

Meet the HealthLight team



**Kathryn
Kashitsyn**
AI Engineer



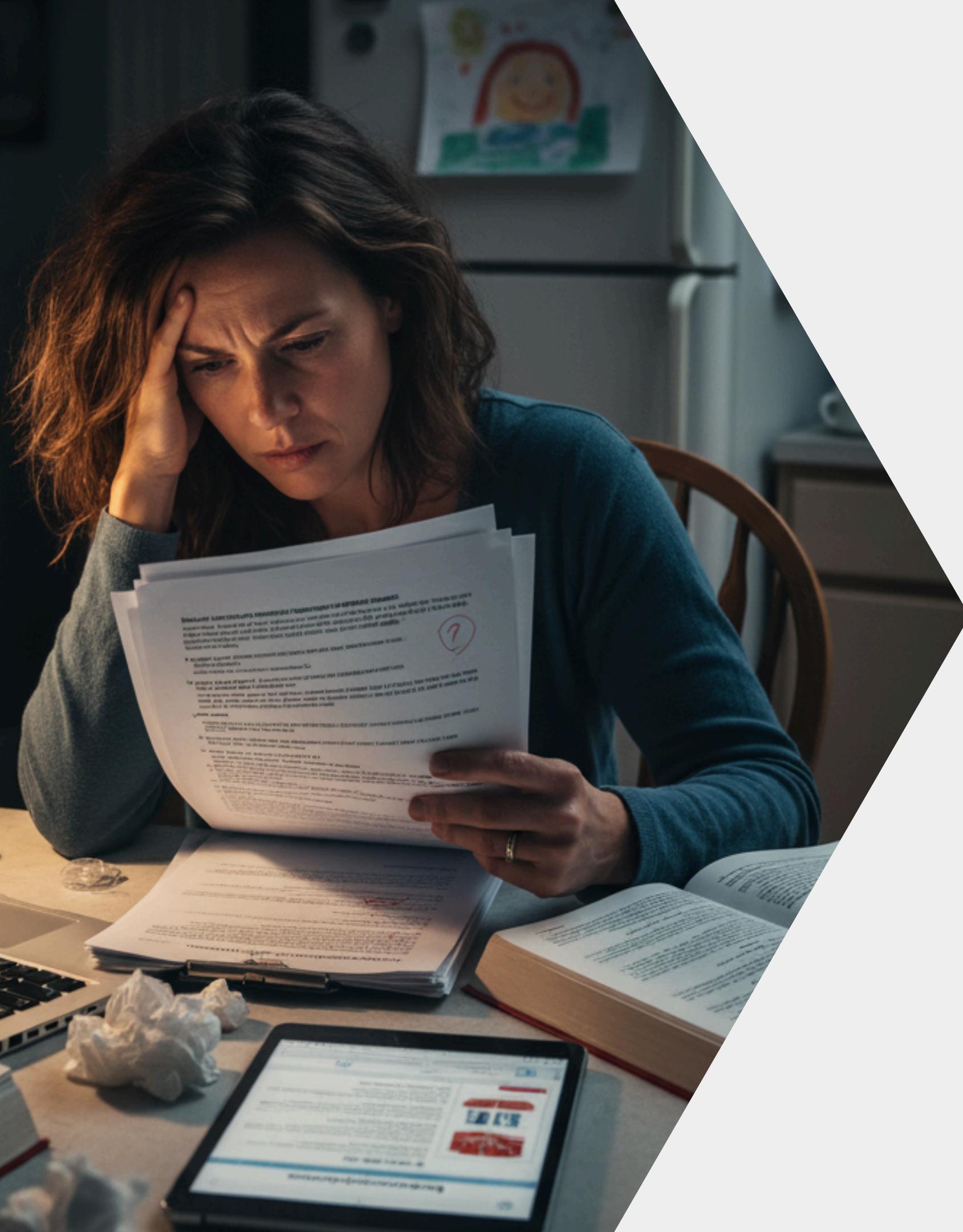
**Mahsa
Ebrahimian**
Senior Data Scientist



