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| Policy/Procedure Title | Clinical Alarm Management | **Manual Location** | |  | | |
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| **Department Generating Policy** |  | | | | | |
| **Affected Departments** | All patient care areas | | | | | |
| **Prepared By** | Joni Chancey BSN ,RN  Randy Austin  Wayne Ruppert CVT | Dept/Title | Administrative Supervisor  Biomed  Cardiovascular Coordinator | | | |
| **Dept / Committee Approval** (If Applicable) | P & P Committee | Date/Title |  | | | |
| **Dept / Committee Approval** (If Applicable) | MEC Committee | Date/Title |  | | | |
| **Dept / Committee Approval** (If Applicable) |  | Date/Title |  | | | |

**PURPOSE:** To delineate the clinical responsibility in identifying and responding to all clinical alarms to ensure patient safety.

**DEFINTION:** Clinical alarms are defined as any alarms that are intended to protect the patient receiving care or alert the staff that the patient is at an increased risk and needs immediate assistance.

**POLICY:**

1. All alarm systems incorporated into medical equipment and into patient monitoring systems must be activated whenever a piece of equipment is in use. This applies to all alarm systems that are triggered by physical or physiologic monitoring of the individual, by variations in measured alarm settings on medical equipment directly applied to the patient and emergency assistance alarms. **Exception: In-bed alarms will be activated based on patient assessment for risk to fall.**
2. Clinicians using equipment with alarms must be thoroughly familiar with the operation, including any equipment self-check procedures for verifying the alarms operation before and during use.
3. The volume level of clinical alarms must be sufficiently audible with respect to distances and competing noise heard by the responsible clinicians in the immediate patient care area. This may require that the volume be adjusted upward at certain times of the day based on the noise level and activity in that patient care area.

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1. On equipment where the nursing or respiratory staff set the alarms, the alarm limits must be set within acceptable ranges based on the patient’s age and condition or per physician’s order so that any significant change in patient condition or any abnormality in the operating condition of the piece of medical device will trigger an alarm.
2. Alarms WILL NOT be disabled or inactivated at any time except as allowed by this policy.
3. When allowed by policy the alarms may be muted or suspended for the brief period of time only when a staff member is monitoring, evaluating, and / or treating the patient. Before turning attention away from the patient the alarm **MUST** be reactivated.
4. It is the responsibility of all clinicians to respond immediately to all clinical alarms. When clinical alarms are annunciated, staff must personally check the patient and evaluate the reason for the alarm before resetting it. PC 02.01.11 PC 02.01.19
5. The biomed department or contracted vendor will maintain regular preventive maintenance and testing of alarm systems. EC-02.04.01 EP 2&3. EC- 02.04.03 EP 2&3.
6. All clinical staff will complete department specific orientation of review of use, warnings and functions of medical equipment and alarm systems listed by this policy. Independent use will not be granted until proficiency is achieved. HR.01.06.01 LD.03.06.01 EP 3 ( added by Joni to address # 4 element of performance)
7. Assessment of alarm volume and settings in clinical areas will be performed monthly. Data collected will be reviewed by clinical alarms committee. Assessments will evaluate conditions in the environment, process failures, and sentinel events. All actions taken will improve safety both proactively and in response to actual occurrences. Information collected will be discussed at staff meetings.
8. Hospital leaders will analyze assessments and results of monthly assessments yearly. Actions will be taken to resolve identified problems. EC. 04.01.01 LD. 04.04.05 PI. 02.01.01PI.02.01.01

**DOCUMENTATION:**

On the flow sheets under Safe Environment, staff checking alarms are to document “Within Defined Limits (WDL)” for “Alarms set and audible”. (previously added, we do not have section in flow sheets for documentation.)

