Case Study

Cybersecurity Assessment

How a Regional Healthcare Network **Reduced 63%** of Its Security Risks in 90 Days

Delivered by SystemSoft Technologies

Client Overview

A regional healthcare provider with six hospitals and 50+ outpatient clinics across the Southeast. Running Epic for EHR, Microsoft 365 for productivity, and a hybrid cloud footprint. Over 2,200 employees, with PHI-heavy workflows and compliance under HIPAA/HITECH.

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Challenges

By early 2024, leadership faced growing cybersecurity exposure:

- No enterprise-wide security posture assessment in 3+ years.
- Overlapping endpoint solutions leading to blind spots.
- Privileged accounts spread across legacy apps with little tracking.
- Increasing phishing incidents targeting clinicians and finance staff.
- Board pushing for third-party validation before an upcoming payer audit.

The network needed a rapid, evidence-based cybersecurity baseline and prioritized remediation plan, not a lengthy multi-year program.

Solution Delivered by SystemSoft

We engaged the CIO, security officer, and compliance team for a 12-week Cybersecurity Assessment and Remediation Pilot.

Phase 1: Risk and Posture Assessment

- Mapped 48 critical apps, user groups, and PHI storage points.
- Conducted a simulated phishing campaign across 1,900 mailboxes.
- Ran vulnerability scans on hybrid workloads.

Key Findings:

- 1,700+ open vulnerabilities across servers.
- 27 dormant privileged accounts.
- 22% of staff failed the phishing test.

Phase 2: Rapid Risk Mitigation

- Rolled out conditional access and MFA on all Microsoft 365 accounts.
- Deployed Sentinel for unified SIEM across on-prem and Azure.
- Privileged accounts reduced from 27 to 6, with PAM enforced.
- Clinician-focused phishing education program launched.

Outcomes Delivered

- ↗ 63% reduction in critical vulnerabilities in 90 days.
- ↗ Phishing test failure rate dropped from 22% to 7%.
- ↗ Privileged access surface cut by 78%.
- ↗ Audit readiness achieved ahead of payer inspection.

What Made It Work

- ↗ Fast, measurable approach: Assessment → remediation in weeks, not months.
- ↗ Aligned with compliance language (HIPAA/HITECH).
- ↗ Embedded with IT + clinical leadership for buy-in.
- ↗ No rip-and-replace: Built on Microsoft security stack already in use.

Conclusion

The project gave leadership a clear security baseline and real risk reduction without a drawn-out overhaul. SystemSoft continues to support this client with quarterly threat simulations and ongoing posture tuning.