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Healthcare



Healthcare Facilities require proactive security measures to improve patient care, provide better security for people and assets and streamline daily operations.

Hospitals and healthcare facilities have the tall order to manage stressful situations from a high number of emergency services, staff, patients, and visitors. Ensuring a safe environment for patients, staff, and visitors is a key priority for every healthcare facility. Security teams must remain informed to stay ahead of disruptions to ensure all essential operations remain functional. Medical staff require the right tools to deliver patient care effectively while ensuring a safe and secure environment.

Security solutions such as IP cameras and IP intercoms have been at the heart of healthcare security landscape for a long time. These technologies have been instrumental in delivering reactive security strategies and have assisted security and medical teams to take quick actions. In a hospital environment where lives are at stake, security technologies need to transform from being reactive to proactive to stay ahead of any security violations that could place staff and patient's lives at risk.

Access control allows a team to restrict entry points to restricted areas such as medicine storage rooms and operation theaters, but it doesn't always provide real-time information. Video surveillance allows security teams to see

and detect, but used alone, it has its limits with providing a complete view of a situation and lacks any interactivity to diffuse the scene. Audio brings those two elements together and creates a well-rounded and interactive solution, providing information and actionable insight to improve patient care, secure people and hospital assets, and streamline hospital operations.

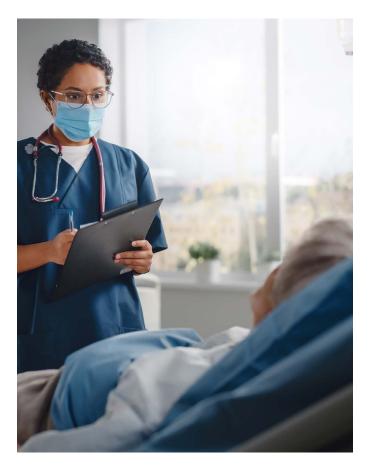
Improving patient care

Improving patient care is the utmost priority for medical staff and security teams. Audio solutions uncover new ways to automate the workflow with interactive communication. This leads to better care of the patient so that hospital staff can effectively care for more patients.



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IP video intercoms in patient rooms who are mentally challenged provide increased situational awareness, allowing medical staff or control operator the ability to see what's happening while also hearing and speaking in real time, helping them to reduce the response time. In addition, with smart analytics technologies like sound detection and scream alarms, an IP intercom can proactively alert medical staff without the patient needing to a single button.



In other cases, when a patient reaches out for help by pressing the intercom or existing nurse call button, staff can reach out to them remotely using the intercom to vet the situation before sending medical staff to the patient ward. This helps them to identify any false alarms or accidental press and therefore optimizes medical staff resources.

According to a 2023 study by Intensive and Critical Care Nursing on the effect of video visitation on intensive care unit patients and family members, any form of remote communication between patients and family has proven to increase patient and family member satisfaction. This is particularly the case with critically ill patients in intensive care units where visitation is highly restricted. An IP intercom inside the intensive care unit can connect the patient with their family members by providing intelligible two-way communications so that family members can feel connected. Increasingly, users are experiencing benefits from

incorporating an intercom solution that not only provides audio, but also incorporates HD video, helping the family members not only to hear, but to also see the patient remotely.

Securing people and hospital assets

It is impossible to deliver the needed patient care without a safe and secure environment to work. An integrated security system helps security teams to take proactive measures that protect staff, patients, and valuable assets, leaving medical teams to focus on what's important, which is treating patients and saving lives.

According to a 2016 GAO study, Additional Efforts Needed to Help Protect Health Care Workers from Workplace Violence, rates of violence against healthcare workers are 12-times higher than rates for the overall U.S. workforce. From verbal abuse to physical assaults, healthcare workers face threats on a daily basis, all while providing care for their patients.

Video technologies work together with audio analytics, helping securing teams to detect any verbal abuse from patients and visitors. With IP speakers and intercoms in communal areas as well as in patient wards, the security staff can proactively and remotely intervene in such situations, preventing the incident from escalating to physical aggression.

With an IP video intercom, incorporating video with audio provides many benefits to a security team and its risk mitigation efforts. For example, an IP video intercom provides an additional and higher level of security by giving security more control and intel on who can enter a restricted area in the hospital. Hearing who is there is one thing but seeing who is there, is better. It can prevent spoofing, where someone pretends to be someone they are not. Having video verification that the individual's photo on their ID card matches who is seen on the video screen enhances security.



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Beyond the security aspect, audio plays a central role in delivering critical communication solutions such as safe evacuation of staff and patients in the event of a fire emergency. A voice-based emergency evacuation system, also known as Public Address and Voice Alarm system, that is certified for EN54-16, empowers your security teams to deliver voice messages and alerts for such life critical situations.

Streamlining hospital operations

Imagine a situation where the emergency entrance is obstructed by a delivery vehicle while an ambulance with a critically ill patient is approaching. This results in unnecessary delays, resources, and frustrations among staff and the patient. Audio can play a pivotal role in proactively eliminating the situation from happening.

While video provides real-time view of such critical areas, it doesn't help the security team to act on what they see. Thanks to open standards such as ONVIF and SIP, an IP speaker can automatically dispatch recorded warning messages as soon as an obstruction is detected through video analytics. In circumstances where manual intervention is needed such as a helicopter landing on the helipad, the security operator can send live voice messages through the IP speaker using a video management terminal. With the built-in microphone, an IP speaker enables ambient listening around the vicinity of the helipad and ambulance entryway. This not only empowers the security to hear what they see in real time but is also helpful for training of security personnel in the future.

Use of audio can stretch well beyond the emergency entryway in a hospital setting. With integration to video management and access control systems, audio can become an assistive tool in helping to streamline daily functions throughout a hospital.



Within Operating theatres, intensive care wards, and treatment rooms, an IP cleanroom intercom helps nurses and surgeons to get immediate help while performing a surgery. With the possibility to connect to a foot switch, an IP cleanroom intercom can be set to dispatch pre-recorded messages to IP speakers installed in other staff areas of the hospital. This saves precious time in such critical situations as medical staff do not need to remove gloves or wash hands to seek for additional help.



IP cleanroom intercoms are easy to clean, can withstand most chemicals, and are resistant to bacteria and other contagions. They can also be used in isolation rooms to allow quarantined patients to communicate with staff while allowing for efficient disinfection.

The healthcare use cases highlighted in this article underscore the critical role audio communication plays in transforming the healthcare landscape, and without a doubt, audio provides a critical piece to any security solution.

The convergence of diverse critical communication technologies including intercoms, IP speakers, and public address and voice alarm systems are coming together as Unified Critical Communication solutions, and it is our strong belief that the healthcare vertical will rely more on a single Unified Critical Communications platform, fully integrated with other security platforms like Video Management and Surveillance, Access Control and Building Management Systems. Making audio an integrated part of any security solution opens the possibility to communicate and gives everyone the possibility to hear, be heard and be understood, everywhere and every time.