NEW YORK UNIVERSITY
HIPAA Information Security Policies, Specifications, and Definitions

Title: Policy 2. Security Management Process
Effective Date: January 1, 2005
Amended: February 26, 2016
Issuing Authority: Executive Vice President for Health; Vice President, Information Technology and Chief Information Technology Officer
Responsible Officer: Executive Vice President for Health; Vice President, Information Technology and Chief Information Technology Officer

Policy

New York University strives to ensure the confidentiality, integrity, and availability of electronic protected health care information (EPHI) by implementing a security management process that includes creating and maintaining appropriate and reasonable policies, procedures, and controls to prevent, detect, contain, and correct security violations. Who is affected by this policy is documented in HIPAA Policy 1 – Overview: Policies, Procedures, and Documentation.

Purpose of this Policy

New York University is required under the HIPAA Security Regulations to implement a security management process. This policy reflects New York University’s commitment to comply with such regulations.

Scope of this Policy

Affected by these policies are all covered components that may be designated by the University from time to time, including the NYU School of Medicine, NYU College of Dentistry, and the Student Health Center, and areas designated part of the health care component of the University from time to time but only to the extent that each component performs activities that would make such component a business associate of a component of the University that performs covered functions if the two components were separate legal entities (i.e., support components), including the Office of the Bursar, Controller’s Division, including Accounts Payable, NYU Information Technology (NYU IT), Office of Insurance and Risk Management, Internal Audit, Office of Compliance and Risk Management, Office of General Counsel, Office of Sponsored Programs, University Relations and Public Affairs, Public Safety, Treasury Applications, and University Development and Alumni Relations. The NYU School of Medicine follows HIPAA-related policies and procedures created specifically for its environment; School of Medicine compliance with HIPAA is coordinated through Langone Medical Center. These policies affect all NYU workforce members in covered components.

Operational Requirements

A. New York University’s security management process will include the following:
   1. New York University’s commitment to take reasonable steps to ensure the confidentiality, integrity, and availability of EPHI.
   2. Institution of security controls, policies, and procedures that appropriately and reasonably prevent, detect, contain, and correct identified risks to the confidentiality, integrity, and availability of EPHI.
   3. Periodic reviews and revisions of security controls, policies, and procedures.
   4. Ongoing training and awareness for New York University’s workforce members on these security controls, policies, and procedures.

B. A risk analysis and risk management program shall be used as the basis for New York University’s Security Management Process administered as set forth in New York University’s Risk Analysis operational specification (see 2.A) and Risk Management operational specification (see 2.B).
C. New York University administration, including the University’s EPHI Security Officer, shall be responsible for security management. These responsibilities shall include:
   1. Approving New York University’s information security policies, procedures, and controls.
   2. Approving, supporting, and, as appropriate, implementing New York University’s Security Sanctions operational specification (see 2.C).
   3. Approving and supporting New York University’s security awareness and training programs.
   4. Creating and enforcing policies that require appropriate clearance and training before a workforce member is permitted to access any EPHI.

D. New York University’s EPHI Security Officer shall oversee New York University’s security management process.

E. Certain supervisors and managers at New York University have stewardship responsibilities for EPHI which include the following security management responsibilities:
   1. Protecting the confidentiality, integrity, and availability of EPHI for which they are responsible.
   2. Identifying and approving the use of security policies, procedures, and controls for the EPHI for which they are responsible.
   3. Authorizing appropriate access by New York University’s workforce members to the EPHI for which they are responsible.
   4. Immediately reporting risks, security incidents, and violations of New York University’s policies, procedures, and controls relating to the EPHI for which they are responsible.
   5. Supporting investigations of security violations with respect to the EPHI for which they are responsible.
   6. Contributing to New York University security training and awareness programs for workforce members.

F. New York University’s workforce members shall be responsible for protecting EPHI within their control from unauthorized access, modification, destruction, and disclosure, are expected to comply with these security policies and procedures, and are responsible for doing so. Responsibilities of workforce members who have access to EPHI include:
   1. Using New York University data processing resources that contain EPHI only for appropriate purposes and consistent with their approved level of access and authorization.
   2. Being aware of and using New York University-approved security controls.
   3. Complying with New York University security policies, procedures, and standards.
   4. Immediately reporting any security violation to his/her supervisor, the EPHI security officer of the covered component, or the University’s EPHI Security Officer.
   5. Attending appropriate New York University security training and awareness programs.

