



Current Status: *Active*

PolicyStat ID: 3994433



**Implementation:** 07/2015  
**Effective:** 10/2017  
**Last Reviewed:** 10/2017  
**Last Revised:** 07/2015  
**Next Review:** 10/2020  
**Owner:** *Teresa Peterson: Coord Quality Management*  
**Policy Area:** *Patient Care Services*  
**References:**  
**Applicability:** *WA - Providence St. Mary MC*

## Management of Clinical Alarms

### PURPOSE:

Promote the monitoring of patients through the use of, and response to clinical alarms. Reduce the potential risk of harm associated with clinical alarm systems by decreasing the number of false, nuisance and non-actionable alarms.

### POLICY:

In keeping with the philosophy and mission of Providence Health and Services, it is the policy of Providence St. Mary Medical Center to establish a consistent method of managing clinical alarms.

### DEFINITIONS/ACRONYMS:

**RED High-Priority (Crisis) Alarm:** An audible alarm for patient conditions that are life threatening, including but not limited to cardiac arrhythmias, such as asystole, ventricular tachycardia, and ventricular fibrillation.

**YELLOW Medium-Priority (Warning) Alarm:** An audible alarm that could indicate significant changes in a patient's condition.

**BLUE Low-Priority (Advisory) Alarm:** An audible alarm for an inadequate waveform such as SpO2 pleth.

**False Alarms:** Alarms due to artifact that produce false data.

**True Alarms:** Alarms that represent true and accurate physiologic data.

**Nuisance Alarms:** A high occurrence of clinically non-actionable alarms.

**Non-Actionable Alarms:** True alarms that do not require patient therapeutic intervention.

**Actionable Alarms:** Alarms that require a response to the bedside and therapeutic intervention to avoid an adverse event.

**Licensed Independent Practitioner (LIP):** Any individual permitted by law and by the organization to provide care, treatment, and services, without direction or supervision, within the scope of the individual's license and consistent with individually granted clinical privileges.

### SPECIAL CONSIDERATIONS:

- A. The configuration of audio alarms on the cardiac monitor or telemetry system are not adjusted by clinical staff. Alarm volumes are set by Biomed and/or Philips and reviewed on an annual basis.
- B. Biomedical Engineering is responsible for preventive maintenance on Cardiac Monitoring Systems

## **PROCEDURES:**

### **A. Alarm Parameters**

1. Alarms and alarm configuration will be inspected and functionally tested during regularly scheduled preventive maintenance.
2. The RN/RT will review actionable alarm limits at the start of each shift and prn. Default alarm limits (see Attachment #) will be used for most patients. The RN/RT will customize alarm limits based on the patient's clinical condition.

### **A. Alarm Volumes**

1. The Biomedical Engineer is responsible for ensuring alarms are sufficiently loud and/or distinctive (e.g., intermittent or varying tones) to be heard over noise commonly occurring in areas where the devices are used.
2. At no time shall Hospital staff or Medical Staff bypass, shut off or adjust medical equipment alarm volumes to a level that cannot be readily heard when the alarm activates.

### **A. Adjustment of Alarm Limits to Off**

1. If a patient is actively dying and has a Do Not Resuscitate order, the RN places the monitor to a privacy or comfort care mode.

### **A. Response to Alarms**

1. The hospital staff must immediately respond to medical equipment alarms.
2. The RN/RT and/or physician assigned to or treating the patient will assess the patient and act accordingly.
3. Telemetry Technicians will notify the Telemetry RN of any alarms that are clinically significant. The Telemetry RN will notify the patient's primary care RN.
  - a. Red Alarms: Less than 1 minute
  - b. Yellow Alarms: Less than 5 minutes
4. In the event that the Telemetry Tech cannot reach the Telemetry RN:
  - a. Notify ICU Charge Nurse.
  - b. If unable to reach the ICU Charge Nurse, contact the Rapid Response RN.

### **A. Troubleshooting Nuisance Alarms**

1. Lead Placement and Skin Preparation
  - a. EKG leads are placed in the standard configuration, avoiding placement on skeletal muscles and the middle of the sternum.
  - b. Skin prep before placement of EKG electrodes
    - i. Excessive hair at the electrode site should be clipped.
    - ii. Skin should be clean and dry.
    - iii. Wash the isolated area with soap and water, wipe the electrode area with a rough washcloth or gauze, and/or use the sandpaper on the electrode to roughen a small area of the skin.
    - iv. EKG electrodes will be changed on admission to the unit and a minimum of daily while on

cardiac monitoring/telemetry.

**REFERENCES:**

- A. Regulatory and/or Accreditation
  - a. The Joint Commission: 2014 National Patient Safety Goal #6
- B. Other
  - a. AACN Practice Alert-Alarm Management
  - b. Lippincott Procedures 2014

**Attachments:**

Default adult inpatient cardio-respiratory alarm settings and RN adjustment range  
Default pediatric inpatient cardio-respiratory alarm settings and RN adjustment range  
Normal pediatric vital signs by age  
Placement of EKG leads

**Approval Signatures**

Approver	Date
Yvonne Strader: VP CNO St Mary Med Center	10/2017
Christopher Hall: Chief Medical Officer	10/2017

**Applicability**

WA - Providence St. Mary MC