**Ashley
Loong**
AI Engineer



**Tiffanie
Kong**
Principal Product
Manager



Healthcare Confusion is A Hidden Crisis

\$238B annually^(I)

avoidable medical expenses

9 out of 10 adults

face low health literacy

1.5x readmissions within 30 days

due to confusion issues



Demystifying Your Diagnosis

CUTTING THROUGH THE COMPLEXITY OF MEDICAL JARGON

- Interpreting medical jargon from office visits, medical discharge notes, and lab results
- Unclear next steps
- Shy to ask for more information
- Where to go for second opinions
- Healthcare coverage, costs and nearby providers

HealthLight

Your go-to Universal Health Companion

CLEAR | AFFORDABLE | LOCAL



HealthLight®

Solving the problem of medical understanding
and access for everyone.

Key Features

01 COMPASSIONATE CARE COMPANION

An empathetic **conversational agent** that informs, guides, and comforts patients and caregivers—explaining symptoms in plain language, offering safe self-care guidance with disclaimers.

02 SIMPLIFIES MEDICAL NOTES

Translate complex medical jargon into **everyday language**, ensuring patients understand their doctor's medical notes, interpret lab results or discharge summaries to decipher diagnosis.

⚠️ DISCLAIMER: THIS TOOL IS NOT A SUBSTITUTE FOR PROFESSIONAL MEDICAL ADVICE. IT PROVIDES INFORMATIONAL SUPPORT ONLY

03 CLINIC FINDER

Our Clinic Finder connects users with local **healthcare providers**, ensuring they have access to necessary services

Approach



Datasets & Models

Hugging Face/Mistral 7B
Open AI/
Groq
CDC
WHO
CMS, data.gov, Kaggle

Tech Stack

Jupyter NB
Langchain & LangGraph
Gradio - UI
Python
ChromaDB

Design & Build

Miro Board
Chat Agent
Clinic Finder Agent
Web App UI

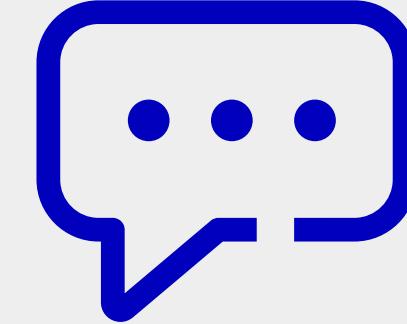
Test & Deploy

Test & Deploy Groq Llama3 application
Test on Jupyter NB
Wrap with Gradio UI

*Bolded items implemented

Built on LangChain

MODULAR, CONTEXT-AWARE, EXTENSIBLE



Core AI Agent Engine: Intent Node

Classifies what the user wants - translator, costs, providers
(Models: OpenAI, HuggingFace, Groq)

Langchain Reasoning Manager & Loop

Planner and Orchestrator - uses memory and selects appropriate tools

Memory & Context

Conversation History & Buffer

Tools & Capabilities

(Modular units that perform specialized tasks by accessing integrated data)

LLM Agent

Medical Jargon and understanding
Knowledge Base

Cost Lookup

Procedure Costs
Drug Prices

Clinic Finder

Location & Services

Plugin APIs

Insurance Coverage
Pharmacies

Data Integration

(Public Datasets: CMS, data.gov, Kaggle, HuggingFace)

An Agent That Understands Context — Not Just Text.

DEMONSTRATING USER INTERACTION

User: “Where can I get a colonoscopy in 91706?”

