The Guide to Structured Ambulatory Data

How AI & humans work together to drive interoperability

DataBank
HEALTHCARE ADVISORS

Contents

INTRODUCTION

Structured patient information is the fuel that powers interoperability in the fractured ambulatory space.

Key issues facing the ambulatory space

Labor expenses

An **average of 4.3 FTE** (full-time employee) support staff is needed to handle paperwork per one FTE physician.

Primary care **physicians will spend two hours on EHR tasks** per hour of direct patient care.

Labor costs are on the rise due to inflation and the need for the cost of living wages.

Staffing shortages remain a top problem for the healthcare industry.

Inaccurate patient information

In a **study** conducted in 2020, patients (total respondents were just under 30,000) reading ambulatory visit notes found a mistake within the information 40% of the time, some of which were severe errors.

Many health systems have numerous people indexing for ambulatory care clinics, creating a higher risk for mistakes by multiple facilities.

Inaccurate patient information can cost a U.S. health system **$6 billion a year** to correct for denied claims.

Increased demand in care

Outpatient care is increasing, with more people going to clinics and ambulatory facilities rather than inpatient stays.

Ambulatory clinics and facilities account for **48% of total hospital revenue.**

Medicare coverage is increasing, and senior populations favor advanced healthcare offerings, including telehealth and in-home care, outpatient surgery centers, and physician specialists.

Key takeaways from this guide:

1. Structuring patient information won't solve all your problems, but it can drive change toward modern ambulatory care.

2. The ROI of using IDP to structure patient information automatically is crucial for you and other decision-makers.

3. Intelligent Document Processing (IDP) doesn't sit on top of existing outdated processes; it is a purposeful change in how patient information moves through a health system.

4. Technology alone can't drive the outcomes you need. Human validation from healthcare experts will ensure the accuracy of patient information.

DataBank IMX

WHAT IS IDP?

| IDP DEFINITION AND BENEFITS |

WHAT IS IDP

Intelligent Document Processing (IDP) uses modern technology and human validation to turn an organization's content into structured, usable data.

Artificial intelligence is a primary component that uses machine learning to study past data, then quickly extracts and structures essential fields to be searchable and accessible. The reward is that it's much faster and requires less human interaction than manual or Optical Character Recognition (OCR) processing methods.

Machine learning is a subset of AI that helps the computer learn from data. If you feed the machine a large data set, it will analyze it to help the AI understand what it means.

The machine receives rules to follow, and once it's ingested enough documents, it can extract and structure the data on its own

WHY IDP FOR HEALTHCA

| BENEFITS FOR HEALTHCARE | DOCUMENT TYPES | ROI |

BD-Plymouth, PL6 7BP, UK
8082236

$C \epsilon$
2.0
mL

(2) STERILE R [LOT] 9276616 2021-01

RE?

There are many benefits for healthcare.

It helps you better manage and govern patient information.

You can get patient information into your EMR or ECM quickly and accurately through IDP. It removes the risky step of having caretakers manually indexing patient information. Once the data is in your systems, it enables better control and management of transferred data between hospitals or other facilities integrated into your health system.

It increases access to data across the health system.

Caretakers need immediate access to patient data, as do care partners within the health system - like, Scheduling, HR, Accounting, and Billing. Greater access will improve decision-making at critical moments, so you can better serve your patients.

It improves confidence in your data.

In healthcare, medical forms vary. That makes it difficult and time-consuming for people to index them manually, which can also lead to data errors. It's even tricky for OCR to extract healthcare data quickly.

IDP works well with healthcare documents and is precise the first go-round, which helps your employees gain confidence knowing the answers they need reside in the data they see.

IT ensures you get paid faster.

IDP helps you start automating medical billing. Instead of manual key entry, AI extracts patient information automatically, so the process can begin immediately and be error-free.

It elevates data security and compliance.

Your data is never stored with IDP. It is processed and passed along to your systems. Delivering standardized data to your vital systems reduces the risk associated with physical forms or storage and increases your ability to follow compliance regulations like HIPAA.

Investing in IDP is a shift in how patient information is received, indexed, and managed across a health system.

IDP can support any healthcare document type.

Indexed documents can be mostly grouped into 10 categories:

Identification information

Medical history

Medical information

Family history

Treatment history

Medical directives

Lab results

Consent forms

Progress notes

Financial information

Why IDP for Healthcare?

With IDP, it's OK if documents and forms within these categories are formatted differently, have many data points, or have inconsistencies like hand-written versus typed text.

Examples:

Lab Results

Outside Facility Records

Prior Records

```
Begin:
DocumentDescription: Prior Records / Outside Facility Records
MRN: 009530445
HAR:
File Name: R_099c71cc4c2f.PDF
Document Date: 02132023
Revision: 0
DocumentTypeNumber: 697
Facility:
CSN: NEW
MPI(UID): 1001165905
Assigning Authority: MCP
Import Source: AMBRD
Date of Service: 02/13/2023 00:00:00
ScanDate: 02/13/2023 00:00:00
NPI: 1831393800
Order Number:
Order Timestamp:
```

697

02/13/2023

Buyer:		
Supplier:		
Description	●	Prior Records
File Name	●	R_099c71cc4c2f.PDF
Type Number	●	697
Date of Service	●	02/13/2023
Scan Date	●	02/13/2023
Document Date	●	02132023

MODERN DOCUMENT PROCESSING

Content Intelligence is DataBank's full-service document processing solution that combines scanning, AI-powered structuring, and human validation.

