



Industry Paper
Intelligent Capture for Healthcare



A2iA Streamlining Access to Critical Healthcare Operations

The healthcare industry's ability to streamline meaningful use and Health Information Exchange (HIE) efforts are largely based on the level of interoperability between management systems. Organizations have long been tasked with improving the accessibility of data throughout complex multi-channel workflows without sacrificing security, accuracy, time or budgets. With this natural progression of the industry's efforts, Intelligent Capture has provided a critical bridge in accessing data held within paper medical documentation and making it available within the daily digital workflow, easing interoperability efforts and helping to facilitate an electronic industry.

With the growing use of electronic reporting and management systems, the need to lift accurate and complete data from paper documentation is more important than ever. The implementation of these systems, such as electronic health records (EHR), vary depending on the medical field of specialty; some fields are seeing a 78% full EHR usage rate, while others are seeing nearly one-third of their providers who rely entirely on paper. On an organizational level, the revenue cycle management (RCM) process is still largely handled by manual tasks because of the complexity of information found within clinical documentation required to code, trickling down through the entire claims process, proving Intelligent Capture has yet to reach its full potential within the healthcare industry.

Benefits of Intelligent Capture:

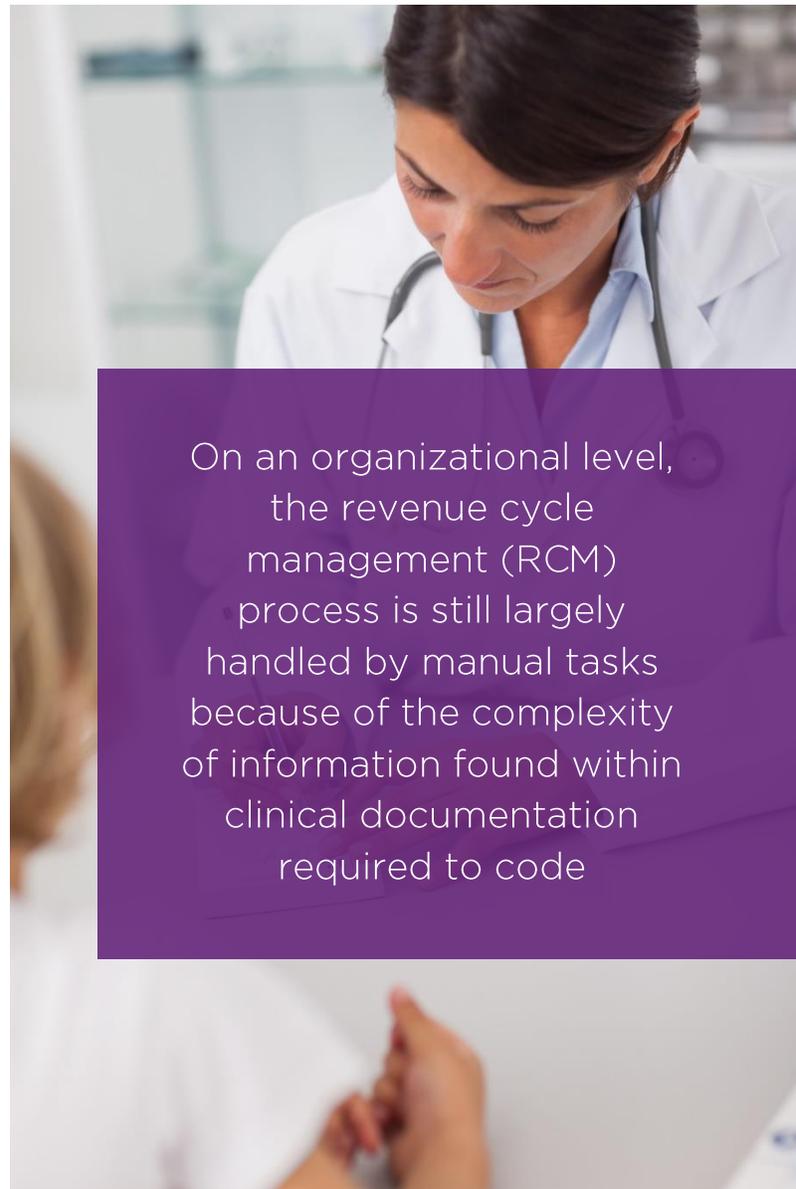
- ✓ **Streamline access to complex data:** Intelligently lift and index complex data, including handwriting and columnar data. Focus on improving document processing, with the ability to automate critical data from provider notes, patient records, administrative forms, and lab results.
- ✓ **Improve health care analytics:** Leverage unstructured medical data for electronic reporting and measurement systems in response to meaningful use, accountable care, and ICD-10 initiatives.
- ✓ **Minimize processing errors and time:** Create immediate actionable and accessible data with minimal manual tasks. Reduce bottlenecks and exceptions.
- ✓ **Streamline the revenue cycle:** Improve billing and collection processes, such as medical coding, claims processing, remittance posting, document image retrieval, contract and denial management, and financial analysis.
- ✓ **Easily sort and make data searchable:** Allow information to be easily accessible for improved search and reporting, with reduced resources.
- ✓ **Improve profitability:** Speed access to data and improve interoperability and business analytics efforts

