Operating with a healthy dose of security.

CentraCare improves patient care, strengthens security and fortifies narcotic storage with Axis network cameras.

Organization:
CentraCare Health System

Location:
St. Cloud, Minnesota, USA

Industry segment:
Healthcare

Application:
Health and safety, operational control, loss prevention, remote monitoring

Axis partners:
Pro-Tec Design, Pivot3, Lenel, Milestone

Mission

In the wake of an extensive four-year growth period, CentraCare Health System has been working hard to coordinate safety and security measures across all of its facilities. Faced with a variety of aging legacy analog cameras, DVRs and difficult-to-secure pharmaceutical narcotics lockers, the central Minnesota collaborative healthcare group began searching for new security technologies to help maintain central oversight while mitigating risks to patients and staff.
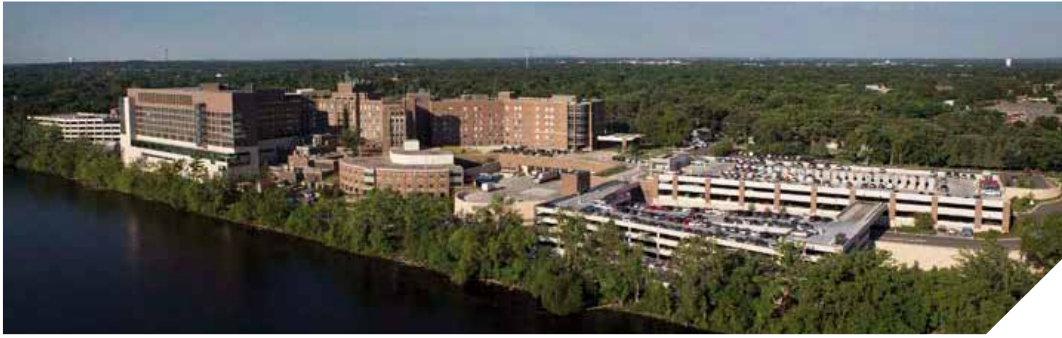
Solution

Partnering with Pro-Tec Design – a Minneapolis-based PSA Security Network owner, security system integrator and Axis partner with Axis Certified Professionals on staff – CentraCare embarked on a multi-year, multi-pronged project that began with replacing its old access control technology with a Lenel OnGuard® IP-based system and led to migrating its analog CCTV system to IP video.

Today, the IP-based security system is managed centrally through a Milestone XProtect® video management system and is being applied to a broad range of high-risk locations.

Result

The benefits of IP video are widespread. The security department is now able to visually verify individuals opening drug lockers and mitigate problems with high-risk patients in ER rooms by monitoring their activity for signs of trouble. They can also provide remote support for high-action areas like the helipad and ambulance bay. And Axis' Lightfinder technology enables security to watch over the infant ward while keeping lights low so newborns and their moms can sleep soundly.

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Suturing security holes

The CentraCare umbrella encompasses four hospitals, four long-term care facilities, nearly a dozen clinics and numerous specialty services throughout Minnesota. But disparate security systems and old technologies at various properties raised concerns about potential risk and liability. Some facilities used DVR-based analog CCTV systems, and some relied solely on the presence of security staff. They needed to integrate surveillance between sites and centrally monitor all cameras.

CentraCare was first introduced to network cameras by Pro-Tech Design when it upgraded their access control to a Lenel OnGuard® IP-based system. As part of that project, CentraCare installed new drug lockers controlled by magnetic card readers. Previously, two standard keys were required to open the lockers. Yet duplicates had been made over the years and, without an integrated video system, it was impossible to monitor who exactly was opening the doors.

The new system's magnetic card readers solved the problem of duplicate keys, but to provide full security, CentraCare needed to visually identify everyone swiping their card for access.

To do this, pin-hole sized, HDTV-quality AXIS P1214-E Network Cameras were installed in the ceiling above the lockers. To protect patient privacy, the cameras maintain a narrow field of view focusing solely on the drug lockers, and hospital staff can now visually verify who opens a locker in Milestone's XProtect VMS. "We have now adopted a redundant, cross-referenced approach to controlling access to narcotics," said Bill Becker, Director of Safety and Security for CentraCare Health System.

