

24%**FASTER CLAIMS** PROCESSING

UTILIZATION MANAGEMENT FOR CLAIMS PROCESSING

ed/Subscriber ily Johnso Mailing Address 123 Main Street

Springfield, Illin

Employed

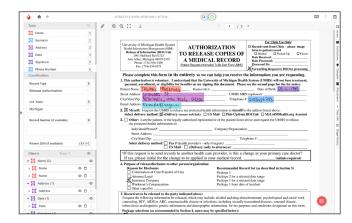
and State

iMerit improved this healthcare insurance provider's claims processing model using Ango Hub's natural language processing and computer vision technology.

THE CHALLENGE

Each day, healthcare insurance providers receive millions of documents from offices, hospitals, and other insurance providers. Historically, these health records are received, compiled, and processed by humans.

After costs began mounting from falsely declined claims, this top healthcare insurance provider realized it needed document AI to help extract and summarize the complex information in medical



66

HEALTH INSURANCE CLAIN

Audits were costing us. Improving the output of our models stood to change how we saw our business.

-Director, Data Science & Al

Patient's Relation Male

records. As documents were becoming increasingly non-standardized, computer vision and natural language processing technologies were becoming essential to processing claims efficiently.

This original process was creating delays in claims processing, as well as poorer resulting data extraction. Due to the rapidly increasing volume and complexity of incoming information, this company realized it needed to boost the performance of its model to prevent further turmoil.

THE SOLUTION

After a brief consultation, iMerit proposed its Ango Hub solution, which uses computer vision to localize information within PDFs and natural language processing functionality with optical character recognition to classify, link, and extract data. iMerit's teams then generated data to tune a foundational Large Language Model to perform summarization.

To begin, iMerit created links to the data servers, maintaining HIPPA and data governance on our client's servers. Specialized healthcare annotators and a customized workflow was then applied that adhered to regulatory standards. Batches of medical data were given to these annotators featuring sensitive information like patient and provider names, insurance numbers, member IDs, group numbers, diagnoses, diagnostic codes, procedure codes, CPT codes, and ICD-10 xcodes.

HEALTH INSURANCE CLAIM FORM APPROVED BY NATIONAL UNIFORM CLAIM COMMITTEE 0805		ING ADDRESS OF THE MEDICARE CARRIER.
		PICA
CHAMPLIS	AMPVA GROUP FECA OTHER	1a. INSURED'S LD. NUMBER (For Program in Itom 1)
	moter survi (John or sul)	987 65 4321A
2. PATIENT'S NAME (Losi Name, Fest Name, Middle Initial)	3. PATIENT'S BIRTH DATE SEX	4. INSURED'S NAME (Last Name, First Name, Middle Initial)
DOE, JOEN S. 5. PATIENTS ADDRESS Dia. Served	05 01 1924 Other Inform	nation Ze Blank unless there is other
		Insurance primary to Medicare. Com
10 Adams Street	Self X Spouse Civid Other	plete Blocks 4,6,7 and 11 if this is
	NI PATENT STATUS optional	the case. STATE
2P CODE TELEPHONE deckule Area Cadel	NJ Single X Married Other	ZP CODE TELEPHONE (Include Anto Cade)
01234 (973) 555-9876	Ful-Time C Par-Time C	
9. OTHER INSURED'S HAME (Last Name, Fest Name, Middle Initial)	Employed Student Student	11. INSURED'S POLICY GROUP OR FECA IN IMPER
9. OTHER INSORED'S WARE (LISE Nome, Pest Name, Middle Insiz)	10. IS PATIENT'S CONDITION RELATED TO:	
OTHER INSURED'S POLICY OR GROUP NUMBER	a. ENPLOYMENT? (Current or Previous)	Must complete with "NONE"
"Medigap" & Policy #		or only complete if other
b. OTHER INSURED'S GATE OF BIRTH SEX	VES K NO	h CADSUTABCE OF SHERIMARY TO
MM DD YY M BEX	PLACE (State)	
E EMPLOYER'S NAME OR SCHOOL NAME		Medicare
C. ENFLOYER & RIVE ON BUTULE MAR		Only complete if entry is made
4. INSUBANCE PLAN NAME OR PROGRAM NAME	104. RESERVED FOR LOCAL USE	4 BIN BLOCKS LL TH BEART PLANT
		VES 10 // ves. roken is and controls item 8 ard
READ BACK OF FORM BEFORE COMPL	Leave Blank	13. INSURFITYS OR AUTHORIZED PERSONN SIZEATURE Lauthorize
 PATIENT'S OR AUTHORIZED PERSON'S SIGNATURE I authorize to process this claim. I also request permet of government benefit 	e the release of any medical or other information necessary	payment of medical benefits to the undersigned physician or supplier for services described below
below. Complete or write	Current Date	Complete or write
some Signature on File	DATE 08/08/2008	sown Signature on File
14. DATE OF CLERENT: 4 ILLNESS (First surreture) OR	THE IS DATIENT WAS WAD SAME OR DAM AD BUILDED	16. DATES PATIENT UNABLE TO WORK IN CURRENT OCCUPATION
06 01 2008 PREGNANCY (LMP)	GVE PRST DATE MM DO YY	FROM for Workers' Comp Only
17. NAME OF REFERRING PHYSICIAN OR OTHER SOURCE	178 - Statistar Participantes Salas and Company	18. HOSPITALIZATION DATES RELATED TO CURRENT SERVICES
Required when ordered by MD	17b. NPI MD'S NPI	FROM MM ; DD ; YY TD MM ; DD ; YY

"

Our work with iMerit helped us reduce the need for manual auditing by 68%.

-Director, Data Science & Al

Using Ango Hub to annotate the data, the specialized healthcare annotators were able to extract the data and create training datasets to begin training a new model.

THE RESULT

Once iMerit trained this company's computer vision and natural language processing algorithms, claims processing time not only became more accurate but also more efficient. The resulting model's efficiency accelerated claims processing time by 24%, with a 68% reduction in manual audits. Within six months, these performance improvements saved this company an estimated \$180M, owing to increased customer satisfaction and reduced staffing for quality assurance audits.

BOTTOM LINE IMPACT

24% Faster Claims Processing 68%

Reduction in Manual Audits



Cost Savings

About iMerit

iMerit provides end-to-end data labeling services to Fortune 500 companies in a wide array of industries including agricultural AI, autonomous vehicles, commerce, geospatial, manufacturing, government, financial services, medical AI and technology. iMerit employs more than 5,500 full-time data annotation experts in Bhutan, Europe, India and the United States.

