The Vidant Beaufort Hospital is a 142-bed, non-profit hospital in Washington, N.C., that delivers a variety of inpatient and outpatient services to Beaufort County. The hospital provides advanced treatments and technology for general surgery, orthopedics, gastroenterology and rheumatology. The hospital’s state-of-the-art radiology services offer diagnostic testing that includes CT scanning, nuclear medicine cameras and MRI. The hospital’s modern labor and delivery unit includes four delivery rooms, a designated operating room and recovery room for C-sections and a newly renovated nursery. The hospital takes pride in providing one-on-one nursing care for expectant mothers — a benefit not always available at larger birthing centers — to enhance the intimate setting of the nursery and deliver additional support for such an emotionally powerful event.

Challenge
While the Vidant Beaufort Hospital leverages modern, state-of-the-art technology to ensure patients the most accurate diagnoses and the best treatment, it was severely lacking when it came to their security solution. Up until the last few years, the hospital relied upon trained security guards to patrol the hospital, and search and react to incidents. However, as Rodney Sanders, Network Administrator, Vidant Beaufort Hospital, discovered with the power of hindsight, it’s not possible for guards to cover every square-inch of the hospital’s campus.

“We never used to have any cameras and we had to rely on our guards to patrol the entire hospital,” Sanders said. “Our guards do an amazing job, but we knew we were missing incidents. It just wasn’t possible for us to cover everything with a limited number of guards.”

Therefore, to enhance the safety of patients, visitors and employees while reducing the hospital’s liability concerns, Sanders knew the hospital needed to modernize its security solution.

Solution
Sanders decided to enhance the hospital’s security with modern surveillance technology and use the security guards to manage security processes during a facility expansion. In 2008, the hospital added a new surgical wing and, thanks to a bit of lobbying by Sanders, the budget included the installation of a focused surveillance deployment as a pilot project. Sanders contacted ABP Tech, an IP reseller and authorized MOBOTIX distributor who passed Sanders off to Ron Poulin, President and Owner, Daytona Broadband, an authorized MOBOTIX partner and security system integrator.

Poulin provided a demo of the MOBOTIX cameras to Sanders and the hospital’s senior management team. The Vidant Beaufort staff was impressed by the presentation, particularly the high-resolution clarity and 360-degree views of the MOBOTIX Q24 cameras, and it wasn’t long after that the hospital officially decided MOBOTIX’s image clarity, decentralized concept and all-encompassing, 360-degree views made it the best solution for their needs and budget.

“It was the easiest of sales visits,” Poulin said. “The advanced technology did most of the
Enhancing The Hospital’s Security With Modern Surveillance Technology

talking! The plan initially called for Poulin to install a small number of MOBOTIX cameras, although Poulin was confident the system would soon be expanded. In the end, he was right.

“The cameras were installed and then all of the sudden, we had the video quality necessary to see incidents and identify perpetrators,” Sanders said. “That made it pretty easy for us to determine that we needed to expand this system.”

The Vidant Beaufort Hospital’s security solution now includes every type of camera in the unique MOBOTIX product line. MOBOTIX DualNight M12 cameras, which are equipped with two separate high-resolution image sensors for night and day visibility, secure the hospital’s perimeter. Meanwhile, the 6.2-megapixel potential of the DualDome D14 and the hemispheric Q24 drastically reduce the number of cameras needed to monitor the hospital’s interior while still providing the best high-resolution imagery available. One MOBOTIX camera with 3.1 megapixels records up to 30 times more detail than traditional CCTV cameras. As a result, larger image areas of up to 360-degree views are possible, reducing immediate and long-term infrastructure costs. MOBOTIX’s decentralized approach to surveillance incorporates an on-board computer into every camera, which allows video to be processed on the camera itself, reducing bandwidth and the need for external storage appliances. This decentralized surveillance enables MOBOTIX cameras to deliver exceptionally clear images and surveillance coverage with drastically reduced costs.

