Institutional Handbook of Operating Procedures Policy 09.13.19	
Section: Clinical Policies	Responsible Vice President: EVP and CEO Health System
Subject: General Procedures	Responsible Entity: Nursing Service

I. Title

Patient Care Alarm Systems: Maintenance, Testing, and Activation

II. Policy

The scope of this policy is inpatient and ambulatory procedural areas.

The purpose of this policy is to establish parameters and provide guidelines for the management of clinical alarms to include alarm settings, response, and the preventative maintenance. Clinical alarm systems require prompt attention to prevent risk or harm to the patient.

- Clinical alarm systems are preset with hard or default setting which provide safety limits based on the patient population. These default settings are specified by Healthcare Professionals and can only be modified or programmed by service personnel per physician order.
- Soft or customized alarm settings may be modified by the Healthcare Professional based on an individual patient's condition and risks and unit based standards.
- Clinical alarm parameters are set and assessed by the Healthcare Professional, based on patient condition and to minimize false and nuisance/artifact alarms.
- Suspend or silence alarms are used temporarily in order to assess the patient's condition, prior to patient manipulation or while assessing the cause of the alarm.
- A clinical alarm may only be discontinued based on physician direction.

Inspection, Testing, and Maintenance

- The Clinical Equipment Services (CES) Department inspects new medical equipment prior to use on a patient. The inspection and configuration of new equipment includes ensuring alarm defaults, for devices so equipped, which are set according to facility and unit specific guidelines.
- Hard or default alarm settings are approved by clinical authorities and programmed by CES staff or factory representatives. Placing equipment into use with factory alarm default settings should only be done with the review and approval of the appropriate clinical authorities.
- The CES Department will maintain regular preventative maintenance and testing of equipment with alarms. CES assesses the accuracy of clinical alarm settings, proper operation of equipment that include clinical alarms, and the detectability of alarms. In addition, the EOC Safety Rounds include an assessment of the detectability of clinical alarms.

III. Procedures

1. Monitoring order received and/or need established with clinical indications.
2. Verify clinical alarm parameters are appropriate.
3. Alarm parameters
   a. Should be set appropriately: examples of factors to include the patient's clinical condition, procedures, or tests being performed on the patient, and/or physician orders.
   b. Alarm parameters will not be set in such a manner that it prevents the equipment from sounding.
   c. Set alarm features and limits for individual patient circumstances.
   d. Set alarms to recognize potential risk of patient harm while limiting the potential for nuisance due to ringing alarms.

4. Check individual alarm signals for accurate settings and volume on initial application and as needed during hospital stay.
5. If a patient alarm is not working properly the equipment should be exchanged with a properly functioning one.
6. Alarms will be tended to according to the Alarm Level assigned.
   a. All alarms shall be investigated, and all clinically engaged staff are responsible to immediately respond to all alarms and either correct the patient or equipment alarm or notify the appropriate care provider.
      - **Level I Alarm Level:** Life Threatening Alarm**:** A crisis alarm that must be responded to immediately. Inattention to this alarm may result in a devastating clinical event.
      - **Level II Alarm Level:** Potentially Life Threatening Alarm: Warning alarm that requires assessment/attention as soon as possible. Delay in response may have a clinical consequence.
      - **Level III Alarm Level**: Advisory Alarm: Alarm that requires assessment/attention to resolve but is unlikely to result in a clinical consequence.

IV. Definitions

Clinical Alarm: The full spectrum of alarm systems that are triggered with audible or visual notification when a patient's immediate physiological or health status is or could be critical. Equipment with clinical alarm systems include, but are not limited to: ventilators, bed alarms, pulse oximeters, infusion pumps, ECG monitors, etc.

Clinical monitoring alarms are sensing and indicating devices that are integral parts of equipment or systems:

- Designed to diagnose, treat or monitor patients;
- Designed for patient safety, security; and
- Supply essential resources for patient care. (i.e. pumps, telemetry, bed alarms, ventilator alarms)

False Positive or Nuisance Alarm: An alarm that is of no clinical consequence, despite the fact that the alarm indicated the patient is outside of set parameter.

Hard or default alarm settings: Settings which require service level access to change and are intended to be set to provide safety limits appropriate for the care/ procedure unit's patient population.

Soft or customized alarm settings: Settings designed to be modified by the Healthcare Professional and intended to be customized for individual patient care. Typically, these settings revert to default settings when the device is reset or the patient is discharged from the device.

Healthcare Professional: Any individual who is licensed and/or qualified to practice a health care profession (for example: physician, nurse, pharmacist, PT/OT/ST, or respiratory therapist) and is engaged in the provision of care, treatment, or services as defined by their job description

V. Additional References

The Joint Commission. (2019). National Patient Safety Goals Effective January 2019 – NPSG.06.01.01 [PDF File]. Retrieved from https://www.jointcommission.org/assets/1/6/NPSG_Chapter_HAP_Jan2019.pdf

VI. Dates Approved or Amended

Originated: 10/17/2003	
Reviewed with Changes	*Reviewed without Changes*
7/18/2016	10/03/2013
10/31/2016	10/03/2019

VII. Contact Information

Patient Safety
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