G. HIPAA REGULATORY INFORMATION

   CATEGORY: Administrative Safeguards
   TYPE: Standard
   HIPAA HEADING: Security Management Process
   REFERENCE: 45 CFR 164.308(a)(1)(i)
   SECURITY REGULATION STANDARDS LANGUAGE: “Implement policies and procedures to prevent, detect, contain and correct security violations.”

Operational Specifications

2.A Risk Analysis

   1. Each covered component of New York University will take reasonable steps to identify and prioritize the risks to the confidentiality, integrity, and availability of EPHI on a periodic basis. A documented risk analysis process as approved by the covered component’s EPHI security officer shall be used as the basis for the identification, definition, and prioritization of potential risks and vulnerabilities to EPHI. The risk
analysis shall include, where appropriate, the judgments used, such as assumptions, defaults, and uncertainties, and explicitly state and document them. The risk analysis shall be based on the following steps:

   a. **Inventory** – A periodic inventory of EPHI Systems and the security measures implemented to protect those systems will be conducted by the covered components.

   b. **Security measures analysis** – The security measures that have been implemented to protect EPHI Systems shall be analyzed, including preventive and detective controls.

   c. **Risk likelihood determination** – The identified risks shall be rated by assigning a ratio or percentage or by some other appropriate means that indicates the probability that a vulnerability is exploited by an actual threat. Three factors shall be considered when assigning the rating: 1) type of vulnerability, 2) existence and effectiveness of current security controls, and 3) threat motivation and capability.

   d. **Vulnerability identification** – Vulnerabilities of EPHI shall be identified and prioritized by reviewing vulnerability sources and performing security assessments on a periodic basis.

   e. **Threat identification** – Potential threats to the confidentiality, integrity, and availability of EPHI shall be identified, such as natural, human or environmental threats, and prioritized.

   f. **Impact analysis** – The impact analysis shall determine the effect on the confidentiality, integrity, or availability of EPHI that results if a threat successfully exploits a vulnerability.

   g. **Risk determination** – The information obtained in the six steps above shall be used to identify the level of risk to EPHI. The risk determination shall be based on:
      i. The likelihood a certain threat attempts to exploit a vulnerability.
      ii. The likely level of impact should the threat successfully exploit the vulnerability.
      iii. The adequacy of planned or existing security measures.

2. Each covered component shall update the risk analysis on a periodic basis and shall use the risk analysis to inform its risk management process as set forth in New York University’s Risk Management operational specification (see 2.B). In addition to the periodic risk analysis updates that New York University completes, the risk analysis shall be updated when environmental or operational changes arise that impact the confidentiality, integrity, or availability of EPHI. Such changes include:

   a. New threats or risks that impact EPHI.

   b. A security incident that impacts EPHI.

   c. Changes to New York University’s or the covered component’s information security requirements or responsibilities that impact EPHI. (e.g., new state or federal regulation, new role defined in New York University, new or modified security control has been implemented).

   d. Changes to New York University’s or the covered component’s organizational or technical infrastructure that impact EPHI. (e.g., addition of a new network, new hardware/software standard implemented, new method of creating, receiving, maintaining, or transmitting EPHI).

   e. Hardware and software upgrades.

3. The documented risk analysis results shall be reviewed by New York University’s EPHI Security Officer, the EPHI security officer of the covered component, and appropriate members of the New York University administration, and shall be maintained in a secure fashion.

4. **HIPAA REGULATORY INFORMATION**

   CATEGORY: Administrative Safeguards
   HIPAA HEADING: Risk Analysis
   REFERENCE: 45 CFR 164.308(a)(1)(ii)(A)
   SECURITY REGULATION IMPLEMENTATION SPECIFICATION LANGUAGE: “Conduct an accurate and thorough assessment of the potential risks and vulnerabilities to the confidentiality, integrity and availability of electronic protected health information held by the covered entity.”

