WHITE PAPER

HIPAA Security Rule notice of proposed rulemaking: physical safeguards

The fourth white paper in a series addressing the specifics of physical safeguard changes in the NPRM.

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Purpose

On December 27, 2024, the Office for Civil Rights (OCR) at the U.S. Department of Health and Human Services (HHS) issued a notice of proposed rulemaking (NPRM) to strengthen the cybersecurity protections of electronic protected health information (ePHI). This white paper provides a guide for Health Insurance Portability and Accountability Act (HIPAA) regulated entities (i.e., covered entities [CEs] and business associated [BAs]) to understand the proposed new requirements to the HIPAA Security Rule.

Due to the extensiveness of the proposed changes to the HIPAA Security Rule, this white paper is one of a series of six that divides the changes into the following subsections: (1) HIPAA Security Rule NPRM overview, (2) definitions, (3) administrative safeguards, (4) physical safeguards, (5) technical safeguards, (6) organizational requirements and documentation requirements. The series will go into depth with the proposed changes to the HIPAA Security Rule as outlined in the NPRM.

This white paper is the fourth in this series and provides information on physical safeguards.

Background

The HIPAA Security Rule was last updated in 2013, and, since then, both the healthcare environment and the cybersecurity threat landscape have experienced significant changes. The current NPRM has been put forward to help address these changes, and is essential to clarify compliance requirements for regulated entities and the courts, ensuring more consistent and effective enforcement of the legislation. HHS emphasizes the flexibility and scalability of the proposed updates, recognizing that these rules can be adapted based on an organization's unique risk tolerance and the diverse nature of regulated entities, ranging from small healthcare practices to large hospital systems.

HHS recognizes the reality of ever-evolving cyber threats, acknowledging that "there is no such thing as a totally secure system that carries no risks to security." However, the proposed updates are designed to be part of a comprehensive security management program, with an understanding that small practices may face greater risks due to limited resources. The requirements listed in the NPRM are the baseline, and regulated entities can implement additional safeguards as long as they do not conflict with the HIPAA Security Rule.

One critical issue identified by the OCR is that many organizations lack a clear understanding of where all the ePHI data they are entrusted to protect is located. Without this understanding, it is impossible to conduct a meaningful risk analysis. The first step in any effective security management strategy must be a clear inventory of the ePHI being collected, stored, and transmitted, as this knowledge forms the foundation for identifying vulnerabilities and implementing appropriate safeguards to protect patient data. The goal of the NPRM is to enhance organizations' ability to identify and track all locations of electronic protected health information (ePHI) by strengthening risk analysis requirements and promoting more comprehensive data inventory practices, thereby laying a stronger foundation for effective security measures and improved patient data protection.

The history and evolution of the HIPAA Security Rule

The HIPAA Security Rule, published in 2003 was designed to create a national standard for safeguarding ePHI through administrative, physical, and technical measures for CEs (e.g., health plans, healthcare clearinghouses, and healthcare providers) who electronically transmit health information. The HIPAA Security Rule standards require CEs to implement reasonable and appropriate safeguards to protect individually identifiable health information (IIHI) in electronic form. The standards were put into place to ensure the confidentiality and integrity of IIHI, protect against any reasonable anticipated

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threats or hazards to the security or integrity of IIHI (including unauthorized uses or disclosures), and ensure compliance with the administrative simplification provisions of HIPAA.

In 2013, the HIPAA Omnibus Rule was introduced, modifying the HIPAA Privacy, Security, Enforcement, and Breach Notification Rules under the Health Information Technology for Economic and Clinical Health (HITECH) Act and the Genetic Information Nondiscrimination Act. The Omnibus Rule expanded the application of the Security Rule's administrative, physical, and technical safeguards BAs, holding them to the same standards as CEs. This change effectively broadened the scope of regulated entities to include BAs.

As published, the HIPAA Security Rule has utilized the legal language of "reasonable and appropriate" to give regulated entities flexibility when implementing security measures. Regulated entities must consider several factors when determining how to comply with these standards, including their size, complexity, and capabilities; their technical infrastructure, hardware, and software capabilities; the cost of security measures; and the likelihood and severity of potential risks to ePHI.

Why the update?

