael Taylor Director, Pulmonary Services	<u>03/20/2023</u> Date
<u>/s/</u> Andre Aguilon, M.D. Medical Director	<u>03/19/2023</u> Date
<u>/s/</u> Russell Smith Senior Hospital Administrator	<u>03/20/2023</u> Date
<i>Review/Revision Completed By:</i> <i>Director, Sleep Disorders</i>	Next Review Date: 03/26
Policies Superseded by This Policy:	

It is the responsibility of the reader to verify with the responsible agent that this is the most current version of the policy.