2.B **Risk Management**

1. Each covered component of New York University, in order to protect the confidentiality, integrity, and availability of EPHI, will implement security measures designed to reduce the risks to EPHI to a reasonable and appropriate level.
2. The risk management process implemented by each covered component and conducted periodically shall be based on a documented process that is used as a basis for selection and implementation of the security measures. The risk management process will include the following:
   a. Assessment and prioritization, on the basis of risks, of EPHI Systems.
   b. Selection and implementation of reasonable, appropriate, and cost-effective security measures to manage, mitigate, or accept identified risks.
   c. Security training and awareness on implemented security measures to covered component workforce members.
   d. Periodic evaluation and revision, as necessary, of the covered component’s security measures.

3. The risk management process, as an implementation process, is led by the covered component’s EPHI security officer in consultation with the University’s EPHI Security Officer and shall be based on the following:
   a. Risk analysis – The covered component’s risk analysis is the basis of its risk management activities, as set forth in New York University’s Risk Analysis operational specification (see 2.A).
   b. Risk prioritization - Risks identified in the covered component’s risk analysis shall be prioritized on a scale from high to low based on the potential impact to EPHI Systems. Information on the probability of occurrence shall be based upon the covered component’s risk analysis. The highest priority shall be given to those risks with unacceptably high risk ratings. Resources, as available, shall be allocated according to the identified risks.
   c. Method identification – The appropriate security methods to minimize or eliminate identified risks to EPHI shall be identified. Security methods shall be identified based on the nature, feasibility, and effectiveness of the specific security method.
   d. Cost-benefit analysis – The covered component shall identify and define the costs and benefits of implementing or not implementing the identified security methods.
   e. Security method selection – Based on the cost-benefit analysis, the covered component shall select the most appropriate, reasonable, and cost-effective security methods for reducing identified risks to EPHI.
   f. Assignment of responsibility – The selected security methods shall be implemented by the covered component’s EPHI security officer and other workforce members who have assigned security responsibility and the appropriate expertise.
   g. Security method implementation – The selected security methods shall be properly implemented by the responsible workforce members. The covered component’s EPHI security officer is responsible for overseeing this implementation.
   h. Security method evaluation – The selected and implemented security methods shall be evaluated and revised, as necessary, by the covered component’s EPHI security officer.

4. The covered component’s strategies for managing risk shall be proportionate with the risks to and sensitivity of EPHI. The covered component’s security measures shall reasonably protect the confidentiality, integrity, and availability of EPHI and the risk will be managed on a continuous basis. The following methods are used to manage risk:
   a. Risk acceptance
   b. Risk avoidance
   c. Risk limitation
   d. Risk transference

5. The results of the risk management process shall be documented in writing, reviewed by New York University’s EPHI Security Officer, and maintained by New York University and by the covered component.

6. HIPAA REGULATORY INFORMATION

   CATEGORY: Administrative Safeguards
   HIPAA HEADING: Risk Management
   REFERENCE: 45 CFR 164.308(a)(1)(ii)(B)
SECURITY REGULATION IMPLEMENTATION SPECIFICATION LANGUAGE: "Implement security measures sufficient to reduce risks and vulnerabilities to a reasonable and appropriate level to comply with § 164.306 (a) [Risk analysis]."

2.C Security Sanctions

1. New York University is committed to applying appropriate sanctions against New York University workforce members who fail to comply with the security policies and procedures of New York University and of the relevant covered component.

2. Each covered component of New York University will take reasonable steps to ensure that applicable security policies and procedures are adhered to by New York University workforce members. Reasonable compliance with these security policies and procedures is necessary to safeguard the confidentiality, integrity, and availability of EPHI.

3. Each covered component will provide periodic security training for workforce members about the applicable New York University and covered component security policies and procedures.

4. Each covered component shall impose appropriate sanctions against workforce members who do not comply with applicable New York University and covered component security policies and procedures. The imposition of those appropriate sanctions shall be a documented process.

5. Sanctions shall be proportionate to the severity of the non-compliance with the applicable security policies and procedures and may reflect, among other things, the extent to which the non-compliance affects the confidentiality, integrity, and availability of EPHI, and the employee’s awareness or knowledge of the non-compliance.

