



Use Case  
**Advanced Data Extraction Delivers Tangible  
Results Required for Improved Interoperability**

## Overview

As interoperability becomes increasingly important, healthcare organizations must adapt their processes to be smarter. In the past, when transitioning from paper to electronic solutions, the transferability of data may not have been a priority for many health entities; however this has now caused health information and data to be heavily segmented between the many different industry systems and applications. In fact, many legacy systems are still without an actionable way to decipher the crucial information contained within their documents and archives, putting patients at risk.

While the data output from healthcare systems grows exponentially over time, the more important the digitalization of healthcare documentation and the data stored within, becomes. In order to meet compliance requirements and achieve true interoperability, health organizations need to transition critical underutilized, unstructured data to usable information for an improved diagnostic approach that will improve patient outcomes.

This begins with a streamlined health IT workflow process designed around automated data recognition, classification, and indexing of each form, chart and record. By removing the time-consuming manual tasks, data is more readily available and transferable across the healthcare organization, for use within electronic health record solutions, and revenue cycle processes, starting from the provider and translating into better care for the patient.



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## Challenge

Interoperability depends on the successful exchange of relevant electronic health information from one organization and one system to another. With an abundance of EHR solutions, providers now face many disconnects because the different systems and applications cannot communicate or exchange data with one another. The ability for physicians to access patient records and share data across offices and disciplines can be a complicated process because of the varying vocabularies, documents, and workflows.

This decentralized infrastructure often creates duplicates and drives up cost for health IT, ultimately putting the patient at risk. Throughout organizations, data is being managed in varying degrees of quality and accessibility. Productivity, profitability, and patient outcomes cannot be fully realized until data is better managed and standardization is improved.

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## Ensuring Interoperability



*Providers must be able to distribute and receive information from all healthcare players. With quicker access to more actionable intelligence, healthcare organizations can improve patient outcomes and enable a higher level of efficiency and profitability.*

## Solution

A2iA's intelligent recognition engines help streamline functionalities across healthcare organizations, improving the overall productivity and profitability, as well as to help deliver improved patient care. As technology and solutions become smarter, the need for complete, accurate and more accessible data increases. While many organizations have transitioned from paper to electronic, data contained within paper-based clinical documentation still requires a considerable amount of manual keying to utilize the contained information.

Powered by unique RNN-based technology, *a2ia TextReader* enables health organizations a simpler 'plug-and-play' integrated approach to full-text transcription for improved data accessibility throughout the health IT management cycle. With expanded transcription capabilities, *a2ia TextReader* streamlines interoperability efforts by delivering a full text extraction of data from both printed and cursive documentation, without the need for customization or a dictionary, that can be applied to varying applications or solutions within the health IT environment.

Additionally, from this transcribed text, electronic solutions and applications for named entity extraction and/or document-classification can be performed, allowing for a generic output of data that can be applied to a vast number of solutions across the industry to improve productivity and accuracy, allowing for faster medical operations and patient outcomes.

*a2ia TextReader* also allows for the critical data found in previously inaccessible patient charts, insurance documents, laboratory requisitions and providers' notes to fill in gaps throughout user-defined applications. Providers are able to diagnose patients quicker based on more comprehensive electronic health records and quicker access to information. Transcribed data can also be transitioned into the revenue cycle for billing and coding, accelerating and improving the overall accuracy and efficiency.

Healthcare IT systems are able to function at a higher level of effectiveness and profitability with A2iA. With streamlined revenue cycles and health information management, interoperability among agencies and applications is more easily achieved.



*Expedite processing of complex printed and cursive documentation*



*Improve data accuracy for streamlined revenue cycles & HIM processes*



*Simplify accessibility of data to help improve patient outcomes*