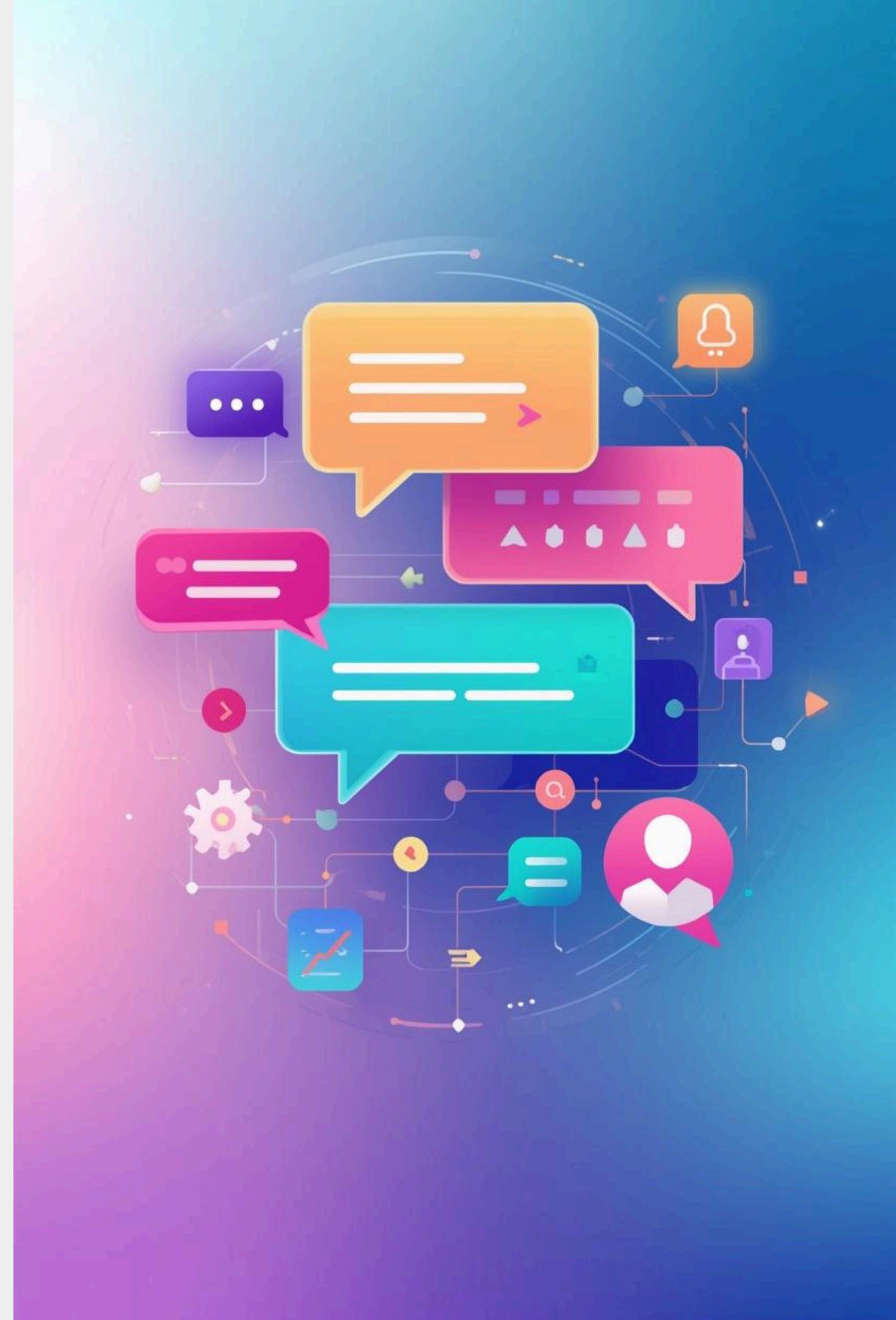
→ Agent detects a provider request, extracts ZIP, and lists nearby clinics.

User: “Now explain what colonoscopy is for.”

→ Agent seamlessly switches to caregiver mode, explaining the procedure in simple terms.

