



MOBOTIX

CASE STUDY

Nonprofit Organization Finds Comprehensive Solution For Health Care Facilities In Six Hospitals

Customer

Valley Health is a nonprofit organization that provides health care throughout Virginia, West Virginia and Maryland. With its headquarters in Winchester, Va., Valley Health now operates six hospitals: Winchester Medical Center, Warren Memorial Hospital, Shenandoah Memorial Hospital, Page Memorial Hospital, Hampshire Memorial Hospital and

War Memorial Hospital. In 2010, Valley Health admitted 31,000 inpatients, swiftly handled more than 112,000 emergency room visits and totaled more than 875,000 outpatient encounters. The health care system employs more than 5,300 people with a medical staff of more than 500.



Challenge

While Valley Health has been building new hospitals and renovating older health care facilities over the past few years, it has also been slowly retiring its old analog surveillance system in favor of a new system designed and installed by Executive Protection Systems (EPS), a MOBOTIX partner. EPS specified a system of more than 100 cameras, consisting of every type of MOBOTIX camera, and a number of groundbreaking applications, throughout multiple Valley Health facilities to coincide with renovations. During the

construction of a new tower at one hospital, for example, Arthur Yow, Director of Safety and Security for Valley Health, was faced with the challenge of removing all of the analog cameras to allow for the tower's construction and then moving all of the cameras back into place once the construction was completed. "We had quite a dilemma because moving all the cameras back would have been a huge expense for outdated technology," Yow said. "That's when I said, 'We need to look into IP cameras.' It was just the right time to do it." Since then, EPS has installed comprehensive MOBOTIX solutions at all of Valley Health's new hospitals. Every time an analog camera at an older location fails, EPS is called in to replace the analog camera with a MOBOTIX camera.

Along the way, EPS and Valley Health have encountered some unique security challenges that required quick, innovative thinking. In one case, Valley Health discovered that their sound detection system for security in a parking garage stairwell was not working properly and needed replacing. In another, Valley Health administrators wanted to create a time lapse to show the complete construction process of a new hospital in a few minutes via a collection of snapshots. Both of these challenges – including the overall replacement of analog systems – were solved by EPS with MOBOTIX solutions.

Security-Vision-Systems





The T24 solution is helping Valley Health minimize false alarms. MOBOTIX M12 cameras provide superb perimeter security with day and night features. In addition, the health care group has utilized the HiRes potential of MOBOTIX's Q24 and D14 DualDome

“This Great Product Gives Us Sound Detection As Well As Visual Capabilities”

Solution

Valley Health always had a noise detection system in the parking garage stairwell to ensure patients, visitors and employees traveled to and from their vehicles safely. However, during renovations Yow discovered that the solution was no longer working. Yow contacted EPS, who at this point had been working with Valley Health for quite some time. The integrators proposed a solution that would not only replace their old noise detection system, but also improve upon it. Throughout the stairwell, EPS repurposed multiple MOBOTIX T24 door stations, which are IP video door stations equipped with a high-resolution, hemispheric camera for a 180-degree view as well as two-way communication. The T24 is configured, just like Valley Health's old solution, to alert authorities when a loud noise is detected. But unlike the health care group's old system, the T24 also offers video of the scene, which allows responders to fully assess the situation and enables them to deploy the appropriate response. “It's similar to those blue call boxes you often see around college campuses,” Yow said. “This is a great product as it gives us sound detection as well as the visual capabilities, and we can weed out false alarms and employees, patients and visitors can use it to contact personnel in non-emergency situations as well.”

“With their old system, when it worked, the sound detection would alert authorities to a potential incident, but the responder would be going in blind. With the camera in place they know

what to expect,” said Mike Guevremont, President, EPS. “In addition, when people manually contact authorities through the T24, it helps reduce stress for that person. Just like with OnStar in vehicles, as soon as you start talking to another person your stress level goes down. There are a lot of different benefits, and this isn't even the T24's intended purpose. We took a great MOBOTIX product, did a little tweaking, and were able to take the hospital's security to the next level.” In addition, Valley Health wanted to create a time lapse of the construction of a new hospital, from the groundbreaking to the opening ceremony. Once again, they contacted EPS, who proposed a MOBOTIX M24 camera. The M24 is a low-cost, 3.1 megapixel camera that is suitable for indoor and outdoor use with a 180-degree panorama view. MOBOTIX high-resolution cameras provide the best image clarity available, and the company's decentralized approach to surveillance keeps the system cost-effective. One MOBOTIX camera with 3.1 megapixels records 30 times more detail than traditional CCTV cameras. As a result, larger image areas of up to 360-degree views are possible, which allows users to cover more of their property with fewer cameras, reducing upfront and long-term costs. Unlike other systems, the decentralized MOBOTIX concept incorporates a high-speed computer into every camera, which reduces network bandwidth because video is processed on the cameras themselves and images do not have to be transferred continuously.



