A Sensible Approach to HIPAA Security

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HIPAA Health Care
Agenda

1. Introduction – Susan Miller
2. Challenge – Steve Taylor
3. Approach – Susan Miller
4. Assessment – Larry Eighmy
5. Questions
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Valley Mental Health

2008 provided Mental Health and Substance Abuse services to 18,278 consumers in 3 counties

- 65% adult consumers
  - 18 adult treatment programs
  - 10 housing/residential programs

- 26% child/youth consumers
  - 28 child/youth treatment programs
  - 9 residential programs

- 9% served by Medicaid subcontractors
Adult Programs

- **Outpatient (7)**
  - All serve dual diagnosed, substance abuse and mental health
  - 4 Specialize in Outpatient Substance Abuse

- **Partial Day Treatment/Club House (4)**

- **Forensic (2)**

- **Specialized Assessment**
  - PASRR

- **Utilization Review**
  - PEHP
  - CVR

- **Homeless Outpatient**

- **Community Computer Education (multiple sites)**

- **Residential (13)**
  - Independent Living (6)
  - Residential Support (5)
  - Residential Treatment (2)
    - mental health
    - substance abuse
Child/Youth Programs

- **Outpatient (7)**
  - Mental Health (3)
  - Substance Abuse (2)
  - Sex Abuse (1)
- **Autism Center**
- **School Based (8)**
- **After School**
- **Day Treatment**

- **Residential (6)**
  - Observation and Evaluation (2)
  - Sex Abuse Treatment
  - Substance Abuse (3)
- **Therapeutic Foster Homes (25)**
VMH Security

- Privatized in 1987
- Dispersed Network
- Centralized Network
- Small amount of built in security
- HIPAA
Dispersed Network

- Designed a personal computer network
- VMH financially assisted employees buying computers
- Increased access for employees
- Not enough IT personnel to handle problems
- Small amount of built in security
- Threat level for security was small
Centralized Network

- IT able to handle problems without increased staff
- More security inherent with Citrix
- Security threat increased, but network industry as a whole ignored the increase in threats leaving Network Administrators with no way to combat the threat
Small Amount of Built in Security

- VMH decisions actually aided in keeping good security in some places while weakening in others
  - Keeping the Client Database on the AS/400 increased security (AS/400 is hard to compromise by the design of the system)
  - Moving to a Citrix environment increased security
  - VMH Chose to use off brand venders increasing security
  - Threat levels were increasing, however industry still ignored the warnings
  - VMH chose easier access for employees decreasing security
HIPAA…

- Threat levels increased to the point that medical records and personal information was being compromised across the globe
- Industry started to take notice and began to combat attacks
- Government stepped in to attempt to control an out of control situation
- Vague rules were created to try and cover all healthcare businesses regardless of size or budget
- Due diligence became the key words to avoiding
- VMH formed a committee
- VMH named a Privacy Officer
- VMH assigned a security role
Corrective Actions…

- VMH increased the security for external infrastructure
  - Added firewalls and DMZ to separate internet access from intranet access
  - Continued to use off brands and added multiple routers/firewalls to block internet access into the intranet
  - Added encrypted email systems
  - Added vulnerability scanners to constantly test servers and routers for areas in need of upgrades or security updates
Corrective Actions (continued) . . .

• Added intrusion detection systems to alert Administrators of unapproved access into the system

• Added a spam filter system to aid in deterring malware from getting to the employees

• Added a content filter system to keep employees from going to unauthorized or inappropriate websites

• Added a logging system to report unauthorized access of client records

• Submitted 30+ new policies for approval
  • Policies were combined into 2 which though approved never were printed or published
1. Introduction – Susan Miller

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5. Questions
Goals…

- Reduce Costs
  - Travel (conduct portions of the project remotely)
  - Compressed time line
    - Solid Methodology
    - Automated Tools
    - Experience Staff

- Provide simplified written report with tangible action items.
- Leave behind an easy to use tool to track and report progress after the fact.
Three Tasks…

- On-Site Visits and Interviews
- Project Manager Training
- HIPAA Security Assessment
Why Did This Approach Work?

- Very Strong Senior Management Support
- Excellent Security Staff
- Everyone Primed for On-Site Visit and Phone Interview
Staff Interviewed…

- Privacy Officer
- Comptroller
- Corporate Compliance Officer
- Medical Records
- Human Resources
On-Site Issues and Solutions…

Fourteen (14) Sites Visited

- Locked doors
- Paper + paperless
- Fax machines + mail boxes + shred boxes + printers
- Courier service
- Releases
- Cleaning staff
- Other
Interviews Discovered…

- HIPAA privacy is ubiquitous at Valley Mental Health
- Staff understands the confidentiality of client medical records
- Staff understands the HIPAA issues at their unit
- Staff wants to fix the HIPAA issues at their unit
Interviews Discovered (continued) . . .

