A Guide for Patients and Their Visitors to Help Them Understand Clinical Alarms

When you walk into a hospital you hear lots of beeps and buzzes that come from an assortment of equipment used to monitor and treat patients, such as heart monitors; pumps that deliver fluids, medications, and nutrition; and ventilators (also known as respirators or breathing machines). The purpose of the alarm sounds is to alert nurses that someone or something needs their attention. These alarm sounds do not necessarily mean that a serious situation related to the patient or equipment has occurred but often they do. Hospital staff is trained to understand alarm sounds and respond appropriately to these conditions. This brochure was written for patients and visitors to better understand the meaning of the alarm sounds.

This guide focuses on clinical alarms. There are many devices in a patient's room such as the bed and other items in the care area around you that may also "alarm".

We encourage you to talk to your caregivers and ask them to explain these devices, what they mean and what to do if one starts to alarm

If you have any feedback on this guide please feel free to contact as at our website: <u>www.thehtf.org</u>

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Types of Alarms

Clinical alarms have different levels of importance. Alarms can make a sound such as a buzz, chirp, beep or chime and/or display a message on the equipment. For example, a patient with a high heart rate causes a beeping alarm on the monitor and the heart rate section on the monitor flashes.

Why do these alarms sound? Is something wrong?

Many medical devices provide built-in alarms that light up or sound when something is not as expected. Alarms help notify the nurse that attention is needed. Some medical devices will beep because the device itself needs attention: a common reason is a low battery state. Other non-medical issues like loose sensors or cables can also cause alarms to sound. Some medical devices sound an alarm because they have stopped working, or because a patient's vital sign reading falls outside of set limits. For example, if your blood pressure should stay below 150 mmHg and it goes over 150 mmHg, an alarm will go off. This notifies the staff that you need to be evaluated.

Impact of clinical alarms on patients and visitors

Because most medical devices are designed for use on many different patients with a wide variety of conditions and clinical needs, alarm settings are adjustable and alarms are set to alert the clinician at the first possible sign of trouble whether it's a mechanical problem or an issue with the patient. Unfortunately, these conditions contribute to a high number of alarms, which can be a source of anxiety for both patients and visitors. Be assured that your care team is experienced in the management of medical device alarms, and know how to respond appropriately. And, of course, never hesitate to ask when you have questions.

Role of the patients and visitors when clinical alarms sound

Patients and visitors need to be aware of the alarms and what they may mean. Alarms can become excessive, and can disturb sleep but it is important that patients and visitors do not attempt to make changes to them. If you have questions about the alarms and their meaning, or are concerned about the excessive noise they make, please talk to the nurse.

Healthcare Organizations Involved with Alarms



The Healthcare Technology Foundation works to improve healthcare delivery outcomes by promoting the development, application and support of safe and effective healthcare technologies.

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The Association for the Advancement of Medical Instrumentation provides global leadership to support the healthcare community in the development, management, and use of safe and effective healthcare technology. <u>www.aami.org</u>