St. Joseph’s Health Care London

Building a Better Hospital Security System, One Phase at a Time

St. Joseph’s Health Care London upgraded to an American Dynamics video management platform for unified, sophisticated control of its surveillance equipment.

CASE SUMMARY

Location:
London, ON, Canada

System Installed:
Illustra
Illustra IP cameras
American Dynamics
VideoEdge and victor video management system

The Integrator:

Access Control, Video, Location-Based Tracking and Intrusion. UNIFIED.
Introduction

St. Joseph's Health Care London (St. Joseph’s) has a history dating back to 1869. The Catholic health care organization is governed by St. Joseph’s Health Care Society of the Roman Catholic Diocese of London, and its services are publicly funded. Today, the hospital system—which consists of four major sites and more than 3 million square feet of space—is one of Ontario, Canada’s leading teaching hospitals. Renowned for compassionate care, St. Joseph’s is one of the best academic health care organizations in Canada dedicated to helping people live to their fullest by minimizing the effects of injury, disease and disability.

Together, St. Joseph’s Hospital, Parkwood Institute, Southwest Centre for Forensic Mental Health Care, and Mount Hope Centre for Long Term Care comprise the hospital system, which has an annual operating budget of more than $400 million.

Affiliated with the University of Western Ontario (Western University), St. Joseph’s annually hosts approximately 2,000 residents, clinical fellows and other health discipline students from colleges and universities around the world. Its 4,044 employees and 900-plus physicians complete approximately 22,148 day surgeries and 34,321 urgent care visits yearly.

St. Joseph’s Security Control Centre handles all emergency calls for the entire organization 24/7 and responds to potential acts of violence, fires, bomb threats, medical emergencies, missing patients, inclement weather, chemical spills, evacuations and critical infrastructure failures. In addition, security personnel monitor the organization’s expansive surveillance system to help ensure the overall safety of patients and employees.

The Challenges

St. Joseph’s security program began with a small VHS recording system more than two decades ago. Over the years, a stronger emphasis has been placed on ensuring the safety of St. Joseph’s equipment, employees and its patients, and as security technology has evolved, the hospital system’s surveillance system has advanced and expanded as well.

The organization recently decided its analog video surveillance system was in need of an upgrade to IP technology. Because St. Joseph’s Hospital was planning a renovation and wing addition, the security staff chose this facility for a new system.

St. Joseph’s security team had been experiencing delays playing back video, said Mike Bessegato, director of Fire & Security Services/Emergency Planning at St. Joseph’s. “We weren’t able to find and review the right video footage quickly enough in the event of an incident,” he said. “And with analog cameras, you’re definitely limited in terms of being able to see people clearly and identify them.” On the hospital’s wish list for an upgraded system was real-time viewing, more detailed images and the ability for operators to simultaneously view more than six cameras per screen in the control center.
One of the challenges that Bessegato and his team wanted to address was St. Joseph’s unique security and surveillance requirements for different areas and facilities within the organization. For example, the hospital system’s mental health facilities require nearly 100 percent surveillance coverage to provide protection for both the staff and patients. Other monitored areas range from public corridors where pharmaceuticals are housed for emergencies to remote parking areas. But the needs didn’t end there. The Security Control Centre takes in approximately 500 calls in an eight-hour period, so security officials required a system that would enable staff to respond to a high volume of calls while providing a safe and secure environment for patients, staff and visitors.

The Solution

With its security needs laid out, the organization’s integrator of more than 20 years, Integrated Video & Surveillance Inc., presented St. Joseph’s with a plan to bring the hospital system into the IP world and position it for the future.

“I've been here 22 years now, and Integrated Video & Surveillance Inc. has been maintaining our cameras ever since,” Bessegato explained. “They continue to bring forward the newest and latest technology and have helped our security system evolve—particularly as St. Joseph’s has grown and security has become bigger and more important within the organization.”

Because Bessegato and his team of 60 were looking for a similar user interface to their current video management system, along with strong analytics and better resolution, the integrator ultimately recommended the VideoEdge video management system from Tyco Security Products’ American Dynamics brand.

Together, with more than 45 new Illustria IP cameras, the security platform would allow St. Joseph’s to realize the capabilities of IP, while seamlessly managing current analog cameras that they weren’t quite ready to upgrade. Overall response time would be faster, and operators in the control center would be able to view 32 cameras on one screen. Previously, operators had only been able to view six cameras at once.

