

Healthcare Cybersecurity: A Mini Review on Recent Incidents and Preventive Strategies

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ABSTRACT

Healthcare organizations are fast becoming a prime target of cyberattacks, that threaten the sanctity and accessibility to patient data, medical histories, personal details as well as financial information. The impact of cyberattacks in healthcare is wide-ranging from ransomware attacks, phishing attacks and data breaches. These attacks lead to severe disruption not only to organizations but to patients and stakeholders such as data losses, financial costs, operational disruption, reputational damage. Furthermore, healthcare organizations face the extra challenge of complying with strict regulatory requirements. Healthcare organizations are particularly prone to cyberattacks due to the sensitive nature of data, often outdated IT systems which can attract cybercriminals seeking financial gain or to exploit personal information. To prevent cyberattacks, organizations require a multifaceted approach, updating and patching outdated systems to eliminate vulnerabilities. Using data encryption, intrusion detection systems to help protect sensitive data, Regular audit and penetration testing, zero trust architecture (ZTA), employee training and awareness, advanced threat and detection, ensures that the organization can quickly address and mitigate the impact of a cyber incident. Adopting proactive measures and organizing regular audits can help in identifying and addressing possible weaknesses in the system and thus healthcare organizations can protect their data and ensure the integrity and trust of their patients.

KEY WORDS: HEALTHCARE, CYBERATTACKS, VULNERABILITIES, RANSOMWARE, DATA BREACHES.

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