The solution was a success, and CentraCare extended the access control/video surveillance strategy to other sensitive and high risk areas. "Coupling Axis cameras with access control has become the standard of care for CentraCare," Becker said.

Migrating from analog to hybrid to pure IP security

When CentraCare first decided to expand the network video project, Pro-Tec Design deployed AXIS Q7406 Video Encoders to upgrade the existing analog cameras with network capabilities.

The now-digitized video streams were integrated into the new IP system and monitored at CentraCare's security office in St. Cloud using XProtect. Since then, more than 300 analog cameras have been replaced by Axis network cameras. The new system keeps watch over properties stretching hundreds of miles across central Minnesota. The cameras monitor everything from front entrances and patient wards to ambulance bays and weapons screening areas. Only a handful of the original analog cameras, now network-enabled with encoders, are still in place.

"Because CentraCare runs fiber between most of their facilities, we're able to stream the video back to St. Cloud's security center for storage [on Pivot3 servers]," explained Tim Ferrian, Director of Sales and Marketing of Pro-Tec Design. "Where the pipeline is too small, we record and store the video locally. But the security director and his team can still view live and recorded video from all the cameras in the system."

Expanding from risk management to patient care

While risk management was the initial impetus for tightening security, CentraCare began using the cameras for patient care and safety as well. For instance, security officers monitor multiple high-risk patients in the emergency and psychiatric evaluation rooms with HDTV-quality AXIS P3304 Fixed Dome Network Cameras.

This allows them to respond immediately to a situation like an unruly or restless patient without having an officer in every room.

"In keeping with HIPAA regulations and our own privacy and confidentiality policies, we don't record the video in those rooms. We only view it live," stated Becker.

Responding to emergency fly-ins and drive-ins

Pro-Tec Design also installed vandal-resistant and weather-proof AXIS P3343-VE Fixed Dome Network Cameras on St. Cloud Hospital's helipad and in their ambulance bay. The cameras help expedite the dispatch of medical personnel and keep the transport areas safe. The exceptional light sensitivity of the Axis cameras, along with their true day/night and wide dynamic range functionalities, make them a good fit for the variable lighting conditions in these outdoor locations. In the ambulance bay, the audio feature gives security both eyes and ears on the active facility, which can house up to six ambulances at one time. Security can quickly send in additional staff if a high-risk patient needs additional support.

CentraCare also authorizes its air ambulance service, Life Link III, to monitor the helipad camera from their own dispatch center to make sure helipads are clear before landing. "It's a good safety catch," explained Becker, as it provides back up to the officer assigned to the helipad. CentraCare extended this strategy to the helipads at Melrose and Sauk Centre Hospitals as well.

Protecting the NICU, PICU and birthing rooms

The more CentraCare familiarizes itself with the IP surveillance system, the more opportunities they find to use the technology. CentraCare has now deployed AXIS P3353 Fixed Dome Network Cameras with color-at-night Lightfinder technology along the third floor hallways of St. Cloud Hospital. This ward was a priority since it houses newborns, infants and moms. Even with the hallways dimmed at night so patients can rest, AXIS P33 Series with Lightfinder delivers crisp, true-color fidelity in low light.

In fact, almost immediately after installing the cameras, security used digital PTZ and Lightfinder capabilities to catch a thief as he passed through the ward. This success led CentraCare to consider installing the same cameras inside the neonatal and premature infant care units.

Maintaining a healthy dose of security

While CentraCare remains dedicated to respecting the privacy of its patients, it continues to apply an aggressive dose of surveillance to all its facilities to ensure the safety and security of patients and staff. "Our employees firmly believe that the Axis cameras are there for their protection," said Becker.

About Axis Communications

Axis offers intelligent security solutions that enable a smarter, safer world. As the global market leader in network video, Axis is driving the industry by continually launching innovative network products based on an open platform - delivering high value to its customers and carried through a global partner network. Axis has long-term relationships with partners and provides them with knowledge and ground-breaking network products in existing and new markets.

Axis has more than 1,600 dedicated employees in more than 40 countries around the world, supported by a network of over 65,000 partners across 179 countries. Founded in 1984, Axis is a Sweden-based company listed on NASDAQ OMX Stockholm under the ticker AXIS.

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