

Building a Culture of Information Technology Security from the Top Down



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Why is Information Security so Important?

Internal
Concerns

EHR
Staff
BC/DR



HIPAA
HITECH
MU

Regulatory
Concerns

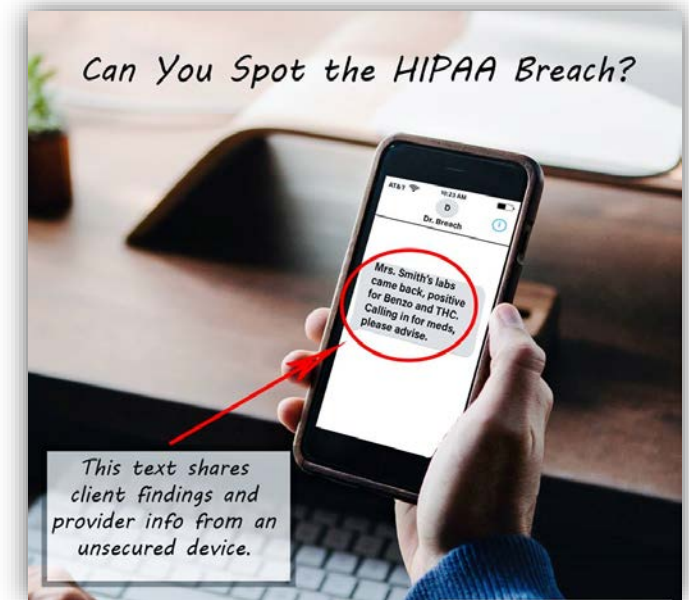
Cyber
Security

External Concerns

Building a Culture of Information Technology Security from the Top Down



Internal Concerns



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External Concerns



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Regulatory Concerns



Building a Culture of Information Technology Security from the Top Down

*Creating a Culture of Information
Technology Security throughout the
organization*



A Great place to start down the road to Security is utilizing the Security Risk Assessment as a guide.

- Information Security Policies
- Workstation/Laptop Security
- Mobile Media Security
- Wireless Security
- Malware Protection
- Configuration Management
- Vulnerability Management
- Secure Disposal
- External Breach Protection
- PHI Transmission Protection
- Password Management
- Access Control and Monitoring
- Remote Access and Authentication Control
- Training and Awareness
- Third Party Security Management
- Incident and Breach Response
- Business Continuity Management
- Auditing
- Physical and Environmental Security

Understanding YOUR scope

- Assess
 - Determine your risks using the SRA as a guide.
- Roadmap
 - Develop a plan that moves forward with attainable goals.
- Implement
 - Commit to the plan and support project leaders.
- Reflect
 - Increased knowledge after implementations and continual process improvement lead to better workflows.



Examples of Administrative Safeguards

- A1 - § 164.308(a)(1)(i) **Standard** Does your practice develop, document, and implement policies and procedures for assessing and managing risk to its electronic protected health information (ePHI)?
- A39 - § 164.308(a)(5)(ii)(A) **Addressable** As part of your practice's ongoing security awareness activities, does your practice prepare and communicate periodic security reminders to communicate about new or important issues?
- A64 - § 164.308(b)(3) **Required** Does your practice execute business associate agreements when it has a contractor creating, transmitting or storing ePHI?



Examples of Physical Safeguards

- PH1 - § 164.310(a)(1) **Standard** Do you have an inventory of the physical systems, devices, and media in your office space that are used to store or contain ePHI?
- PH6 - § 164.310(a)(2)(i) **Addressable** Have you developed policies and procedures that plan for your workforce (and your information technology service provider or contracted information technology support) to gain access to your facility and its ePHI during a disaster?
- PH31 - § 164.310(d)(1) **Standard** Do you remove or destroy ePHI from information technology devices and media prior to disposal of the device?



Examples of Technical Safeguards

- T1 - § 164.312(a)(1) **Standard** Does your practice have policies and procedures requiring safeguards to limit access to ePHI to those persons and software programs appropriate for their role?
- T17 - § 164.312(a)(2)(iii) **Addressable** Does your practice have policies and procedures that require an authorized user's session to be automatically logged-off after a predetermined period of inactivity?
- T28 - § 164.312(b) **Standard** Does your practice have policies and procedures for creating, retaining, and distributing audit reports to appropriate workforce members for review?



Importance of Policies and Procedures

- “It didn’t happen if you don’t write it down.”
- Clearly define boundaries via policies and procedures.
- Build auditable trails.
- Reference regulations in policies when possible.

{Company}	Page 1 of 4
Policy Title: Security Awareness and Training Policy	
Audience: All Employees	
References and Citations: 45 CFR § 164.308(a)(5) - Security Awareness and Training 45 CFR § 164.308(a)(5)(ii)(A) - Security Reminders CMS Security Standard: Security Awareness and Training (AT) NIST Publications SP800-53: Recommended Security Controls for Federal Information Systems and Organizations, SP800-63: Electronic Authentication Guide Information Security Agreement Policy	
Scope: This policy applies to {Company} and all {Company} affiliated facilities, practices, and personnel	

Policy Title: Granting and Revoking Access Privileges Policy
Audience: All Employees
References and Citations: 45 CFR § 164.308(a)(3)(ii)(C) – Termination Procedures 45 CFR § 164.308(a)(3) – Workforce Security 45 CFR § 164.312(a)(1) – Access Control 45 CFR § 164.312(b) – Audit Controls Identification Standard Authentication (Password) Standard Information Security Agreement Policy
Scope: This policy applies to {Company} and all {Company} affiliated facilities, practices, and personnel



Staff Training – Constant Reinforcement

- Create a Security Awareness Program.
- Monthly HIPAA Walkthroughs.
- Security Training at Orientation, along with additional “Online Learning/CE” required of all employees yearly.
- Simulated phishing attacks.
 - Follow-up training required for repeat offenders.
- Mass emails warning about specific phishing attacks (including ransomware).