- Good HIPAA privacy and security culture
- But cannot prove it
- Need to
  - Complete documentation
  - More training
  - Contingency plan role playing/training
  - Build compliance office
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Accelerated Success Criteria…

Our experience has been that the following aspects impact the project schedule the most:

- Clearly defined and documented Methodology, Roles and Responsibilities
- Experienced HIPAA Security and Privacy resources
- Easy to use Collection Tool
- Completed pre-onsite information package
- Availability of staff members
- Availability of application/ePHI inventories
- Availability of infrastructure topologies
- Completed department questionnaires
- Onsite central coordinator
  - No central meeting facility for department interviews
  - Multiple missed or re-scheduled department interviews
Risk / Gap Hybrid Strategy…

Not a full Qualitative Risk Analysis, however, included many risk components that will easily contribute to this effort.

Enablers:

✓ Leveraged VMH’s internal security group. They were very knowledgeable, trained and experienced. VMH had many industry standard controls in place that addressed several standards at once.

✓ VMH’s Security team could easily articulate their configurations and topologies.

✓ VMH’s Security team already completed System Characterization, Threat and Vulnerability Identification, Control Analysis and Impact Ratings.

✓ VMH runs periodic vulnerability scans and performs Ethical Hacking (Pen Tests) on systems.

✓ Team was very open and eager to participate.

✓ Steve provided excellent coordination and sharing between the groups.
Tools…
Assessment Tool...

PATHFINDER™
Security Compliance Dashboard
HIPAA Edition
## Control Descriptions…

<table>
<thead>
<tr>
<th>CFR</th>
<th>Standard</th>
<th>Implementation Specification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GENERAL STANDARDS</td>
<td></td>
<td>Ensure the confidentiality, integrity, and availability of all</td>
</tr>
<tr>
<td></td>
<td>General Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§ 164.308(a)(1)(i)</td>
<td>Security Management Process</td>
<td>*Implement policies and procedures to prevent, detect,</td>
<td></td>
</tr>
<tr>
<td>§ 164.308(a)(1)(ii)(A)</td>
<td>Risk Analysis</td>
<td>*Conduct an accurate and thorough assessment of the</td>
<td></td>
</tr>
<tr>
<td>§ 164.308(a)(1)(ii)(B)</td>
<td>Risk Management</td>
<td>*Implement security measures sufficient to reduce risks</td>
<td></td>
</tr>
<tr>
<td>§ 164.308(a)(1)(ii)(C)</td>
<td>Sanction Policy</td>
<td>*Apply appropriate sanctions against workforce</td>
<td></td>
</tr>
<tr>
<td>§ 164.308(a)(1)(ii)(D)</td>
<td>Information System Activity Review</td>
<td>*Implement procedures to regularly review records of</td>
<td></td>
</tr>
<tr>
<td>§ 164.308(a)(2)</td>
<td>Assigned Security Responsibility</td>
<td>*Identify the security official who is responsible for the</td>
<td></td>
</tr>
<tr>
<td>§ 164.308(a)(3)(i)</td>
<td>Workforce Security</td>
<td>*Implement policies and procedures to ensure that all</td>
<td></td>
</tr>
<tr>
<td>Policy Reference</td>
<td>Federal Registry Comments</td>
<td>CMS Video Training Comments</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------------</td>
<td>-----------------------------</td>
<td></td>
</tr>
<tr>
<td>GENERAL GUIDELINES TO SAFE GUARD PROTECTED</td>
<td>It is important to note that covered entities have the flexibility to implement the standard in</td>
<td>The covered entity must decide whether to put</td>
<td></td>
</tr>
<tr>
<td>RISK ANALYSIS AND ONGOING RISK MANAGEMENT</td>
<td>d. Comment: One commenter asked whether all health information is considered equally</td>
<td></td>
<td></td>
</tr>
<tr>
<td>See Risk Analysis Policy and Procedure above</td>
<td>An entity's risk analysis and risk management measures required by § 164.308(a)(1) must</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SANCTIONS FOR VIOLATING PRIVACY AND SECURITY</td>
<td>Some form of sanction or punishment activity must be instituted for noncompliance. &quot;b.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACTIVITY REVIEW OF INFORMATION SYSTEM SECURITY</td>
<td>Our intent for this requirement was to promote the periodic review of an entity's internal</td>
<td>To promote the periodic review of internal</td>
<td></td>
</tr>
<tr>
<td>ASSIGNMENT OF SECURITY RESPONSIBILITY</td>
<td>We proposed that the responsibility for security be assigned to a specific individual or</td>
<td>One individual must be assigned the responsibility</td>
<td></td>
</tr>
<tr>
<td>ASSIGNMENT AND MANAGEMENT OF INFORMATION</td>
<td>We proposed implementation of a number of features for personnel security, including</td>
<td></td>
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</tbody>
</table>

d. Comment: One commenter asked whether all health information is considered equally “sensitive,” the thought being that, in determining risk, an entity may consider the loss of a smaller amount of extraordinarily sensitive data to be more significant than the loss of a larger amount of routinely collected data. The commenter stated that common reasoning would suggest that the smaller amount of data would be considered more sensitive. Response: All electronic protected health information must be protected at least to the degree provided by these standards. If an entity desires to protect the information to a greater degree than the risk analysis would indicate, it is free to do so. e. Comment: One commenter asked that we add “threat assessment” to this requirement. Response: We have not done this because we view threat assessment as an inherent part of a risk analysis; adding it would be redundant. An entity must identify the risks to and vulnerabilities of the information in its care before it can take effective steps to eliminate or minimize those risks and vulnerabilities.

