

MediGuide – AI-Powered Medication Intelligence & Adherence Platform

Problem Statement:

Misunderstanding prescriptions is a leading cause of medication non-adherence, resulting in 125,000 preventable deaths annually. Current solutions offer passive translation but fail to address the root causes: patient anxiety, complex multi-drug regimens, and the critical "what happens next?" after taking a pill. Patients need a proactive partner, not just a dictionary.

Objective:

Develop an intelligent, predictive platform that doesn't just translate prescriptions but actively guides patients through their entire treatment journey, from decoding instructions to managing side effects and ensuring adherence.

- **Predictive Personalization Engine:** The AI cross-references the prescription with (anonymized) patient age, known conditions, and past reactions to flag potential drug-drug interactions or higher-risk side effects *before* they occur.
- **Smart Medication Scheduler & Reminders:** Automatically creates a personalized intake schedule synced to the user's timezone and daily routines (e.g., "with breakfast," "after your evening walk"). Reminders escalate intelligently if a dose is missed.
- **Care Circle Integration:** Allows patients to securely share their simplified medication plan and adherence status with a family member or caregiver, turning individual management into a supported team effort.
- Integration with FHIR-based Electronic Health Record (EHR) APIs (with patient consent) for automatic prescription upload and personalization.
- A secure, encrypted backend for storing sensitive patient data and facilitating "Care Circle" invitations.