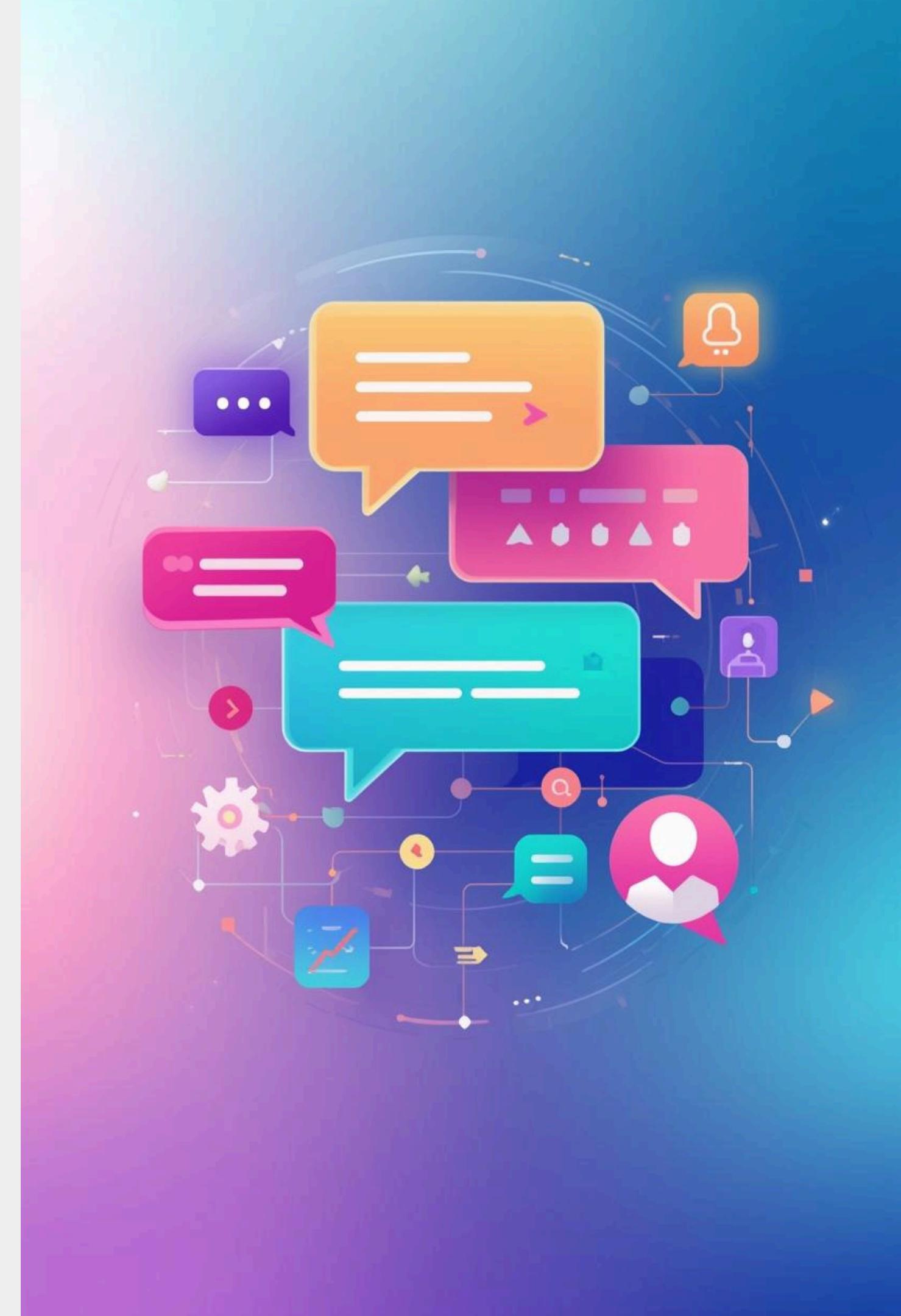
User: “Patient also has diabetes and high blood pressure.”

→ Agent summarizes key conditions, explains medical terms, and suggests follow-up actions.

