iMerit

CASE STUDY

20,000
PATIENT INTERACTIONS ANNOTATED

AI FOR REMOTE PATIENT MONITORING

Top 3 database management company partners with iMerit to develop an AI-driven remote patient monitoring model.

THE PROBLEM

While undergoing treatment, cancer patients struggle to schedule, attend, and afford healthcare appointments. With remote patient monitoring (RPM), physicians can constantly track symptoms and responses to treatments without a visit.

To improve RPM quality for a leading cancer center, this top 3 database management company needed a natural language processing (NLP) model that could analyze 20,000 unique medical

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> *Any improvement to remote patient monitoring would boost care quality, efficiency, and cancer survival rates.*
>
> VP of Data Products,
> Top 3 Database Management Company

encounters. These encounters included data from doctor's visits, lab reports, physical examinations, and pharmacy visits.
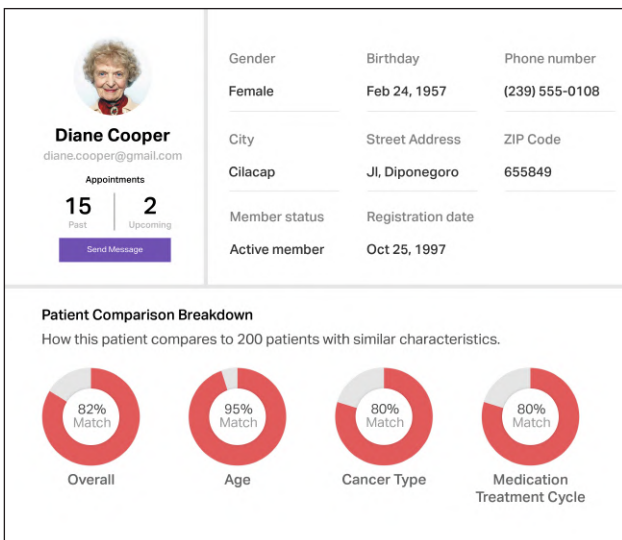
Due to the personal and unstructured nature of the data, this top 3 database management company needed a US-based HIPAA-compliant annotation partner with scaleable medical and natural language processing expertise that could standardize the data for AI use.

THE SOLUTION

To bring structure to the data, this company chose iMerit for its HIPAA-compliant processes, US-based team, and diverse team of cancer and natural language processing experts.

iMerit created a HIPAA-compliant workflow to annotate and structure the data, employing both medical expertise and natural language processing expertise with every annotation. By analyzing medical encounters individually, the annotators were able to generate ground truth datasets that could train the model to remotely monitor patients to the same level as a doctor.

Checks for quality were initiated at every step, ensuring all medical records and data annotated met or exceeded the standards of a doctor, physician, or clinician.

> ❝
> *We sampled the annotations and they were excellent. There wasn't a single mistake.*
>
> Algorithms Group Manager,
> Top 3 Database Management Company

THE RESULT

After iMerit annotated 20,000 unique medical encounters, iMerit generated datasets that trained the model to autonomously monitor cancer patients' responses to treatments remotely. Physicians gained a unified view of each patient's medical data, enabling them to make data-driven decisions and provide highly-personalized treatment.

Today, the model continues to monitor cancer patients and suggest treatments before side effects or irregularities become severe. Overall, the engagement helped this cancer center to improve operational efficiency, care quality, and cost control on behalf of the patient.

BOTTOM-LINE IMPACT

195,000	ENABLED	INCREASED
Medical Annotations Conducted	Precision Medicine	Cancer Survival Rates

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