

SECURE AND EFFICIENT DOCUMENT MANAGEMENT IN HEALTHCARE

A Guide for 2025 and Beyond



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Table of Contents

- 3 <u>THE PROBLEM</u>
- 5 REGULATORY REQUIREMENTS AND CHALLENGES
- 9 DOCUMENT MANAGEMENT SYSTEMS
- 12 DATA STORAGE SOLUTIONS FOR HEALTHCARE
- 16 SECURE PRINTING SOLUTIONS
- 19 DOCUMENT WORKFLOW AUTOMATION
- 22 REAFFIRMING THE IMPORTANCE OF CYBERSECURITY
- 25 WHY CHOOSE SUMNERONE
- 26 <u>REFERENCES</u>

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The Problem

With the <u>U.S. population</u> nearing 350 million in 2025, the daily volume of patients continues to rise, increasing pressure on healthcare organizations to manage growing amounts of patient data, medical records, and administrative documents.



As the healthcare sector expands, so does the complexity of maintaining secure, compliant, and efficient document management systems. Hospital administrators and IT teams are tasked with safeguarding sensitive patient information against potential breaches while adhering to stringent regulatory requirements—all in the pursuit of timely, accurate, and secure care delivery.

This guide offers practical insights and strategies to help healthcare institutions navigate these challenges, streamline document management, and strengthen data protection.

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Regulatory Requirements and Challenges



As a key component in identifying whether or not security is effective, compliance with data privacy regulations is crucial for healthcare organizations.

The healthcare industry is governed by strict regulatory standards to ensure patient confidentiality, data protection, and the secure management of healthcare documents. The <u>Health Insurance Portability and Accountability Act</u> (<u>HIPAA</u>) <u>Privacy Rule</u> serves as the primary guideline in establishing strict rules for patient information privacy and security to protect sensitive health information.



Under its regulations, healthcare organizations are mandated to implement administrative, technical, and physical <u>data</u> <u>safeguards</u>. This involves:

- 1) shredding documents;
- 2) securing medical records with a lock and key or a passcode; or,
- 3) limiting access to keys or pass codes.

Additionally, healthcare organizations must develop and implement policies restricting access and use of protected health information, even for internal use. Under these directives, the HIPAA Privacy Rule ensures that an individual's health information is properly protected.



In the case of non-compliance, the penalties involved range depending on the severity of the violation. According to the HIPAA Journal, these violations are classified into four specific tiers.

Tier 1: Unintentional violation, despite reasonable care Tier 2: Violation due to lack of proper awareness, though not willful

Tier 3: Willful neglect with efforts made to correct the issue

Tier 4: Willful neglect with no attempt to correct within 30 days

The resulting financial penalty is mostly determined by the Office for Civil Rights (OCR) but is set within a specific range.

Multiple factors are considered, but Tier 1 violations usually range from \$100 - \$50,000, Tier 2 violations range from \$1,000 - \$50,000, Tier 3 violations range from \$10,000 -\$50,000, and Tier 4 violations range from \$50,000 -\$1,500,000.

These hefty fines are stipulated by the Health Information Technology for Economic and Clinical Health (HITECH) Act and are adjusted annually.

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Document Management Systems

With the HIPAA Privacy Law overlooking the industry, managing documents effectively is not just a matter of efficiency but compliance.

Document Management Systems (DMS) are important digital solutions that store, organize, secure, and easily retrieve documents. These systems are created to ensure adherence to legal and regulatory standards such as the guidelines listed by the HIPAA Privacy Law. They are pivotal in protecting all types of sensitive documents containing personal health information. If a system is left unprotected, it becomes vulnerable to unauthorized access or acquisition of protected health information (PHI)—commonly referred to as a health data breach. Such incidents not only risk violating the HIPAA Privacy Rule but also compromise patient privacy, damage institutional trust, and may lead to decreased patient engagement.

