HealthCare Document Imaging Trend Report

Market Description (The Prospect):

- The HealthCare sector provides significant opportunities for Document Imaging software and hardware including document scanners as this market is currently paper intensive and prospects are looking for ways to manage information more efficiently and to ensure the privacy and physical protection of patient information.

- This sectors includes numerous prospects including the following:
  - Hospitals,
  - Multi-physician practices,
  - Solo-physician practices,
  - Pharmacies,
  - Drug manufacturers,
  - HealthCare Plans,
  - Dentists,
  - Assisted living facilities,
  - Nursing homes
  - Optometrists, and
  - Insurance providers.

- Virtually any and all HealthCare providers are potential prospects.
Business Drivers:

- HealthCare remains a paper-intensive and minimally automated and digitized industry. CBS Market watch reported that an estimated 90% of all patient information remains on paper. Inherent problems associated with paper-based patient records include:
  
  - A sizeable amount of money associated with healthcare is spent for administrative costs. The New England Journal of Medicine estimates that of every dollar spent on healthcare 31 cents is for administrative costs. Using this as a guideline, an estimated 31% of healthcare spending is for administrative.
  
  - Paper-based files are often lost or misfiled. It is not uncommon for a patient file to be in the trunk of a doctor’s car. It is also feasible that a patient file may not be re-filed before they return to the healthcare facility. As a result, physicians see patients an estimated 40% of the time without a completed chart resulting in potential errors.
  
  - Physicians and staff spend a tremendous amount of time maintaining paper-based patient records.
  
  - To remain competitive HealthCare providers are looking for technology that can help them to improve overall healthcare and to improve the accuracy of diagnosis.
  
  - To recover costs associated with healthcare, providers are looking for technology that can expedite transaction processing such as the paperwork associated with insurance claims.
  
  - The HealthCare industry is heavily regulated by guidelines such the Health Insurance Portability and Accountability Act (HIPAA). Under this act patients have the right to inspect their records for six years. Also patients have the right to know who has had access to their records and for what purpose. This is forcing healthcare providers to seek technology that can ensure the privacy and physical protection of patient information.
  
  - A new law has been introduced to Congress by Senator Edward Kennedy, the democratic U.S. Senator from the state of Massachusetts. This law is referred to as the Health Care Quality Modernization, Cost Reduction and Quality Improvement Act. If it is approved, it will mandate that all U.S. patient records be in an electronic format by 2011.
- E-Health initiatives are not limited to the U.S. Virtually, every government worldwide is calling for computerized patient records and the establishment of health care standards. Many governments are using financial incentives to encourage adoption.
- Worldwide the healthcare industry is looking for technology that can aid with establishing on-line clinical repositories enabling rapid access to shared information that can help find cures for prevalent medical conditions.

The Medical Records Institute does a worldwide study yearly regarding the trends driving the need for Electronic Health Records (EHR). Please note the motivating factors for EHR from the ‘2005 study shown below:

<table>
<thead>
<tr>
<th>Motivating Factors</th>
<th>2004</th>
<th>2005</th>
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<tbody>
<tr>
<td>The need to improve clinical processes or workflow efficiency</td>
<td>84.6%</td>
<td>89.3%</td>
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<tr>
<td>The need to improve quality of care</td>
<td>83.3%</td>
<td>85.0%</td>
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<td>The need to share patient record information among healthcare practitioners and professionals</td>
<td>79.8%</td>
<td>81.1%</td>
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<tr>
<td>The need to reduce medical errors (improve patient safety)</td>
<td>76.4%</td>
<td>76.1%</td>
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<tr>
<td>The need to provide access to patient records at remote locations</td>
<td>65.4%</td>
<td>67.9%</td>
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<tr>
<td>The need to improve clinical documentation to support appropriate billing service levels</td>
<td>67.7%</td>
<td>67.1%</td>
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<tr>
<td>The need to improve clinical data capture</td>
<td>68.3%</td>
<td>64.6%</td>
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<tr>
<td>The need to facilitate clinical decision support</td>
<td>63.1%</td>
<td>60.7%</td>
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<tr>
<td>The requirement to contain or reduce healthcare delivery costs</td>
<td>51.8%</td>
<td>54.6%</td>
</tr>
<tr>
<td>The need to establish a more efficient and effective information infrastructure as a competitive advantage</td>
<td>51.1%</td>
<td>53.6%</td>
</tr>
<tr>
<td>The need to meet the requirements of legal, regulatory, or accreditation standards</td>
<td>53.7%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Other</td>
<td>6.4%</td>
<td>5.7%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>436</strong></td>
<td><strong>280</strong></td>
</tr>
<tr>
<td><strong>Margin of Error</strong></td>
<td>+/- 4.7%</td>
<td>+/- 5.8%</td>
</tr>
</tbody>
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Medical Document Imaging Solutions:

