

# Meet the HealthLight team



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AI Engineer



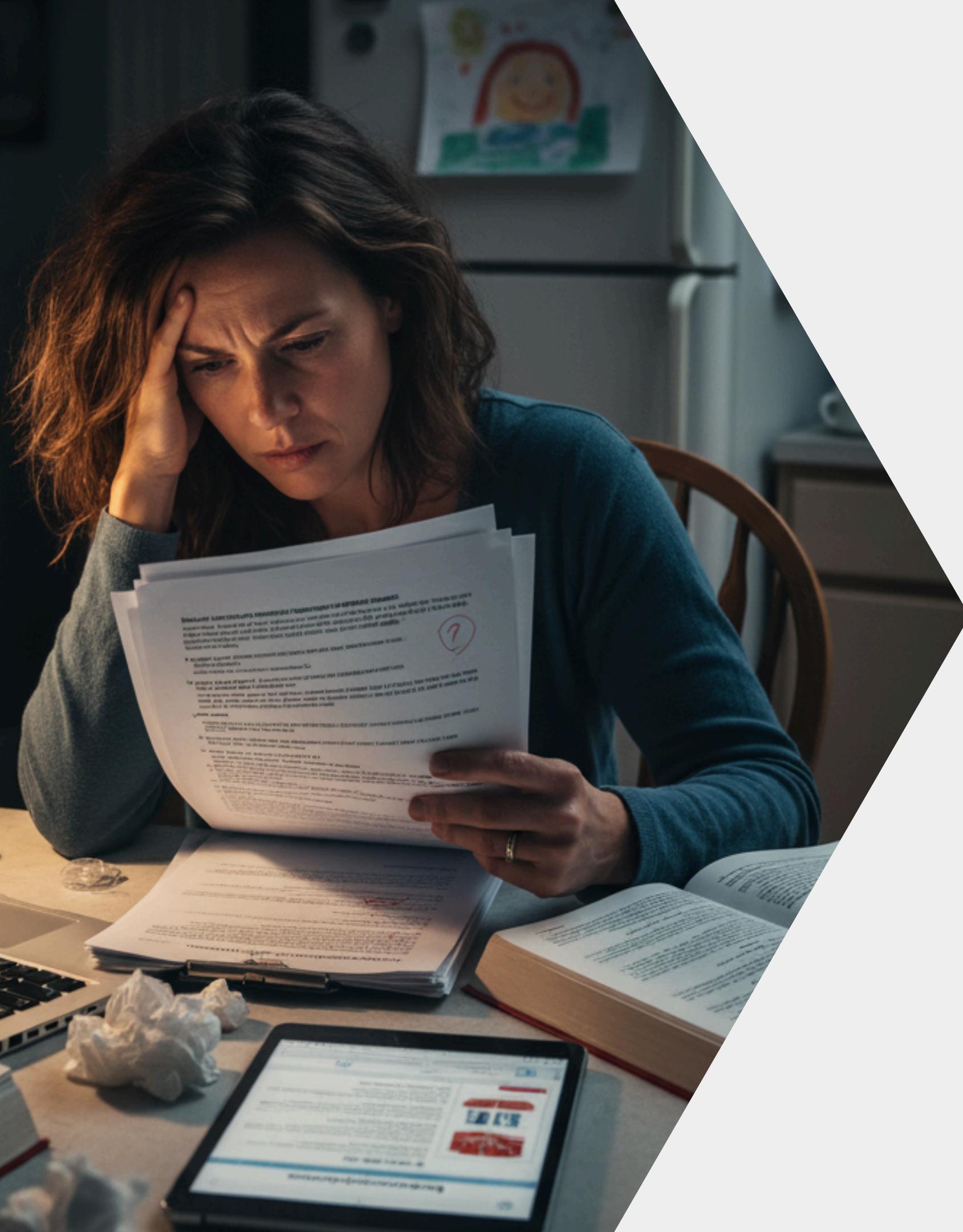
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Senior Data Scientist



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AI Engineer



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Principal Product  
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# Healthcare Confusion is A Hidden Crisis

\$238B annually<sup>(I)</sup>

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avoidable medical expenses

9 out of 10 adults

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face low health literacy

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1.5x readmissions within 30 days

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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



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.