In that context, compliance becomes more than just avoiding penalties. As a safeguard for both institutional integrity and patient welfare, investing in an effective DMS plays a vital role in preventing these risks





The DMS ensures personal health information security by:

- 1. keeping patient files, lab results, and insurance details in safe storage,
- 2. ensuring that only authorized personnel can access sensitive health information,
- 3.tracking document changes and access history to assure accountability,
- 4. automatically managing how long documents are kept or safely disposed of.

For healthcare providers, this translates into improved record accuracy, better decision-making, and the reduction of most vulnerabilities in terms of security.

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Data Storage Solutions for Healthcare

Storing vast amounts of patient information has always been a challenge in healthcare. Traditional practices, for example, usually saw the use of layered filing cabinets.

In these cases, personal health information was regularly and physically stored in folders. Although locks were designed to prevent unapproved acquisition, unauthorized access was generally more common before the documents could be shredded.





Modern time calls for a smarter and safer way to store information, and it is for this reason that digitization has become the norm. While poor security protocols or outdated digital infrastructure remain challenges that expose sensitive data to cyber threats, modern systems are generally effective in protecting personal health information.

As a result of newer threats, data storage solutions remain one of the continuously evolving aspects of DMS.

Here are two key benefits of having efficient data storage solutions:



1) Utility of Cloud-Based Storage

With multiple possible features such as encrypted file storage, access control systems, and secure data using back-ups, reducing the risks of data loss and unauthorized access has become streamlined. Aside from this, doctors and other healthcare staff are provided the ability to safely retrieve documents from remote situations to support telehealth and on-demand healthcare assistance.



2) Scalability and Cost-Efficiency

In traditional methods, paper waste was prevalent because paper was used frequently to print out necessary documents or even basic information. Using data storage solutions helps in reducing the need for bulky paper file rooms or hardware upgrades whenever patient volumes grow.



Adopting a secure, cloud-based data storage solution is crucial not just in increasing operational efficiency through effective document management but also in ensuring that personal health information remains protected.

Secure Printing Solutions

In healthcare, printing is a necessity to hand out important medical documents such as laboratory results or medical certificates. Unfortunately, traditional printing methods pose significant security risks.

For instance, patient records, medical charts, and other critical documents could be printed and exposed in open areas, causing vulnerability to unauthorized access. Not only does this pose a grave risk to HIPAA Privacy Rule compliance, but it can also lead to physical breaches that infringe upon patient confidentiality.

Fortunately, recent developments have given rise to new printing solutions that boost data security. To address the issues that overshadow traditional printing, multifunction printers have evolved to utilize features that reduce exposure to unsafe circumstances.

These are some important features of secure printing solutions:

1) On-Demand Printing: To eliminate the risks that accompany unattended prints, on-demand printing ensures that documents are only printed in the vicinity of the user.

2) User Authentication: This solution requires users to authenticate before printing to ensure that only the needed personnel can release certain documents.

3) Audit Trails: Logging every print job can be accomplished by installing audit trails to allow traceability and give way to accountability. This helps primarily in meeting regulatory standards.

4) Secure Software: Some printers can regularly perform checks on their operating code and repair themselves from attempted hacks. An example of this is the <u>HP Color LaserJet Enterprise</u> <u>MFP M681 series</u>.

Cybersecurity risks related to printers are real challenges. Such was the case when a healthcare organization, Affinity Health Plan, Inc., settled potential <u>violations of the HIPAA</u> <u>Privacy Rule</u> for \$1,215,780 when their photocopiers were breached, leading to the unconsented disclosure of the personal health information of 344,579 individuals.



Document Workflow Automation



Manual, labor-intensive document management often leads to delays in care, increased risk of errors, and inefficient workflows. This administrative burden strains staff capacity, diverting valuable resources away from critical tasks. While not always immediately visible, these challenges are embedded in traditional document handling across many healthcare settings.

In healthcare, timely access to information is crucial. As a result, document workflow automation is a solution widely regarded in most healthcare organizations. With the capacity to streamline operations by using technology to replace repetitive manual tasks, operational errors can be reduced by eliminating human error in data entry and document sorting.

