EQUIPMENT MAINTENANCE

PURPOSE

To ensure the safety of patients and personnel and ensure accurate and uninterrupted operation of all patient-related mechanical and electric equipment through routine cleaning and periodic inspections.

POLICY

All patient-related equipment will be cleaned by sleep facility staff on a regular basis and routinely monitored and inspected for electrical and mechanical safety consistent with manufacturer’s recommendations and OSHA regulations.

Patient-related equipment includes all facility owned, borrowed, leased, and consigned equipment used for demonstration purposes and data collection, including oxygen equipment, sensors, bands, oximeters, thermistors, beds, PAP equipment, HSAT equipment, and bio-physiologic equipment, computers and equipment in the control room.

PROCEDURE

1.0 All equipment used in the sleep facility will be inventoried and logged prior to its initial use.
2.0 A record of all equipment and inspections will be maintained and updated and documented in the equipment log book.
3.0 Sleep technicians will perform visual, safety and operational tests on all patient related equipment at the beginning of each shift/prior to each use.
4.0 Records of these inspections will be documented and kept on file in the manager’s office to include:
   1.1 Date of inspection;
   1.2 Equipment ID information;
   1.3 Repairs or replacements needed; and
   1.4 Name or initials of individual performing inspection.
5.0 In-center patient equipment will be inspected as follows:
   5.1 All units and cables, leads, etc. are inspected nightly by the recording technician and weekly by the manager or designee.
   5.2 All sensors are inspected nightly by the recording technician and monthly by the manager or designee.
   5.3 All defective equipment will be pulled and reported to Clinical Equipment Services.
6.0 HSAT equipment will be inspected as follows:
   6.1 All units, disposable materials and batteries are inspected prior to shipping or release to patient by the technician.
   6.2 All defective equipment will be pulled and reported to Carefusion.
EQUIPMENT MAINTENANCE

7.0 An equipment maintenance log will be used to document repairs, replacements, and safety inspections of all equipment.

8.0 Devices with sensor issues or failed tests will be removed from service, recorded in the equipment maintenance log and returned to manufacturer for repair.
   8.1 Issues will be reviewed and analyzed for cause by the technical director.
   8.2 Trends related to device, sensor or services issues will be identified and addressed in a plan to prevent future failures.

9.0 All disposable equipment will be disposed of in the proper container.

10.0 Separate clean and dirty areas for all patient related equipment will be maintained and utilized appropriately.

11.0 All patient related non-disposable equipment will be cleaned according to manufacturer’s recommendations after each use and treated with appropriate disinfectant or germicidal agent if warranted.
   11.1 Effort belts should be washed weekly or whenever contact is made with the patient’s skin. Each buckle and wire should be wiped with Cavicide/Sani wipes and allowed to air dry.
   11.2 The surface of the CPAP machine and the pulse oximeters will be wiped down daily by using Cavicide/Sani wipes.
   11.3 Leg leads, thermistors, and snore sensors should be wiped clean using Cavicide/Sani wipes and allowed to air dry.
   11.4 All single use patient items (EKG pads, nasal cannulas, oximetry probes wraps) should be disposed of properly.
   11.5 Routine EEG electrodes decontamination:
      a. After procedure, transport electrodes to processing area in a covered transport container tagged with a “dirty” biohazard sticker.
      b. In designated area, don appropriate PPE and remove electrodes and equipment from the lined transport container.
      c. Fill basin designated as clean with clean water and place basin in area labeled as clean area.
      d. Fill basin labeled as dirty with hot water. Place dirty basin on counter in area labeled as dirty area.
      e. Place as much of the electrodes in the hot water as possible. Allow electrodes to soak for 10 minutes in hot water. Use disposable brush to remove remaining paste before removing electrodes from dirty basin. Dispose of brush after use.
      f. Remove electrodes from “dirty” basin and place them in “clean” basin filled with clean water to rinse electrodes. Remove dirty gloves. Don, clean gloves.
University of Texas Medical Branch  
Center for Sleep Disorders  
Policy: Equipment Maintenance  

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g. Pat electrodes dry with paper towel to remove excess water.

h. Pour disinfectant into a clean basin. Make sure as much of the electrodes are completely submerged into disinfectant as possible. Follow Manufacturer’s instruction for use as a disinfectant on pre-cleaned non-critical medical devices, instruments and implements.

i. Fill another clean basin with clean water. Remove the electrodes from the disinfectant and place in clean basin with clean water to rinse electrodes. Remove electrodes and pat them dry with paper towel. Hang clean electrodes vertically in clean storage area.

j. Empty water from dirty and clean basin into dirty sink. Wipe out basin to remove excess water then wipe basin with Cavi-wipes. Wipe inside and outside of basin.

k. Empty disinfectant and water into dirty sink. Wipe basins with Cavi-wipes inside and outside of basins. Place clean basins back in area labeled as clean. Wipe out dirty sink with Cavi-wipes.

11.6 STORAGE:

   a. Store clean EEG electrodes in cabinet or covered IV pole to prevent recontamination. Electrodes should hang vertically to promote drying.

   b. Cabinet/IV pole should be wiped down at least weekly or when visibly soiled.

12.0 Bio-medical department will be contacted for inspection, repair, or replacement of defective equipment.

13.0 Annual electrical safety testing will be completed by a certified bio-medical engineer.