

CASE STUDY

Community Healthcare Center Achieves Uninterrupted Operations and Data Protection with the Fortinet Unified SASE Solution

The Rexdale Community Healthcare Centre provides comprehensive, high-quality health services to the Etobicoke community in Ontario, Canada, and nearby municipalities. Its mission is to ensure that every individual in the area receives the best possible medical attention with its family medicine, primary care, and chronic disease management services. Its team of physicians, nurses, and practitioners strives to create an environment where inhabitants feel supported and empowered to achieve optimal well-being.

In delivering on this endeavor, the center has grown aware of the increasing cybersecurity risks in the healthcare industry. Hospitals and medical centers are prime targets for malicious actors who engage in ransomware and phishing attacks that disrupt the patient's journey and put critical information at risk.

Because it is crucial to protect sensitive health data to effectively provide healthcare services, the center started looking for an advanced security solution and protocols to build a robust cybersecurity infrastructure. This solution had to be comprehensive, cost-effective, and able to counter emerging threats while staying ahead of potential attacks.

"We take cybersecurity very seriously," says Raghieb Ali Shah, IT manager at Rexdale Healthcare Centre. "Our team constantly implements policies to ensure regular firmware updates and security patches on our servers and continuously monitors our security posture to look for improvements." The challenge was to ensure the uninterrupted delivery of health services and guarantee the protection of sensitive patient data through a robust security infrastructure that would allow for continuous enhancements.

Ensuring Cost-Effective, Robust Security

When looking for a solution, Raghieb's team had to prioritize cost-effective products that comprehensively integrated various security functions and ensured a holistic approach against a wide range of threats. Rexdale needed to leverage existing resources efficiently and improve cybersecurity without compromising other critical operations. The solution also needed to be highly efficient to guarantee security amid the medical staff's lack of cyberthreat awareness.

After searching in the market and meeting with various vendors, Rexdale decided on Fortinet FortiGate Next-Generation Firewalls (NGFWs). "We chose Fortinet because it met all our requirements and fitted our budget. The local Fortinet partner, Interware Systems, was instrumental in introducing us to Fortinet and helping us implement the solutions," says Raghieb. With FortiGate, the healthcare



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Raghieb Ali Shah
IT Manager,
Rexdale Healthcare Centre

Details

Customer: Rexdale Community Healthcare Centre

Industry: Healthcare

Location: Ontario, Canada

Business Impact

- Improved cybersecurity posture and centralized management across its environment
- Extra security against unauthorized access to electronic health records and sensitive patient data
- Improved control over all devices, protecting the network even with off-site users

center could leverage more robust security and higher networking capabilities, which include intrusion prevention, web filtering, application control, and virtual private networks (VPNs).

Initially, the team deployed a FortiGate at one center to evaluate its performance. After successful testing, it expanded to the other two sites. This phased approach, supported by the Fortinet FortiCare Support Service, would later help Rexdale adopt other Fortinet solutions smoothly. "The FortiGate improves our cybersecurity posture and allows for centralized management across our entire environment," Raghieb says. "We can also segment our network, including areas with printers and medical devices, to prevent unauthorized access."

To improve the security of user authentication processes, Rexdale also deployed FortiToken, a multi-factor authentication (MFA) solution. It enhances verification beyond a password and adds an extra layer of security, making it more difficult for unauthorized users to gain access to electronic health records and sensitive patient data. "Before FortiToken, anyone with a stolen username and password could easily access our network via VPN if they were part of the remote group. Now, even if someone steals some credentials, they can't connect without the additional token."

Unified Security Approach with the Fortinet Security Fabric Platform

The successful deployment and the benefits of FortiGate and FortiToken prompted Rexdale to introduce FortiSASE, which enables secure access to the web, cloud, and applications for the hybrid workforce, while simplifying operations. It combines software-defined wide area network (SD-WAN) with FortiSASE cloud-delivered security service edge (SSE) to extend the convergence of networking and security from the network edge to remote users. "Paired with FortiToken, FortiSASE allows us to secure protected health information [PHI] data without noticeable delays while guaranteeing service continuity," says Raghieb. This capability was critical, as Rexdale needed to ensure compliance with the Personal Health Information Protection Act.

During the rollout, Raghieb and his team divided the Rexdale staff into four groups based on their roles. They started the implementation among the most critical users, and after a successful one-week test, they rolled it out to the next group within a month. FortiSASE enhanced the center's security and gave the IT team centralized management of the Rexdale network. It also facilitated the scalability of cybersecurity services during peak usage time. "Previously, we couldn't control or supervise web browsing of users who connected via VPN and FortiToken outside of our network," Raghieb says. "With FortiSASE, we have control over all our devices, including those off-site, which allows us to protect our network much more effectively."

Rexdale also leveraged the essential features of FortiSASE, such as secure web gateway, cloud access security broker, data loss prevention, and zero-trust network access. Together, they allow the IT team to block access to malicious websites and detect phishing attempts, as well as monitor and control the movement of PHI to prevent unauthorized transfers and limit access to sensitive data based on user roles and context. This integration significantly reduces the risk of unauthorized data exposure and enables quick detection and response to cyberthreats.

To round off its unified Fortinet Security Fabric platform, Rexdale rolled out FortiAP, a wireless access point (AP) that provides organizations with secure, high-performance wireless networking. "We implemented FortiAP because having the same product platform in our network is good for us. Relying on Fortinet instead of any other vendor avoids compatibility issues and blame games," Raghieb says.

Solutions

- FortiGate Next-Generation Firewall
- FortiSASE
- FortiToken
- FortiAP

Services

- FortiCare Support Service

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Raghieb Ali Shah
IT Manager,
Rexdale Healthcare Centre

Rexdale can also segment its Wi-Fi into private and guest networks using FortiAP. The private network is restricted to domain-joined devices, allowing authorized users to access the internet and the local network. On the other hand, the guest network is designated for clients and staff who need internet access on their personal devices. Users can only connect to the internet with proper authorization.

Inspiring Cybersecurity Improvement among Health Centers

The deployment has transformed the healthcare center's cybersecurity posture and allowed the IT team to fulfill its objectives. "We've improved a lot and now can sleep peacefully at night knowing that we have the best tools in place," Raghib says. "In the past, we didn't have this level of network control, and without Fortinet, we'd have been in trouble. Its solutions are reliable, and we recommend them to other Community Health Centers [CHCs] in the area."

The top management at Rexdale is also satisfied with the Fortinet solutions, which strengthen the center's cybersecurity posture and facilitate securing and maintaining cyber insurance. This improvement underlines Rexdale's preparedness against growing and ever-changing cyberthreats. "Approximately 90% of the necessary measures have been implemented, demonstrating significant progress amid all our budget constraints," Raghib says.

The biggest win for the Rexdale IT team has been achieving all its security goals while overcoming the industry's inherent cost challenges. "We believe we are leaders in cybersecurity implementation among CHCs thanks to the adoption of the most recommended and reliable security solutions." This success has prompted Rexdale to evaluate more Fortinet solutions to continue delivering health services, safeguard sensitive patient data, and support the community's well-being.



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