



A Research Hospital Introduces Document Automation

Background

A Midwest hospital system with individual hospitals ranked as some of the best in the United States has a sprawling presence and has struggled with managing their incoming document workflow for lab orders.

The Challenges

Every day the hospital's central processing facility receives boxes of paper orders via courier. The volume of pages received per month has already grown from 70,000 when conversations with the organization and Extract began to more than 200,000 in their first month live.

These shipments required time from clerks to scan, sort, and enter information into the EMR. Some of the pages come neatly machine printed with a barcode, while others come handwritten, and usually with a barcode as well. Generally, it takes a week to get these orders entered into the EMR.

While most of the pages are orders, they can also come attached with advance beneficiary notices and scans of driver's licenses and insurance cards. These normally accompany an order, but can become mixed up in transit as well.

The existing process for sorting client bill and patient bill lab orders, and the subsequent process of entering the data and scanning the documents to the Epic chart, is labor intensive and is heavily dependent on manual paper workflows. There are many points of potential failure and room for human mistakes.

Their Vision

Streamline and automate lab order workflows. The goal is to speed up turnaround times (resulting in faster cashflow), reduce labor costs, reduce errors and the rework associated with those errors, and improve management workflow through detailed reporting.

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The Solution

The Hospital System eliminated the use of a courier service that led to delays in processing and pages getting mixed up with other documents. They then implemented Extract's HealthyData platform to process and sort documents in real-time as they are scanned.

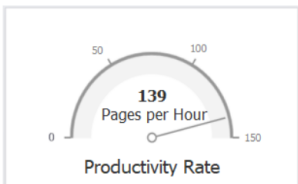
Scans are immediately classified into one of four document types, allowing documents to be routed where they are needed. Once the documents are classified, they are handled based on their billing status and available document information.

If the order is a patient-bill, it can be automatically linked to the appropriate patient and encounter in the EMR or be flagged for human review if patient information is mismatched or the order number is unavailable. For client-bill, the order can be quickly filed, or once again, flagged for human review if needed.

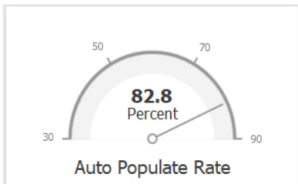
In addition to the software, this customer received an analytics dashboard that gave them a window into their document intake processes, internal productivity, and more. Having quick access to these metrics streamlines management decision-making.




675 Pending Batches	Oldest Pending Batch 5/16/2019 8:02:00 AM	9,136 Input Documents	22,612 Output Documents	79,871 Pages
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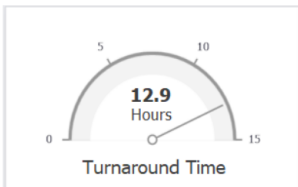
Acc.	Name	Input Docs	Output Docs	Pages	Active Minutes	Indexed Fields	Auto-Populated	Manual	Documents/Hour	Pages/Hour
<input type="radio"/>	Althaus, Heidi	692	1689	5924	2433	10146	6455	3691	41.7	146
<input type="radio"/>	Bowling, Daniel	514	1266	5015	2527	7596	4924	2672	30.1	119
<input type="radio"/>	Carpet, Katrina	906	2920	8909	3401	17520	12303	5417	51.5	197
<input type="radio"/>	Clark, Kristen	385	574	3871	1565	2450	2141	1309	22	71.7
<input type="radio"/>	Conley, Dawn	393	833	3657	1463	5058	3313	1745	34.2	150
<input type="radio"/>	Dorn, Jenny	450	863	2709	1505	5178	3152	2026	34.4	108
<input type="radio"/>	Driscoll, Donny	128	275	1256	678	1650	1027	623	24.3	111
<input type="radio"/>	Hamburg, Julia	871	2103	7714	2273	12618	8253	4365	55.5	204



By Field	Capture %
Document/Date	79.03 %
Document/Description	84.29 %
Document/Type	92.96 %
Patient/DOB	87.97 %
Patient/First Name	76.43 %
Patient/Last Name	75.90 %

By Doc Type	Docs	Pages	Capture %
External Documentation - Patient	4,34K	36.3K	83.31 %
Consent - Encounter	3,08K	5,48K	87.10 %
Orders - Patient	2,75K	4,74K	77.69 %
Authorization - Patient	1,37K	2,04K	76.73 %
Questionnaire	1,12K	3,32K	85.08 %
Form	1,03K	3,14K	69.25 %

By Queue	% Correct	Active Hours
CentralClinics	84.2 %	111.7
CentralHospitals	79.4 %	62.4
DuluthClinics	82.8 %	241.2
EastHospitals	73.8 %	21.5
ParkRapids	88.1 %	61.7
WestClinics	80.4 %	137.0



By Department	Avg Hrs to EMR	Docs	Pages	Capture %
BMC	6.97	2,59K	8,24K	84.61 %
Scan	14.6	1,06K	3,25K	80.41 %
Scanner	5.74	931	2,75K	83.38 %
DCLenRef	20.4	748	1,33K	82.17 %
DCLenPract	8.9	731	2,22K	76.71 %
HIS West - Park Rapids	9.12	695	1,33K	96.07 %

Document Name	Batch	Doc T.	Hours	Pa.	Capture %	Captured	Final Data	Queue	Input/Folder	User	Date/Time
01097017_Engranted_1.TIF	01097037	Enter	17.87	9	91.67 %	click here	click here	ParRapids	Physical Ther	Althaus, Heidi	5/3/2019 9:02
01097001.TIF	01097001	Nucle	17.56	2	91.67 %	click here	click here	ParRapids	HIS West - Pa	Althaus, Heidi	5/3/2019 8:55
01097146.TIF	01097246	Nucle	17.53	2	91.67 %	click here	click here	ParRapids	HIS West - Pa	Althaus, Heidi	5/3/2019 8:55
01097296a.TIF	01097296	Nucle	17.51	2	91.67 %	click here	click here	ParRapids	HIS West - Pa	Althaus, Heidi	5/3/2019 8:55
01097300_Engranted_1.TIF	01097300	Ime	17.46	1	66.67 %	click here	click here	ParRapids	None	Althaus, Heidi	5/3/2019 9:02
0109746E_Engranted_1.TIF	0109746E	Enter	17.60	2	75.00 %	click here	click here	ParRapids	North Nurses	Althaus, Heidi	5/3/2019 9:02
01097208_Engranted_1.TIF	01097208	Immu	17.54	2	88.33 %	click here	click here	ParRapids	North Nurses	Althaus, Heidi	5/3/2019 9:02

The Results

- Reduced turnaround time of invoice generation, improving revenue turnaround time.
- Eliminated the need for paper to be couriered to the central processing facility – saving time, reducing cost, and improving data security.
- Eliminated support & maintenance fees for a redundant application and its third-party support vendors for scanning and image storage.

Turnaround time for orders being attached to encounters in the EMR was cut in **half**

- Improved the quality of the documents / data in Epic (by eliminating an additional scan).
- Reduce scanning errors.
- Improved workflow management through reporting and analytics.
- Reduction of paper and improved data security.
 - a. Controlled/limited access to documents.
 - b. Eliminate the physical movement of paper between buildings.
- Extensible technology that can be applied to other workflows.

Seven staff members were able to be reassigned to higher value tasks