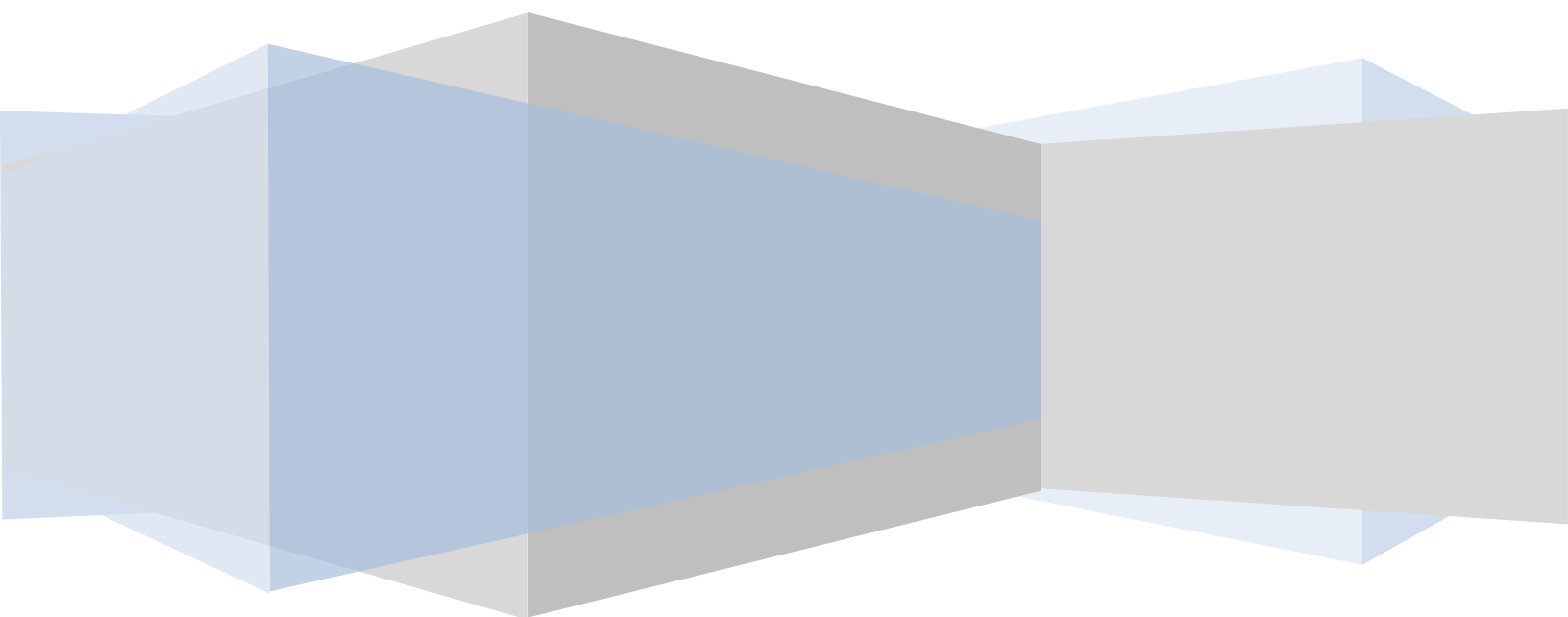


The National Association of Clinical Nurse Specialists

Alarm Fatigue

Strategies to Safely Manage Clinical Alarms and
Prevent Alarm Fatigue

NACNS Alarm Fatigue Task Force



Alarm Fatigue Task Force 2013 -2014

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NACNS Alarm Management Toolkit

I. Introduction and Instructions

Alarm Safety has been named by ECRI the number one technology safety hazard six out of the last eight years. The number and types of clinical alarms generated by medical devices can be overwhelming for clinicians, patients and families. “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 or non-actionable alarms. Delayed response and silenced alarms constitute significant threats to patient safety. Alarm fatigue has been implicated as the lead contributing factor in sentinel events related to alarm safety (Sentinel Event Alert, 2013). In 2014, The Joint Commission established a National Patient Safety Goal to improve the safety of clinical alarm systems.

Clinical alarms may be associated with physiologic and equipment monitors (e.g., cardiac monitors and IV pumps) or physical-safety alarms (e.g., bed exit alarms). Clinicians may be exposed to hundreds of alarms per patient per day. There are complex reasons for the overwhelming number of alarms, including technology issues, human factors, staffing, and environment. Appropriate alarm management is a complex, yet essential component of clinical practice. When alarms are not set or responded to appropriately, clinicians are more likely to develop alarm fatigue. Patients, families and staff can suffer undue anxiety. Eighty five to ninety nine percent of alarms do NOT require clinical intervention (Cvach, 2012; Feder & Funk, 2013; Gorges, Markewitz, & Westenskow, 2009; Graham & Cvach, 2010; Sendelbach & Funk, 2013).

It is essential that clinicians mitigate the risks associated with ineffective alarm management. There are a number of solutions to managing alarms more effectively and safely. Effective alarm management is influenced by unit culture, infrastructure, nursing practice and technology. The Clinical Nurse Specialist (CNS) role is uniquely positioned to understand the variables that facilitate appropriate alarm management and assist staff in implementing strategies for safe and effective alarm management. The CNS practices within the spheres of influence of patient/client; nurses and nursing practice; and organizations /system. The CNS will be able to work collaboratively with an inter-professional team to assess the clinical environment; and to develop, implement and evaluate appropriate interventions to mitigate risks associated with ineffective alarm management. These interventions will impact the patient's environment, the nurse's workplace, and the overall clinical environment (Urden & Stacy, 2011). This toolkit serves as a repository of resources and strategies to effectively and safely manage alarms and is intended for use by the CNS working to decrease alarm fatigue and promote safe, effective alarm management in the clinical setting.

References

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Toolkit Contents

This toolkit was developed to help the CNS on their journey to create an alarm safe environment. The following are the links to the available tools:

1. How to Get Started
 - a. Describes a Six Sigma process to guide the CNS in a change strategy
 - i. define, measure, analyze, design, verify
2. NACNS Crosswalk
 - a. Extensive table of resources from the American Association of Critical Care Nurses (AACN), the Association for the Advancement of Medical Instrumentation (AAMI), ECRI, Johns Hopkins, the Joint Commission, and the Healthcare Technology Foundation.
 - b. The table contains embedded links, enabling the CNS to have direct access to the resources.
 - c. Literature table: an extensive literature review on alarm fatigue is included after the table, with review and grading of each article.
3. Frequently Asked Questions
 - a. Series of frequently asked questions from the NACNS list serv and the open forum at the NACNS National Conference.