

Conversational Generative AI Revolutionizing Patient Engagement

Helped a medical devices client achieve 40% time savings
for health workers.



Discover how our AI agent transformed the offline pre-medical questionnaire process for a leading US-based medical devices client. By leveraging advanced natural language processing and conversation AI, we created an interactive chat agent that streamlined patient interactions, improved efficiency, and enhanced patient satisfaction.

About the Client

Our client is a prominent US-based medical devices and healthcare company that address a spectrum of healthcare needs catering to all ages, nutrition, diagnostics, medical care and pharmaceutical therapy.

The Objective

The client wanted to devise an effective and engaging solution to replace their previous offline pre-medical questionnaire process.

The client desired an AI-powered medical conversational agent (chatbot) that could engage with the patient effectively. They wanted it to pose inquiries, elicit responses and subsequently, automatically fill out the form based on the collected data. The solution should help streamline the form-filling process, save time for healthcare workers, and provide doctors with a detailed pre-medical checkup summary to facilitate prompt diagnosis and treatment.



The Solution

To address the client's challenges, HCLTech developed a generative AI-based agent for patient query understanding. This involved identifying key pre-medical questions and building a conversational agent using Large Language Model (LLM), similar to ChatGPT.

Patient's voice inputs are transcribed into text, enabling machine comprehension. The transcribed text is then processed through ChatGPT, leveraging conditional prompting to generate domain-specific responses. Our team has further refined this large language model via finetuning to ensure the creation of highly specialized responses to achieve the business objective.

The solution can maintain conversation logs and tagging evidence for informed decision-making.

Our team of generative AI experts also addressed speech-to-text conversion challenges by considering language variations encompassing factors like age, gender, and speech-related difficulties.

Benefits Delivered

By implementing our AI-powered conversational agent, we delivered remarkable benefits for healthcare workers and patients alike. Healthcare workers experienced up to 40% time savings as the agent streamlined the pre-medical questionnaire process, eliminating manual form fillings.

The conversational agent provided patients with a more engaging and personalized experience through human-like conversations, tailored questions, and responses based on their specific needs.

Doctors gained valuable insights into patient health trends and patterns, enabling informed decision-making, and they could decide on improved treatment strategies, ultimately improving patient outcomes.

This transformative solution enhanced overall patient satisfaction by replacing tedious form-filling procedures with dynamic and interactive conversations, making the entire process more efficient and engaging for both healthcare workers and doctors.

The Impact

40%

Time savings of health workers

Human

like Conversation AGENT

<10

less than 10 retries per question