Using Document Management in a Healthcare Organization
For HIPAA Compliance and Improved Operational Efficiency

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Dramatic regulatory and economic changes in the healthcare industry are forcing every organization in the healthcare business to re-evaluate the use, storage and retrieval of patient health information. These changes not only impact large hospitals and insurance companies; they also reach down into the business operations of private physicians and clinics.

The objective of this white paper is to examine the current state of healthcare information management systems, then demonstrate how organizations can use document management to bring patient-related document storage and retrieval into HIPAA compliance and at the same time improve patient safety and care, and dramatically increase profitability and cash flow.

First, we will examine the state of healthcare information management systems and understand some of the critical issues that could be barriers to compliance, patient safety, and profitability.

<u>Current State of Healthcare Information Systems</u>
Healthcare organizations have the opportunity and responsibility to provide needed medical treatment for patients from pre-birth to end of life. They provide services based on patient need and the skills of medical professionals. At each step of the medical care process, large volumes of paper and computerized information are gathered and retained.

The information is captured and managed within two major categories:

● Patient Billing Information
● Patient Medical Records
Each category contains complex data storage and retrieval mechanisms, because it must be referenced and updated by numerous departments and functions throughout the healthcare organization. It is not unusual for a typical healthcare provider to have more than thirty functions that impact these patient data records. Adding to the complexity, many departments also make and retain their own files of patient information, and may have their own unique patient identifiers and forms containing relevant patient information.

Federal regulations are changing the way patient records and patient billing information are stored, accessed and distributed. Healthcare organizations are not only looking for ways to comply with the regulations, they are also looking for more efficient ways to manage all the computerized and paper-based information.

Automation of the patient billing process in medical clinics, hospitals and long-term care facilities has been developing for more than thirty years. Today most organizations have a system to generate patient bills electronically and transmit them to payer organizations for reimbursement. Any organization that cannot prepare electronic bills internally will usually outsource this function to billing service providers.

Surprisingly, only a small percentage of hospital organizations have fully implemented a clinical records system that creates a true electronic medical record (EMR).

- Patient Info Access
- Data Repositories
- Transfer of Images
- Workflow Automation

The next frontier for automation has been the patient registration process. This is the data input phase for both the patient billing system and the patient care medical record, and for most organizations this phase creates a tremendous amount of paper that cannot be managed by the health information management system (HIMS). The paper problem must be addressed, because it causes inefficiency, inaccuracy, redundancy and inconsistency, and it is very difficult to insure patient privacy for the information that is
not under the control of the HIMS. A document management strategy can address this issue.

Surprisingly, only a small percentage of hospital organizations have fully implemented a clinical records system that creates a true electronic medical record (EMR). Recent reports show 72% of hospitals have no EMR, with only 21% having a full EMR. This
data implies that 80% of the organizations are using a mix of electronic information systems alongside a combination of computerized and paper-based patient records. These disparate systems, which result in multiple databases, paper files and inconsistent formats, make patient information retrieval inefficient and costly. When healthcare organizations evaluate new information technology today, their decisions are driven by the following priorities (in order), all of which are made even more difficult to achieve by the HIPAA regulations:

1. Patient safety
2. Quality of care
3. Improvement of cash flow
4. Market share
5. Reduction of expenses without reducing critical personnel These priorities will drive information technology expenditures in the years to come. Recent studies have shown that significant efforts are underway to address these using technologies that create and manage computerized patient records.2

Computerized Patient Records
- Implemented
- In Process
- Pending
- Planned

It is not unusual to have many different systems in a medical clinic and even more in a full healthcare organization.

The Problem of Disparate Systems

With the complexity and multitude of departments in a typical healthcare organization, the diversity of medical professionals, and the varying rate of adoption of computer technologies, most organizations have a potpourri of disparate patient record methodologies and automated systems installed. It is not unusual to have more than fifteen different systems in a medical clinic and over one hundred in a full healthcare organization.

The systems include patient billing, ancillary departmental systems in radiology, laboratory, heart diagnostics, pharmacy, surgery, emergency room, room and bed assignments, dietary purchasing and many more. Each system may produce information relating to a patient and the patient's care, which becomes a permanent part of the patient healthcare information. The databases created by each area, whether automated or not, must be accessed on occasion to provide requested information about a patient, a medical service provider, or a process or procedure in the organization.

