Management of Alarm Fatigue in ICU

Morghan Cormier, RN; Maria Francisco, RN; Renee Richardson, RN; Audrey Tulloss, RN

Background

- Excessive alarms in intensive care settings, particularly those that are not significant, results in alarm fatigue for healthcare providers and poses a risk to patient safety
- In 2013, The Joint Commission reported 80 deaths from alarm related events with alarm fatigue being the most common contributing factor
- Considering the risk for patient harm and critical delays in patient care, reducing alarm fatigue intensive care units can directly improve patient care and outcomes
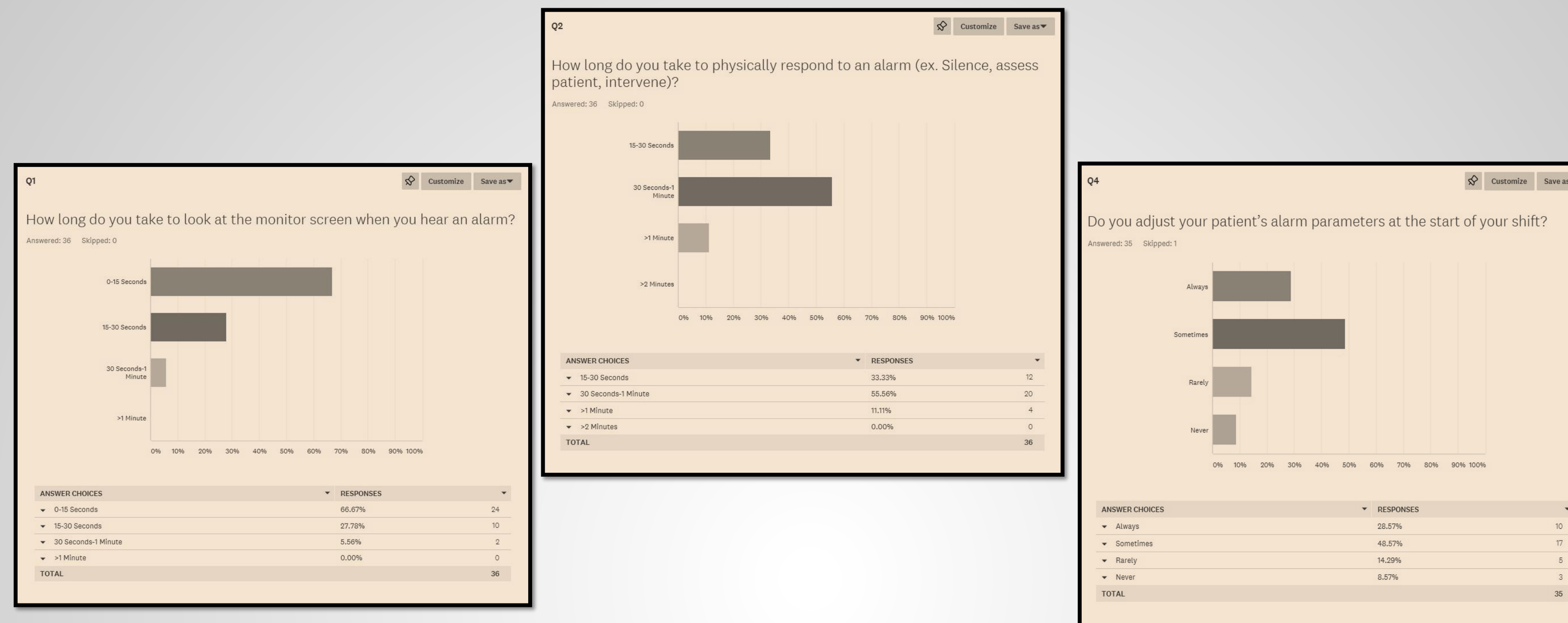
Practice Change

Increase registered nurse's (RNs') knowledge of integrating factors contributing to alarm fatigue and increase awareness and responsiveness of alarms in the ICU

Methods

- Pre alarm fatigue survey was distributed to ICU RNs
- Alarm fatigue was discussed during daily shift huddles and RNs were encouraged to modify alarms appropriately for each patient at the beginning of each shift
- Education and assistance was provided to staff as needed in order to improve alarm management
- Post alarm fatigue survey was distributed to ICU RNs

Measures and Results

Survey Results

Educational Pamphlet

Summary/Discussion

- **Next Steps:**
  - Create and implement a training pamphlet
  - Develop a plan to include this education into new hire orientation
  - Continue to provide education to RNs and CNAs working in the clinical setting
- **Barriers of this Study:**
  - Lack of time or interest to complete a pre and post survey
  - Inability to directly implement changes
  - Measurement of success is subjective
  - Low number of responses compared to the number of surveys to distributed to staff
  - The results of this project only reflect the pre-education

Conclusion

- Most survey participants agree that alarm fatigue is a problem in our ICU and this needs to be addressed
- There is an opportunity surrounding alarms and educating staff how to maximize their efficacy in their nursing practice in order to decrease fatigue and improve patient satisfaction

References
Jepsen, S., Sendelbach, S., Ruppel, H., & Funk, M. (2018). Managing alarms is in acute care across the lifespan: Electrocardiography and pulse oximetry. *Critical Care Nurse*, 38 (2), 16-20. https://doi.org/10.4037/ccn2018468
Suba, S., Sandoval, C., Hemsey, J., Hu, X., & Pelter, M. (2019). Contribution of electrocardiographic accelerated ventricular rhythm alarms to alarm fatigue. *American Journal of Critical Care*, 28(3), 222-229. https://doi.org/10.4037/ajcc2019314
The Joint Commission (2013). *Sentinel event alert*, 50, 1-3. Retrieved from https://www.jointcommission.org/-/media/deprecated-unorganized/imported-assets/jcr/assets/sea_50_alarms_4_5_13_final1pdf.pdf?db=web&hash=5E82688C2EB0B3039476443B834CCF10