



White Paper

DIGITECH SYSTEMS AND THE HEALTHCARE MARKETPLACE

February 2007

Digitech Systems proactively addresses the unique needs of the healthcare market. PaperVision[®] Enterprise provides an affordable, easy to use document and content management solution that provides powerful tools to help healthcare providers directly address the concerns of a HIPAA-compliant environment. ImageSilo[®], Digitech Systems' on-demand document and content management service, can simplify document management needs and help members of the healthcare industry save time and money while at the same time, complying with HIPAA privacy and security regulations.



Overview

When Congress passed the Health Insurance Portability and Accountability Act (HIPAA) in 1996, they set forth various provisions for the privacy of Protected Health Information (PHI) during diagnosis, treatment, and billing for medical issues. As a result, the U.S. Department of Health and Human Services (HHS) issued both Privacy and Security Rules to guide healthcare providers through the implementation of HIPAA-compliant processes and procedures. The Privacy Rule was designed to encourage adoption of secure, effective electronic document and content management practices in the healthcare industry. The Security Rule called for administrative, technical and physical safeguards to protect patient data.

Although the most burdening deadlines passed in 2003 and 2005, recent reports state many healthcare companies are still struggling with compliance. As a result, IT priorities continue to focus on document privacy, security and electronic records management as a means for unified compliance and operational efficiency. Thus, healthcare providers continue to explore and invest in Enterprise Content Management (ECM) systems.

Digitech Systems offers a comprehensive document and content management solution that assists healthcare providers in building and maintaining HIPAA-compliant practices. PaperVision Enterprise and ImageSilo include disclosure tracking, de-identification and document security features to ensure the privacy of health-related information such as controlled information access, disaster recovery, technical data protection and internal activity audits. With PaperVision Enterprise or ImageSilo, HIPAA-compliant procedures can be integrated into the normal work routine with minimal effort.

The Healthcare Market

Electronic Medical Record systems were identified most frequently as the most important application to implement within the next two years.

~17th Annual 2006 HIMSS Leadership Survey

A Sizeable Opportunity

HIPAA and the demand for protected health information have driven the importance of records security and management from an administrative need to an executive-level business priority. Today, any listing of healthcare issues includes the adoption of new technology to improve operational efficiency. Finance and technology executives are pushing for the implementation of content infrastructure, creating a simple, efficient and amalgamated electronic records system. The 17th Annual HIMSS Leadership Survey compared the top eight IT healthcare priorities. The study found implementing an Electronic Medical Record (EMR) system and redesigning process and workflow were among the top four IT priorities of 2005 and 2006. Electronic record systems were considered the most essential of all IT applications studied.

Healthcare companies are investing heavily in ECM systems and technologies that enable HIPAA compliance. IT operating budgets are increasing, and HIPAA technology spending remains strong. In 2005, an AMR Research survey found that 225 companies spent \$3.6 billion on HIPAA compliance. Nearly \$1.3 billion of that spending went towards technology. Another study, conducted by Phoenix Health Systems (PHS) and Healthcare Information and Management Systems Society (HIMSS), found 39 percent of large hospitals spent more than \$100,000 on HIPAA in 2005 and 17 percent of those hospitals projected spending another \$250,000 to \$2 million on HIPAA in 2006.

As HIPAA and regulatory compliance spending grows, healthcare corporations are asking how they can make their compliance process more efficient, according to Scott Crawford, Senior Analyst for Enterprise Management Associates, in an August 2006 article addressing ControlPath's *2006 Compliance Progress Survey*. The survey shows 74 percent of companies are still using costly manual processes to comply with regulations. ECM systems enable healthcare corporations to comply with regulations while opening the door to operational efficiency. The PHS and HIMSS survey overview says "HIPAA standards have substantially increased the electronic flow of healthcare business transactions, thereby providing for time savings, clarity in transaction conventions, simplification of manual processes and decreases in paper and postage use."

74 percent of companies are still using costly manual processes to comply with regulations.
~August 2006
ControlPath HIPAA Compliance Progress Survey

Despite the precedence of HIPAA-related IT priorities, hefty HIPAA spending and recognized benefits, healthcare providers are struggling to meet compliance terms. A January 2006 American Health Information Management Association (AHIMA) survey found HIPAA compliance had slipped 8 percent between 2005 and 2006. Although the HIPAA Security Rule compliance deadline passed more than a year ago, only 56 percent of providers said they have implemented the security standards, according to the PHS and HIMSS study. As long as IT operating budgets continue to grow, and as long as there is room for compliance improvement, experts expect the demand for compliance aiding technologies will continue to increase.

