Reducing Alarm Fatigue on a Medical Surgical Unit
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**Background**

- “Alarm fatigue” occurs when clinicians become desensitized and nonreactive to the sensory overload created by an overwhelming number of alarms, many of which are nuisance alarms. (Phillips et al, 2014)
- Alarm desensitization is a multifaceted problem related to high false alarm rates, poor positive predictive value, lack of alarm standardization, and the number of alarming medical devices. (Czach, 2012) Patients or their loved ones often find ways to silence or otherwise inhibit alarms from going off in their rooms. Some alarms truly are appropriate and silencing them indiscriminately can lead to a life threatening situation.

**Practice Change**

Educate hospital staff to be compliant with alarms, as well as educate patients and patient family members on the importance of alarms for increasing patient care and safety.

**Methods**

- Pre alarm fatigue survey on frequency and awareness of alarm fatigue.
- Presented educational content to RNs during via email and huddle.
- Post alarm fatigue observational studies in the M3S setting.

**Measures and Results**

- Pre alarm fatigue survey:
  - How often do you notice alarms during a 12 hour shift? 47% 59% 4%
  - How often do you react to an alarm? 56% 14% 30%
  - How often do you hear an alarm and ignore it/assume someone else will go to it? 49% 13% 62%
  - How frequently do you do IV pump reconciliation during your hourly rounding (or every 2 hours on night shift)? 62% 19% 81%

- Post survey:
  - How often do you notice alarms during a 12 hour shift? 36% 32% 68%
  - How often do you react to an alarm? 14% 76% 10%
  - How often do you hear an alarm and ignore it/assume someone else will go to it? 34% 82% 4%
  - How frequently do you do IV pump reconciliation during your hourly rounding (or every 2 hours on night shift)? 14% 35% 49%

**Summary/Discussion**

- Our work was the first step, but in order for this education to be successfully implemented we need to next:
  - Follow-up observational studies tracking changes in alarm responses.
  - Re-educate clinicians as needed to cultivate a culture of alarm awareness, prevention, and response.
  - Provide patient education: Patients and their family/friends more often than not welcome being involved in the care of a loved one. Helping them understand the importance of alarms and to assist to ensuring alarms are addressed can enhance overall patient care.

**Conclusion**

- Improvement to addressing alarms when they first go off can essentially better over all care for the patient and even save lives. Education helps to implement prioritization in patient care.
- Implementation of education to M3S setting should be done on an annual basis to ensure caregivers are applying knowledge and setting patient safety as a priority.

**References**