- To improve practice management and to ensure the best healthcare, physician practices need to digitize and automate the collection, distribution and management of information. The impetus for change is here and now. The solution is Enterprise Content Management (ECM) including the critical document capture component as it enables healthcare entities to manage information more efficiently, to ensure its privacy and physical protections.
- Selected ECM technologies that are particularly beneficial for the healthcare sector include the following:
  - **Forms processing** for processing documents associated with loans for new cars or mortgages. Forms processing can be used to scan and extract data from either typed or handwritten text. Advances in this technology allow organizations to process forms with either structured or unstructured data. Implementing this technology for transaction processing can reduce cycle time from weeks to literally hours.
  - **Archive and retrieval** can assist by converting paper-based patient information into electronic documents that can be archived. Accessing electronic data is much faster enabling physicians to access all patient information leading to more accurate diagnosis and ultimately improved healthcare. Additionally faster access to patient information ensures healthcare facilities can be more forthcoming with it to assist with regulatory guidelines such as HIPAA.
  - **Data Warehousing Software** can be used to store and analyze information producing valuable clinical repositories. Document Publication Software can be used to publish this data enabling worldwide access to aide with treatment and cures for prevalent medical conditions.
  - **Document distribution** can be used to electronically distribute documents using the internet eliminating the time and resources required to fax documents for referrals and second opinions. Many hospitals are finding they can scan and send prescriptions and lab requests faster than manual processing. Additionally document distribution can be used for redundant off-site storage to ensure the physical protection of patient information.
  - **Business Process Management**, formerly call Workflow, can be applied to automate business processes by routing electronic documents to appropriate departments or individuals to expedite patient care. With automated business processes, organization’s can more effectively track access to information and produce a substantially more accurate audit trail of who has had access to the patient information.
The Benefits:

- Implementing document imaging technology in healthcare facilities can yield many benefits such as:
  - Converting archival and working records to an electronic format can help healthcare entities *harness the exploding amount of information*. Leveraging the internet, this information can be shared to help find cures for prevalent medical conditions.
  - *Faster access, retrieval and distribution* of patient information. Due to on-line access physicians will be able to provide more accurate diagnosis, prescribe more appropriate treatments that will ultimately lead to higher quality and more successful healthcare.
  - As a result of implementing Business Process Management (Workflow), healthcare facilities can *automate and accelerate their business processes*. Additionally they can *control and track access to ensure the privacy of patient information and to produce more accurate audit trails to demonstrate regulatory compliance*.
  - Redundant off-site storage *protects data and ensures business continuity* should there be any type of data storage disaster.

Return on the Investment:

- In addition to improving the quality of healthcare, implementing document imaging can help healthcare entities achieve significant cost savings and return on their investment.
  - *Cut costs* associate with photocopy, faxing or using courier services to transport patient information. One healthcare facility reports that it costs them ten cents to photocopy a patient’s document and only six cents to image. Additionally, it is estimated the cost to courier one packet of information is between eight to fifteen dollars versus the minimal cost to send a document electronically via the internet.
  - *Reduced physical storage* requirements for patient health information. Many healthcare providers have reported that have repurposed their file rooms to facilitate additional physicians or for more examination rooms.
  - *Significant decrease in record administration* enabling physicians to see more patients. In many cases, healthcare facilities have reported a *reduction in staff requirements*. 
• More accurate healthcare reducing the threat of timely and expensive malpractice suits.
• By using forms software for transaction processing healthcare organizations are able to recover the payments for services faster improving their cash flow.
• By managing patient information more efficiently, ensuring its privacy and physical protection, healthcare facilities reduce the risks of litigation and financial penalties for not meeting regulatory requirements.

Strategic Software Partners:

› Our document scanners are a critical component in addressing the myriad of application needs in the healthcare sector. Complementing our hardware to make a complete solution are a number of strategic software partners including some of the following (list is not all inclusive):
  • Allscripts:
    The burden of medical records in a medical practice is extreme. Overcrowded offices lead to inaccessible charts’ either misplaced or lost. Document Imaging was targeted as a potential solution, but it had to be very easy to use and flexible, yet standardized for consistency and compliance. IMPACT.MD® Document Imaging Solution from Allscripts is a cost-effective way to automate patient charts and generate a rapid return-on-investment. Allscripts spent thousands of hours listening to medical professionals to develop this seamless and easy to use solution. IMPACT.MD offers medical groups the perfect starting point for clinical automation. However, it uniquely provides a modular approach to clinical automation, enabling users to add functionality over time and seamlessly migrate to a complete electronic health record solution.
  • Hyland:
    OnBase® Healthcare solutions enable healthcare entities to run more efficiently and cost-effectively by streamlining workflows across the enterprise with point solution in the following areas:
    – Revenue Cycle Management
      ◦ Registration
      ◦ Patient Accounting
      ◦ Coding
- Medical Records
  - Health Information Management
  - EMR Augmentation
- Back Office Operations
  - Accounting
  - Human Resources
  - Compliance Assistance

OnBase Healthcare Solutions are built using OnBase software, a configurable, scaleable enterprise content Management (ECM) application that can be deployed to meet your organization’s specific content and process requirements now and into the future. The open architecture of the system enables integration with your EMR, HIS, AP/AR, HR and PACS systems to fully leverage their capabilities and achieve rapid payback on you technology expenditures.