While St. Joseph’s previous video management platform allowed security personnel to view real-time video, they had been experiencing latency, along with interruptions during playback. “The VideoEdge VMS allows us immediate playback and real-time viewing, allowing our guards to react to events as they happen,” Bessegato explained. In addition, he said, no latency means security personnel can follow people from camera to camera more smoothly, and the high-definition resolution allows for much better image quality.

“Another pro we found is that we can capture still images from the video review without having to save the video clip first. That has been an important bonus for us to be able to immediately export a face or license plate without taking additional steps,” Bessegato said.
The organization’s 600+ cameras are used to manage slip and fall incidents, equipment theft, and even to make sure areas have been salted during the winter to prevent potential accidents. “High-resolution cameras can spot these things, and dispatchers can work very efficiently this way,” said Tim Hobbs, managing partner at Integrated Video & Surveillance Inc. For example, one recorded incident in a facility parking lot showed a driver backing into another car and leaving the scene. The resolution was high enough to provide staff with clear images of the incident and driver’s license plate, Hobbs explained.

Security personnel have also benefitted from other capabilities such as sophisticated analytics, made possible by the powerful victor client used with VideoEdge. “With the victor client, St. Joseph’s can count people going in and out of a building to estimate traffic on the floor, and they can analyze which corridors or entries are being used more. They can also set restricted areas that will cause an alarm to pop up for security personnel if someone is walking into a controlled area,” said Hobbs.

Although St. Joseph’s has one control center, staff can also view video at individual locations via PC and remotely. The VMS allows security personnel to send live video to other monitors or personnel at other sites, allowing guards across different cities to react to an event very quickly.

Hobbs added that the VideoEdge VMS with victor has allowed St. Joseph’s the flexibility to prioritize not only which existing equipment needs to be upgraded, but also the flexibility to choose the type of cameras they need for a particular solution. “For instance, in some areas of the new hospital wing, we wanted high definition for facial recognition in an entryway. In other areas where we just needed eyes down a long hallway, for example, we could use a lower-budget option and save some money,” he said. “It’s nice to have a system that allows you to prioritize your surveillance needs, while integrating it all together seamlessly--it allows us to design a very complete video system that way.”

The Future

Though St. Joseph’s new security platform will allow it to upgrade the entire surveillance system over time, the ultimate intention is to get there sooner rather than later.

“Our goal is to be completely digital as soon as we can,” Bessegato said. “The benefits we see so far with the video management platform and IP cameras have been paramount. IP augments so many of our other procedures and has been very beneficial to our organization.”

The Customer - St. Joseph’s Health Care London

St. Joseph’s Health Care London is one of Ontario’s leading teaching hospitals, contributing to the advancement of health care, education and research. Its services publicly funded, St. Joseph’s is a Catholic health care organization, owned by St. Joseph’s Health Care Society of the Roman Catholic Diocese of London and governed by a volunteer board of directors representing the community. In 2014, St. Joseph’s Health Care London ranked eighth in the country, according to “Canada’s Top 40 Research Hospitals” list from Lawson Health Research Institute.
The Integrator - Integrated Video & Surveillance Inc.

Integrated Video and Surveillance Inc. offers installation and service to the closed circuit camera market. Integration of custom audio visual installations as well as networking and wireless broadcast products keep Integrated Video on the leading edge. Integrated Video offers it services to the policing, industrial, educational and private sectors. The partners in the business are Colin Chambers and Tim Hobbs. Together, the two bring 50 years of combined industry experience to the company. Colin and Tim have worked on the design, installation and service of close to 2,000 camera systems in a variety of applications. The company provides professional assistance on all of its video surveillance systems, industrial viewing applications and digital video recording solutions. Full system integration and control, including networkability, are just a portion of the services the company offers.

The Solutions Provider - Tyco Security Products

Tyco Security Products and its leading brands conducts business in over 177 countries around the world, in multiple languages and employs over 2,800 employees globally, including research and development, marketing, manufacturing, sales, service and logistics teams in the Americas, Europe, the Middle East, Africa, and Asia Pacific. Our products, built by developers from all product disciplines, consistently allow customers to see more, do more, and save more across multiple industries and segments including healthcare, government, transportation, finance, retail, commercial and residential. Worldwide, Tyco Security Products helps protect 42% of Fortune 500 companies, transportation systems on five continents, 37% of the world’s top 100 retailers, over two million commercial enterprises, thousands of students in more than 900 educational facilities, and over five million private residences.