CASE STUDY

"At COE Security, we build, operate, and transfer world-class security solutions, empowering businesses with resilience and trust."

Joseph Henderson





CASESTUDY

PROTECTING PATIENT DATA AND ENSURING HEALTHCARE SYSTEM INTEGRITY

COE SECURITY LLC
USA | BRAZIL | UAE | INDIA



Measurable Impact Our Security in Numbers



- 1,500+ Global Engagements
- 95% Client Satisfaction
- 10+ Years of Cybersecurity Excellence
- 15K+ Critical Vulnerabilities Identified
- 1M+ Security Incidents Managed
- \$350M+ Costs Saved
- \$2.5B+ Transactions Secured
- 24/7/365 Threat Monitoring & Response
- Proactive Threat Hunting
- Cutting-Edge Security Technologies
- Dedicated Security Advisors
- Zero-Day Exploit Mitigation
- Incident Response Planning & Execution
- Security Awareness Training
- Customizable Security Solutions



Client Profile

A major healthcare provider with multiple hospitals, clinics, and a network of digital platforms offering patient services, diagnostics, and electronic health record management

Challenges Faced

As a healthcare provider managing a vast amount of sensitive patient data and facing increased digital integration, the client was increasingly at risk of cyberattacks targeting medical records, patient privacy, and system uptime. Additionally, the client needed to meet regulatory compliance standards such as HIPAA and ensure the availability and integrity of critical healthcare systems.

- Protecting Patient Data Safeguarding electronic health records (EHRs) and personally identifiable information (PII) from data breaches and unauthorized access
- Ensuring System Availability Preventing disruptions to critical healthcare services and patient care systems due to cyberattacks or system failures
- HIPAA Compliance Meeting the stringent cybersecurity requirements of HIPAA, ensuring privacy and security of patient health information
- Responding to Emerging Threats Addressing new types of cyber threats targeting the healthcare sector, such as ransomware and supply chain attacks

Solution

The healthcare provider partnered with COE Security to implement a comprehensive security solution that focused on protecting patient data, ensuring system availability, and achieving full regulatory compliance.



Compliance & Regulatory Mastery







- ISO 45001
- HIPAA & HITRUST
- NIST & NIST 800-171
- ISO 27001
- PCI DSS
- CMMC
- CIS Controls
- SOC 2
- CCPA & NYDFS
- EU CRA
- FedRAMP
- GDPR
- UK Cyber Essentials
- Essential Eight Australia



Risk Assessment and Compliance Alignment

- Conducted a thorough risk assessment to identify vulnerabilities within the healthcare provider's digital ecosystem
- Mapped existing security measures against HIPAA, HITECH, and other healthcare-specific regulations, identifying gaps and compliance needs
- Developed a tailored cybersecurity strategy to address security weaknesses and ensure ongoing regulatory compliance

Data Protection and Privacy

- Deployed robust encryption protocols for all patient data, both in transit and at rest, to ensure the highest level of protection
- Implemented advanced access controls and multi-factor authentication (MFA) to restrict access to sensitive healthcare information
- Introduced data loss prevention (DLP) tools to monitor, detect, and prevent unauthorized access or accidental leaks of patient data

Security Controls for Healthcare Systems

- Secured healthcare applications, electronic health record (EHR) systems, and medical devices from cybersecurity threats through firewalls, intrusion detection systems (IDS), and endpoint protection
- Implemented real-time monitoring and incident response capabilities to quickly detect and respond to emerging threats such as ransomware and data breaches
- Established system redundancy and failover mechanisms to ensure the continuous availability of critical healthcare systems and services



Our Cybersecurity Arsenal: Beyond Protection- We Build Resilience







- Application Penetration Testing (Thick/Thin)
- Mobile Application Penetration Testing
- API Penetration Testing
- Network Penetration Testing
- Operational Technology Security Testing
- Cloud Penetration Testing
- AI & LLM Security Audit and Pen Testing
- Red Teaming & Social Engineering Services
- Product & Hardware Penetration Testing
- IoT Security
- Security Operations Center Services (24/7)
- Custom Security Services

Regulatory Compliance and Training

- Assisted the healthcare provider in meeting HIPAA, HITECH, and other healthcare compliance requirements by implementing industry-specific security standards
- Conducted regular compliance audits and vulnerability assessments to ensure ongoing adherence to regulations
- Provided training for healthcare staff on cybersecurity best practices, data privacy policies, and the importance of maintaining patient confidentiality

Results

Thanks to COE Security's comprehensive cybersecurity solutions, the healthcare provider achieved:

- Enhanced Patient Data Protection Secured sensitive health information from cyber threats, maintaining patient trust and compliance with regulations
- Increased System Uptime Protected critical healthcare systems from disruptions, ensuring uninterrupted patient care and service availability
- Full Compliance Met HIPAA, HITECH, and other regulatory standards, ensuring legal compliance and reducing audit risks
- Strengthened Cyber Defense Built a proactive defense against emerging threats, safeguarding healthcare systems against ransomware, phishing, and other attack vectors





Industries We Protect with Cutting-Edge Security







- Financial Services
- Healthcare
- Retail
- E-commerce
- Government
- Cryptocurrency
- Blockchain Technology
- Automotive
- Transportation/Logistics
- Energy & Utilities
- Hospitality/Tourism
- Entertainment/Media
- Manufacturing
- Education
- Telecommunications
- HiTech & Information Technology



Client Testimonial

COE Security has been instrumental in strengthening our cybersecurity posture. Their expertise in healthcare security has enabled us to better protect patient data, ensure system availability, and meet regulatory requirements with confidence. Partnering with COE Security has allowed us to focus on providing quality care while keeping our patients' information secure.

"Peace of mind in a world of cyber threats.

That's what we deliver."

Joseph Henderson