Given the recent, immense changes to the environment in which health care is provided, HHS has provided the following reasons for the NPRM:

- Technological evolution: Updates are necessary to address the significant advancements in technology since
 the 2013 HIPAA Omnibus Rule. As digital health tools, telemedicine, and cloud computing continue to evolve,
 the law must be updated to account for new methods of storing, transmitting, and securing ePHI, ensuring the
 HIPAA Security Rule remains relevant and effective in safeguarding sensitive data.
- Cybersecurity threats: The healthcare sector is increasingly targeted by cyberattacks, including ransomware, phishing, and data breaches. These attacks have become more sophisticated, highlighting the urgent need for stronger security measures to protect ePHI. The sharp rise in data breaches across the healthcare sector (Table 1) not only highlights a troubling trend but also serves as a stark warning: the current safeguards are no longer sufficient to protect sensitive health information in an increasingly digital environment. This surge in breaches underscores the urgent need for the enhanced cybersecurity strategies outlined in the NPRM, including advanced encryption, multi-factor authentication, and continuous monitoring. These measures are no longer optional but essential to safeguarding patient trust and maintaining the integrity of the healthcare system.
- HHS and NIST guidelines: To ensure comprehensive protection of ePHI, healthcare organizations must align with best practices outlined by HHS and the National Institute of Standards and Technology (NIST). While both organizations have published materials, it is apparent that a change in legislation is required to enforce adopting standard security best practices. By using these guidelines, healthcare entities can bolster their security frameworks, address emerging risks, and implement technical safeguards that mitigate vulnerabilities, ensuring the confidentiality and integrity of patient data.
- Legislative intent: The proposed updates aim to clarify the original intent of HIPAA, ensuring that the law is
 interpreted with a focus on safeguarding patient privacy and security in an ever-changing technological
 landscape. This ensures that courts and regulators uphold the spirit of the law, not just the specific language. By
 focusing on the underlying intent of the law, these updates promote more effective enforcement and protection
 of ePHI in today's dynamic healthcare environment.
- Enforcement insights: OCR has identified recurring gaps and weaknesses in healthcare security practices, which continue to pose risks to ePHI. These findings emphasize the need for continuous monitoring, regular risk analyses, and proactive remediation to address vulnerabilities before they can be exploited. By addressing these weaknesses, healthcare organizations can improve their overall security posture, ensuring compliance with HIPAA regulations and protecting patient data from emerging threats.

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Breach data

HHS has reported HIPAA/HITECH breach data annually since 2009. The table below shows that data as reported to Congress. HHS used this data in creating the NPRM.

| Year | Small breaches (fewer than 500 affected individuals) | | Large breaches (500+ affected individuals) | | Total | |
|------|--|----------------------|--|----------------------|--------------|----------------------|
| | Breach count | Affected individuals | Breach count | Affected individuals | Breach count | Affected individuals |
| 2018 | 63,098 | 296,948 | 302 | 12,196,601 | 63,400 | 12,496,549 |
| 2019 | 65,771 | 284,812 | 408 | 38,723,966 | 63,179 | 39,017,778 |
| 2020 | 66,509 | 312,723 | 656 | 37,641,403 | 67,165 | 37,954,126 |
| 2021 | 63,571 | 319,215 | 609 | 37,182,558 | 64,180 | 37,501,773 |
| 2022 | 63,966 | 257,105 | 626 | 41,747,613 | 57,592 | 42,004,718 |

Table 1: Breaches of PHI reported to Congress 2018 to 2022

HIPAA Security Rule physical safeguards

The current physical safeguards in the HIPAA Security Rule consist of four standards: (1) facility access controls, (2) workstation use, (3) workstation security, and (4) device and media controls.

While the current legislation is expansive, OCR's enforcement efforts and best practices for improving the cyber protections of ePHI have identified significant gaps. For instance, regulated entities have often misinterpreted the standards given as "addressable" as "optional." (Per HHS, "addressable" has never meant "optional;" all addressable standards must be satisfied.) Also, gaps noted in recent breaches, such as failures to implement facility access control procedures and the loss of laptops and flash drives not configured for encryption, underscore these gaps in physical safeguard compliance. Additionally, the healthcare landscape has shifted significantly since the last update in 2013. The transition to cloud-based infrastructure has transferred much of the responsibility for physical safeguards to BAs. Furthermore, the rise in remote work and workforce mobility has changed operations and physical environments.

