Performing
A Security Assessment

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Keane, Inc.
Overview

- The Data Security issue – what do we need to do?
- How are we going to do it?
- Case Study
HIPAA Security Assessment

What To Do?
Why conduct a Security Assessment?

• Provide an understanding of the impact of HIPAA legislation on business operations and technology infrastructure
  – Identify gaps between current business and technical environments compared to the requirements of HIPAA

  – Evaluate the significance of the vulnerabilities (Risks) in the context of the organization’s operations
Goals of the Risk Assessment

• The questions you are trying to answer in the risk assessment are:
  
  – What could compromise the confidentiality, integrity and availability of the health information in our possession?
  
  – If that information is compromised what is the impact to our business or to the individual?
  
  – What is the probability that it will happen?
What do we need to do?

1. Plan
2. Gather Data
3. Analyze Data
4. Assess Risk
Plan

- Kickoff meeting to provide an understanding of the security assessment process
  - Identify the people involved, confirm staff to be interviewed
  - Identify the security assessment approach
  - Identify the steps to be taken
  - Review high level milestones
Gather Security Data

- Customize security assessment questionnaire for HIPAA specifications
- Assign appropriate questions to representatives from functional areas
- Interview representatives from functional areas using the applicable questionnaires
- Record data
Conduct Gap Analysis

• Compile results of questionnaires

• Identify gaps

• Develop gap analysis report to reveal gaps in compliance between the current environments and the HIPAA requirements
## Gap Analysis - Considerations

<table>
<thead>
<tr>
<th>Results from Gap Analysis should factor:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Purpose of process/system/department</td>
</tr>
<tr>
<td>• Number of users</td>
</tr>
<tr>
<td>• Types of users, internal, external, on-site, remote, contract</td>
</tr>
<tr>
<td>• Type of access, level and scope of access</td>
</tr>
<tr>
<td>• Frequency of use</td>
</tr>
<tr>
<td>• Knowledge level of users</td>
</tr>
<tr>
<td>• Number of locations/sites</td>
</tr>
<tr>
<td>• Physical environment</td>
</tr>
<tr>
<td>• Types of security controls</td>
</tr>
<tr>
<td>• Interdependencies and interfaces</td>
</tr>
<tr>
<td>• Type of information and confidentiality, integrity and availability risks</td>
</tr>
<tr>
<td>• Type of threats intentional or unintentional</td>
</tr>
</tbody>
</table>
Assess Risk

• Each Health Care entity must:
  – Assess potential risks and vulnerabilities to the individual health data in its possession in electronic form
  – Develop, implement and maintain appropriate security measures
Gap Analysis vs. Risk Assessment

• The gap analysis compares where we are to where we need to be in relation to HIPAA compliance. It helps determine the areas where the organization has vulnerabilities.

• The risk assessment will be used to evaluate the significance of the vulnerabilities in context of the organization’s operations.
HIPAA Security Assessment

How To Do It?

Available as Zipped file download on the NCHICA secure Web site – www.nchica.org
HIPAA EarlyView™ Security

HIPAA EarlyView™ (HEV)

• What it is
• What it isn’t
• Deployment in Large Organization
  – Deployment Options
  – Case Study
  – Lessons learned
What it is

• A “First Glance” at an organization’s readiness to comply with the proposed HIPAA Security Regulations

• A self-assessment that provides assistance to an organization seeking insights into the proposed HIPAA regulation

• A guideline in the formulation of a response appropriate to a particular organization’s situation
What it isn’t

• A “Silver Bullet” to eradicate the implications of the HIPAA security regulations

• A self-conducting tool that automates all Security Data Assessment requirements

• A black box – if you put garbage in, you’ll get garbage out
Main Menu

HIPAA EarlyView™

- Start New Questionnaire
- Update Existing Questionnaire
- Run Reports
- About HIPAA EarlyView(TM)
- Exit

NCHICA

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## Question Listing by HIPAA Requirement and Implementation

<table>
<thead>
<tr>
<th>HIPAA Requirement</th>
<th>Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIPAA Implementation</td>
<td>A</td>
</tr>
</tbody>
</table>

