

## **HCE helps Lakeridge Health to embark on its digital transformation journey with Integrated Voice Communications.**

Lakeridge Health is Durham Region's acute health care provider. It's dedicated team of more than 5,400 employees, 760 physicians and 1,500 volunteers provide care to 650,000 people living and working in the Durham region.

Lakeridge Health is a dynamic and fast-moving organization, with five hospitals, four emergency departments, a residential treatment centre and more than a dozen community health care locations as well as several regional specialty centres, including the R.S. McLaughlin Durham Regional Cancer Centre, Pinewood Centre for addictions and mental health, and The Shoulder Centre. Lakeridge Health also provides regional eye care, mental health and chronic kidney disease services to residents of Durham Region and beyond.

### **The Challenge**

With people's health in their hands, Lakeridge Health needed a modern, integrated communications system upon which it could rely. Over the years, as Lakeridge Health expanded its scope, it became apparent that the challenges of working with multiple phone systems and multiple networks was proving too costly and was creating precarious delays in critical communications. Aware of advances in information and communications technology, Lakeridge Health turned to ORION to help them begin their journey to digital transformation.

ORION, a not-for-profit organization dedicated to empowering Ontario researchers, educators and innovators, provides a high-speed dedicated fibre optic network committed specifically to supporting research, education, and innovation in Ontario. It connects community institutions, linking them to each other and to a global grid of research, education and innovation networks. The organization's community includes two million users at a hundred universities, colleges, hospitals and research institutions, as well as at the majority of Ontario's school boards. Through its innovative digital networking, ORION enables ground-breaking discoveries and cutting-edge education through its network and provides vital digital tools and expert support.

ORION reached out to HCE, a leading-edge telecommunications company to provide leadership on developing and implementing a voice communications strategy for Lakeridge Health. Given its pedigree, HCE has a deep understanding of the needs of the Municipal, University, School, and Hospital (MUSH) sectors. ORION looked to HCE to help design and deliver a state-of-the-art communications network for Lakeridge Health.

### **The Solution**

To unite all of Lakeridge sites and create a homogenous layer for voice communications, HCE deployed a Cisco soft switch. A softswitch is software that is used to bridge calls made over the legacy public switched telephone network (PSTN) with Voice over Internet Protocol (VoIP) calls made over the data network.

Put more simply, a softswitch provides dial-tone in the VoIP world while allowing connectivity to the traditional telephony network. Softswitches have become the backbone of VoIP communications. The Cisco softswitch performs carrier-grade signalling and call-control tasks such as call routing and circuit selection, within the PSTN gateway infrastructure.

Lakeridge Health chose to obtain this as a managed service from HCE, who owns and operates the Cisco softswitch and provides voice services to Lakeridge Health as a managed service. Thanks to HCE, Lakeridge Health can retain its focus on its core competency, health services, and leave the investment and expertise in voice communications to HCE.

## **Migration**

HCE were vital to the deployment's success. Orion looked to HCE because of their pedigree as a highly capable telecommunications provider with exceptional technical support. HCE provided Lakeridge Health with a rapid turnaround on an extraordinarily complex project.

## **Outcomes**

Lakeridge Health has been able to simplify telephony operations by adopting a service-based approach to telephony. Now, maintenance, management, and support are handled by HCE.

The soft switch has been instrumental in the transformation of communication services. The new system now provides homogenous communications that are a vast improvement over diverse and disconnected telephony on which Lakeridge Health could not rely. The new service base approach has meant cost savings for Lakeridge Health, as they no longer have to invest in infrastructure and can have access to the latest and greatest in telephone communications.

## **Benefits**

Since HCE has deployed the new system, Lakeridge Health has enjoyed a surfeit of benefits. The softswitch provides local and long-distance voice services that previously would have incurred significant costs for Lakeridge Health. Legacy telephony required hardware that took up valuable real estate to accommodate physical telephone switches. Compared to traditional switching systems, the Cisco Softswitch enables Lakeridge Health to reap significant savings in equipment as well as overhead costs related to real estate savings for saved space from the removal of large telephone systems and for electricity and HVAC savings.

Lakeridge health now enjoys complete system reliability with full flexibility. Billing, reporting, and monitoring have been completely transformed for Lakeridge Health, enabling the organization to have better granularity of data. This has had rebound effects on its reporting and billing services. Something that has proven immensely valuable to Lakeridge Health.

Since deployment in March 2020, Lakeridge Health have been enjoying increased reliability and lower costs from the new service. The new telephone network offers more granularity of data and enhanced analytics for reporting that was not possible with the legacy telephone system.

## **Customer Quote**

Lakeridge Health Infrastructure leaders, Brian Harrison and Erin Lamb, are thrilled with HCE. Thanks to HCE, from design to deployment, Lakeridge Health has been able to improve operational and cost efficiency. Lakeridge Health has been able to eliminate separate telephony systems and create a common underlying telephony infrastructure.

## Technical Overview

- Lakeridge Health modernized connectivity by replacing costly Primary Rate Interface (PRI) trunks with Session Initiation Protocol (SIP) trunks
- Originally deployed Call Manager voice infrastructure to replace legacy Nortel PBX infrastructure
- Fully resilient with fail-over
- Over 1000 numbers ported from diverse systems to a single unified voice communications network
- Flexible trunk groups
- High availability
- 60 trunk groups

## About HCE

Servicing the Greater Hamilton Area, HCE is a different kind of telecommunications company. HCE prides itself on being a nimble organisation that moves quickly in response to client needs. Thanks to a team of experienced and dedicated professionals, HCE is able to swiftly deliver on particularly complex demands, providing innovative solutions to highly intricate network challenges. It draws on deep network experience to provide exceptional service to its local community, to help create a healthy, safe and vibrant society. Since 2015, HCE has deployed a 10-gigabit fibre network that serves city facilities, businesses, universities and hospitals.

Playing to its strengths. HCE has developed a solid understanding of the needs of the Municipal, University, School, and Hospital (MUSH) sectors. It counts among its customers; Hamilton Wentworth District School Board, City of Hamilton, The Region of Halton and the Hamilton Police Service), The Weather Network and the Elementary Teachers Federation of Ontario.