

CASE STUDY

AI-driven form filling saves hundreds of hours of work for doctors and care givers

Doctors and other care givers are often operating at full capacity. They want to say “yes” more, but, after each encounter with a patient, they are forced to sit for hours filling out forms. Synthoni used Prediction Guard to create a doctor dictation processing application for their client. The application takes audio dictations from doctors as input and automatically parses out medical form fields (primary diagnosis, patient history, etc.) into a draft form for post editing. This AI-driven process can help a doctor fill out necessary forms in minutes rather than hours!

SYNTHONI SOLUTION

Synthoni’s client receives 1000’s of doctor dictations per day from the health systems that they serve. These dictations are transcribed using AI transcription. Then, an AI agent loops through each field within form templates attempting to extract the relevant information from the transcription.

Upon extracting the relevant information, the application utilizes Prediction Guard’s output validations to generate a confidence score for each field. Draft forms containing the extracted information are then uploaded into a review system for the doctors to make final edits.

PREDICTION GUARD BENEFITS

HIPAA Compliance

Synthoni needed a fully HIPAA compliant AI platform, that will not store healthcare data externally. Prediction Guard has third party monitoring in place for HIPAA compliance and strict data protection policies.

Developer Friendly APIs

Engineers at Synthoni are used to working with things like LangChain, which assume OpenAI compatible APIs. Prediction Guard’s API provides library-level compatibility, such that developers can use familiar tools/ frameworks.

AT A GLANCE

AI Solution

- Medical form-filling from unstructured doctor dictations
- Chained LLM calls for multiple form fields

Benefits

- HIPAA compliance
- Easy-to-use APIs



“Given the high stakes in healthcare, responsible AI must be applied in healthcare primarily to augment human decision making, rather than replacing human tasks or decision making. ‘Human-in-the-loop’ must be an essential characteristic for most, if not all, AI healthcare deployments.

In addition, AI healthcare systems must be compliant with existing privacy laws...”

Anand Rao Professor at
Carnegie Mellon University