

INTELLIGENT DOCUMENT CLASSIFICATION AND INDEXING

What is Intelligent Document Classification and Indexing?

The Extract Systems Platform is a software solution that accurately identifies and extracts relevant indexing and clinical data and uses it to intelligently classify, index, and routes documents to your document storage system and to appropriate link them to the Order, Encounter or Patient level of the EMR.

How does it work?

Once a document arrives via fax or is scanned, the document is processed using an Optical Character Recognition (OCR) engine to convert all the information from the document into raw text. The original document is then analyzed along with the text by Extract's extensive library of production-tested rules to locate the data elements and values that have been pre-defined for a particular document type. These rules are based on machine learning, as well as advanced logic that includes text, label, and pattern recognition, as well as context and database lookups. Once all the extracted data is defined and validated, the solution uses the information found to automate indexing and routing of the document to its desired storage location or workflow, and to input any extracted data in the appropriate fields of your EMR or other systems.

**ACCURATELY
IDENTIFIES &
EXTRACTS
RELEVANT
INDEXING
& CLINICAL
DATA TO
INTELLIGENTLY
CLASSIFY,
INDEX,
& ROUTE
DOCUMENTS.**

The highly functional, easy-to-use interface organizes the extracted data for easy verification, if desired, ensuring accuracy and compliance. The solution offers the option for documents to be routed and stored after being verified by a member of your staff or an organization can decide to let the process be fully automated based on pre-defined validation rules. If fully automated, then documents that do not meet the defined criteria of the rules are sent to an exception queue so that the index data may be verified before continuing the automated classification and routing process.

What makes Extract different?

Extract Systems Intelligent Document Classification & Indexing leverages the power of Extract's intelligent Clinical Data Extraction platform, which captures all patient and physician demographic information and all desired clinical data from a document with a **minimum of 80% accuracy**, and uses this same technology to capture the necessarily index data elements to perform document classification and indexing. The power of this platform can also be combined to classify all documents and route certain documents, such as lab results or other specialty reports, to the full clinical data extraction platform to extract all data and send it to the EMR as discrete data to populate the fields in addition to routing the document to its appropriate storage area.

Extract has proven the power of this technology with its many healthcare customers nationwide and using this platform, along with our vast experience with unstructured clinical data, allows us to offer yet another powerful solution.

Strategic benefits of using Extract

There are number of strategic benefits that are routinely mentioned by customers as key investment rationale.

SPEED OF ACCESS TO CRITICAL INFORMATION

Extract greatly reduces the time it takes for clinical documents to reach the EMR after the fax has been received. This empowers the patient's care team to spend more time looking **AT** documents instead of looking **FOR** documents and also allows clinicians across the enterprise to make more informed decisions for their patients.

CLINICIAN SATISFACTION

Clinical staff at all levels routinely express frustration with the increasing demands of data entry and searching for information. Expediting the flow of documents to appropriate storage in the document management system or EMR and classifying and naming them appropriately reduces clinician time spent on searching for documents and allows them to trust systems to have the information they are looking for.



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DATA CARE QUALITY

Clinicians will see time-savings from improved and quicker access to patient data in the EMR. Having documents consistently named, consistently classified, and readily available shaves preparation time for each patient visit can increase face-to-face time with patients to help improve care quality.

QUALITY AND COMPLETENESS

Having a complete patient record with all available information is important to making good clinical decisions. Making sure all documents associated with a patient are available and appropriately classified and named help to be sure that information is not overlooked.

Unique to Extract Systems, our Intelligent Document Classification solution can route certain document types to our Intelligent Clinical Data Extraction solution to accurately identify and **extract over 80%** of the clinically-actionable data trapped inside those documents. This alleviates the strain of manual data entry and the verification process is supported by behind-the-scenes validation of demographic data populated against existing databases and built-in logic to alert them to invalid data prior to it being filed into the EMR. This results in complete patient record both captured in the discrete fields of the patient's chart and other areas of the EMR and the associated original document available to reference if required. The combined solution offers a complete picture to help clinicians make the best decisions possible.

EMR ADOPTION

Implementing an EMR system is only half the challenge. The success of an EMR project can be measured by the extent to which it is used by clinicians and medical staff. Ensuring the EMR provides easy access to complete patient information will help to drive high levels of user adoption by making the EMR the single source of truth for each patient. If physicians have to search for documents outside of the EMR they'll likely be dissatisfied with their EMR experience.

DATA STANDARDIZATION

Because documents from non-interfaced, external sources typically uses the naming conventions of that external organization, this causes issues in "translating" test names, demographic or resulting lab information into terms that match your EMR or other systems. Based on information supplied by you, this solution will automatically rename incoming documents to match how you name things internally and to do it consistently to ensure staff can easily find what they are looking for.

COMPLETE QUALITY MEASURES

Often times, having complete information for quality measures is hindered by the fact that key pieces of information are stuck in incoming documents. By automating the storage of external screenings in the EMR with the event's date and time or by collecting required lab results, such as A1C values, quality reports run from the EMR can include information from tests and encounters that happened outside of your organization the same as if they had happened internally.

OUR INTELLIGENT DOCUMENT CLASSIFICATION SOLUTION CAN ROUTE CERTAIN DOCUMENT TYPES TO OUR INTELLIGENT CLINICAL DATA EXTRACTION SOLUTION TO ACCURATELY IDENTIFY AND EXTRACT OVER 80% OF THE CLINICALLY ACTIONABLE DATA TRAPPED INSIDE THOSE DOCUMENTS.



HIPAA COMPLIANCE AND DOCUMENT SECURITY

By increasing automation (and reducing the printing of documents), the routing, handling, and storage of documents within the organization helps to ensure patient privacy is maintained for HIPAA compliance. Additionally to support compliance and process improvement initiatives, all user actions taken in this solution are audited for reporting purposes.

ANALYTICS AND REPORTING

The use Extract's Intelligent Document Classification solution provides you with the unique ability to report on the volumes, types, sources and other relevant details of your incoming documents. Additionally, any time spent verifying certain document types or dealing with exceptions is recorded and reported as well.

OTHER BENEFITS

- Very significant reduction of paper usage
- Significant reduction in various manual workflow steps that typically surround the manual indexing process:
 - Movement of documents from one place to another within a department
 - Time spent classifying and naming documents
 - Automatic routing of documents to your Document Management System and linkage to the patient record
- Potential reallocation/reduction in FTE dedicated to manual indexing process
- Workflow standardization across departments
- Reduction in time for documents to be available to clinicians

NEED HELP WITH RETURN ON INVESTMENT (ROI) AND JUSTIFICATION?

EXTRACT IS HERE
TO HELP! LET US
SHOW YOU OUR
WORKFLOW TIME
SAVINGS TOOL
TO HELP YOU
SPECIFICALLY DEFINE
AND PREDICT HOW
YOUR CURRENT
PROCESSES WOULD
BE IMPROVED
USING EXTRACT'S
INTELLIGENT
DOCUMENT
CLASSIFICATION &
INDEXING.