

American Hospital Association

AHRMM's Issues & Legislative Committee issued the following briefing on Alarm Safety Management: Alarm Safety Management – Why Supply Chain Managers Should Pay Attention

Alarm safety is not a new topic; by now most of us have heard the term 'Alarm Safety' and recently the term 'Alarm Fatigue'. As supply chain professionals we are aware how important alarm management is when providing a safe environment for our patients. To ensure supply chain remains cognizant of this topic as it continues to be a major safety issue, alarm management was highlighted during an AHRMM14 Annual Conference & Exhibition learning lab.

Alarm safety is relevant across healthcare infrastructures including hospitals, clinics, ambulatory settings or long term care facilities, and has been a topic of discussion throughout various organizations. Alarm Hazards has been on ECRI Institute's Top 10 list of health technology hazards every year since 2007, and was number one on the list for 2014.¹ In an effort to inform healthcare professionals on medical device alarm safety, The Joint Commission published a Sentinel Event Alert identifying the importance of this topic.² Additionally, The Joint Commission established Clinical Alarm Management as a 2014 National Patient Safety Goal (NPSG.06.01.01).³ This NPSG has two phases of implementation which includes four Elements of Performance.

On the surface, alarm safety management may appear to be a clinical requirement with very little involvement required from supply chain managers. But is this true? The following FAQs are provided for your reference as a supply chain professional:

Q. What is the alarm safety management requirement for accredited organizations?

A. The Joint Commission's National Patient Safety Goal, NPSG.06.01.01, was established to reduce the harm associated with clinical alarm systems. Phase one includes two Elements of Performance that must be implemented in 2014. Phase two begins on January 1, 2016 during which the remaining two Elements of Performance are targeted for implementation.³

The four Elements of Performance (EP) are as followed:

- 1. As of July 1, 2014, leaders establish alarm system safety as a hospital priority.
- 2. During 2014, identify the most important alarm signals to manage based on specific listed criteria.
- 3. As of January 1, 2016 establish policies and procedures for managing the alarms identified in EP 2 and address specific criteria as listed.
- 4. As of January 1, 2016, educate staff and licensed independent practitioners about the purpose and proper operation of alarm systems for which they are responsible.

Q. What is the requirement or role for supply chain professionals?

A. Supply chain is uniquely positioned to convene a cross-disciplinary team comprised of members such as departmental managers, inventory staff, bio-medical/clinical engineers, and technicians. The team will work with clinicians to establish an inventory of alarms and address alarm safety issues such as, alarm fatigue, alarm silencing, and various equipment malfunctions. Training staff on proper usage and conducting routine alarm testing should also be implemented.



Q. How much involvement should supply chain professionals expect?

A. The level of involvement will depend on the organization's structure and the willingness of the supply chain to invest their time and effort to assist in this endeavor. Utilizing master equipment inventory listings, purchasing data, and involving supply chain personnel in identifying, locating, and annotating medical devices with alarm features is critical to the success of this process. Supply chain may also play a role in establishing and implementing a process for continual alarm improvements.

Q. Why should supply chain professionals get involved?

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A. At first some supply chain personnel may view their involvement as unnecessary, but the patient's safety and comfort is the ultimate goal. Involvement from the inception of this requirement should be viewed as a collaboration opportunity for the astute supply chain manager. Supply chain's involvement is a key element to the success of meeting the established timelines.

Q. How big of an issue is alarm management for a facility?

A. Alarm systems that are not managed properly can result in serious consequences involving the patient's safety. Issues with alarm safety can vary greatly among hospitals and even within different areas in a single hospital. Considering most medical devices have alarm systems, the number of alarms in a facility can be daunting. Although it might be a complex task, establishing an inventory of alarms in your facility is an important way supply chain can contribute. This inventory process must also assess alarm settings established by the manufacturer, such as determining if the device alarm can be disabled or if someone can alter the settings (reduction of noise level or silencing). Supply chain plays a key role in the engagement of the manufacturer and clinical teams.

Q. Is alarm management a one-time requirement?

A. No. As new equipment is purchased and old equipment is replaced, the requirement to manage and update the alarm inventory should be ongoing. Even after initially identifying existing alarms there are various ongoing procedures that will need to be implemented; for example, training staff on safe alarm management and response. It is also important to keep in mind that requirements may be forthcoming for alarms other than clinical alarms. There are numerous non-clinical alarms found throughout facilities such as elevator alarms and security alarms. The criteria for managing alarms based on life-cycle equipment requirements, standardization, technology, and facility layout may all be factors for supply chain involvement, as well as collaboration in the development of medical device Requests for Information and Requests for Proposals (RFI and RFP respectively).

A Final Note to Supply Chain Professionals:

To ensure success of such an organizationally wide project as alarm management, supply chain professionals are an essential part of the team. As a result of their cross-disciplinary role within healthcare organizations, supply chain is uniquely positioned to initiate alarm management





procedures. Collaboration with clinicians, engineering, facility managers, and other applicable participants is crucial in order to efficiently collect data, identify medical device inventory, and implement on-going alarm management procedures. This cross-functional collaboration is imperative when approaching alarm management and can ultimately improve clinical safety, patient experience, and outcomes.

*This briefing was written by Susan Turley, CMRP, Director, Supply Chain Management, USA MEDDAC – Alaska, and member of AHRMM's Issues & Legislative Committee.

References:

The Joint Commission (2013, April 8). Medical device alarm safety in hospitals. Sentinel Event Alert (50). Retrieved from <u>www.jointcommission.org</u>
The Joint Commission (2013). NPSG.06.01.01 Clinical Alarm Safety. 2014 Hospital National Patient Safety Goals. Retrieved from <u>http://www.jointcommission.org/assets/1/6/HAP_NPSG_Chapter_2014.pdf</u>

^{1.} ECRI Institute (2013 November). Top 10 list of health technology hazards. Adapted from *Health Devices, 42*(11). Retrieved from www.ecri.org/2014hazards