



Security System Protects the Most Important Hospital in Barbados

As the Queen Elizabeth Hospital in Barbados began renovations of its security system, the key objective was to update the old standalone system to guarantee a quick response to any security incident.

CASE SUMMARY

Location:
Barbados

System Installed:
American Dynamics
Discover Fixed Cameras
SpeedDome Optima Cameras

Software House
C•CURE

Introduction

The Queen Elizabeth Hospital is the most important medical facility in Barbados, an island country in the Lesser Antilles, which has an estimated population of 284,000 people. Located in Bridgetown, Barbados' capital, the mission of the hospital refers "to be the premier regional institution providing excellent, patient-centered, secondary and tertiary health care services and health professional teaching in Barbados, the Eastern Caribbean and beyond."

Opened in 1964, the Hospital has increased its number of patient beds from the original 464 to 600. The staff is comprised of nearly 2,400 people who provide top quality health care and specialized services in various areas such as; gynecology, pediatrics, obstetrics, cardiac surgery, plastic surgery, psychotherapy, radiology, radiography and ophthalmology, among others.

With such diverse capabilities, the Queen Elizabeth Hospital is considered the main medical facility to serve the Barbadian population.

The Challenge: To guarantee the safety and security of patients and visitors

The Queen Elizabeth Hospital holds a very strong reputation among Barbadians as well as citizens of other surrounding nations who don't have access to top quality healthcare. With this in mind, it was important to consider the safety and security risks for both patients and visitors to guarantee the facility operates smoothly, something the hospital's staff won't achieve unless they have complete visibility of the number of visitors they have at any given time.

To upgrade the hospitals access control and surveillance system, the hospital hired Tansal Akcayli, President and Chief Executive Officer of Consolidated Systems & Supplies (CSS), a Bridgetown-based systems integrator. The company was hired to centralize the hospitals security operations and to integrate the functionality of the surveillance system with an access control platform.

According to Akcayli, the main objective for the security director at the Queen Elizabeth Hospital was to monitor the behavior and activity of visitors in the corridors and along the perimeter of the building. It was not uncommon for patients to receive visitors from various family members, which could potentially lead to overcrowded rooms creating problems for the nurses caring for other patients in the shared rooms. There were also many cases of visitors entering the hospital outside of visiting hours making it difficult to keep the hospital's doors locked.

Paula Agbowu, Director of Engineering Services at the Queen Elizabeth Hospital, concurred that a major concern was the unlimited access to the hospital at any time during the day. "The hospital was relying in key-locks, but keys tend to go missing," Agbowu said.

Along with overcrowding, the hospital has also had to deal with safety issues connected with the lack of control over who is entering and exiting the building. Even though Barbados has a low-crime rate there have been several incidents involving weapons being brought into the facility.

In the past, the hospital relied upon myriad simple and weak surveillance and access control systems that operated as standalone systems.

The Solution

Several years ago, the Hospital Board approved funding to install an integrated surveillance and access control system. Working with the Consolidated Systems & Supplies, the hospital selected a security solution that included cameras from American Dynamics and the C•CURE access control solution from Software House.

“C•CURE was chosen because of its scalability and because it is a networked-based solution,” said Akcayli. “By implementing this system, the hospital can expand its access control system as its needs and the size of the hospital increases.”

The project was not without some challenges. “From a technical point of view, our main difficulty was that the building where the hospital operates is very old, which made it hard to install cable,” said Akcayli. “In addition, it is a very large building and, over the years, new areas have been added such operating rooms and management offices. This all had to be taken into consideration.”

The project started with a small scope with regular upgrades each year as circumstances required. The project has grown from 64 cameras to 86, 70 of which are Discover Fixed Cameras and 16 of which are SpeedDomes Optima Cameras, both from American Dynamics.

On the access control side, the project started with 96 proximity readers and has now increased to 120. The hospital is currently using six American Dynamics Intellex DVRs, which record up to one month of surveillance each.

The system has continued to grow as the hospital has decided to secure new areas to manage the flow of people into sensitive areas of the hospital. The project started with protecting the pharmacy, the nursing stations, and the IT room and has recently grown to include operating rooms and management offices.

A new, electronic access control system has also brought order and control not only to the building, but to restrict access to the general parking areas.

The integrated solution has simplified security operations by allowing guards to monitor the facility and identify security incidents remotely,” said Akcayli. “If someone forces a door open the system sends an alarm to the access control system to tell them that a door is being opened. If there is a camera close by, security personnel can then see an image of the area where the alarm was triggered.”

Agbowu, the Director of Engineering Services added that, “the security system has helped to reduce vulnerabilities at the hospital, particularly outside of normal working hours when people were accessing the hospital without the permission of the authorized personnel. Another benefits comes from the system helping the hospital with its overall disaster and recovery program since it enables the hospital to open all the doors with a button in case a natural disaster happens and people need to leave the building immediately.”

“By combining the access control and CCTV systems, we have even been able to provide evidence to help the police in cases when people have accessed unauthorized areas and removed items,” said Agbowu.

Today, the integrated security system is relied upon to manage the daily hospital operations. If an incident occurs, the security staff is now able to secure the doors, gates and corridors with the push of a button. The security solution has also helped the hospital reduce violence, prevent criminal activity, and better manage their visitor hours.

The Future

The Queen Elizabeth Hospital is an institution that is constantly improving its practices and procedures, which includes hosting medical conferences and scheduling training activities for personnel. On the infrastructure side, there are also plans to renovate and remodel the building, which will result in another upgrade of its security solution sometime in the near future.

According to Agbowu the hospital reviews its security systems each year, assessing the need to add access control or additional camera coverage to more vulnerable areas.

“As time goes on we hope to have the entire facility secured in a consistent manner. We also believe we will gain more from the surveillance system because cameras are now monitored on a daily basis,” Agbowu said.

That future includes the implementation of the victor unified video client, which will enable the hospital to further enhance its security systems by managing both IP and analog cameras from a single interface.