



# GENAL FOR AUTOMATING CLINICAL NOTES

This tech titan improved its large language model's ability to summarize patient/doctor conversations and generate summaries for electronic health records.

#### THE CHALLENGE

During a clinical encounter, healthcare providers often have to sacrifice important face-to-face time with their patients in order to perform documentation. To augment physician capacity and improve patient care, clinicians are employing Al-powered digital scribes to summarize conversations and generate reports. This helps doctors maintain records to measure, track, and communicate a patient's long term health.



It's good that you came in. We'll do a thorough check-up to get to the bottom of this. I'll start by taking your vitals and then order some blood tests to check for things like anemia, thyroid function, and any other potential issues.

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Maintaining medical records is time-consuming and difficult. We needed to find a better way to document patient data securely and efficiently.

- Director, Global Services

This leader in conversational AI needed to improve its large language model's ability to summarize clinical encounters and generate subjective, objective, assessment, and plan (SOAP) notes for electronic health records (EHR). After struggling to find high-quality data with other data annotation vendors, this company came to iMerit to provide HIPAA-compliant medical specialist services for corpus creation and reinforcement learning from human feedback (RLHF).

### THE SOLUTION

- Specialized medical teams listen to doctor/patient conversations
- Language specialists summarize clinical information
- RLHF analyzes accuracy of model-generated clinical findings

To improve model performance, iMerit's specialized medical teams began by listening to doctor/patient conversations and validating ASR transcriptions of clinical encounters. Once validated, iMerit language specialists would extract and summarize clinical information from transcripts like initial diagnoses, previous medical history, patient medications, courses of action, and scheduled visits.

To improve the quality of model-generated specialty clinical settings, iMerit created a second custom workflow involving RLHF with a team of



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The quality has been outstanding. Thanks to iMerit, we're expanding transcription to other languages.

- Director, Global Services

sub-specialists. This team of healthcare specialists performed RLHF to analyze the clinical accuracy and relevance of model-generated clinical findings from multimodal patient records, including labs, studies, and historical data.

#### THE RESULT

As a result of this process, model performance quickly improved. Seeing the success of this workflow, the scale of the project was expanded to include new specialties and languages. By reducing the administrative burden on healthcare providers, doctors were saving an average of 12 hours per week when using the ambient digital scribe.

This integration of iMerit's services ensured that the data used for training the Al models was high-quality, HIPAA compliant, and tailored to the specific needs of various medical specialties. This comprehensive approach to model development and validation facilitated a more robust and reliable system for managing electronic health records, setting a new standard in the healthcare industry for leveraging Al technology.

## **BOTTOM LINE IMPACT**

**Doctor Hours** Saved Weekly

**Annual Hours** Saved Per Doctor 43%

**Provider Burnout** Reduction

#### About iMerit

iMerit provides end-to-end data labeling services to Fortune 500 companies in a wide array of industries including agricultural Al, 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.