Cyber Security



Spam

Unwanted e-mail, instant messages, e-cards, and other online communication



Hoaxes

E-mail sent by online criminals that tries to trick you into giving them money



Identity Theft

A crime where con artists get your personal information and access your cash and/or credit



Cyber Security



Viruses/Ransomware

Software programs designed to invade your computer, and copy, damage or delete your data



Root kits/Trojans

Viruses that pretend to be programs that help you while destroying your data and damaging your computer



Spyware/Malware

Software that secretly watches and records your online activities or sends you endless pop-up ads




Phishing


- Currently the most common attack
- Things to look for:
 - Spelling errors and Grammar
 - Check the address
 - Formatting errors
 - Smell Test



Phishing

- When in doubt... DELETE
- Think (hover and read) before you click
- Not all are obvious
- Spearfishing / Whaling
- When in doubt... DELETE

To: xxxxxx@berkeley.edu 

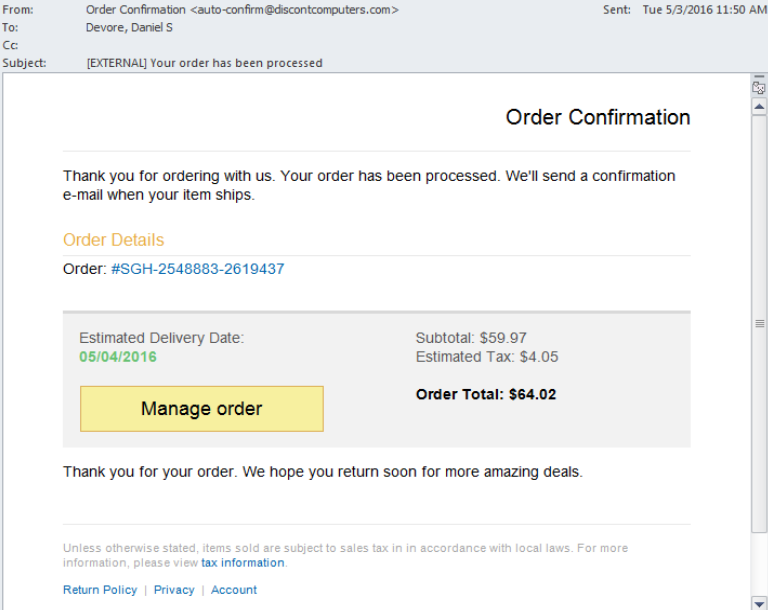
From: ADP PORTAL <director.stics@boyaca.gov.co> 

Date: Tue, 24 Jan 2017 13:31:49

Subject: Update Portal

The Human Resources/Payroll Department has completed the final paystub changes for 2017 tax year.
To view the changes to your paystub information and view/download your W-2 forms (2014 - 2016 tax years), go to: [Adp Portal](#)

We hope you find the changes to your paystub information and any comments you may have.
Yours Sincerely,
Danielle Carrel.



From: Order Confirmation <auto-confirm@discontcomputers.com> Sent: Tue 5/3/2016 11:50 AM
To: Devore, Daniel S
Cc:
Subject: [EXTERNAL] Your order has been processed

Order Confirmation

Thank you for ordering with us. Your order has been processed. We'll send a confirmation e-mail when your item ships.

Order Details
Order: #SGH-2548883-2619437

Estimated Delivery Date: 05/04/2016	Subtotal: \$59.97 Estimated Tax: \$4.05
Order Total: \$64.02	

[Manage order](#)

Thank you for your order. We hope you return soon for more amazing deals.

Unless otherwise stated, items sold are subject to sales tax in accordance with local laws. For more information, please view [tax information](#).

[Return Policy](#) | [Privacy](#) | [Account](#)

Social Media

- Cyber Criminals often use information shared by you, against you.



Disaster Recovery and Business Continuity

- Inability to access your clients information is a both a clinical and a security risk.
- Be Prepared.
- Prioritize systems.
- Develop and Test your Plans.



Internal Business Silos Can be a Security Concern



Examples of Silos creating IT Security issues:

- Renovation/Layout changes of Clinical Areas without Information Security Considerations.
- New Contract for Copiers negotiated.
- Clinical staff implements Collaborative Documentation without proper safeguards.
- Departmental only software/hardware decisions.



Defeating Internal Silos

- Almost all purchases now have a technology component, some minor, some major.
- Get input/direction from IT/Security/Compliance from concept to purchasing to implementation.
- Value IT's opinion more (or at least as much) as the salesman's.
- Deploying technology against the will of your IT department can be challenging but is sometimes necessary.
- Security and Compliance costs money, so spend it wisely and try and cover as many "bases" as possible with your purchases.



Technical Staff

- Staff retention for technical staff can pay big dividends
 - Have enough staff
 - Invest in your equipment and infrastructure
 - Invest in your technical staff's education
 - New hire orientation can be lengthy and costly in production and losses of functionality
 - Remember to tell them thanks

Questions?

