(A) Policy Statement

All standard EEG tests performed during which the patient actually falls asleep either naturally, after administration of sedation/hypnotic or as a result of having been sleep-deprived shall be classified as a “Sleep EEG”. Sleep deprivation shall be considered total or partial for the purpose of interpretation and indicated as such on the Technician Report Sheet. Total sleep deprivation is defined as no observed sleep during a 24-hour period. Anything less is considered partial sleep deprivation and an attempt at an accurate estimate must be made.

(B) Purpose of Policy

To establish a differentiation between the Basic EEG test and a Sleep EEG.

(C) Procedure

1. Sleep Deprivation EEG:

   A. Scheduling:
      1. Outpatients scheduled for Sleep Deprived EEG study shall be preferentially granted the first appointment times available in each working day.
      2. Appointment day and time must be coordinated with the primary nurse for in-patients with orders for sleep deprivation EEG.
      3. If in-patient orders for sleep-deprivation EEG exceed the department’s morning personnel resources, the ordering physician is to be notified of the problem.
      4. The Medical Director shall determine the priority of testing if sleep deprivation orders exceed personnel resources and priorities cannot be resolved.
      5. To the extent possible based upon patient priorities, technicians shall endeavor to test any sleep-deprived outpatient who arrives in the department without an appointment or any in-patient sleep deprived on the nursing floor without prior notification.
      6. Patients who usually sleep in the day and stay awake at night will be granted the final appointment tome of the day or as last in the day as can be arranged.
      7. A two-hour block of time will be granted for completion of sleep EEG appointments.

   B. Patient Instructions:
      1. Instructions shall be provided to patients to have sleep deprivation EEG to insure that upon arrival for testing, the patient will be fatigued and ready to fall asleep.
      2. The adult patients must stay awake all night; children may be allowed to sleep between 02:00 and 04:00 only.
      3. Caffeine is to be prohibited after midnight the night before testing.
      4. All sleep deprived or a responsible adult to drive them to and from the testing location must accompany sedated patients. This adult must stay with any minor child.
C. Unprepared Patients:
1. Outpatients who are not adequately sleep deprived shall be granted a rescheduling of the appointment.
2. The referring physician's office shall be notified of the need to reschedule the sleep deprivation EEG.
3. The referring physician's office shall be called if the outpatient fails to show for testing, reschedules or cancels the appointment.
4. The request form shall be returned to the referring source if the patient fails to show for testing or cancels.
5. In-patients scheduled to be sleep deprived, but was not actually deprived of sleep shall be returned to the nursing unit and rescheduled after coordination with the primary nurse.

D. Recording Technique:
1. EEG recording technique shall be as per Policy 17-1-02, "Standard EEG Recording Technique".
2. An Nz, T1 and T2 electrode may be attached in addition to the standard International 10-20 System Electrodes to allow reformatting of the bipolar-basal chain montages.
3. EEG recording time will be extended beyond a 30-minute total duration to allow sufficient time for sleep onset and progression into deep sleep.
4. The technician will maintain a sleep environment and take any and all needed measures to do this. If the sleep deprived patient fails to fall asleep after 60 minutes of continuous EEG recording in a sleep setting, the study may then be terminated and considered a prolonged study (EEG Monitoring) rather than a routine Sleep Deprived EEG.
5. Patients who fall asleep immediately may be allowed to remain in sleep, but some waking activity must be obtained before the tracing is concluded. The patient must be aroused enough to perform alerting tasks and demonstrate difference in the EEG activity with eyes open and eyes closed.

2. Natural Sleep and Sedated Sleep:
A. Patients who fall asleep naturally during the course of an EEG must be allowed to reach Stage 2 of sleep as the minimum requirement to be considered a Sleep EEG.
B. EEG tracings performed on patients who have been given a sedative or hypnotic for behavior control (i.e. small children) must include epochs of both awake and sleep activity.
C. No type of sedation is to be given by any Electroneurodiagnostic Staff member. If sedation is ordered, it is to be administered by a responsible adult that is accompanying the patient.

Refer to American Clinical Neurophysiology Society Guidelines 2006.