

Challenge

Deploy a powerful and cost-effective surveillance system to monitor hospital construction site and leverage for hospital facility surveillance upon completion.



Solution

Muskogee Community Hospital installed the Avigilon HD surveillance system, including Avigilon HD cameras ranging from two to five megapixels, at the hospital's construction site to monitor for criminal activity and to survey work progress. Once construction was complete, the hospital relocated the Avigilon HD cameras to monitor the exterior of the hospital. Security personnel manage the integrated system using Avigilon Control Center network video management software with HD Stream Management and store 35 days of footage using a combined Avigilon NVR and SAN storage solution.



Benefits

Since deploying the Avigilon HD surveillance system at its construction site, Muskogee Community Hospital has only experienced one incident, which was quickly resolved. Because of the system's ease-of-use and advanced functionality, the hospital increased employee productivity. The hospital also enjoyed significant costs savings during the construction phase: the Avigilon HD surveillance system was 25 percent less expensive to purchase and deploy than leasing a construction site monitoring system.

- *Quick Incident Resolution*
- *25% reduced up-front costs*
- *Increased productivity*

New Hospital Facility Deploys Advanced HD Surveillance System as Part of Technology Initiative to Foster Better Patient Care

Muskogee Community Hospital in Muskogee, Oklahoma was the brainchild of Dr. Tim Robison, who felt that the quality of healthcare in the region could be enhanced with the addition of a new, sophisticated, facility that optimized technology to foster safe, high quality, patient care. After several years of planning, the 101,656 square foot acute care hospital opened in early 2009 with the financial support of 25 local physicians. The hospital's commitment to use a high technology, service-oriented, approach to the delivery of care included the deployment of an advanced, high definition (HD) surveillance system from Avigilon, which was used to monitor and secure the site during construction and was relocated to the facility upon completion to ensure the safety of patients, staff, and visitors around the clock.



24x7 Construction Site Monitoring

Based on the recommendation of Digi Surveillance Systems, a local provider of surveillance solutions, Muskogee Community Hospital installed the Avigilon HD surveillance system, including Avigilon HD cameras ranging from two to five megapixels, at the hospital's construction site to monitor for criminal activity, including robbery and vandalism, and to survey work progress. "We initially considered installing a fence and hiring security guards to monitor the site, but neither option would be as effective as 24x7 surveillance," explains Mark Roberts, president of Muskogee Community Hospital. "Nor would they eliminate the issue of internal theft." After weighing the options of leasing or purchasing a system, the hospital decided to invest in the Avigilon HD surveillance system.

The Avigilon HD cameras were installed on poles located around the 22.5 acre construction site and mounted on the construction trailer to provide a 360-degree view. Digi Surveillance Systems connected the cameras via a wireless mesh network and powered the cameras using solar panels and battery arrays to effectively monitor activity across the site. "I was able to monitor the cameras from my computer, leveraging the pan and zoom features, to get a very clear view of all activity at the site," notes Roberts. "Not only did this help with monitoring for criminal activity, it was also very useful in helping us keep tabs on the progress of the construction."

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In fact, Muskogee Community Hospital provided a monitor and Avigilon Control Center network video management software to both the facility's architects, who were located 45 minutes away, and the construction company head office so the team could supervise construction at any given moment, helping to keep the project on time and budget. "We also installed a system at the sheriff's office so they could monitor the site remotely." With the Avigilon HD surveillance system in place, hospital executives were confident that the site was being effectively monitored both day and night.

Transitioning Surveillance to the Facility

With 45 patient rooms, four Operating Rooms, three procedure rooms, eighty physicians, and a staff of more than 125, Muskogee Community Hospital is committed to providing better healthcare. To ensure the safety of its patients and staff, the hospital moved the Avigilon HD cameras from the construction site over to the hospital to ensure extreme clarity and image quality and, ultimately, better overall protection.

