The Stats on the Desats: Alarm Fatigue and the Implications for Patient Safety

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INTRODUCTION

BACKGROUND

Many healthcare facilities are now faced with staff shortages across the nation and an increased amount of workload. One of the main problems is an increased amount of alarms that alarm fatigue for the staff. The present technology at many facilities is outdated and necessitates routine and continuous monitoring. The monitoring system examines the ekg, pulse rate and perfusion index, medicine, level of blood sugar, and even the blood pressure of the patient. The system determines how closely the patient is monitored and provides alarms. The system can also be programmed to set different levels of sensitivity for the monitoring. When an alarm goes off, beeps are heard and a patient is observed. While these alarms are necessary and important for patient safety, they have the potential to cause fatigue and burnout among healthcare workers.

GAP IN KNOWLEDGE

The gap in quality for monitoring techniques monitored the patient’s staff of critical alarms. Currently, no standard communication system is in place for patients and their care providers. The goal of this study was to develop a system that helps healthcare providers avoid alarm fatigue.

RESEARCH QUESTIONS

What is the reason for alarm fatigue?

Improving signage, reducing the number of patients alarm, and educating staff will reduce alarm burden.

METHODS

All measurements were recorded on Fridays, AM and PM, each at a duration of two hours. The alarms were categorized as manually triggered alarms or self-triggered alarms. The sample size was the number of patients on MA for that period.

Alarms and number of patients were recorded pre-intervention. Based on initial data, the group met to discuss interventions to reduce alarm fatigue. The decision was made to implement a monitoring system. The data were collected in the same manner as previously stated and in conjunction with the first intervention.

The second intervention utilized the secure chat function in Mayo’s electronic medical record. The secure chat function provides an immediate notification to the patient care team in the event the patient’s condition changes.

CONCLUSION

Alarm monitoring and alarm fatigue at Mayo Clinic is a complex issue with many moving parts. The number of alarms is directly related to the number of patients on continuous monitoring at the hospital. The electronically distributed eligible patients will lead to reduced alarms, but this was complicated by the monitoring system. The communication between staff and the ordering of continuous monitoring in Epic. Much of the benefit from this intervention stems from the communication between the system and a phone system with a phone system between nurses and doctors.

Manually triggered alarms were reduced after both interventions, achieving a net reduction of 26% alarms. Systems change is needed to reduce alarms, improve communication, and improve work culture for those involved in patient monitoring. Alarm fatigue is a significant problem that must be addressed at Mayo to ensure patient safety, decrease staff burnout, and improve the sensitivity of SPO2 monitoring to detect early hypotension.

REFERENCES

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