“MOBOTIX cameras might seem expensive at first glance, but only if you compare them to traditional surveillance cameras. MOBOTIX cameras, particularly the Q24, provide significantly more coverage area, reducing the need for more cameras,” Poulin said. “It would take several traditional cameras to match the coverage area of one MOBOTIX camera, and that saves customers a lot of money, today and into the future.”

The hospital is also leveraging MOBOTIX’s T24 IP Video Door Station — the only door station in the world that incorporates a high-resolution, IP surveillance camera that delivers a 180-degree view — to secure access points leading to secure areas of the hospital. One MOBOTIX V12, a vandalism-proof camera for use extreme applications, secures an area of the hospital where vandals repeatedly destroyed surveillance cameras.

The hospital is currently using MxControlCenter, professional video management software included with the purchase of MOBOTIX cameras at no additional cost, to further improve ROI. MxControlCenter includes all of the functions of a robust security software solution including
unlimited users, simple configuration, layout editor for floor plans, and a user-friendly interface and camera view.

**Results**
The reach of its limited number of security guards no longer hinders security at the Vidant Beaufort Hospital and incidents no longer go unnoticed. In fact, the system dramatically improves the guards’ efficiency and made their jobs easier.

“The guards were very effective prior to the surveillance system, and now with it in place, they have another tool in their security toolbox. It has helped them be more proactive and reactive in case an incident happens,” Sanders said.

The MOBOTIX surveillance cameras helped bring justice to a hospital employee. At the beginning of the Christmas season, a marketing department employee set up a Christmas tree in the lobby. She placed her Blackberry on an empty chair and a person in the waiting room, whose wife was a patient at the hospital, picked up the phone and left the hospital. The perpetrator didn’t see the high-resolution MOBOTIX camera, but the camera saw him.

“The image of him was perfect,” Sanders said. “He came back to pick up his wife, and we nabbed him. Without the camera, though, particularly with how discreet the cameras are – they look like smoke detectors – we probably would have just dismissed the phone as misplaced and moved on.”

The MOBOTIX installation at the hospital is still ongoing, as it is taking place in phases. The next phases will include the expansion of the system to cover the parking lot, and system additions will continue until the entire hospital is covered. Until then, Sanders will keep the peace with jealous departments.

“We will install cameras in one department as part of an installation phase, but then other departments want them too,” Sanders said. “The goal is to be up-to-date throughout the facility.”

The system has also impressed the heads of security at other Vidant Health-owned hospitals, possibly leading to the adoption of MOBOTIX surveillance cameras at larger hospitals.
MOBOTIX has developed and manufactured IP video systems, video management and analysis software in Germany since 2000.

MOBOTIX stands out for its **high level of reliability**. All outdoor cameras are subjected to a stress test for temperatures between -30°C and +60°C (-22°F and +140°F). Without additional components, without heating or cooling and with no moving parts (for example auto iris), they are virtually maintenance free.

MOBOTIX delivers a **perfectly matched package**, starting with the microSD card for storage management and HD audio (microphone and speaker) with VoIP telephony through video analysis, a professional video management system and motion detection software reducing false alarms.

The **decentralized architecture** means that a central computer is not required and the network load is minimal. The intelligent cameras from MOBOTIX process and store image data themselves, trigger events and, in the event of remote access, manage the frame rate and resolution depending on the available bandwidth.

The **6MP Moonlight sensors** and complementary **thermal imaging technology** ensure reliable detection of moving objects, even under the most challenging light conditions and over long distances. As a result, it is possible to cover large areas with just a few cameras. Less power cabling, less IT infrastructure and fewer additional light sources are needed. MOBOTIX cameras are powered using standard PoE and do not require more than 4-5 watts.

An intelligent IP video system from MOBOTIX allows you to **reduce total costs**. The investment pays for itself after a short time and the free-of-charge software and updates ensure it is a future-proof investment.