Further EHR Improvement

The benefits of transitioning from paper to an electronic workflow have been well defined across all paper-intensive industries. Healthcare, in particular, has seen a vast push to end its reliance on using paper for patient's medical records and claims processing for over 10 years. The industry as a whole is said to still use approximately 10-13 pieces of paper for each patient visit and processes over four billion EOBs each year. Meaningful use regulations and government incentive programs have been a vital contributor for healthcare professionals, hospitals, and other healthcare organizations to implement and update EHR technology. Electronic health records are implemented to improve the overall quality of care and convenience for patients as well as improve costs and efficiencies at an organizational level.

Intelligent Capture has long been utilized to improve document workflows. The technology allows for the minimization of manual entry along with the ability to gather information deemed necessary by the user. Traditional recognition technologies can struggle with the complexity of information within varied formats of healthcare documents. Realistically many practices today create ways to work around their EHR solutions because of the limited usability and time restraints. The process of manually entering information from a patient's paper record can become an overwhelming step in route to a streamlined workflow.

With *a2ia DocumentReader*, organizations gain the complete automated access to the information they deem critically necessary from patient records to claims documents. The recognition software is engineered to extract and classify data regardless of writing style, document type or content, including the recognition of providers' handwriting. This leads to accelerated, automated access, lessening the need to create workarounds and ultimately improving interoperability and access to electronic, searchable, and reportable data.



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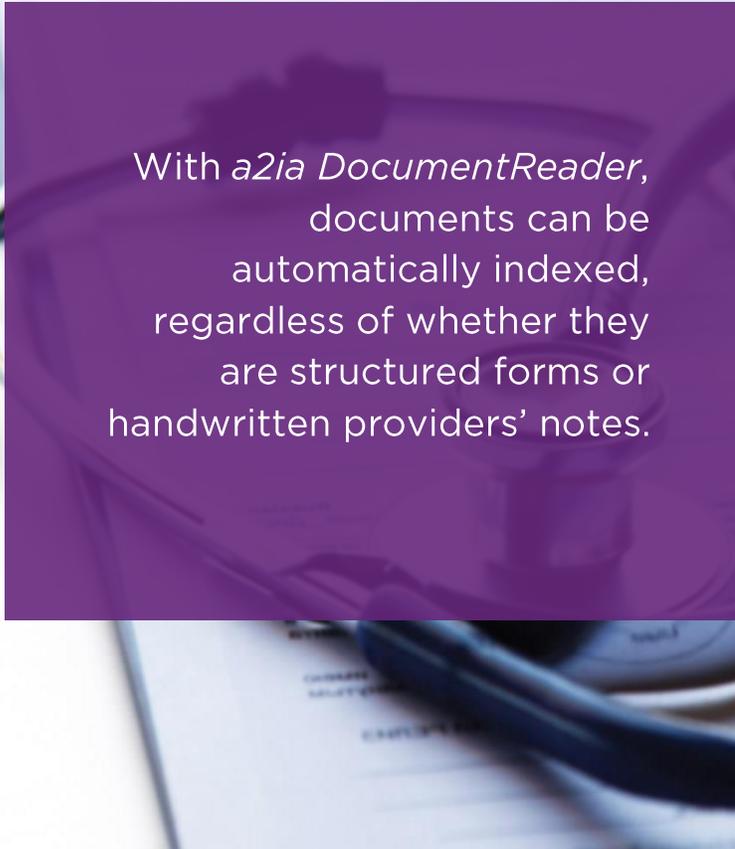
Enhance CAC Capabilities

