



Digital Network Improves Staff & Patient Experience

London Health Sciences Centre and St. Joseph's Health Care London

Size: 15,000 employees
Industry: Healthcare
Location: Ontario, Canada

Solutions

- Providing fast, secure access to clinical data and expertise with Cisco Digital Network Architecture
- Improving bedside care with Cisco Wireless
- Boosting medical expert collaboration and productivity
- Simplifying IT management through Cisco Prime® Infrastructure

Global Presence through a Single Location

Dr Tom Janzen has many jobs. Currently, he serves as physician and chief medical information officer (CMIO) for London Health Sciences Centre. His responsibilities range from treating patients to medical training and staff administration. He's also a sought-after speaker.

So, time is precious. Dr Janzen was hard to reach and tired of losing long hours on national and international trips. He needed to be accessible to his medical staff to help ensure productivity, while also delivering medical courses and speeches remotely.

Improving collaboration and productivity was also a top priority for vice president of diagnostic services and CIO, Glen Kearns. "On measures like customer care, we sat in the healthcare sector's top quartile," he says. "Our goal now is to be even better".

A Digital-Ready Network for Healthcare Transformation

The hospital seized the opportunity to reduce travel, streamline workflows and improve communications between multidisciplinary healthcare specialists.

"With Cisco, we look at the bigger picture and get there using an end-to-end approach, rather than siloed systems and point products," Kearns adds.

Cisco Services helped assess the network's readiness, and identified a long-term strategy for transforming campus IT. The foundation is a Cisco® Digital Network Architecture-ready infrastructure. It helps multiple hospital campuses and remote sites act as a single entity sharing real-time data securely and reliably.

"With Cisco DNA, our entire medical staff is now connected," says Kearns, "Our patients can see and feel the professionalism we put into their care".

Patient data is no longer reliant on handwritten notes by multiple staff, but instead directly collected on mobile devices. Staff can digitally communicate to nurses, pharmacists and other medical experts reliably, with everyone connected to the correct patient information.

"In two years, we've grown from 2,000 mobile devices to over 10,000," says Dave Schned, Integrated Director of IT Infrastructure. "Cisco DNA helps insure device growth drives innovation, not extra administrative burdens".

Cisco Digital Network
Architecture and Collaboration
solutions have helped to:



Link insight into patient journeys and
clinical workflows with connected staff



Improve adverse medication events
by 40 percent



Release doctors to spend more
time with patients

The multi-campus London Health Sciences organisation is connected by a city-wide optical ring over a Cisco ONS platform. Together with Cisco Catalyst switches, it provides seven hospitals and multiple remote clinics with fast, reliable connectivity. The network design has built-in dual redundancy. So, in the unlikely event that a link should go down, the network stays on.

To meet Ontario's strict compliance requirements for data privacy and security, the network is protected against malware threats by Cisco next-generation ASA firewalls..

"Our firewalls integrate easily with our Cisco infrastructure and future solutions, such as web filtering and intrusion protection, forming a wider cyber-security strategy", Schned says.

This comprehensive WAN and LAN infrastructure connects to more than 2600 Cisco Aironet™ wireless access points and 40,000 active endpoints. There are three wireless security zones: one for core staff, one for external suppliers and contractors, and free guest Wi-Fi for patients and visitors. Everyone, regardless of role, is connected. This transforms the hospital experience for staff and patients.

"With pervasive wireless, no one has a frustrated look on their face as they try to find signal strength", says Schned. "Medical staff can work seamlessly, while patients are less stressed and can keep in touch with friends and family".

Medical teams always have secure access to electronic patient records, scan results and clinical apps – whenever and wherever they need it. This translates into faster, more informed decision-making and improved patient care. Before, there were lots of repeat trips back and forth between nursing stations, drug cabinets and the patient's bedside. Now, the Wi-Fi connects 2000 wireless mobile workstations, so staff can work and administer care on the move.

"Using the mobile workstations, we're able to scan the medication, the patient and the person administering at the bedside", says Schned. "This has resulted in a 40 percent improvement in adverse medication events".

To protect network health, London Health Services chose Cisco Prime® Infrastructure and the Smart Net Total Care service. The former provides proactive monitoring and simple, unified management for both wired and wireless domains. The latter helps insure fast access to Cisco technical expertise, along with automated inventory and contract management. The combined result is quicker fault resolution, greater uptime and better end-user experience.

"Our Cisco network brings it all together", says Kearns. "Having a solid platform for digital healthcare is vital. We're able to work more efficiently, flexibly and securely, and deliver better outcomes and quality of care to our patients".

Collaborating for Patients, Students and Peers

The healthcare provider has boosted productivity further still with Cisco Collaboration solutions. "I've got a Cisco phone on my desk and Jabber is open on my desktop", says Kearns.

The hospital previously had to bear the expense of supplying 6000 staff with pagers. So far, 2000 users have moved to Cisco Jabber® technology, reducing costs and boosting productivity. For example, it makes it easy for clinicians to view the availability of colleagues and use IM chat to resolve issues on the spot.

The video connectivity of Cisco WebEx® technology has had a huge impact.

"I can work from home and share my keynotes and courses online, and the quality is exactly like a face-to-face meeting", says Dr Janzen "It has totally transformed my working day".

"I'm able to do two or three presentations on the same day, complete my clinical work and be home with my family in the evening. That wouldn't have been possible before."

Dr Tom Janzen
Physician and CMIO
London Health Sciences Centre

Giving Time Back to Patients

Before, four meetings could take up his entire day, but now Dr Janzen's time is used efficiently.

"With WebEx, I can virtually travel to Northern Ontario over my lunch hour," he says.

By air, that would be four hours each way, taking two days out of his work schedule.

"I'm able to do two or three presentations on the same day, complete my clinical work and be home with my family in the evening. That wouldn't have been possible before," he adds.

Beyond time efficiency, Cisco WebEx technology also helps Dr Janzen train users in diverse locations over a single session. This helps insure doctors

and nurses always have the most up-to-date skills, without unnecessarily diverting them from caring for patients. And, of course, travel costs have reduced significantly, too.

Canada has a minimum requirement for 50 hours of training per physician per year. Cisco Collaboration solutions are helping free-up around 100 hours of doctors' time per annum, the equivalent of up to 600 additional patient consultations.

Moving to digital healthcare is helping London Health Sciences obtain more detailed, consolidated information concerning patient care journeys. This creates opportunities to improve clinical workflows and continue to enhance in-patient care.

For more information

To find out more about the Cisco solutions featured in this case study, visit

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