The NPRM was introduced to mitigate these gaps, and various current organizational policies, procedures, and practices may need to be revised to align with these changes. Therefore, it is essential to ensure that stakeholders are educated about the updated physical safeguards and their implications, so that the impact of the changes is fully understood and can informed decisions operations can be made.

NPRM updates to physical safeguards

The subsections below detail the key updates that the NPRM proposes to make to the HIPAA Security Rule physical safeguards, as well as examples of the standards in use.

General rules

The NPRM seeks to remove the concept of "addressable" throughout the HIPAA Security Rule. As a result, all physical safeguards are now classified required, and a regulated entity should use its risk analysis and management program to

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understand how to reasonably and appropriately implement measures to support the required safeguards. Please note, however, that the HIPAA Security Rule's physical safeguards are defined as a baseline, and HIPAA regulated entities can choose to implement additional safeguards if they do not conflict with the HIPAA Security Rule.

HHS now requires that security measures must be documented in writing and implemented both for systems containing ePHI and for relevant electronic information systems. (The NPRM defines a relevant electronic information system as "an electronic information system that creates, receives, maintains, or transmits [ePHI] or that otherwise affects the confidentiality, integrity, or availability of ePHI.") These required security measures must be reviewed and tested for effectiveness at least every 12 months, and whenever there is a change in the regulated entity's environment or operations that may affect ePHI. Examples of this type of change can range from organizational acquisitions to changes in state law.

Facility access controls

The NPRM modifies the standard for facility access controls to clarify that regulated entities must have written policies and procedures for facility access controls that address physical access to electronic information systems and the facilities housing them. Contingency operations, facility security plans, and access control and validation policies and procedures must be implemented and documented in writing. The facility security plan must apply to all facilities and the equipment within the facilities. Additionally, procedures should be in place to authorize and manage role-based access to facilities. Security cameras should be included among physical security components requiring documentation of repairs and modifications in maintenance records. Security measures must be reviewed and tested at least once every 12 months.

The example below provides an illustration of the standard in use, as well as relevant action items:

- Standard in use example: Regulated Entity ABC currently maintains maintenance records for physical security components. Currently, security cameras are not included in this process.
- Action items: Regulated Entity ABC needs to update its maintenance records process and procedures to include security cameras as part of the physical security components, with records maintained for at least six years.
 Additionally, the regulated entity will need to ensure all camera repairs and modifications are properly documented and reviewed regularly.

Workstation use

The NPRM proposes several changes to acknowledge the increasingly mobile nature of workstations that connect to regulated entity workstations. Such modifications include requiring regulated entities to have written policies and procedures governing the use of all workstations, including mobile ones, that access ePHI or relevant electronic information systems. These policies should address the physical attributes of workstations, such as the movement of workstations within or outside the facility and their removal. The policies and procedures must be reviewed and tested at least once every 12 months.

The example below provides an illustration of the standard in use, as well as relevant action items:

- Standard in use example: Regulated Entity ABC's current workstation use policies do not include all relevant electronic information systems now covered under the HIPAA Security Rule NPRM, leading to potential compliance gaps.
- Action items: Regulated Entity ABC needs to update its workstation use policies and procedures to include all
 electronic information systems as defined by the latest HIPAA Security Rule NPRM. Additionally, the entity should
 ensure that these policies are reviewed and tested at least once every 12 months to maintain compliance.

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Workstation security

The NPRM proposes to modify the standard for workstation security to require regulated entities to implement physical safeguards in line with their written workstation use policies and procedures for workstations that access ePHI or relevant electronic information systems. These safeguards should be updated as policies change. Entities should assess factors, such as workstation location and the risk of theft or unauthorized access, and apply physical security measures like privacy screens and cameras. Additionally, role-based security awareness training should include these physical safeguards, especially for mobile devices, to ensure staff understand their role in protecting ePHI.

The example below provides an illustration of the standard in use, as well as relevant action items:

- Standard in use example: Regulated Entity ABC's recent risk analysis reviewed the physical safeguards
 implemented at the facility. During the inspection, it was noted that privacy screens are not used in the public
 lobby areas, which may expose workstations to unauthorized viewing of ePHI and create a potential security
 vulnerability.
- Action items: Regulated Entity ABC needs to implement privacy screens on all workstations in public lobby
 areas to prevent unauthorized viewing of ePHI. Additionally, the entity should update its physical security policies
 to include the use of privacy screens in high-traffic or public spaces and ensure staff are trained on these updated
 measures.