6. New York University’s EPHI Security Officer, the EPHI security officer at the covered component, the Human Resources and Legal departments, and other departments or personnel, all as applicable and appropriate, shall be involved in identifying and defining appropriate sanctions. Sanctions may include, but are not limited to:
   a. Oral warnings
   b. Suspension or limitation of access to New York University’s and/or the covered component’s information systems, repositories, and conduits that contain EPHI
   c. Required re-training
   d. Letter of warning
   e. Suspension from work
   f. Termination

7. HIPAA REGULATORY INFORMATION

   CATEGORY: Administrative Safeguards
   HIPAA HEADING: Sanction Policy
   REFERENCE: 45 CFR 164.308(a)(1)(ii)(C)
   SECURITY REGULATION IMPLEMENTATION SPECIFICATION LANGUAGE:
   “Apply appropriate sanctions against workforce members who fail to comply with the security policies and procedures of the covered entity.”

2.D Information System Activity Review

1. New York University is committed to taking reasonable and appropriate steps to review, on a periodic basis, records of activity on its information systems that create, receive, maintain, or transmit EPHI.

2. Each covered component of New York University will take reasonable and appropriate steps to ensure that EPHI Systems have the appropriate hardware, software, or procedural auditing mechanisms installed on them to enable review of information system activity on a periodic basis. The covered component’s risk
analysis shall determine the level and type of auditing mechanisms that will be implemented on EPHI Systems. Examples of generated reports of information system activity auditable events include:

a. Failed authentication attempts
b. Use of audit software programs or utilities
c. Access of particularly designated EPHI (e.g., EPHI regarding VIPs)
d. Information system start-up or shutdown
e. Use of privileged accounts (e.g., system administrator account)
f. Security incidents

3. When feasible, these information system activity auditing mechanisms will generate the following information about information systems activity:
   a. Date and time of activity
   b. Description of attempted or completed activity
   c. Identification of user performing activity
   d. Origin of activity (e.g., I/P address, workstation ID)

4. The covered component shall review logs of information system activity audit mechanisms implemented on EPHI Systems on a periodic basis. Findings from the risk analysis shall be used to help determine the frequency of such reviews; however, each covered component should review the audit mechanism on a periodic basis. The following factors should be considered with respect to the frequency of reviews of audit mechanisms:
   a. The merit or sensitivity of the EPHI on the EPHI Systems.
   b. The importance of the applications operating on the information systems.
   c. The degree to which the information systems are connected to other EPHI Systems and the degree to which that connection poses a risk to the EPHI.

5. The information system activity audit mechanism review process shall include:
   a. Definition of what activity is significant.
   b. Procedures for defining how significant activity will be identified and, if appropriate, reported.
   c. Procedures for maintaining the integrity of records of significant activity.
   d. Identification of which workforce members will review records of activity.
   e. Definition of which activity records need to be archived and for what duration.

6. For each of the EPHI Systems, the covered component shall maintain and follow a specific procedure for conducting information systems activity review, including review of information systems activity and review of auditable events on a periodic basis. These procedures shall identify the information systems activity to be reviewed and the auditing mechanism to be used to capture the information systems activity. The audit results shall be retained for six years.

7. HIPAA REGULATORY INFORMATION

   CATEGORY: Administrative Safeguards
   HIPAA HEADING: Information System Activity Review
   REFERENCE: 45 CFR 164.308(a)(1)(ii)(D)
   SECURITY REGULATION IMPLEMENTATION SPECIFICATION LANGUAGE: “Implement procedures to regularly review records of information system activity, such as audit logs, access reports and security incident tracking reports.”

Policy Definitions

Auditable event
Availability
Business associate
Confidentiality
Covered component
Data steward
Electronic Protected Health Information (or EPHI)

EPHI systems
HIPAA Security Regulations
Information system
Integrity
Protected health information
Risk
Security incident
Security measures
Threat
Vulnerability
Workforce member

Related HIPAA Documents

HIPAA Policy 1 – Overview: Policies, Procedures, and Documentation
HIPAA Policy 7- Security Incident Procedures
HIPAA Operational Specification 7.A - Response and Reporting
HIPAA Policy 16 - Audit Controls
HIPAA Operational Specification 17.A – Mechanism to Authenticate Electronic Protected Health Information
HIPAA Privacy Regulations covered component’s Minimum Necessary Policy


