

# **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 to reminders and educational insights (*assistive only, non-diagnostic*).

### **Outcome**

Improves medication adherence to 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.)