**References:**

1. National Patient Safety Goal on Alarm - Copyright 2013 The Joint Commission
2. TJC *Sentinel Event Alert*, Issue 50
3. American Association of Critical Care Nurses (AACN) Practice Alert
4. ECRI Institute Alarms Safety Resource site

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| **Reviews/Revisions:** | **1st** | **2nd** | **3rd** | **4th** | **5th** |
| Date: | \_\_2/16/2015\_\_ | \_\_2/25/15\_\_\_\_\_ | \_\_\_\_2/27/15\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| By: | \_JC /RA\_\_\_\_ | \_\_JC/AM\_\_\_\_\_ | \_\_\_\_\_JC/TP\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_ |

ATTACHMENT A

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| **Clinical Device** | **Alarm Check Done By** | **Frequency and Documentation** | **When Parameters Can Be Changed** | **When Alarms Can Be Disabled** |
| **1N/CPCU/ICU/ED**  **Equipment used in Patient care settings** |  |  |  |  |
| Tele Monitors |  |  | Pre-set(not adjustable) | Always on |
| ICU/PCU Bedside Monitors | Staff/biomed | Pt set up/annual PM | Can be adjusted up only | No, can be temporarily silenced |
| ER Bedside Monitors | Staff/biomed | Pt set up/annual PM | Low limit set | time (about 2 minutes) |
| IV Pumps | Staff/Bio Med | Pt set up/annual PM | Pre-set(not adjustable) | No, can be temporarily silenced |
| SCD | Staff/Biomed | Pt set up/annual PM | No | No |
| Level 1 blood/fluid warmer | RN/Biomed | On startup per patient/quarterly | No | No-can be temporarily silenced |
| **Cath Lab** |  |  |  |  |
| Witt Calysto IV | all cath staff | on start up per patient/annual PM | yes - physiological parameters and physician order | Yes, Per physician order. |
| Datascope CS300 balloon pump | RN/Maquet | on start up per patient/6 mo PM | yes - physiological parameters | no |
| Angiojet Ultra 500A | All cath staff | On start up per patient/annual PM | No | no |
| Medtronic 5348 temporary pacer | RN | On start up per patient/semi-annual PM | no | no |
| **Surgery** |  |  |  |  |
| Fluid pumps  (arthroscopy) | Biomed | yearly | No | no |
| Insufflator | Biomed | Semi-annual | Yes, patient size | no |
| Ligasure | Biomed | Semi-annual | Procedure setting | no |
| Tourniquet | OR staff/biomed | Self check on setup/semi annual | Procedure setting | no |
| PACU monitors | RN/biomed | Pt set up/annual PM | Physiological parameters | no |
| Cell saver | Specialty care | Yearly | No | no |
| Anesthesia machine & monitor | Datey Ohmeda | Semi-annual | No | no |
| Bovie | Biomed | Semi-annual | Patient setting | no |
|  |  |  |  |  |
| **Respiratory** |  |  |  |  |
| Ventilator | Respiratory/CEMC | Q2 hours when in use/semi-annual PM | during vent checks | during care & temporary silence |
| BiPAP | Respiratory/biomed | q3-4 hrs when in use/ | during checks | during care and temporary silence |
| Pulse Oximetry | Nursing/RT | Q 4hrs when in use/q shift | Q shift/patient | during care at bedside |
| End-Tidal CO2 | Nursing& RT/biomed | Q 2 hrs by RT/annual | Q shift/patient | during care at bedside |
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| **House wide**  **Ancillary Equipment** |  |  |  |  |
|  |  |  |  |  |
| Defibrilator | RN | Q daily | Not able to be changed | Not disabled |
|  |  |  |  |  |
| Philips Allura XP FD20 | RT in cath/Phillips | On startup per patient/annual PM | No | no |
| PSS | No | No alarms checked | Not able to be changed | May be silenced - Not disabled |
| Neg Press Rms ED only | Staff | When in use | Not able to be changed | No- can be temporarily silenced |
| **Laboratory** |  |  |  |  |
| Helmer BB refrigerator | Lab tech | Quarterly | Silence mode | no |
| Revco FFP freezer | Lab tech | Quarterly | silence mode | no |
| **Surgery** |  |  |  |  |
| smoke evacuator | RN | Daily |  |  |
| sterilizer | steris | Quarterly | Load based | no |
| blanket warmer | OR staff/Biomed | Daily/semi-annual | No | no |
| fluid warmer | OR staff/Biomed | Daily/semi-annual | No | no |
| Bair hugger | Biomed | Yearly | No | no |
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