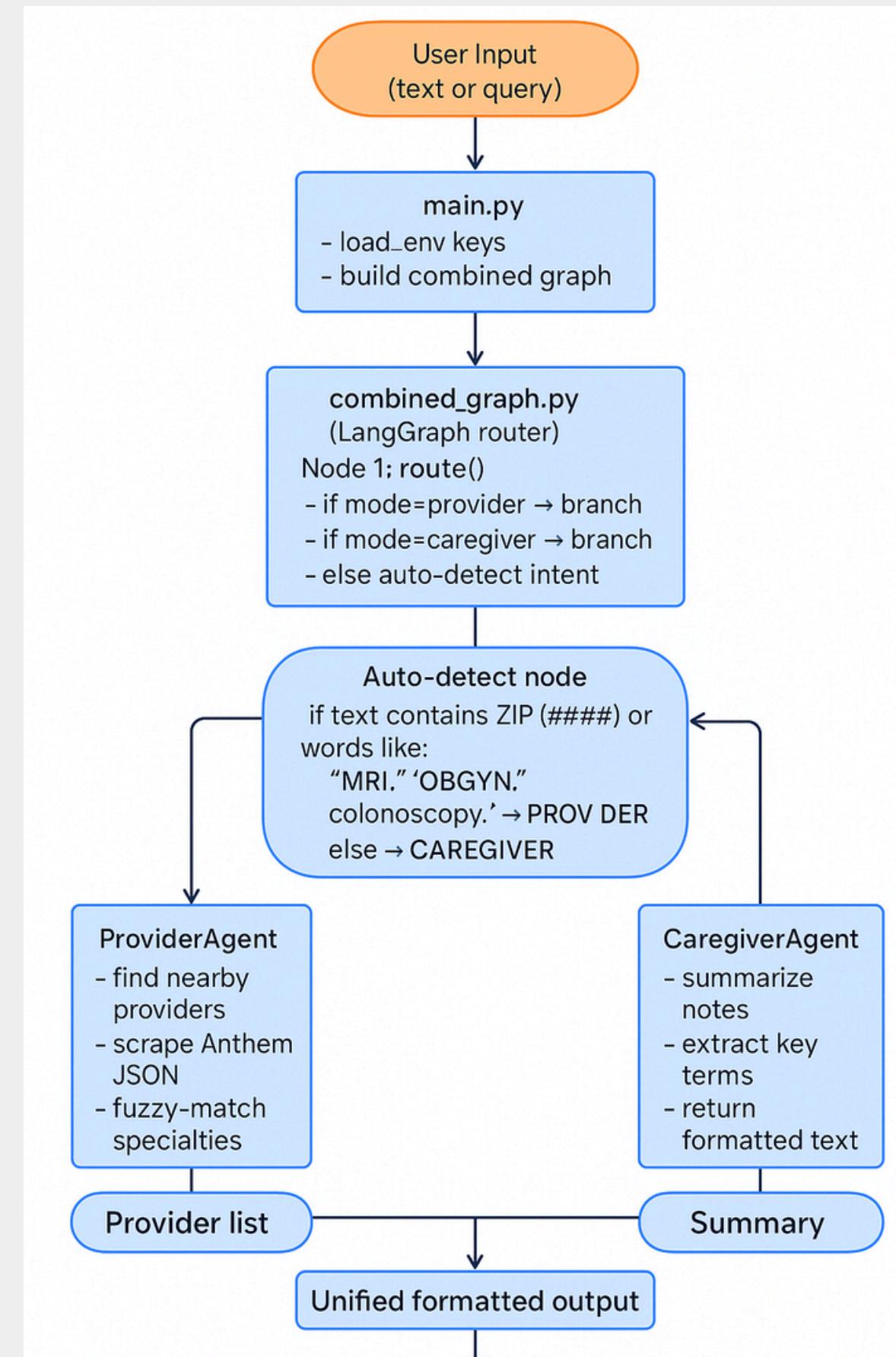


How the Agent Works Behind the Scenes

- 🌐 Understands context – remembers prior ZIPs, symptoms, or conditions.
- ✈ Routes automatically – Combined Graph decides:
 - If input mentions a ZIP or procedure → Provider path
 - Otherwise → Caregiver path
- 🧩 Multi-agent coordination –
 - ProviderAgent → uses live provider data and radius search.
 - CaregiverAgent → summarizes notes and explains terminology.
- 💬 Unified output – returns friendly, structured text.



Flowchart



A Path Toward Equitable Health Access



01

MVP

General Healthcare Awareness
Local clinic matchmaking
Symptom Triage



02

Expansions

Estimate procedure costs
Multi-model Support
Multilingual Support
Voice Assistant
Mental Health Resource
HIPPA Compliant LLMs
RAG: open datasets (Medline, NIH, PubMed abstracts)
Extended Model & Datasets



03

3P Integration

Insurance coverage APIs
Pharmacy costs APIs
Integration (FHIR APIs) for anonymized Electronic Health Records EHR interoperability



04

Partnerships

Local Hospitals & Clinics
Health Insurance providers
Medical/Medicaid/Medicare
Non Profits & Public Health



HealthLight

Your go-to Universal Health Companion



HealthLight®

One question, one clear answer —
When it matters most.