Overall, Valley Health has installed more than 100 MOBOTIX cameras throughout four of its six hospitals and continues to install more as old analog cameras are replaced. The health care group has utilized the 360-degree views of MOBOTIX's Q24 and the 6.2-megapixel potential of the D14 DualDome cameras to secure interior hallways, intersections and entrances. MOBOTIX M12 cameras provide superb perimeter security with day and night features from hospital rooftops. "We've installed at least one of every type of MOBOTIX camera in every hospital," said Kevin Ganczak, Chief Technology Officer, EPS. "Having MOBOTIX cameras that have so many functions built-in is great, especially for larger customers. It provides us with a lot of flexibility to find the best camera for the job and to exceed customer expectations." In addition, EPS deployed MxControlCenter, professional video management software included with the purchase of MOBOTIX cameras at no additional cost, at Valley Health hospitals to create a large, interconnected system. The software includes all of the functions required from a robust security software solution, including unlimited users, simple configuration and installation, a layout editor for floor plans, and a user-friendly interface and camera view. "The security officers and I now have the capability to view cameras from our PC," Yow said. "That is amazing to me."

Results

MOBOTIX solutions now cover most, if not all, of four of Valley Health's six hospitals, and Yow couldn't be more pleased with the cameras' enhanced safety, incident investigation and covertness. The superb image quality produced by the MOBOTIX cameras has impressed Yow and helped create an environment where incidents can be thoroughly and quickly

investigated while reducing crime and incident response times. "There is no comparison between the pictures we view now from the MOBOTIX cameras and the images produced by the analog cameras," Yow said. "Plus, the cameras, particularly the Q24s, are so small that people don't even know they are there. They look like a smoke detector or speaker, and they cover such a wide field of view that helps reduce the number of cameras needed."

The innovative T24 solution provided by EPS helping Valley Health minimize false alarms. For instance, someone may slam a stairwell door shut and trigger the noise detection alarm, but the video feed will quickly allow the responders to see that no danger exists. In addition, it allows them to be prepared for the emergency before they arrive on the scene. "You never know what is going to happen, whether in the parking garage stairwell, the parking lot or the lobby, and we wanted to be prepared for whatever happens," Yow said. "Someone could slip and fall; patients with dementia may accidentally wander off. It helps reduce theft, and it has on multiple occasions helped police officers investigate a broad range of incidents." Today, EPS continues to replace Valley Health's failing analog cameras and install comprehensive IP-based MOBOTIX systems at new hospitals while Valley Health forges on with the purchase, renovation and build-out of new facilities. "Every time we turn around Valley Health is expanding or renovating new properties," Ganczak said. "The team loves the cameras and are quickly learning how to use the system to its full potential."



MOBOTIX – Made in Germany: Innovative Technology, Reduced Total Costs

The German company MOBOTIX AG is known as the leading pioneer in network camera technology since its founding in 1999, and its decentralized concept has made high-resolution video systems cost-efficient.

Increased Resolution Reduces Amount Of Cameras Needed

1536-line, high-resolution sensors give a better overview and allow users to monitor an entire room with just one camera.

Reduced Installation Costs At Any Distance

Standard Ethernet connection enables the use of common network components such as fiber, copper and wireless (wi-fi).

Intelligent Cameras Reduce The Number Of Recording Devices

The decentralized MOBOTIX concept makes it possible to store data from approximately ten times more cameras to a single storage device than is normally possible.

Event-Controlled Image Format Minimizes Storage Costs

Automatic image adjustment (frame rate, size) based on movement, sound or signal input reduces the bandwidth and storage requirements.

Low Power Costs, No Extra Heating

Anti-fogging without heating allows usage of standard PoE technology to power the system via Ethernet or two-wire cable, saving power cabling costs.

Backup Power Supply Costs Reduced By Over 80 Percent

Low power consumption, approximately four watts, enables year-round PoE (no heating required) with one centralized UPS from installation room using the network cabling.

Robust And Practically Maintenance-Free

Fiberglass-reinforced composite housing with built-in cable protection and no mechanical moving parts (no auto iris) guarantees longevity.

Software For Thousands Of Cameras And Storage Devices Included

The right premium user interface software for every application: MxEasy for compact video solutions, MxControlCenter for professional control centers.

Unlimited Scalability And High Return On Investment

While in use, more cameras and storage can be added at any time; image format, frame rate & recording parameters are camera specific.

Additional Functions And Other Extras Included

Audio support, lens, wall mount and weatherproof housing (-30 to +60 °C; -22°F to +140°F) are included; microphone & speaker available in almost all models.

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