POSITION DESCRIPTION / PERFORMANCE EVALUATION

Job Title: Chief Biomedical Engineer

Prepared by: __________________________________ Ap proved by: ___________________________
Date: ________________________________________ Date: _________________________________

Job Summary: Directs, monitors and participates in the installation, calibration, inspection, maintenance, electrical safety and equipment repair programs for the biomedical equipment at this hospital. Maintains maintenance records on all equipment included in the program. Maintains performance improvement activities within the department and participates in CQI activities. Assures competency of all staff. Assists in formulating the budget. Maintains efficient and effective department operation while requiring compliance with all accrediting organization, state, federal and local regulatory laws, standards and protocols.

DUTIES AND RESPONSIBILITIES:

3 = Exceeds Performance 2 = Expected Performance 1 = Needs Improvement

Demonstrates Competency in the Following Areas:

Oversees and performs installation, calibration, inspection, preventive maintenance and repair of patient care equipment and associated technical equipment.

Provides direction to assigned staff.

Knowledgeable of relevant codes and standards that apply to biomedical equipment and healthcare facilities.

Schedules and performs maintenance according to established maintenance strategies and procedures including: inspecting, calibrating, adjusting, lubricating, repairing or replacing components.

Responsible for repairing or servicing more complex equipment.

Responds to all calls for emergency repairs. Maintains records of all maintenance and repairs.

Diagnoses system malfunctions on mechanical and electronic equipment. Repairs or replaces defective parts, tests and reinstalls repaired equipment.

Maintains permanent records for each piece of equipment which falls under the responsibility of the Biomedical Engineering Department. Maintains complete and up-to-date records at all times.

Maintains code requirements by performing and documenting scheduled inspections and electrical safety tests.

Tests all new and repaired equipment before equipment is put into service. Documents all equipment repairs and tests.

Trains staff in the operation and repair of equipment.

Monitors work performed by outside contractors to ensure requirements are met and results are documented properly.

Monitors the inventory of biomedical equipment, parts and stand-by equipment to ensure minimum disruption of patient care.

Assists in evaluating new equipment for purchase.
NOTE:
This policy and procedure is for those hospitals that use Joint Commission (TJC) accreditation for deemed status purposes.

MISSION:
Insert your mission statement for the medical equipment management plan. Be sure that the mission for the plan reflects the mission statement of the organization.

SCOPE:
• The scope of the medical equipment management plan shall define the processes which _____________ Hospital (list all sites that are included in this plan) provides for the safe and proper use of medical equipment used in the patient care setting. The Engineering and Biomedical Engineering Departments shall provide services seven (7) days per week, 24 hours per day. The Engineering Department has contracted with the following companies to provide services (include the name of the company and what equipment services are supplied):

______________________________________________  __________________________________________
______________________________________________  __________________________________________

OBJECTIVE:
The objective of _________________ Hospital's medical equipment management plan shall be designed to assess and control the physical and clinical risks of all equipment used in the diagnosis, treatment, monitoring and care of our patients.

GOALS:
• The goals of _________________ Hospital's medical equipment management plan shall include the following:
  • To minimize the clinical and physical risks of equipment through inspection, testing and regular maintenance
  • To establish criteria for identifying, evaluating and inventorizing equipment which is included in the program
POLICY:

All clinical alarms and medical equipment alarm systems utilized for patient care shall be properly operational and alarms are activated when the appropriate settings are in use.

PROCEDURE:

- Patient Care Units/Departments:
  - Patient care staff shall perform routine testing of clinical alarms prior to use of medical equipment/devices on the patient population:
    - Patient care staff shall manually set off alarms during operational assessment of all medical devices/equipment to assure proper functioning of the equipment and associated alarms prior to use on the patient.
    - An environmental assessment of the alarm shall be performed to assure the alarm can be heard within an appropriate distance and with competing noise in the unit where the medical device/equipment is being used. The environmental assessment shall include assurance that any visual aspects of the alarm system are working properly when activated.
  - Patient care staff shall verify and reset, if necessary, the alarm parameters at the beginning of each shift, when the nurse returns from breaks, when the patient is turned or moved, or after patients are transferred.
    - Ensure that dysrhythmia detection functions are available and appropriately activated, and that the alarm volume is high enough to be heard outside the patient's room.
    - Alarm parameters are patient specific. Parameters should be set at 5-10% above and below expected rate.
  - Patient care staff shall assure that direct observation of the patient is routinely conducted to avoid singular dependence on alarm systems.
  - Patient care staff shall not silence alarms without first checking on the patient.
  - Be sure to correctly discharge patients from their monitors on transfer or discharge from the bed, unit or hospital.
NOTE:
See Medical Equipment Management Plan

POLICY:

• It shall be the responsibility of the Biomedical Engineering Director to keep the Alternative Equipment Maintenance Program (AEM) accurate and ongoing, and to ensure that the hospital is in compliance with the most stringent maintenance requirements mandated for medical equipment.

• Documentation of the AEM shall be located in the ________________.

PROCEDURE:

• The Chief Biomedical Engineer shall develop preventive maintenance procedures for all applicable medical devices serviced by the Biomedical Engineering Department. The preventive maintenance procedures shall be developed using the specific device's manufacturer's maintenance recommendations, NFPA standards and ASHE and AAMI recommendations.

• At the beginning of each week, the Chief Biomedical Engineer or his/her designee shall issue the scheduled maintenance work orders to the Biomedical Engineer.

• Maintenance shall be performed in accordance with the instructions included in the work order. The assigned engineer shall document the maintenance, including any pertinent observations, on the work order. When maintenance and documentation are completed, the engineer shall return the work order to the Engineering Department office.

• If scheduled maintenance cannot be performed (i.e., part not available), the reason shall be documented on the work order and it shall be returned to the Engineering Department office. The work order shall be placed under "outstanding jobs", which shall later be compiled as part of 30- or 60-day report.