



Accelerating Insurance Appeals Using Generative AI

SUMMARY

Our client, a west coast based startup company, wanted to create a way for consumers to navigate the complexity of the insurance appeals system and effectively submit appeals for denied claims without requiring them to have deep expertise in the field. They partnered with Source Allies to develop a generative AI solution that streamlines the process by handling the detailed aspects of insurance disputes, enabling patients to focus on their well-being rather than administrative hurdles.

SOLUTION

We built a solution using generative AI and Retrieval Augmented Generation (RAG) to streamline the process of appealing prescription denials by generating comprehensive letters. We leveraged existing medical literature, previous appeals and legal precedent to produce well-supported arguments tailored to the patient's personal story, condition and medication. Additionally, it facilitates the inclusion of supplementary documents, such as physician letters, to bolster the appeal. Observability measures were implemented to track the performance of the letter generation process, ensuring continuous improvement. We used prompt engineering principles, particularly the few-shot technique, to provide the generative AI model with example prompts and responses to train it to produce high-quality, relevant and accurate appeals.

Tech Stack: Amazon API Gateway, AWS Lambda, Amazon SQS, Amazon S3, Amazon DynamoDB, Amazon RDS (Postgres).

RESULTS

<2

System generates appeal letters in <2 minutes

90 Days

Project from concept to ready for consumer use in under 90 days

100%

Letter generation process moved from manual to 100% automated