It is not unusual to have hundreds of requests per month requiring retrieval of multiple forms or reports from many departments and data repositories in the organization, offsite or onsite, remote or local. Because the information is all over the place, the total cost and time to retrieve this information can be measured at most organizations in the thousands of dollars and hundreds of hours of people's time. A document management strategy can significantly reduce this cost.

Patient Billing Records

The information obtained at patient registration is quickly entered into a format to collect the charges for services and products used throughout the patient care history. This information is used as the key patient identifier for all subsequent documentation created during diagnosis and treatment, and is a common practice throughout the healthcare system from a Physician's office, clinic, ambulatory center or a full care facility.

The patient billing record becomes the receptacle for all cost-based information relating to the care of the patient. These patient charges are collected in the patient billing databases and maintained until patient discharge when the bills are completed for patient private payment or submission to the patient's insurance company.

<u>A document management strategy can provide an affordable method for data retention.</u>
All or part of the patient billing process may be automated to produce electronic medical bills, suitable for printing for payment or transmitting to the reimbursement organization. Federal and state regulations mandate that patient bills must be retained for many years in either electronic, microfilm or paper form. A document management strategy can provide the most affordable and secure method of retention.

<u>Patient Medical Records</u>
Immediately upon completion of the patient registration process and movement of the patient to the patient care area, a patient medical record is initiated. It documents all of the initial health-related questions asked of the patient or guardian, a record of the initial symptoms and description of the patient's desire for medical care.

Upon presentation to a medical professional, a battery of initial tests and qualifications are performed to establish the base case for the medical record. These initial results along with all further testing, procedures, medical professional notes, results, charts or other pertinent information are stored in the medical record.

It is not unusual for a physician's clinic to have up to 100 different forms and information documents. A full healthcare provider such as a hospital or long term care facility may have hundreds of different forms and documents in the medical record. All of this data must be retained for up to 28 years, in a file that is accessible for retrieval and reporting by authorized healthcare personnel. A document management strategy can provide an affordable method for data retention.

A typical patient medical record flow might include all or part of the following steps and databases, based on the patient care procedures:

Patient Care Area
- Electronic Medical Records
- Patient Care Provided Paper
- Medical Record
- Historic Patient Information
- Patient Registration
- Patient Discharge
- Patient Record Encoding
- Patient Orders & Scheduling
- Paper Results or XRAY Record
- Pharmacy Dispensing /Dosage Record
- Paper Results of Lab
- Results Other
- Paper Charts or Documents
- Human Resources
- Resource Scheduling
- Patient Record Transcription
- Patient Bill
- Ancillary Patient Records
- Departmental Databases

Depending on the individual organizational policies, none, part or all of the medical record may be electronic. As seen earlier, surprisingly few medical facilities have a full Electronic Medical Record (EMR) solution in use today. Most organizations have some electronic records augmented by vast storage rooms of paper records, loosely organized by some patient identifier. Paper records are costly to store, prone to misfiling or loss, and notoriously difficult to secure for compliance. Locating all the historical records for complicated cases can consume a tremendous amount of time. A document management strategy can convert the paper into digital documents. This will improve responsiveness to regulatory requests, and increase cash flow by speeding up responses to insurance requests for supporting information.

<u>Payer Organizations</u>

Upon discharge of the patient, a patient bill is prepared, or in the case of a long-term care facility, an interim patient bill is prepared for payment from a variety of sources. It could be a private pay situation by the patient or some related party, one or more insurance companies with whom the patient is contracted, a governmental agency that provides payment for patient care, or a combination of all these organizations.

In the case of a payer organization, following is a general picture of the information flow and the required processes and databases.

<u>Patient Billing</u>
- Transmitted For payment
- Insurance Information
- Member Information
- Patient Information Reimbursement
- Statement For Patient
- Insurance Verification
- Procedure Evaluation
- Procedure Reimbursement
- Pricing Procedure
- Pricing Diagnostic
- Related Group Information
- Insurance Contract Information
- Transmit payment info to provider

Most of the payer organizations have an automated billing system for the reimbursement of patient bills with large databases of patient and member information, along with employer contracts. A document management strategy can integrate paper-based records and electronic databases by providing common identifiers to streamline retrieval.

Without a document management strategy in place, retrieval and compilation of this disparate information is very costly and time-consuming.