STRATEGIES TO IMPROVE MONITOR ALARM SAFETY

Alarm Management is Complex

- Staffing Patterns
- Care Model
- Patient Population
- Ancillary Technology
- Alarm Coverage Model
- Architectural Layout
- Technology Capabilities & Configuration
- Delineation of Responsibility

Minimize patient safety vulnerabilities and reduce risk

Improve the effectiveness and efficiency of alarm management

1. Assemble a multidisciplinary team
   - Administrative sponsor (e.g., CNO, VP Quality)
   - Key medical staff
   - Nurse managers
   - Front-line nurses
   - Monitor technicians
   - Patient safety/risk manager
   - Clinical engineering staff
   - IT staff
   - Consult with others, as appropriate

2. Review recent events and near misses
   - Root causes
   - Frequency of alarm types
   - Aggregate of alarm types per care area/shift
   - Review remediation/results
   - Trends

3. Observe alarm coverage processes and ask nurses and other staff about their concerns
   - Routine rounding
   - Listen to staff concerns/problems
   - Map processes for alarm notification and response
   - Identify obvious problems
   - Excessive alarms
   - Difficulty in hearing alarms
   - Delayed alarm response
   - Pagers not being worn

4. Review entire alarm coverage system
   - Culture
   - Infrastructure
   - Practices
   - Technology

5. Identify patient safety vulnerabilities and potential failures
   - FAILURES
     - Delayed alarm response
     - Transport Communication Breakdown
     - Leads-off Apathy
     - Alarm Fatigue
   - CAUSES
     - Diffuse responsibility for alarm response
     - Competing priorities
     - Assumptions that someone else will respond
     - Excessive nuisance alarms
   - TODAY FIXES
     - Proper skin prep
     - Proper electrode placement
     - Routine change of electrodes
     - Battery replacement every 24 hours
     - Elevate “Leads-Off Alarms” to crisis priority
   - THINGS TO CONSIDER
     - Delineate responsibility for alarm response
     - Develop a back-up plan with tiers of coverage
     - Delineate responsibility for back-up response
     - Implement two-way communication devices that would allow a nurse to request help
     - Develop an alarm escalation scheme
       - Who receives initial alarm notification for each type of alarm
       - Who receives back-up alarm notification for each type of alarm
       - Time intervals per escalation

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