MANAGING ALARM FATIGUE: REDUCING TELEMETRY ALARMS IN THE HOSPITAL SETTING USING A COMPREHENSIVE UNIT-BASED SAFETY PROGRAM TEAM AND EVIDENCE-BASED PRACTICE

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Background/Significance: In recent years, the number of devices alarming in the clinical setting has increased. The resulting desensitization to alarms that warrant a nurse’s attention is a safety concern. (Sendelbach, S. & Jepsen, S. (2013) American Association of Critical Care Nurses AACN Practice Alert Alarm Management)

Purpose of the Project: The purpose of this project was to use the Comprehensive Unit-Based Safety Program (CUSP) philosophy coupled with the (AACN) American Association of Critical-Care Nurses’ Alarm Management Performance Improvement Plan (AMPIP) to decrease the number of non-clinically significant telemetry alarms. Results gathered from a survey of ICU nurses and the fatigue of having a telemetry monitoring system in the central nurse’s station of the ICU indicated that telemetry alarms as the most prevalent alarms in the ICU.

Sample Description/Population: The total number of telemetry alarms recorded daily over a random two-week period to determine the number and type of alarms pre-and-post intervention.

Setting: A 107-bed community hospital in Southeastern Wisconsin

Method/Design & Procedure: Six ICU RNs, Patient Care Manager, Clinical Nurse Specialist, telemetry technician, Biomedical technician and Quality Improvement Coordinator comprised the CUSP Team. The telemetry monitors for the hospital are situated in the ICU’s nurses’ station. Decreasing the amount of telemetry alarms was focused on. Using the AACN’s AMPIP, a tip sheet was constructed and released to each medical/surgical unit including reminders of skin placement and how often to change the patch (CITE). The second phase of the plan focuses on reconfiguring individual telemetry parameters (CITE). It is hypothesized that these two interventions will decrease lead failure rate and bradycardia alarms.

Results/Outcomes: Pre-intervention telemetry data per type of alarm is as follows: 32.9% bradycardia, 23.3% tachycardia, 11.5% lead failure, 3.5% change battery, 2.5% remote graph, 0.7% pre-admit false transmission, 25.6% other. Post-intervention data will be collected after the second phase has been implemented.

Conclusions/Implications: The use of the CUSP philosophy, guided by evidence-based interventions can improve the delivery of safe patient care. The ICU CUSP Team will use the AACN’s AMPIP to systematically decrease the number of non-clinically significant alarms in the ICU.