ECM: A Government Priority

On the heels of HIPAA, the Federal Government is pressing for the development of a national electronic medical record database. President Bush's Health Information Technology (Health IT) agenda is expected to accelerate the adoption of records management systems among healthcare providers in both the private and government sectors. By 2014, President Bush wants to ensure that Americans can utilize electronic health records. With innovations in electronic healthcare, the President's Health IT Plan seeks to reduce medical records mistakes, reduce healthcare costs, improve administrative efficiencies, reduce paperwork and improve healthcare quality. The Health IT Plan will further define standards for assuring privacy and security while allowing medical information to be stored, shared and transmitted via the internet. This plan is another driving force behind the adoption of ECM systems in the healthcare industry.

Selecting the Best Solution

There is tremendous motivation to adopt ECM systems as part of a unified compliance process.

The Privacy Rule identifies five key areas of concern, including disclosure tracking, protected disclosure, de-identification of protected information and patient disclosure authorizations. The fifth is generally protecting the privacy of personally identifiable electronic health information as it routes through the processes of diagnosing, treating, and billing individuals for health-related issues. The Security Rule outlines administrative, physical and technical safeguards for personally identifiable electronic health information, including controlled information access, disaster recovery, technical data protection and internal activity audits.



HIPAA Privacy Rules

Disclosure Tracking—HIPAA regulations require healthcare providers to track all disclosures of personally identifiable health information to any internal or third party. This includes doctors, insurance providers, billing and claims processors, and all other entities that may have reason to view the information.

Protected Disclosure—The Privacy Rule allows certain types of disclosures without patient authorization. These include 1) to the individual, 2) treatment, payment and healthcare operations, 3) disclosures with the opportunity to object, 4) incidental use, 5) public interest and benefit activities, and 6) release of a limited data set. Specific information must be captured for each disclosure and, in some situations, only a subset of the patient's record may be disclosed.

De-identification—De-identification requires the user to strip all personally identifiable information (i.e., patient name, identity number, address, etc.) from the health document before it can be shared with others. There are no restrictions on the use of de-identified health information, much of which is used by the government, researchers and health organizations to compile statistics.

Patient Authorization—A healthcare provider may not disclose PHI outside the scope of the HIPAA regulations without prior written authorization from the patient. The authorization must be obtained, recorded and then maintained for a period of at least six years. Authorizations should be specific to the information being disclosed, the person disclosing and receiving the information, expiration, etc., so a separate authorization is often required for each disclosure.

Protected Electronic Transmission—HIPAA regulations guard the transmission of electronic PHI. The healthcare provider must ensure the confidentiality, integrity and availability of all electronic PHI created, received, maintained or transmitted. This applies to email servers including data at rest and data during transfer.

HIPAA Security Rules

Controlled Information Access—The Security Rule emphasizes procedures for clearly identifying those who need protected information access to complete their job function. Procedures should address access authorization, establishment, modification and termination.

Disaster Recovery—Emergency response plans must identify data backup methods and schedules as part of a disaster recovery program.

Technical Data Protection—Electronic information systems must be protected from intrusion. Encryption is required when information flows over an open network. Entities must ensure information has not been changed or erased in an unauthorized manner.

Internal Activity Audits—Internal audits should routinely review operations and activities to identify potential security violations.

Digitech Systems' Solution

Digitech Systems software enables healthcare companies to:

- Reduce costs associated with filing, managing, storing, retrieving patient information.



- Improve efficiency as the system can be programmed to route documents through any organizational process including admissions, billing, collections, and interactions with insurance providers.
- Protect patient privacy resulting in improved patient confidence.
- Control information access and increase document security by defining user access privileges.
- Enhance security with electronic audit tracking—no more paper documents which can readily be lost or misplaced.
- Speed Explanation of Benefits (EOB) and collections processes through real-time access to electronic records and information, providing significant improvement in cash flow through reduced days payable.
- Help healthcare providers avoid fines and litigation associated with noncompliance.

Enable Companies to:

- Reduce records costs
- Improve efficiency
- Protect patient privacy
- Control information access
- Enhance records security
- Track document history and user activity
- Speed processing
- Avoid fines and litigation

HIPAA-enabling functionality

Digitech Systems software provides a flexible document and content management solution that will significantly assist any healthcare organization in attaining HIPAA compliance. PaperVision Enterprise and ImageSilo are affordable, easy to integrate systems that facilitate process efficiency, document protection and applications for HIPAA privacy and security standards.