The healthcare industry's implementation of electronic medical records (EMR) and the United States' adoption of ICD-10 have caused drastic changes and improvements to the revenue cycle, despite the inevitable frustrations that an adoption of such technology can cause. Besides being one of the last countries to adopt the new set of codes, the process itself was in need of a complete renewal to become more efficient and to offer better reporting capabilities and accelerated access to critical data found in patient charts, payment and claims documentation. Computer-Assisted Coding (CAC) applications have become a crucial component to support medical coding productivity and accuracy, faster medical billing operations, and contribute to identifying clinical documentation gaps.

At the most basic level, CAC applications allow for the identification of key terms from medical documentation and then suggest medical codes to match terms. Recognition software, such as optical character recognition (OCR) and intelligent character recognition (ICR), can be utilized to read printed or handwritten text and convert it to usable electronic data. While this is an important step in the automation process, it leaves a substantial amount of cursive handwriting left to be manually reviewed and entered by a coder – a piece of the puzzle that A2iA's proprietary intelligent word recognition (IWR) has been proven to deliver, and by working in conjunction with an NLP, can deliver extremely accurate results.

Intelligent Capture works hand in hand with CAC applications by streamlining functionalities to help improve the overall revenue cycle. A2iA's software toolkits are designed to do just that; work in cooperation with end-to-end solutions for enhanced productivity and efficiency. With *a2ia DocumentReader*, documents can be automatically indexed, regardless of whether they are structured forms or handwritten providers' notes. The

identification of keywords and phrases that will be assigned ICD-10 codes reach beyond traditional OCR capabilities to include documents like lab requisitions, doctors' notes, and other variations of clinical documentation that includes handwritten information, which previously required manual entry. A2iA's Intelligent Capture engines work to eliminate operational headaches by automating the unnecessary manual tasks, translating into improved access to information, data accuracy and company profitability.



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Expedite EOB Processing

The majority of Explanation of Benefits (EOB) processing efforts still extensively utilize manual procedures to validate and post payment information – there is still no fully automated approach on the market today. When EOBs are received, they are sorted into manageable batches and distributed to operators who then key necessary information into the electronic system. All documents are reviewed and all payment information is entered once the necessary adjustments and validations take place.

Operators are also responsible for matching EOB and payment information with patient services that were provided. While business process outsourcing (BPO) can offer providers assistance in minimizing manual tasks, it doesn't offer the same benefits as Intelligent Capture technology.

Intelligent Capture offers the very real option for providers to keep EOB processing in-house without losing the accuracy or speed needed to save time and money. *a2ia DocumentReader* is a fully customizable and integratable data extraction and document classification toolkit that provides automation throughout an array of healthcare applications, including those for Explanation of Benefits (EOB), and claims processing.

With its ability to deliver access to columnar data with the simple 'point-and-click' of a mouse, it is an easy to use, semi-automated data extraction tool that allows users to quickly and interactively capture full-columns of information, maintain its columnar structure and format, and perform on-the-spot verification. Payers are better able to control business operations, as well as benefit more quickly from automated access to payment and claims information and permitting providers to streamline access to more usable data – including unstructured information, cursive handwriting and columnar data.

By reducing manual tasks and providing quick, accurate automation, *a2ia DocumentReader* is an integral part of reducing labor, saving time and money, and improving processing speeds, information exchange and reducing bottlenecks.

Gain Intelligent, Meaningful Data with the Automatic Identification of Key Medical Data Points



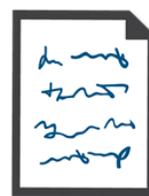
Structured



Semi-Structured



Unstructured



Freeform