



Bolton
NHS Foundation Trust

AI THREAT DETECTION

Detect Hidden Cyber Attacks

 **VECTRA**[™]

CORE TO CLOUD[™]

THE CLIENT

BOLTON NHS KEEPS THE FOCUS ON QUALITY PATIENT CARE WITH AI-POWERED CYBERATTACK DETECTION AND THREAT HUNTING TECHNOLOGY

WE ARE DUTY BOUND TO PROTECT OUR PATIENT INFORMATION,

Brett Walmsley

CTO of Bolton NHS Foundation Trust.

More than 140,000 people in Bolton and the surrounding area northwest of Manchester depend on Bolton NHS for community health centres and clinics. It also provides district nursing and intermediate care and services at the Royal Bolton Hospital, a hub for women's and children's services in the greater Manchester area.

TRANSFORMING PATIENT CARE

Digital transformation is helping Bolton NHS deliver high-quality care whilst controlling costs.

"Digital technologies make doctors' and nurses' jobs easier," says Walmsley. "They can spend more time with their patients."

Although digital healthcare delivers great efficiencies for patients, it contributes to the significant challenge of protecting patient information across a growing number of mobile devices, medical IoT devices, data centre workloads and cloud services. Healthcare providers have a treasure trove of patient, financial and clinical research data, making healthcare a top target for data theft. Criminals also target healthcare providers for extortion with ransomware, knowing that hospital systems must operate around the clock.

THE CHALLENGES

BOLTON NHS RELIES ON A COMPLEX, HIGHLY INTEGRATED IT ECOSYSTEM TO DELIVER QUALITY CARE.

Doctors and other caregivers have seamless access to patients' electronic health records, medical images and medications. The staff needs access to an array of productivity and administrative applications. The use of cloud is rising, and the healthcare system is migrating to Microsoft Office 365.

Connected medical devices is an area of innovation, from Wi-Fi-enabled infusion pumps to smart MRI machines. Medical IoT devices offer new ways to monitor patients and equipment while improving care and lowering costs. But many of these smart devices have unknown security provenance.

The patient experience is important, too. Patients and their families use the guest Wi-Fi to stay connected and entertained while waiting for appointments or during a hospital stay.

THE SOLUTION

BOLTON NHS USES THE COGNITO® PLATFORM FROM VECTRA® AS THE CORNERSTONE OF SECURITY MONITORING.

An AI-powered cyberattack-detection and threat-hunting platform, Cognito, enables the security operations team to detect and stop hidden attackers in real time, from its data centre and cloud workloads to its user and medical IoT devices.

Bolton NHS has strong security protections – from using virtual desktops to firewalls, intrusion detection, network access controls, endpoint protection and data loss prevention software. Each layer is critical; Cognito gives the IT team visibility into attacks that they simply could not see before.



THE RESULTS

Cognito exposes hidden attackers by collecting, analysing and storing network metadata, relevant logs and cloud events. Always-learning behavioural models enable Cognito to detect attackers in real time so the security operations team can respond quickly and decisively, and have a logical starting point for investigations.

Cognito's ease of use delivered immediate value. Cognito automatically triages, scores and correlates threats to compromised hosts, and maps attack behaviours across hosts so the security operations team can see the narrative of developing attacks. Threats are prioritised on an intuitive user interface.

Cognito has proven itself as the go-to tool of the security operations team at Bolton NHS. Automating threat detection eliminates the time-consuming work of manual threat hunting and investigations, and that makes the security operations team far more efficient and effective.

With Cognito, if something looks odd, you know after a couple of clicks. You see what it looks like whether it's a smash-and-grab or an infiltration. You know Cognito is working.

Cognito filled the gap. We needed to know what we didn't know, and Cognito showed us what was hidden.

Brett Walmsley
Bolton NHS