



Halton Healthcare Builds a Foundation for Smart Hospitals with Cisco





Results

- Extend real-time communications across two new large healthcare facilities to enhance healthcare delivery and patient outcomes
- Deploy a network that provides a foundation for patient and caregiver services that's always on and always available
- Safeguard patient information with end-to-end, indepth security to maintain compliance and minimize risk
- Power more intelligent, responsive monitoring to maintain consistent standards and ensure a superior patient experience

Challenge: Integrate a Growing Provider

Halton Healthcare is a progressive, multi-site healthcare organization comprised of three community hospitals - Georgetown Hospital (GH), Milton District Hospital (MDH) and Oakville Trafalgar Memorial Hospital (OTMH). Supported by 3,800 staff, 1,500 volunteers and 300 physicians, these hospitals provide healthcare services to a growing population of nearly 400,000 residents in the communities of Halton Hills, Milton and Oakville.

Halton Healthcare is constantly growing, as well as exploring new technologies and applications that can better serve its patients. When the organization planned to open two new hospitals, it realized that its existing infrastructure required a more unified, strategic approach to support the new sites and additional clinical and corporate applications.

The hospital's leadership was committed to the vision of smart hospital design and determined that a converged IP network approach would deliver the intelligence, security, and manageability required to take healthcare to the next level. It would also need to support disaster recovery to help minimize risk and guarantee uptime.



"We were seeking solutions that would enable us to standardize our operations onto an IP based platform, so every system could talk to every other system," says Sandy Saggar, Chief Information Officer at Halton Healthcare. "And we wanted to make sure that we had the ability to grow into these solutions over time – we had to anticipate further growth and change over time well after the opening of our new hospitals."

Solution: A Single Platform for All Healthcare Delivery

To power the single, converged, highly availability network it needed to consolidate its key operations, Halton Healthcare turned to Cisco. At the heart of the solution is a Cisco end-to-end wired and wireless network. In the organization's data center, a Ciscobased VCE Vblock System provides a converged infrastructure system for compute, network, storage and virtualization.

"These technologies serve as the central nervous system of our hospital sites," says Saggar.

The flexible foundation connects all of the hospital's systems, including electronic medical records (EMR), imaging, biomedical equipment, building automation, security, and other applications together on a single shared network.

To roll out the solution, Halton Healthcare worked closely with its responsive Cisco account team to ensure a seamless migration of over 400 servers from the legacy to new data center—with no downtime. More than 13,000 devices were deployed and activated on the network, and 120 new IT projects were implemented by opening day at the two new hospitals. "We achieved our primary goal of opening up our new hospitals in Milton and Oakville safely for our patients, and have not experienced any major system issues," says Saggar.

Communication and collaboration are essential to delivering exemplary patient experiences, and Saggar and his team deployed Cisco Unified Communications to support voice connectivity, alarms, and interconnections between healthcare devices.

"We deployed more than 700 Cisco IP mobile phones in Oakville, Milton and Georgetown to support critical communications in terms of voice and alarm propagation between key systems like the nurse call system," says Saggar.

The intelligent Cisco network helps Halton Healthcare consolidate and streamline its communications onto a single network, as well as automate monitoring and other processes. Now with an enabling network and mobile devices, staff no longer have to travel to get information – information travels to them.

"Prior to deploying this solution, our nurses had to manually monitor patients in some of our clinical areas," says Saggar. "With our alarm propagation system, there's less need to monitor individuals manually. If a monitoring threshold is triggered, the nurse is notified immediately, and the patient receives better, faster, more consistent care."





The solution enables Halton Healthcare to not only streamline but standardize healthcare delivery. It helps ensure that nurse call, smart bed alarms, patient elopement, duress, clinical alerts, and workflow messages are all sent to appropriate staff, with embedded escalation routines.

Results: Better, More Responsive Patient Care

After opening its new smart hospital facilities, Halton Healthcare is already enjoying industry recognition for its improved healthcare delivery. The provider was a finalist for three major awards including the 2016 and 2017 Large Public Sector Ingenious Award and 2017 Canadian Health Informatics Award for the successful delivery of a new smart hospital enabling exemplary patient experiences.

The mobility and alarm propagation solution has also had an immediate impact on patient experience. Just three months after moving into the new Oakville Trafalgar Memorial Hospital, patient surveys on nurse call bell response reflect a 50 percent increase in satisfaction rates. This truly highlights Halton Healthcare's vision of providing exemplary patient experiences, always.

The new environment is also more secure and resilient, with Cisco Vblock providing support for disaster recovery to keep essential operations up and running. Saggar and his team are also employing



Cisco security solutions to safeguard sensitive patient information and comply with PHIPA and other legislation.

Saggar credits the Halton Healthcare leadership team with understanding how technology can enable better patient outcomes—and moving quickly to take advantage of these opportunities. The provider is already looking forward to improving its technologies and applications to enhance the patient and family experience at its facilities.

"We are continually refining our systems to enable better care, improved patient safety at a reduced cost. With Cisco, we can continually grow into our solution, and have the capacity to support future workflows, improve integration and automation, and support an always-on environment."

Sandy Saggar

Chief Information Officer, Halton Healthcare

Learn More

To discover how Cisco solutions can help you enable better healthcare outcomes and a superior patient experience, visit:

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