Muskogee Community Hospital also leveraged the wireless equipment from the construction site to beam four analog cameras on a single Avigilon analog video encoder at the hospital's unmanned water treatment facility that is acres away from the main campus. The water treatment facility plays a key role in the hospital's daily operations, providing recycled water for lawn maintenance and other purposes, so monitoring the site for potential problems is critical. The hospital's security team manages the hybrid analog and HD surveillance system using Avigilon Control Center network video management software with HD Stream Management and stores 35 days of footage using a combined Avigilon Network Video Recorder (NVR) and SAN storage solution.



Feature-Rich Surveillance

According to Roberts, one of the remarkable features of the Avigilon HD surveillance system is the image clarity it delivers through its megapixel cameras and network video management software designed specifically for megapixel performance. **“The image clarity of the Avigilon HD surveillance solution is incredible,”** comments Roberts. **“I have never seen such advanced camera technology before.”** Roberts has also been impressed with how easily the Avigilon HD surveillance system adjusts for light conditions: **“I have used the system many times to monitor late at night or early in the morning and have always been able to see with near-perfect clarity.”**

The system’s ease-of-use was another important feature. **“A technological neophyte, even I find the system incredibly easy to use,”** notes Roberts. **“With only five minutes of help over the phone, I was able to set the system up on my computer and can now leverage all its advanced features to review footage, zoom in for greater detail, and dramatically reduce investigation times.”** The hospital’s four-person security team also finds the system user-friendly and has dramatically reduced the time required to review footage to find an event. **“We recently had an incident where construction tools were taken after being left outside,”** explains Roberts. **“In less time than it would take to walk across the facility, we were able review the footage, determine what had happened, and then retrieve the stolen goods.”**

A New Role for Security

Often, moving to a new technology platform or system is a daunting task, but because of Avigilon’s ease-of-use and exceptional performance, the transition to HD surveillance at Muskogee Community Hospital was easy. **“Our users have embraced the system,”** says Roberts. By leveraging Avigilon’s powerful playback features for forensic analysis, security staff no longer have to monitor cameras 24x7, freeing up their time for other activities. **“With less time required to monitor the system live, our security personnel can now act as hosts to visitors as they enter the facility, welcoming them and directing them where to go – a great new service we can now provide to the hospital community.”** Muskogee Community Hospital has also leveraged the new HD surveillance system to help boost employee productivity.



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Impressive Cost Savings

Not only is the hospital enjoying greater employee efficiency, it has also achieved significant cost savings since deploying the Avigilon HD surveillance system. In fact, when construction began, the hospital initially considered leasing construction site monitoring equipment, which would have cost approximately \$2,500 per month for a total of \$37,500 over the course of the project, and they would not have owned the equipment in the end. The Avigilon HD surveillance system cost 25 percent less to purchase and deploy during the construction phase, and delivered far superior performance than any other surveillance option. "In addition, the Avigilon HD surveillance system cost less than it would have to install a fence and hire around the clock security guards," notes Roberts. "And because of Avigilon's superior performance, we managed to eliminate any criminal activity on site, which meant that we did not have to dip into our \$20,000 loss budget which was available to cover the cost of anything that was damaged or stolen."

"With the Avigilon HD surveillance system in place, every action is now accounted for."



Greater Accountability, Greater Peace of Mind

By making the surveillance system visible to everyone who enters the campus, Muskogee Community Hospital has only experienced one incident since deploying the Avigilon HD surveillance system – and that was resolved within minutes. "With the Avigilon HD surveillance system in place, every action is now accounted for," says Roberts. "I no longer have to worry about robbery, vandalism, or suspicious activity. Avigilon has delivered greater peace of mind to me and the hospital's management team."

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Leveraging Technology for Better Care

Muskogee Community Hospital was designed from the ground up to provide extremely safe patient care while delivering exceptional healthcare to patients, families, and guests. “We have leveraged technology from the onset to build a cutting-edge facility in which to deliver progressive healthcare,” notes Roberts. “The Avigilon HD surveillance system plays a critical role in allowing us to provide a safe and secure environment to improve patients’ health outcomes and deliver better overall service. I would definitely recommend Avigilon to any facility looking to deploy a high-performance surveillance solution.”

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