Statement on Principles for Alarm Management for Anesthesia Professionals

Committee of Origin: Quality Management and Departmental Administration (QMDA)

Committee of Oversight: Equipment and Facilities

(Approved by the ASA House of Delegates on October 16, 2013, and reaffirmed on October 17, 2018)

Purpose:

As Anesthesia Professionals, we interact with many different types of monitors, machines, infusion pumps and other equipment; many of these devices have audible and/or visual alarms. We rely on Alarms to signal us when set parameters/thresholds are violated and/or when a potentially abnormal situation has occurred. A given alarm’s clinical usefulness depends on numerous factors including attributes of the patient (e.g., baseline clinical status and vital signs), the clinical situation at the time (e.g., anesthetic and procedural factors), the intended recipient(s) (e.g., experience, hearing acuity), unintended recipients (who may be distracted or worried), and the physical environment (e.g., noise and light levels). Management of these alarms becomes challenging, especially in that we must rapidly discern when a trigger is trivial, meaningful or life threatening.

The Principles below are applicable only to Anesthesia Professionals and the environment in which they care for patients. Principles for Alarm Management for other health care providers and in other hospital environments may be very different and should be separately established.

Alarm Management Policy and Principles:

Each facility should have an Alarm Management Policy (henceforth, the AMP) pertaining to Anesthesia equipment and/or devices used by anesthesia professionals.

The AMP should describe the equipment and alarms found in each care environment (OR, PACU, ICU, Pain clinic, special procedures, etc).

Anesthesia Professionals who use/operate and monitor said equipment and medical devices that have alarm systems should be involved in the creation and maintenance of the AMP.

Alarm System SETTINGS must balance patient and provider safety risks against unintended consequences (distraction, alarm fatigue, intrusiveness). Thus, ALARM SYSTEM SETTINGS should be locally customized to reflect the patients, the practice, and the perceived risks of the alarm conditions in each care environment.

The AMP should delineate the process for familiarizing all Anesthesia Professionals with the recommended use of Alarm Systems in use in the facility. The nature and occurrence of such familiarization for each Alarm System should be documented. Anesthesia Professionals should adjust Alarm settings as appropriate for a particular patient prior to starting an anesthetic. Clinicians should not indefinitely silence or disable alarms on any device, unless necessary because: (a) the device or module is not in use, (b) the
device or module has malfunctioned, or (c) the patient’s medical condition supports using the AUDIO OFF or ALARM OFF modes.

In general, individual Anesthesia Professionals should not be able to change default alarm settings of any Anesthesia Equipment. The AMP should specify an institutional process for changing default alarm settings.