

Problem Statement 8

AI-Assisted Medication Adherence Monitoring System

The Challenge

Medication non-adherence is a major challenge in chronic disease management, often leading to poor health outcomes and increased hospitalizations. Healthcare providers lack continuous visibility in patient medication adherence patterns. There is a need for an assistive AI system that can analyze adherence data and identify patients at risk of non-compliance.

Medication Data Analysis Agent

An agent that analyzes medication intake logs, refill history, and missed-dose patterns.

Adherence Risk Detection Agent

An agent that identifies declining adherence trends using historical patterns and predefined rules.

Reminder & Lifestyle Support Assistant

An agent that generates adherence reminders and educational insights (*assistive only, non-diagnostic*).

Outcome

Improves medication adherence through awareness and supports better long-term treatment outcomes.

Mandatory Tech Stack

Lang Flow using IBM Granite Model (Using RAG on medication adherence best practices and patient education resources.)