



# Healthcare Surveillance

Finding efficiencies from OR to ER  
and beyond.

Whitepaper | 4.2023





## Healthcare surveillance:

### A balance of patient care and operational efficiency

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For all their unique requirements, hospitals are not immune to the daily challenges that affect every industry: staffing shortages, limited resources, shrinking budgets, and rising costs. Add in 24/7 visitor traffic, confidential patient data, large supplies of pharmaceuticals, and emergency situations and it's no surprise healthcare facilities today welcome anything to help them be more efficient.

This includes video surveillance playing a larger role in every healthcare setting.

It's a major shift from only a few years ago, when more doctors and staff were hesitant to embrace technology of any type: ***"We can't put cameras in patient rooms. There are too many issues with HIPAA compliance and patient privacy."***

In recent years, that mindset has begun changing, and then COVID came along and accelerated the swing. Everyone became much more reliant on and comfortable with technology, especially remote applications. Hospitals were no exception.

A perfect example is Hanwha Vision's integration of IP pan-tilt-zoom (PTZ) camera with a leading remote sitting video platform. Hospitals can now perform 24/7 centralized patient monitoring and conduct remote observation of high-risk patient rooms and specialized units.

The success of a joint solution like this comes down to the balance of enhancing patient care while creating more efficiency. It allows key staff, especially nurses, to use their time for higher value activities without getting bogged down with time-intensive, tedious tasks.

It's a welcome alternative to having a live person act as a "sitter" in a room monitoring a high-risk patient prone to falling out of bed, pulling out a PICC line, or generally harming themselves. Beyond the health implications for the patient in these instances, the hospital has to pay for additional medication, new surgeries, and extended stays because that patient was harmed while in the care of the hospital.

Hospital staff can remotely check on patients from a central command center at the nurses' station, keep an eye on various in-room equipment using motorized camera lenses, or view which way the patient's body is turned.

They can look for different behaviors or movements that might indicate a person is about to fall or harm themselves, and then communicate to either the patient directly or alert other personnel to preemptively resolve the situation.

Now the patient care process moves from reactive to proactive, ultimately leading to better quality care and a safer environment for everyone involved.



## AI on the Rise

The use of Artificial Intelligence (AI) is spreading across the healthcare industry for a range of applications. Hospitals are complementing their cameras' security monitoring performance with enhanced data-gathering capabilities combining intelligent audio/video analytics and AI.

The result is targeted object detection and classification, which saves time for hospital security teams by speeding forensic searches. When an incident occurs, locating a person of interest, for example, can take only a few minutes instead of having to sift through hundreds of camera streams.

AI is also playing a larger role in cameras used for license plate recognition, recording vehicle entries and exits and alerting staff to potentially dangerous activities in real-time.

For example, all hospitals have to deal with issues like "dump and run" incidents. A car may drive by an emergency room entrance in the early morning hours, "dump" off a body that's the victim of a criminal activity, and then speed away.

The hospital needs to know who was driving that car. With AI-based license plate recognition, they can simply plug in their search attributes - a male in a red shirt and blue pants, between 2:00 and 2:30AM -- and get quick hits on people or objects that match those parameters. It's more efficient than calling down to the command center with a search request that could take an hour or more without AI.

Hospitals also keep building "watch lists" of people whose previous histories prohibit them from being on hospital grounds. Those individuals can be identified by their license plates while they're still in the parking garage and security teams can intercept them before they enter the facility. If they do get past the front doors, their movements can be tracked throughout the building.



## Cameras everywhere - multiple sensors, multiple views

Cameras are now installed throughout a healthcare facility to meet a diverse set of security and surveillance needs.

Multi-sensor technology is beneficial to hospitals looking to get the most out of their security spend. With one device, data drop or license, they can record several key areas like pharmacies, hallways, or lobbies with unique fields of view for each.

Cameras in the operating room help to "audit" surgeries to make sure certain procedures are followed and provide evidence in case of issues like "wrong sight surgeries," where surgery is performed on the wrong part of the body.

Drug diversion policies are more common in hospitals, especially those with large quantities of pharmaceuticals or other attractive targets for theft. Nearly every hospital uses a Pyxis MedStation, mobile pharmacies designed for automated medication dispensing allocation.

These carts are stocked with the daily medications needed for a floor or area, and only available to authorized users. However, unauthorized personnel using stolen or forged credentials can unscrew the backs of these carts for easy access to the drugs. With the right cameras constantly watching, if a pallet of medication is suddenly short one box, it's easy to filter a search to specific areas and locate the missing assets.

Looking ahead, the potential applications for security cameras in a healthcare setting are limitless, but the one constant will always remain achieving a balance of quality care, safety and, of course, efficiency.

Hospitals often adjust their surveillance priorities to focus on different areas or activities. Removing an entire camera mount and housing to install a new camera is traditionally a time-consuming process. It requires an entire area to be shut down and dust-tents deployed to ensure proper air quality if a ceiling or wall is penetrated.

**Cameras with a modular design, like Hanwha Vision X-Plus for example, use a magnetic camera module to make replacement or upgrading easier and faster. Remove a few screws, open the housing, clip in the new module and a unit is up and running in a few minutes.**

Beyond safety, patient care and efficiency, installing the right surveillance infrastructure also adds to a hospital's competitive advantage. What doctor or nurse wouldn't want to work for a facility with a reputation for being forward thinking and willing to embrace the latest and greatest?



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