2022 was the worst year financially for healthcare since COVID-19, according to **Kaufman Hall.**

> Around half of US hospitals finished in the negative margins for the year.

Hospitals and health systems can't afford more investments that don't reduce labor expenses, cut time for providers, and grow the bottom line.

> The **total expense per provider** FTE grew to $592,430 in the fourth quarter of 2022.

> **Medical errors** cost around **$20 billion per year.**

ROI Considerations:

Time Savings:

Eliminate the need for indexing by primary caregivers, offering more time for direct patient care.

Cost Savings:

Reduced operating costs, giving you space to focus on revenue generation in your department.

Staffing and Hiring:

Automating tasks removes the need for hiring for indexing positions, and rehiring, and then hiring again.

DATABANK'S CONTENT IN

INTELLIGENCE

CONTENT INTELLIGENCE IS FULL-SERVICE DOCUMENT PROCESSING.

Scanning, AI-powered classification, and human validation.

DataBank's Content Intelligence combines IDP and human validation to automatically index patient information for immediate access while ensuring data is accurate before being integrated into an EMR and/or ECM.

Indexing data in a multi-ambulatory facility environment can be done competently and swiftly by choosing the right partner and solution for your health system.

How does it work?

We work with you every step of the way, no matter where you are on the path to digital modernization. Together, we'll create a patient information management journey defined by your needs, built for your success.

Our AI-led document processing solution isn't AI alone. We believe in the power of human ingenuity, so any data that doesn't match your confidence level is sent to a queue to be validated by a healthcare expert.

01 Define your objective

Our work is based on your goals. **Manage** is about making your patient information accessible. **Activate** takes it a step further to turn that data into insights that help you make predictions.

02 Discovery

Discuss objectives, file variations, and costs.

03 File receipt

Physical files are picked up, shipped, and digital assets are delivered to one of our HIPAA-compliant centers.

04 Content prep

Our team prepares your content to be processed, while your care teams prioritize patient care.

05 Convert

We convert your patient information to machine-readable text so rules can be applied.

06 Structure

Data is extracted and structured based on predetermined keywords or through AI depending on your objective. Results that don't match your confidence level are sent to a queue to be validated by a real healthcare expert.

07 Delivery

Newly structured patient information is delivered to any EMR and/or ECM so it's immediately accessible by your care teams and staff.

08 Activate

Build automated workflows, power reporting, analytics, and insights that help you improve patient outcomes.

Proof of concept

No matter the objective, a proof of concept is delivered before we hit "Go" so you can be sure expectations are being met.

How is patient information made more accessible?

Visualize Your Integrated Healthcare Data Ecosystem

databankimx.com/healthcare

Physician Care

Behavioral Health

Post-Acute Care

Healthcare Payers

Quality Management

IT

Legal

Human Resources

OB/GYN

AP/AR

Health Information Management

Patient Registration

Clinical Care

CENTRALIZE YOUR ENTERPRISE

DataBank
HEALTHCARE ADVISORS

Content Intelligence provides accurate information that healthcare departments across the network can access via your ECM.

Once patient information is uploaded, it can be integrated into other processes utilized by billing, scheduling, additional physician charts, and more. This provides the entire healthcare organization with a seamless flow of information that strengthens communication and collaboration and jumpstarts automation.

DataBank IMX

WHO IS DATABANK?

| ABOUT DATABANK |

DataBank is well-versed in healthcare:

Over 30 years of experience working with healthcare organizations

We work with eight out of 15 of the largest healthcare systems in the mid-Atlantic region

DataBank currently works with 30 healthcare systems around the U.S.

Sources

https://www.aafp.org/pubs/fpm/issues/2002/0900/p45.html

https://www.annfammed.org/content/15/5/419.full

https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2766834

https://www.fiercehealthcare.com/finance/patient-matching-technology-costs-1-5-million#:~:text=Approximately%2033%25%20of%20all%20denied,survey%20from%20Black%20Book%20Research.

https://www2.deloitte.com/us/en/insights/industry/health-care/outpatient-virtual-health-care-trends.html

https://www.kaufmanhall.com/sites/default/files/2023-01/KH_NHFR_2023-01.pdf

https://www.beckershospitalreview.com/finance/hospitals-suffer-worst-financial-year-since-the-pandemic.html

https://www.ncbi.nlm.nih.gov/books/NBK499956/#:~:text=Depending%20on%20the%20study%2C%20medical,100%2C000%20people%20dying%20each%20year.

Get started with an expert

DataBank IMX   DataBank IMX   DataBank IMX