How Technology Contributes To Better Healthcare Facility Security

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Video, access control and visitor management are among the technologies that are enabling greater safety and security at hospitals and other healthcare facilities.

Video surveillance systems enable hospital management and security professionals to know what goes on in and around a medical facility. Recording images in high resolutions (megapixels and gigapixels) is becoming more and more important in healthcare, says Jason Ouellette, Product Line Director – Access Control, Tyco Security Products.

Video event management software

Video analytics are now being leveraged for patient tracking, asset tracking,
If an incident occurs in a medical facility, the security staff has to be able to identify faces easily and accurately. Storage and costs have to be considered, of course. With technology improving and prices decreasing, video solutions can even be used for purposes beyond traditional security. For example, video analytics are now being leveraged for patient tracking, asset tracking, and operational purposes, and captured video can be used to defend against liability claims.

What’s next? Video analytics will continue to be a valuable addition to any surveillance infrastructure due to its ability to address patient needs, operational efficiencies and early risk detection, says Brandon Reich, Senior Director of Surveillance Solutions, Pivot3. Through video event management software (VEMS), hospitals can customize the statistics that are relevant to their individual buildings or campuses without having to spend extra time or money on rigorous employee training.

Real-Time access control security updates

Furthermore, once healthcare facilities are able to digitize all of their patient records, secure any of their ingress and egress points with real-time access control security updates, and fully transition from analog to IP video surveillance cameras, VEMS systems that house analytical software will be able to multiply the benefits offered to hospitals, not just in real time, but in planning ahead for future risk, expansion and safety protocols.

It is vital to implement integrated and innovative access control solutions

With large, complex facilities, directors of security at hospitals struggle with controlling access to various levels of the facility, according to Eric Widlitz of Vanderbilt Industries. To manage the risks that hospitals face and ensure a comprehensively protected atmosphere for patients and staff, it is vital to implement integrated and innovative access control solutions. For example, ease of access with controlled entrances is vital to medical crash teams, as is the need for a zonal access control
lockdown in the event of a contagious disease outbreak.

**Strict access limitations**

Different hallways, rooms, floors and waiting areas within a hospital require different amounts of restriction, and sensitive materials, such as medical files, controlled substances and sterile environments (such as operating and procedure rooms) all necessitate an additional layer of protection.

Access control in particular has advanced significantly to offer healthcare facilities the ability to control access remotely, through mobile applications, confirm identity quickly and easily and program varying levels of access for visitors, patients, doctors and staff. One area that is recently experiencing rapid growth – and drastic change – is the securing of narcotics within healthcare facilities, says Robert Laughlin, CEO and Chairman, Galaxy Control Systems. In the past, all medicine was controlled in a central pharmacy located somewhere in the hospital or health facility. These pharmacies were highly secured areas, with strict access limitations; only authorized staff could get near the medicine stocks.

**Fiber optic communication lines**

> For vehicle access control, medical centers and hospitals prefer beam barricades and shallow foundation barriers

To improve the speed of delivery, and to have the necessary medicines ready at hand for inpatients without retaining a large delivery staff, the current trend is to have distributed pharmaceutical closets or carts that hold medicines much closer to the intended patients. For vehicle access control, medical centers and hospitals prefer beam barricades and shallow foundation barriers, according to Gregg Hamm of Delta Scientific.

Manual beam barricades are installed at the Fort Bragg Veterans Administration Hospital in North
Carolina to shut down certain areas of the facility when a higher alert is sounded. They will stop a 15,000-pound vehicle traveling 50 mph. The Navy Hospital in San Diego uses high speed, high security and very shallow foundation barricades to control all vehicles going in and out of the facility.

With their extremely shallow foundation, they obviate the concerns of interference with buried pipes, power lines and fiber optic communication lines. They will stop a 15,000-pound vehicle traveling 50 mph. At the National Institute of Health in Bethesda, Maryland, even stronger shallow foundation barriers are used for traffic control and protection. These barriers will destroy a 65,000-pound (5.4 million foot-pounds) dump truck traveling 50 mph and continue to stand.

Physical access control systems

Controlling visitors to hospitals and healthcare facilities can directly impact security.

Controlling visitors to hospitals and healthcare facilities can directly impact security. Traditional methods of visitor management, such as paper visitor logs and handwritten badges are insufficient given today’s variety of security challenges. A hospital using paper-based systems cannot easily cross-check information, confirm patient information, check visitor names against up-to-date watch lists, or visually confirm identity.

An increasingly popular and important application is secure and simplified visitor management, integrated with the physical access control systems (PACS). Today’s visitor management systems enable the screening, badging and tracking all visitors or, at a minimum, those visiting critical areas or during ‘after hours’ periods.

Quickly identify inappropriate visitors

One other growing technology is the ability to link to internal or governmental watch lists, to quickly identify inappropriate visitors before they gain access to the facilities. For example, Visitor
Management systems can be configured to perform a Sex Offender search in both Children’s Hospitals and Pediatric areas, further decreasing the likelihood that someone of the list could gain access.

Wayfinding is indoor navigation to guide a person step-by-step on the way to a desired destination

HID Global and Phunware Inc. are addressing the need of healthcare institutions to deploy standardized technology to provide a **better wayfinding and visitor engagement experience** inside the hospital, across campus and even in parking lots. The companies are collaborating to improve the experience for hospital patients and visitors to find their way within medical facilities, using wayfinding on their mobile phones. Wayfinding is indoor navigation to guide a person step-by-step on the way to a desired destination.

**Enterprise-Level mobile wayfinding**

“It’s easy for visitors and patients to get lost in hospitals, and every time they do it puts appointment times and patient satisfaction at risk,” says Rom Eizenberg, Vice President of Sales, Bluvision, part of HID Global “With our location-aware app on a mobile device, we equip the visitor to get instant, turn-by-turn navigation that creates a better experience than that which is currently available on the market.”

HID’s healthcare IoT solution-enablement platform simplifies the delivery of real-time location of clinicians, patients and devices. The platform is enabled by Bluvision (part of HID Global). Phunware’s Multiscreen-as-a-Service (MaaS) platform also provides enterprise-level mobile wayfinding, engagement, data and more for other vertical markets, including retail, residential, hospitality, media and entertainment and more.

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An experienced journalist and long-time presence in the US security industry, Larry is SecurityInformed.com's eyes and ears in the fast-changing security marketplace, attending industry and corporate events, interviewing security leaders and contributing original editorial content to the site. He leads SecurityInformed's team of dedicated editorial and content professionals, guiding the "editorial roadmap" to ensure the site provides the most relevant content for security professionals.
The healthcare sector is a crucial part of a functioning society as it provides life-saving care and reassurance to the population. A key pa...

The ability to treat patients in a secure environment is a base requirement of hospitals and other healthcare facilities. Whether facilities...

When violence or a life-threatening incident occurs, hospitals and other healthcare institutions are often in the crosshairs. Hospitals incr...

The healthcare market is rife with opportunity for security systems integrators. Hospitals have a continuous need for security, to update th...