"Response: The data an entity needs to backup, and which operations should be used to carry out the backup, should be determined by the entity’s risk analysis and risk management process." § 164.306(a). an entity’s risk analysis and risk management measures required by § 164.308(a)(1) must be designed to lead to the implementation of security measures that will comply with § 164.306(a). --- e. Comment: One commenter stated that there is a need to ensure the confidentiality of risk analysis information that may contain sensitive information. Response: The information included in a risk analysis would not be subject to the security standards if it does not include electronic protected health information. We agree that risk analysis data could contain sensitive information, just as other business information can be sensitive. Covered entities may wish to develop their own business rules regarding access to and
<table>
<thead>
<tr>
<th>Compliance Question (M) / Qualifying Questions (Y-YYY)</th>
<th>Question</th>
<th>Response</th>
<th>Source</th>
<th>Maturity Level</th>
<th>Security Compliance</th>
<th>Review Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Does the organization have a comprehensive</td>
<td>Pass</td>
<td>1</td>
<td>1</td>
<td>5 - Well Defined/Documented</td>
<td>Pass 100% 1Q2009</td>
</tr>
<tr>
<td></td>
<td>Has your organization conducted an accurate</td>
<td>Pass</td>
<td>1</td>
<td>1</td>
<td>5 - Well Defined/Documented</td>
<td>Pass 100% 1Q2009</td>
</tr>
<tr>
<td></td>
<td>Has the organization implemented a risk</td>
<td>Pass</td>
<td>1</td>
<td>1</td>
<td>5 - Well Defined/Documented</td>
<td>Pass 100% 1Q2009</td>
</tr>
<tr>
<td></td>
<td>Does the organization have a sanction policy</td>
<td>Pass</td>
<td>1</td>
<td>4</td>
<td>4 - Somewhat</td>
<td>Pass 100% Verify</td>
</tr>
<tr>
<td></td>
<td>Do procedures to review records of</td>
<td>Pass</td>
<td>1</td>
<td>1</td>
<td>5 - Well Defined/Documented</td>
<td>Pass 100% Conflicting Info</td>
</tr>
<tr>
<td></td>
<td>Does the organization have a designated</td>
<td>Pass</td>
<td>1</td>
<td>1</td>
<td>4 - Somewhat</td>
<td>Pass 100% 1Q2009</td>
</tr>
<tr>
<td></td>
<td>Are policies and procedures implemented to</td>
<td>Pass</td>
<td>1</td>
<td>1</td>
<td>5 - Well Defined/Documented</td>
<td>Pass 100% 1Q2009</td>
</tr>
</tbody>
</table>
## Findings and Suggestions

<table>
<thead>
<tr>
<th>Client Notes and Observations</th>
<th>Client Considerations</th>
<th>Dept</th>
<th>Assigned To</th>
<th>Update / Status</th>
<th>Finding / Ancillary Finding</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>R. Client indicated no formal written</td>
<td>Consider implementing an overall</td>
<td>IT</td>
<td>George Washington</td>
<td>George is currently get</td>
<td>XYZ does not have an adequate</td>
<td>Consider implementing an overall security</td>
</tr>
<tr>
<td>R. No formal risk analysis has been</td>
<td>Refer to NIST SP 800-33 and 800-37</td>
<td>IT</td>
<td>Ben Franklin</td>
<td>The organization does not have an</td>
<td>A security risk analysis process should be</td>
<td></td>
</tr>
<tr>
<td>R. Data classification exists</td>
<td>The organization does not have an</td>
<td>IT</td>
<td>The organization should develop a security risk</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>R. Sanction policies were said to be</td>
<td>Client recently terminated an</td>
<td>HR</td>
<td>The organization has adequate</td>
<td>The organization should consider</td>
<td></td>
<td></td>
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<tr>
<td>R. Access was said to periodically restricted</td>
<td>Current Intrusion Prevention System</td>
<td>IT</td>
<td>The organization does not have adequate</td>
<td>A security official has been formally</td>
<td></td>
<td></td>
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<tr>
<td>R. Access has been assigned as</td>
<td>HR</td>
<td>The organization should implement adequate</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>R. Verbal policy and procedures not</td>
<td></td>
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</tbody>
</table>
Compliance %...

Overall Minimum Level Security Controls

- Pass: 36 (60%)
- Fail: 24 (40%)
Dashboard...
Dashboard…
Client Feedback…

- Executive Leadership Team appreciates dashboard view.
- Security Team favored details of the report and maturity model.
- Management Team liked the detailed Action Item list.
- Management liked the ability to show progress to Executives.
- Simplicity and portability of Microsoft Excel spreadsheet.
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Questions…