Technology asset controls

The NPRM proposes renaming the "device and media controls" standard to "technology asset controls" to better reflect the diverse components within a regulated entity's electronic information system and make clearer to regulated entities their compliance obligations for technology assets that could impact the confidentiality, integrity, or availability of ePHI, including stationary devices (e.g., servers, desktop computers) and mobile devices (e.g., smartphones, tablets, USB drives). In addition, the NPRM would require regulated entities have policies and procedures in place for disposing of ePHI, including addressing ePHI on devices like photocopiers. These policies should also cover the receipt, removal, and movement of technology assets within a facility, along with an inventory tracking system. Policies must be reviewed and tested at least annually, or more frequently if there are environmental or operational changes, to ensure they remain effective. Given the constant evolution of IT and data recovery methods, entities must regularly assess the reasonableness of their disposal and media sanitation procedures, particularly in response to changes in the environment or operations. HHS expects regulated entities to proactively identify such changes through a comprehensive risk analysis.

The example below provides an illustration of the standard in use, as well as relevant action items:

- Standard in use example: Regulated Entity ABC current technology asset inventory does not include mobile
 devices, such as tablets and USB drives, which can lead to inaccurate tracking and inadequate protection of
 ePHI.
- Action items: Regulated Entity ABC must update its technology asset inventory to include mobile devices like tablets and USB drives. This should be integrated into their current inventory system and reviewed annually.

Summary

The NPRM for the HIPAA Security Rule introduces significant changes to the framework for protecting ePHI, requiring regulated entities to implement comprehensive security measures. Key updates include the expansion of technology asset controls, the requirement for more rigorous workstation security measures, and the need for comprehensive facility access controls. With the transition from addressable to mandatory standards, regulated entities must ensure that all

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physical safeguards are fully implemented, regularly tested, and updated to reflect changes in the healthcare landscape, such as the increased use of mobile devices and cloud infrastructure. As healthcare organizations navigate these updates, it is essential to manage evolving risks, maintain compliance, and safeguard ePHI in an increasingly mobile and interconnected environment.

To effectively manage the new requirements and reduce the risks posed by the complex healthcare environment, organizations must adopt a Governance, Risk, and Compliance (GRC) program. A well-structured GRC program offers a balanced, structured, and scalable approach to building organizational processes to manage risk and comply with regulatory requirements while achieving business operational goals and objectives. This type of program helps organizations to ensure that they not only meet current legal and regulatory obligations but also to establish sustainable processes for addressing future challenges. By integrating risk management practices with operational goals, a GRC program helps healthcare organizations balance compliance with achieving broader business objectives, fostering a culture of security and compliance.

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Appendix A: references

The Notice of Proposed Rule Making § 164.310 Physical safeguards

Appendix B: acronyms

| Acronym | Term |
|---------|--|
| ВА | Business associate |
| CE | Covered entity |
| CIA | Confidentiality, integrity, and availability |
| ePHI | Electronic protected health information |
| GRC | Governance, risk, and compliance |
| HHS | U.S. Department of Health and Human Services |
| HIPAA | Health Insurance Portability and Accountability Act of 1996 |
| HITECH | Health Information Technology for Economic and Clinical Health Act of 2009 |
| IIHI | Individually identifiable health information |
| MFA | Multi-factor authentication |
| NIST | National Institute of Standards and Technology |
| NPRM | Notice of proposed rulemaking |
| OCR | Office for Civil Rights |

Table B-1: Acronyms

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With a decade of information technology management and healthcare information management experience, Brittany is responsible for translating the complex requirements created by healthcare-related risk and compliance mandates into attainable, business-centric cyber solutions strategies.

Brittany's expertise spans a wide range of frameworks and standards, including NIST SP 800-53, HIPAA, MARS-E, EDE/DE, CMMC, and ISO 27001. Her hands-on experience in healthcare security risk analysis, policy development, and system security planning makes her a trusted advisor to clients navigating the evolving cybersecurity landscape. Brittany is also passionate about mentoring emerging professionals through the American Health Information Management Association (AHIMA), further demonstrating her commitment to advancing the field.

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