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## DEMONSTRATING USER INTERACTION

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

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

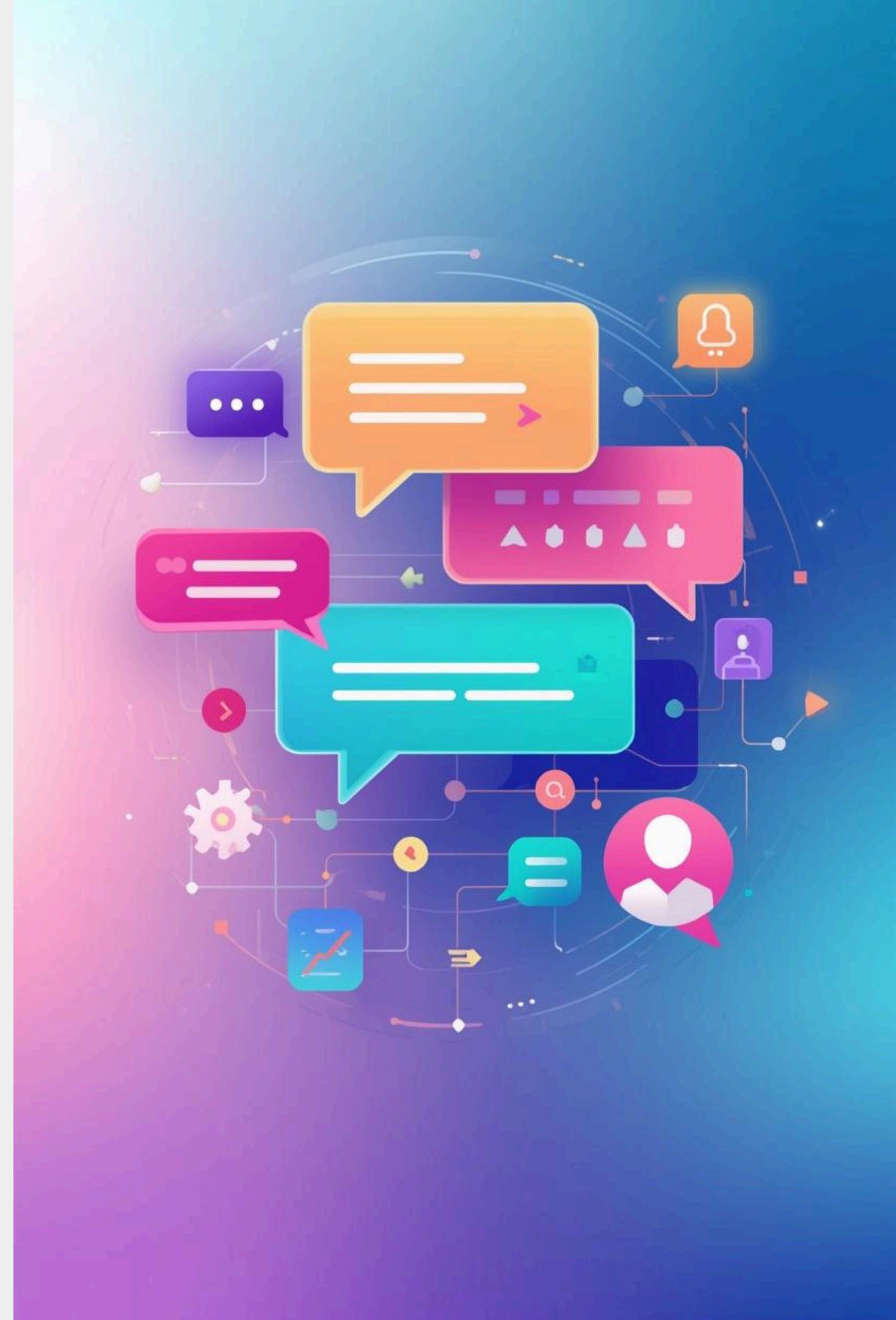
User: “Now explain what colonoscopy is for.”