### Detailed Question

<table>
<thead>
<tr>
<th>Question Number</th>
<th>Detailed Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Has an external entity or group performed a technical evaluation for BOTH your information systems AND network design for compliance with security standards?</td>
</tr>
<tr>
<td>2</td>
<td>Does your organization have an internal audit group that performs technical evaluations for BOTH information systems AND network design for compliance with security standards?</td>
</tr>
<tr>
<td>3</td>
<td>Does your organization maintain a technical evaluation history for BOTH information systems AND networks?</td>
</tr>
<tr>
<td>4</td>
<td>Does your organization require that BOTH information systems AND networks are reviewed after any additions or significant modifications to design?</td>
</tr>
<tr>
<td>5</td>
<td>Does your organization document all steps taken to ensure and maintain security compliance?</td>
</tr>
</tbody>
</table>

### Chain of Trust

<table>
<thead>
<tr>
<th>HIPAA Requirement</th>
<th>Chain of trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIPAA Implementation</td>
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### Detailed Question

<table>
<thead>
<tr>
<th>Question Number</th>
<th>Detailed Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Does your organization require that a chain of trust partner agreement be signed with all third parties that process protected health information?</td>
</tr>
<tr>
<td>7</td>
<td>Does your organization explicitly state requirements for ensuring confidentiality and integrity of data in any chain of trust agreements?</td>
</tr>
<tr>
<td>8</td>
<td>Does your organization explicitly state requirements for availability of data in all chain of trust agreements?</td>
</tr>
<tr>
<td>9</td>
<td>Does your organization maintain the right to audit the security measures of third parties who process protected health information?</td>
</tr>
</tbody>
</table>
Security Questions

This form is used by a facilitator to conduct the HIPAA Security Questionnaire. It is designed to be used to capture all required information. Comments should be forwarded to DataSecurity@NCHICA.ORG. Thanks!

Question 1

Has an external entity or group performed a technical evaluation for BOTH your information systems AND network design for compliance with security standards?

Answer: □ Yes □ No □ N/A □ Unanswered

Due Diligence Demonstrated: □ Check if YES

Comments: evaluation done by test org - june 1999

Refer To:

Document Name: tech eval

Doc Type: Paper

Periodically Reviewed?: No

Point of Contact: Mr. Contact

Contact Title: boss

Contact FAX: (999) 999-9999

Answer Date (M/D/Y): 6/9/00

Readdress Requirement: □
Report Example

Questions answered with "NO"

<table>
<thead>
<tr>
<th>HIPAA Table</th>
<th>A</th>
<th>HIPAA Requirement</th>
<th>Certification</th>
<th>HIPAA Implementation</th>
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<tbody>
<tr>
<td>Question Number</td>
<td>Detailed Question</td>
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<td>Contact</td>
<td>Contact Phone</td>
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<tr>
<td>2</td>
<td>Does your organization have an internal audit group that performs technical evaluations for BOTH information systems AND network design for compliance with security standards?</td>
<td>Susan Reference</td>
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Report Example

Answers by HIPAA Table

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<th>C</th>
<th>D</th>
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<td>18</td>
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</tbody>
</table>

**Answer Key**
1. Yes
2. No
3. N/A
4. Unanswered
Deployment Options

• Minimal Control
  – Subject Matter Experts are assigned questions and enter data directly into the tool

• Minimal Control combined with training and awareness effort

• Fully Managed and Executed Data Security Assessment
Case Study: Conducting the survey utilizing the tool

- Deployment in a large, disperse organization

- The approach requires that an experienced individual conducts direct interviews with Subject Matter Experts (SMEs) and records the answers for each question into the tool
Executing the Data Security Assessment

1. **Plan:** Determine the lines of business or departments that will participate in the assessment

2. **Gather Data:** Conduct the survey utilizing the tool

3. **Analyze Data:** Review the results of the survey and perform a gap analysis for each department or line of business that indicates vulnerabilities utilizing the reports provided with the tool or other reports created by your organization

4. **Assess Risk:** Perform a risk assessment for each line of business or department to determine the priority and sequence of how these gaps will be addressed for the entire organization
Lessons Learned

• Create a well-defined approach
• Obtain executive commitment
• Assign one responsible individual
• Provide awareness and education
Lessons Learned

• The assessment does not execute itself
  – It must be administered and controlled

• Upfront planning pays many dividends
  – More timely and accurate response
Thank You!

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