PaperVision securely retrieves, displays, distributes and tracks all stored documents. ImageSilo is a secure, on-demand ECM service uniquely positioned for the healthcare industry. ImageSilo allows multiple security levels making it easy to provide web-based access to data anywhere, anytime for an unlimited number of system users. Digitech Systems operates and maintains the storage hardware and server access, minimizing impacts to IT resources.

The table below matches HIPAA requirements with PaperVision Enterprise and ImageSilo key features and benefits.

HIPAA Requirement	PaperVision Enterprise/ ImageSilo Feature	Advantage/Benefit
Disclosure Tracking and Internal Activity Audits	Enhanced Auditing	Forces user to track disclosure methods, recipients and reasons Creates a log for every document operation a user performs
Disclosure Tracking and Internal Activity Audits	System Assisted Manual Disclosures	Electronic logs track patient data released via phone call or office consultation

HIPAA Requirement	PaperVision Enterprise/ ImageSilo Feature	Advantage/Benefit
Disclosure Tracking	Document Grants	Disclose information to out-of-office parties, post documents to a secure, password protected, web-accessible location
Protected Disclosure and Internal Activity Audits	Email/Enhanced Auditing	Forces a disclosure entry before sending emails and reports all emails sent
Protected Disclosure and Controlled Information Access	Document-level and Project-level Security	Control user access by project, document and/or specific index fields. Restrict users to view only the information necessary to perform the task
De-identification	Redaction	<p>User-level settings control users' ability to turn off redactions and reveal PHI</p> <p>Set redaction colors and styles so de-identified portions of a document blend seamlessly into the background</p> <p>Redactions remain in place when emailing and printing</p>
De-identification	Control Index Field Access and View	Viewers are unaware that certain fields are hidden, further ensuring information security
Protected Electronic Transmission	Email Message Management	<p>Capture and preserve email messages that contain PHI</p> <p>Organize all messages into a single information management system for immediate retrieval</p> <p>Provide non-repudiation—emails are stored with unique values to ensure original versions are not changed</p>

HIPAA Requirement	PaperVision Enterprise/ ImageSilo Feature	Advantage/Benefit
Patient Authorizations	Imaging and Retrieval	Scan and store every copy of a patient's disclosure authorization form in a readily-accessible, electronic format retrievable from any location, anytime, anywhere
Internal Activity Audits	System Operations/Queries and Utilization Reports for System Administrators	Tracks all user activity, including successfully completed, attempted or suspicious activities, such as trying to open protected records without security clearance Filters activity reports by user or by date/time stamp
Controlled Information Access	User-level Security	Setup password protected user accounts that allow and restrict functions, such as view, change, delete, email, print or add annotations Edit or terminate user access
Internal Activity Audits	Document-level Security Audits	Document security audits provide single document access and activity reports
Technical Data Protection	Protected Data Storage	Never fully expose information to an end-user—configure secure storage to allow document access only via secure Internet communication technologies
Protected Electronic Transmission	AES 256 Data Encryption	Encrypt data during processing, transmission and at rest. Use the same encryption the federal government uses for top secret information Archived emails encrypted at rest and during processing
Disaster Recovery	Data Transfer Manager and Data Delivery Service	Package and encrypt information for delivery and back-up to any media



In addition to these HIPAA-specific features, PaperVision Enterprise and ImageSilo are robust, scalable, feature-rich document and content management systems that will simplify records management needs while saving organizations time and money.

Digitech Systems products facilitate records manageability and enable process efficiency. With ImageSilo, users can work remotely or securely access any document in the system, from any workstation, at anytime, from anywhere. No coding is needed to make PaperVision Enterprise an integrated part of day-to-day work processes. Users can access information without leaving Microsoft Office applications and existing medical software can be integrated with PaperVision Enterprise.

With an efficient records system in place, labor savings and increased employee productivity quickly follow. Paper filing systems are replaced with secure and redundant electronic data storage. Outsourcing data storage with Digitech Systems can relieve IT of storage and server maintenance, while many of the setup and overhead costs can be eliminated and reduced to monthly operational fees.

Vocabulary and Terminology

Authorization

Written permission from a patient that allows a healthcare provider to disclose PHI in a manner not covered by HIPAA. The authorization must be in plain language and specific to the reason for the disclosure, the receiving party and should include an expiration date.

Covered Entity

Under HIPAA, this is a health plan, a healthcare clearinghouse or a healthcare provider who transmits any health information in electronic form in connection with a HIPAA transaction.

