2023 California Area IHS Tribal Leaders Meeting

Cybersecurity Hot Topics

Ransomware, MFA & Cyber-Insurance

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Ransomware

What keeps you up at night...

What are the potential threats to your operations?

Ransomware represents over 70% of healthcare breaches

Frequency of attacks doubled from 2020 to 2021

Several IHS clinics have been hit with ransomware in the last couple of years – at least 2 in California Area 6

Ransomware

By the numbers...

2/3 of healthcare orgs hit with ransomware in 2021

2/3 of those resulted in encryption of health records

Ransom paid was averaged at \$197K

Recovery costs avg \$900K

Ransomware

The bad guys know no boundaries - they know the small clinics are often the easiest targets

HHS HIPAA Individuals Breach Reporting Requirements

Ransomware is always considered a breach

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For all breaches:

- Notify affected patients
 by 1st class mail
- Post front page of website for 90 days
- Report via major media broadcasting

HHS HIPAA Other Breach Reporting Requirements

For breaches affecting 500+ patients

- Report to HHS Secretary within 60 days
- Media notification Press release to local, major news outlets

Multi-factor authentication and email security

The first lines of defense

90% of ransomware attacks come from phishing emails

Multi-Factor Authentication

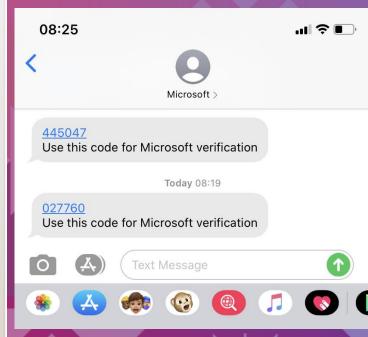
Requiring a combination of 2 or more credentials



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E-Mail Security

Locking your largest door

- Primary communication tool in the workplace
- 300+ billion emails sent and received DAILY
- Employees receive an average of 120 emails a day.
- 94% of cyberattacks start with a malicious email.
- Cybercrime cost more than \$4.1 billion
 in 2020

E-Mail Security

Locking your largest door

- Choose a reputable email host
- Outsource your email security by using cloud email products like Office 365
- Take advantage of advanced threat protection offerings
- Require Multi-Factor Authentication
- Train folks on incident response by holding phishing exercises
- User Awareness (ISSA)
- Invest in protections against e-mail spoofing/impersonation

Cyber Insurance: Liability insurance to cover attacks, malware and breaches.

Where does insurance fit in?

What does a typically policy cover?

Policies typically cover costs that are directly associated with a security breach: documenting and investigating the attack, data recovery and hardware repairs, notifying consumers and regulatory agencies, crisis management and PR damage control, etc.

Depending on your provider, cyber insurance plans may also offer additional forms of first-party and third-party coverage, including paying for the lost income of your business or covering fines, legal fees and settlements that result from a breach.

What does a typically policy cover?



Data breaches



Theft or loss of client information



Business interruption costs



Forensic investigation



Data recovery



Extortion



Fines & penalties



Crisis management costs



Potential legal costs

What DON'T the policies typically cover?

- **Bodily injury**
- Property damage
- Intentional dishonest acts by the insured
- Acts of war and terrorism
- Utility failure



Qualification Process

- Employees must receive regular awareness training
- All PCs must have AV be kept up to date
- All PC's must have endpoint protection
- Central patch management to ensure critical updates are applied in time.
- Must have a network firewall
- Data Backups
- Vulnerability scanning/pen testing
- User accounts and permissions must be actively managed and audited
- Admin and other privileged accounts must be secured using MFA

Disadvantages for small clinics

Many healthcare organizations,
particularly rural health
networks and community hospitals, are seen
as softer targets because their
IT budgets are relatively limited, and they
are more likely to be using dated systems
that are more difficult to protect.

This creates challenges when they shop for cybersecurity insurance, as carriers may charge higher premiums or deny coverage outright based on the higher perceived risk.

How to potentially reduce your premiums and increase chances of coverage

- Implement a Zero Trust architecture
- Create, test and maintain a robust
 Disaster Recovery Plan, COOP plan, and Incident Response Plans.
- Implement, document and test Backup and Recovery solutions
- Have I mentioned MFA? MFA for all users!
- Perform a HIPAA Secure Risk Assessment
 - Use the reported feedback to identity weaknesses and harden your operations as much as possible

How to potentially reduce your premiums and increase chances of coverage using internal audits and certifications

Obtain ISO 27001 Certification

- A standard for IT security procedures developed by the International Organization for Standardization (ISO) in collaboration with the International Electrotechnical Commission (IEC). The ISO 27001 framework sets out requirements for the implementation, operation and continuous improvement of an information security management system
- Be SOC-2 or SOC-Cybersecurity Compliant
 - American Institute of CPAs (AICPA) offers Systems
 Organization Controls (SOC) reports
 - Reports contain detailed information and assurance about the controls at a service organization relevant to security, availability, and processing integrity of the systems the service organization uses to process users' data and the confidentiality and privacy of the information processed by these systems.

How to potentially reduce your premiums and increase chances of coverage using internal audits and certifications

Obtain NIST CSF Compliance At its core, the NIST CSF covers 5 key functions that an organization's cybersecurity program should address: Identify, Protect, Detect, Respond, Recover. These five areas are subdivided into categories (larger topics such as Asset Management or Detection Processes) and subcategories (specific requirements) such as "Response and recovery plans are tested"). To assess how well your business meets these targets, the framework measures successful implementation of these criteria in 4 tiers.

Cybersecurity Hot Topics Cliteria III 4 Ciers.

Cost Benefit Analysis

- Healthcare ransomware attacks cost between \$1M-\$10M
- Insurance premiums have steadily raised over the years
- Insurance providers continue to add more requirements and stipulations for coverage, which can limit access to coverage
- Consider the cost of premiums versus the potential costs of a breach
- Consider the costs of conforming to insurance company's standards

Questions?

THANK YOU!

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Resources:

Ransomware Attacks on Hospitals Have Changed | Cybersecurity | Center | AHA

Ransomware attacks against healthcare organizations nearly doubled in 2021, report says - Thomson Reuters Institute Breach Notification Rule | HHS.gov

U.S. Department of Health & Human Services - Office for Civil Rights (hhs.gov)

Multi-Factor Authentication Fact Sheet (cisa.gov)

What is Email Security? | Microsoft Security

Cyber Insurance for Healthcare: Benefits, Requirements, Premiums | HealthTech (healthtechmagazine.net)

Quarterly Cyber Insurance Update: February 2023 (wsj.com)

What you should know when considering cyber insurance in 2023 | CSO Online

SOC 2® - SOC for Service Organizations: Trust Services Criteria (aicpa.org)

THANK YOU!

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