Essential aspects promoted by document workflow automation solutions include the following:

1) Data Integrity: Referring to the maintained accuracy and consistency of data throughout its lifecycle, data integrity is sustained by ensuring that each document is correctly processed and stored in secure locations, thereby protecting it from being altered, deleted, or misplaced. 2) Automatic Document Routing: This refers to the automatic sending of documents toward a specified location, which, in the context of healthcare, usually means another department. This eliminates the risk of misplaced documents, which is common in traditional settings during the physical transportation of documents.

3) Document Tracking: Traditionally, this was done manually and was cumbersome. Staff members could forget to update logs, which can lead to problems. Automated document tracking streamlines the process by allowing users to easily monitor the status of a document as it passes through the stages of the workflow.

Combined, these benefits come with reduced workload for staff members and improved document accuracy to improve patient safety and enhance the quality of patient care, meaning that, on an objective standpoint, investing in this type of solution is a practical decision.

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Reaffirming the Importance of Cybersecurity

Cybersecurity remains just as vital today as it has always Protecting patients' been. personal health information should always be at the top of the priority list for healthcare institutions. In addition to the financial burden data breaches significant result in, can reputational damage follows as an afterthought.



Due to the value of sensitive patient data, the healthcare sector has become a major target for cyberattacks. One of the most popular instances of cyberattacks was the October 2020 <u>ransomware incident</u> at the University of Vermont Medical Center (UVM). Cyber-criminals launched a malware attack on an unsuspecting UVM Health Network employee, resulting in an estimated \$63 million loss when factoring in recovery costs and lost revenue.

Unsafe healthcare organizations also have their own "wall of shame" in the <u>U.S. Department of Health and Human Services</u> (<u>HHS</u>) <u>Breach Reports</u>, where organizations attacked by data breaches affecting over 500 individuals are listed as required by the HITECH Act. With this growing issue, effective and secure document management is needed now more than ever. Patient confidentiality does not extend to just one institution—it affects the quality of care, as a patient's broken trust due to poor cybersecurity or inefficient handling leads to hesitancy in sharing necessary information in the future.

Luckily, the direction document management is taking is a positive one. With access to newer technology, document management systems have begun to incorporate state-of-theart innovations by including AI, machine learning, and other advanced encryption methods. As the healthcare industry continues to embrace these cutting-edge technologies, the future of document management seems bright.

Why Choose SumnerOne

If the first step was understanding how secure and efficient document management works, then installing those solutions is the next step. Where can health-related institutions find a trusted partner to reliably address their document management needs? Fortunately, there's no need to look further than SumnerOne.

With over 70 years in the business of providing specialized print solutions, SumnerOne is ready to provide a breadth of solutions beyond data storage, secure printing, and document workflow solutions. SumnerOne ensures that each solution is advanced and comprehensive, tailored to respond to each problem assessed.

With a proven track record and deep expertise, SumnerOne stays committed to providing a seamless, secure, and efficient approach to document management, allowing healthcare institutions to remain fully compliant with each regulation, all while streamlining operational workflows.

References

- [1] <u>https://ourworldindata.org/population-growth</u>
- [2] <u>https://www.cdc.gov/phlp/php/resources/health-insurance-portability-</u> and-accountability-act-of-1996-hipaa.html
- [3] <u>https://www.hhs.gov/hipaa/for-professionals/privacy/laws-</u>
- <u>regulations/index.html</u>
- [4] <u>https://www.hipaajournal.com/what-are-the-penalties-for-hipaa-</u>
- violations-7096/
- [5] https://h20195.www2.hp.com/v2/getpdf.aspx/4aa6-9659enuc.pdf
- [6] <u>https://www.hhs.gov/hipaa/for-professionals/compliance-</u>
- enforcement/examples/health-plan-photocopier-breach-case/index.html
- [7] <u>https://insurica.com/blog/uvm-health-network-ransomware-attack/</u>
- [8] <u>https://ocrportal.hhs.gov/ocr/breach/breach_report.jsf</u>