

# Cybersecurity Solutions for End-to-End Protection for one of the Busiest Safety Net Hospitals in New York

## Client Overview

The customer is the largest voluntary, not-for-profit health and teaching hospital system serving South and Central Bronx, servicing more than one million outpatients and 141,000 emergency visits each year.

## The Business Situation

As part of their digital transformation initiatives, the customer required comprehensive cybersecurity solutions to proactively protect their high-risk legacy landscape that included 4,500+ endpoints, 500+ servers, 500+ network & security devices, 100+ applications, and 4500+ users (employees, vendors, contractors). Their needs included – among others, implementation of Multi-Factor Authentication (MFA), a highly secure business-class email & collaboration solution, extended endpoint protection, and Artificial Intelligence (AI) based network protection.

## The Solution

With extensive expertise and rich experience in cybersecurity and data protection solutions for the healthcare domain, GAVS took an integrated approach to providing cybersecurity with AI-based security solutions focused on preventing intrusion, minimizing risk, and increasing resilience. Given below are the different security solution components:

- 24x7 SOC operations for threat monitoring, detection, and prevention
- Security Incident Triage and Response
- AI-based network solution, by partnering with Darktrace
- Collaboration with H-ISAC for real-time Cyber Information Sharing
- Automated Cyber Threat Intelligence and Threat Hunting
- Vulnerability detection in devices, IoT, and clinical applications
- Secure-By-Design: Microsoft Exchange to O365 Migration
  - Microsoft Exchange Online Protection, Advanced Threat Protection
  - Self-Service Password Reset (SSPR) with MFA for authentication
  - Cloud App Security for proactive risk mitigation for cloud services
  - AIP for encryption, to restrict ePHI content access
  - HIPAA compliant collaboration with SharePoint, OneDrive, Forms
  - Secure texting platform for desktops, mobile devices using Teams
- Adaptive, flexible MFA (Windows, Apple, Chrome OS) after assessment
  - Secured SSO access to applications
  - Hybrid cloud-based, on-premise solution for classic, emerging tech
  - Extensive API integration with Syslog and SIEM
  - Enhanced compliance and governance
- Strict adherence to HIPAA and state guidelines like the NY SHIELD Act
- Periodical 3<sup>rd</sup> party audits for vendor adherence to HIPAA/HITRUST
- ZIF™ enabled security functionalities:
  - Thwarting of phishing emails
  - Automation of the following: blocking of cyber attacks; incident response for Command & Control, data exfiltration, and ransomware; incident response in servers through auto scaling capability; repeatable security processes

## Challenges

- High-risk legacy IT landscape
- Undetected vulnerabilities across end user, business, IT environments
- Lack of visibility into threat landscape
- Reactive approach to cybersecurity and data protection

## Solution Highlights

- 24x7 SOC, Managed Detection & Response-MDR
- AI-based cyber defense solution, Darktrace
- Automated Cyber Threat Intelligence, Hunting
- Vulnerability detection, remediation in devices
- ZIF™ for automation of repeatable processes, threat blocking, and incident response
- Tightly integrated MFA solution with secured SSO access to applications
- Exchange Hybrid solution with advanced security features for access and collaboration
- Periodic audits to ensure regulatory compliance

## Solution Outcomes

- 360° protection for the enterprise with multi-pronged AI-led solutions
- Expanded IOCs to proactively block nation/state sponsored & healthcare/HDO specific attacks
- Increased ability to predict threat landscape & scale security initiatives
- Highly secure communication, collaboration between clinicians
- Comprehensive MFA solution to include employees, vendors, contractors, partners
- Protection from identify theft, breaches, weak passwords, phishing attacks through MFA
- Enhanced regulatory compliance, governance, risk management