Enhancing Healthcare Security with Video Intelligence

The Challenge of Healthcare Video Surveillance

Effective healthcare requires that hospitals and emergency rooms be safe and secure. However, workplace violence and crime are constant threats. According to the US Department of Justice, the rate of violent crime is 29% higher than average among physicians and 74% higher among nurses[1].

Healthcare facilities are vulnerable to a wide array of other crimes and security events: pharmacies and equipment are attractive targets for thieves, infants require round-the-clock protection, and restricted areas must be closely monitored. Healthcare facilities are also physically dynamic, with thousands of staff, patients, and visitors moving through hundreds of entry points, corridors, and rooms.

Meeting these challenges can be difficult with traditional video surveillance systems that passively record terabytes of raw video data. These older systems don't allow security teams to efficiently monitor large facilities, integrate alerts from other security systems, and ensure the fastest possible response when incidents occur.

A revolutionary new approach called **video intelligence** integrates video surveillance with business and security systems and uses video analytics to make it easy for security teams to improve workplace safety.

High Risk Areas In a Hospital

Areas of Risk	Layered Security Approach
Emergency Room	- Video Surveillance - Nurse Panic Buttons - Physical Security Guard - Triage stations - Location of Nursing stations
Labor and Delivery	- Access Control - Hugs® Infant Protection System - Video Surveillance
Pharmacy	- Access Control - Video Surveillance - Contact Alarm Integration
Parking Lot Security	- Video Surveillance - Video Analytics: License Plate Recognition - Video Analytics: Advanced Object Tracking

Video Intelligence: a Force Multiplier

For security teams tasked with monitoring a deluge of footage, video intelligence platforms can act as a force multiplier, helping monitor real-time events and quickly tracking down historical footage. Video intelligence platforms can help manage:

- **Access control** – making sure only the right people are in restricted areas

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"Putting these systems together has an accretive value that is sometimes more valuable than the individual systems themselves, so we are seeing some activity in combining these systems," says Bill Lawrence, director of service solutions and platforms at ADT Security Services. *"By correlating these events through this higher-level (system) … you have much broader situational awareness."*

– Modern Healthcare

Integrating Hugs Infant Protection with Video Surveillance

Video intelligence can provide an added layer of security for infant care. Video can be integrated with infant monitoring systems, such as Hugs. When a Hugs RFID device sets off an alert, an integrated video intelligence platform can instantly pull up surrounding cameras and help security teams respond as quickly as possible.

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- **Real-time alerts** – helping efficiently monitor facilities and speeding up response time

- **Case Management** – finding and identifying important visual evidence

Keeping Watch on Restricted Areas

At any given moment, only a fraction of surveillance cameras are being watched. Video analytics can help alert security staff when suspicious activity occurs on a camera they don't happen to be watching. Video analytics can detect motion in and around restricted areas. Alerts can also be tied to access control systems, alarm panels, and asset-tracking systems (such as in pharmacies). And when breaches occur, video analytics help users to quickly find footage of activity in restricted areas.

Putting Eyes on Real-Time Events

Layering security measures increases effectiveness. Video intelligence platforms can work with other security technologies to provide a clearer picture of real-time events and sharpen situational awareness.

For example, if an ER nurse hits a panic button, location data can be used to instantly launch video feeds that will tell security staff:

- Who is involved in the incident?
- What is the nature or severity of the incident?
- Where is the perpetrator?

Such real-time information can help teams quickly respond to the right location with the right tactics and mitigate the outcomes of violent events.

Speeding up Investigations

Video analytics dramatically speed up searches for footage of important events, people, and objects. This allows security teams to quickly compile video evidence for case management, investigations, and hand-off to law enforcement.

The ability to query historical footage for key details like faces and license plates can help track repeat offenders or uncover previously unknown events. License plate recognition in particular can help positively ID suspects and provide strong evidence for law enforcement.

The Importance of an Open Video Intelligence Platform

Traditional video surveillance has a critical limitation, in that evidence can only be found by watching raw footage and manually correlating locations and timestamps. Video intelligence platforms streamline this painstaking process by integrating data from other security systems to help pinpoint important footage.

However, layering video with other security data is only possible when video intelligence platforms can communicate with other systems via API, or common data formats such as XML. As new security technologies emerge, it's important that video intelligence platforms be able to easily integrate and leverage new sources of data.

Bringing an Offender to Justice

Video analytics helps gather evidence by connecting events, people, and objects. For example:

1) Perpetrator follows patient into ER and violent incident occurs.
2) Facial surveillance finds video connecting perpetrator to his/her vehicle – perpetrator is positively ID'd by license plate.
3) License plate recognition uncovers additional footage of vehicle and perpetrator.
4) Video intelligence platform quickly exports relevant video and still images for law enforcement.

Learn More

If you'd like to learn more about the ways that video analytics can improve the strength of your decisions, contact 3VR:

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[1]osha.gov/Publications/OSHA3148/osha3148.html

Additional statistics on workplace violence can be found here:
bjs.ojp.usdoj.gov/content/pub/pdf/wv09.pdf