De-Identification

The removal of personally identifiable health information from a patient record.

Disclosure

A release of information out of the document and content management system to a third party through email, document grants, export, print, or fax.

Enterprise Content Management

A suite of software tools designed to turn paper and electronic documents into a single, searchable electronic system that's instantly accessible, safely archived and becomes a valuable business tool.

Electronic Medical Record (EMR)

The electronic file containing all of a patient's medical documents.

Encryption

To alter or encode information so it is unintelligible to unauthorized parties.



Explanation of Benefits (EOB)

Used by an insurance provider to clarify and explain the covered and non-covered benefits related to a specific claim.

Health Care Clearinghouse

A public or private entity that does either of the following 1) Processes or facilitates the processing of information received from another entity in a nonstandard format or containing nonstandard data content into standard data elements or a standard transaction; 2) Receives a standard transaction from another entity and processes or facilitates the processing of information into nonstandard format or nonstandard data content for a receiving entity.

HHS OCR

United States federal government's Department of Health and Human Services' Office for Civil Rights. Has authority for overseeing and enforcing the Privacy Rule.

HIPAA

A Federal law allowing persons to qualify immediately for comparable health insurance coverage when they change their employment relationships. Title II, Subtitle F, of HIPAA gives HHS the authority to mandate the use of standards for the electronic exchange of healthcare data; to specify what medical and administrative code sets should be used within those standards; to require the use of national identification systems for healthcare patients, providers, payers (or plans), and employers (or sponsors); and to specify the types of measures required to protect the security and privacy of personally identifiable healthcare information. Also known as the Kennedy-Kassebaum Bill, the Kassebaum-Kennedy Bill, K2, or Public Law 104-191.

Health Information Technology (Health IT) Plan

Health Information Technology (Health IT) Plan is a governmental initiative allowing comprehensive management of medical information and its secure exchange between health care consumers and providers. Electronic health records should be offered to all Americans by 2014. Health IT is designed to improve healthcare quality, prevent medical records errors, reduce healthcare costs, increase administrative efficiencies, decrease paperwork and expand access to affordable care.

Privacy Rule

A set of national standards for the protection of health information; a subset of HIPAA. Addresses the use and disclosure of an individual's health information by organizations. Sets standards for each individual's right to understand and control how their health information is used and dispersed.

Protected Health Information (PHI)

Individually identifiable health information. Also Electronic Protected Health Information (EPHI)



Security Rule

A set of national standards for the administrative, physical and technical safeguards of electronic protected health information, however it is transmitted or stored; a subset of HIPAA.

Healthcare Industry Case Studies

For more real-world applications and testimonials on how healthcare providers are using Digitech Systems' software to comply with regulations and increase operational efficiency, please visit MyDSI at MyDSI.DigitechSystems.com

Community Reach Center

The Community Reach Center increases efficiency within the organization and provides instant access to critical medical information to anyone who needs it with both PaperFlow™ and PaperVision® Enterprise.



National Jewish Medical and Research Center

ImageSilo® enables the medical center to comply with HIPAA regulations while managing tens of thousands of documents and reducing claims processing by 450 hours per month. Multiple security levels provide protected access for more than 50 daily users.



University of Illinois Medical Center at Chicago

In the Patient Accounts department, thousands of paper documents have converted to scanned images using PaperFlow™ and ImageSilo®. The on-demand ECM system improved document processing, boosted employee productivity and morale, assisted with HIPAA compliance and saved the medical center money.





Digitech Systems

ABOUT US

Digitech Systems, Inc. enables businesses of any size to more effectively and securely manage, retrieve and store corporate information of any kind. By significantly reducing the cost of electronic document and content management systems (ECM), Digitech Systems has moved ECM from a luxury to an essential element of a well-managed business.

Delivering the industry's smartest suite of ECM products and services, Digitech Systems is established by its customers as the trusted source for managing, storing and providing immediate, secure desktop or Web-based access to any and all corporate information. ImageSilo, PaperVision Enterprise and a variety of document and content capture products are available from Digitech Systems as a fully integrated suite, or as process components to match the individual needs of small businesses or major corporations.

CONTACT INFORMATION

Digitech Systems, Inc.
8400 East Crescent Parkway, Suite 500
Greenwood Village, CO 80111
Toll Free: 866.374.3569
Email: Sales@DigitechSystems.com
www.DigitechSystems.com

© 2007 Digitech Systems, Inc.

PaperVision and ImageSilo are registered trademarks of Digitech Systems, Inc.

Digitech Systems