- **Captiva**:
  Captiva offers a number of products that meet the needs of healthcare entities including:

  **ClaimPack**, an automated claims processing solution based on the FormWare? platform from Captiva. It captures critical information from HCFA and UB92 forms with a proven accuracy rate of up to 99%. Companies that have taken full advantage of the ClaimPack solution have seen productivity skyrocket, as operators are able to process over 2,000 claims daily! ClaimPack can even be set up to process dental claims.

  **ClaimsEditor Professional and ClaimEditor Online**, play an instrumental role across the healthcare industry by utilizing the most advanced and comprehensive clinical editing technology available to ensure that claims are properly coded and are in accordance with applicable state Medicare and other third-party payer rules and regulations.

  **FirstPass** is an automated healthcare claims editing software solution that delivers higher rates of data accuracy, reduces the need for manual intervention and lowers both resubmission rates and cycle times simply by being consistent with the axiom that a “good carpenter measure twice and cuts once.”

- **Verity (Cardiff Software)**:
  Verity solutions for healthcare fall into two categories:

  - Verity Healthcare Provider Solution
    - ClinCapture for processing clinical trials, and
    - HIPAA to address the critical compliance issues.
– Verity Healthcare Insurance Solution
  – MediClaim provides a comprehensive, high-volume enterprise solution for
    scanning insurance claim forms.

Using Verity solutions, health organizations have experienced:
  – Improved clinical care.
  – Enhanced collaboration among physicians and other health practitioners.
  – More effective compliance with government regulations such as HIPAA.
  – Greater productivity among staff.
  – Streamlined processes for billing and insurance eligibility.
  – Higher customer satisfaction.

• SRS Software:
  SRS is a document-based Electronic Medical Record with an unmatched track
  record of 100% successful implementations for the past five years.
  SRS leverages its document-based EMR and delivers powerful features such
  as messaging and document workflow, e-prescribing, customized flow sheets
  and tight integration with labs, diagnostic equipment, fax servicers and
  transcription services.
  These features make SRS a flexible, indispensable tool for managing the flow
  of patient information within a medical practice.

Market Potential

  • Market data for the overall potential of Enterprise Content Management is very
    diversified. There are several studies indicating the market is healthy but there is
    tremendous discrepancies in the size of the market.
  • A recent study by the Gartner Group (used by AIIM) indicates the market is 3 billion.
  • AMR Research predicts the overall information technology opportunity created by
    the need for compliance will reach 80 billion over the next five years. The
    healthcare sector is heavily impacted by the need for regulatory compliance.
  • A study by AIIM International indicates the Compound Annual Growth Rate for
    the Healthcare Sector is 30% of the overall market.
Supporting Case Study — Family Practice Associates, P.S.C. of Lexington, Kentucky:

As reported by Allscripts, Inc.

Family Practice Associates in Lexington, Kentucky has nine physicians in two locations. They have 30 support staff members who aid them in seeing an estimated 250 patients per day. They generate 5,000 new patient charts each year.

Family Practice Associates wanted to become more efficient, improve patient care, move towards HIPAA compliance, and save money. A comprehensive Electronic Medical Records system was too expensive to cost justify and would require too much physician behavioral change. They needed a system that was affordable, flexible, easy-to-implement and use, and was written in an open architecture platform that would interface with best-of-breed integrated solutions.

The solution included IMPACT.MD® from Allscripts and Fujitsu scanners. IMPACT.MD was interfaced with their existing practice management system to enable a full system that utilizes high-speed scanning to quickly get every piece of paper in a patient’s record in the computer, including all paper coming into the practice such as referral letters, lab results, and explanation of benefits, to name a few.

Within six months they became a totally paperless office. The physicians were eased into a paperless environment by using IMPACT.MD’s “mini charts.” Mini charts are printable, customizable, stripped-down version of the entire patient chart that can be shredded at the end of the day to keep a practice paperless, even if physicians are relying on paper during the visit with the patient. The physicians became comfortable very quickly with the technology advancements and no longer need the printed mini charts.

Family Practice Associates reported the following benefits from their Document Imaging implementation:

- Saving $300,000 per year in transcriptions costs reduction
- Saving $30,000 per year for two file clerk positions
- Saving $40,000 in two years by not creating paper charts
» Improved profitability due to decrease in overhead
» Lab reports are in patient chart within hours instead of days
» No more lost charts
» Authorized users have simultaneous access to the patient record from any workstation with the click of a mouse
» Assistance with HIPAA compliance: Patient data is secured from unauthorized use
» Lower staff turnover since implementing IMPACT.MD

Other Resources of Information:

The following web sites have been beneficial in the research of this report and may proved beneficial for further research on this subject:
» The Medical Records Institute: www.medrecinst.com
» The Association of Information and Image Management: www.aiim.org
» The Association of Records Management Professionals: www.arma.org

Periodicals referenced include:
» Business Solutions Magazine
» eDoc Magazine
» Document Imaging Report

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Fujitsu Computer Products of America, Inc. is a subsidiary of Fujitsu Limited, a leading provider of customer-focused IT and communications solutions for the global marketplace. FCPA provides innovative solutions for the U.S. marketplace. Current product and service offerings include high performance hard-disk drives, magneto-optical drives, scanners, and scanner maintenance.