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

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

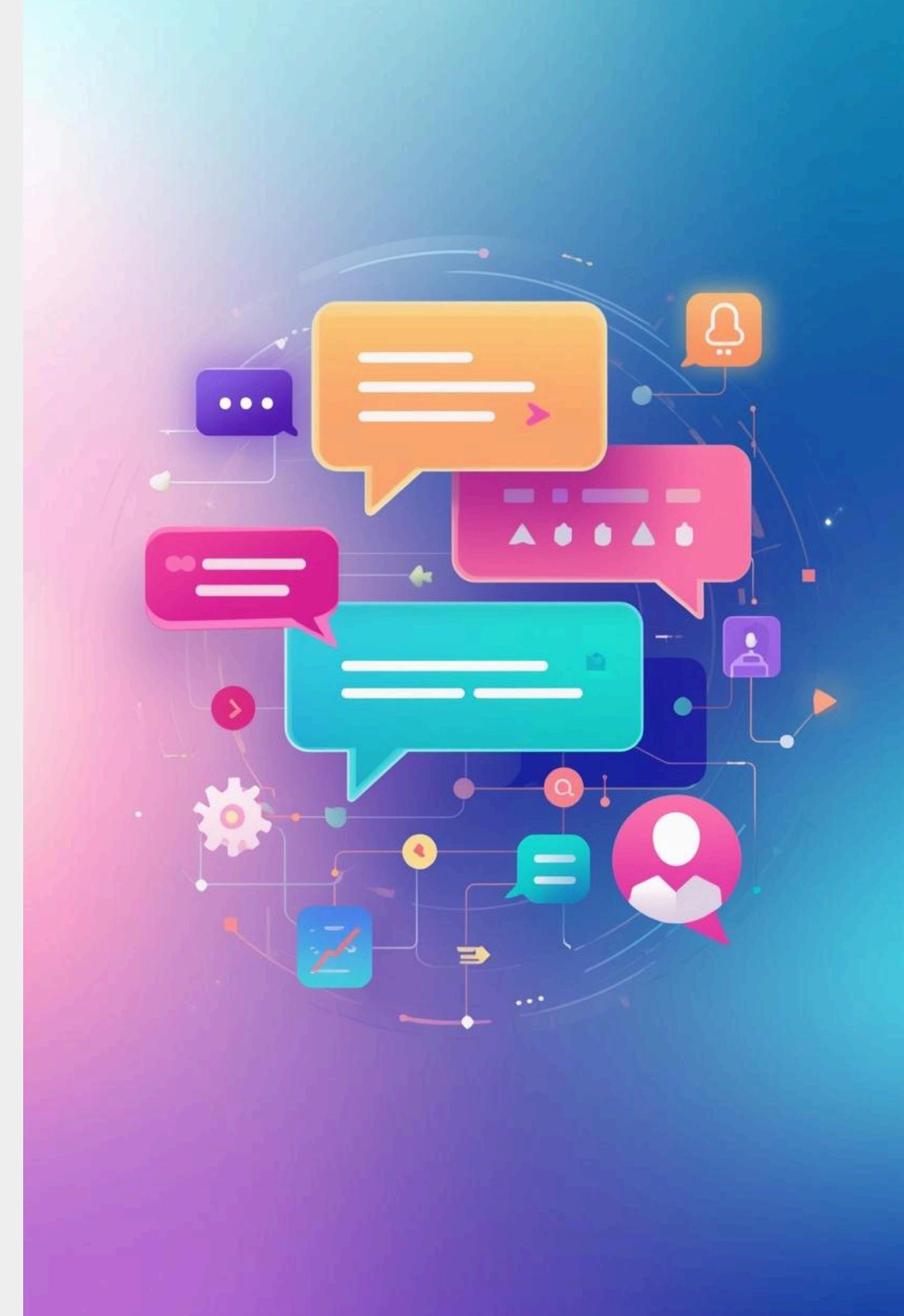
→ Agent summarizes key conditions, explains medical terms, and suggests follow-up actions.

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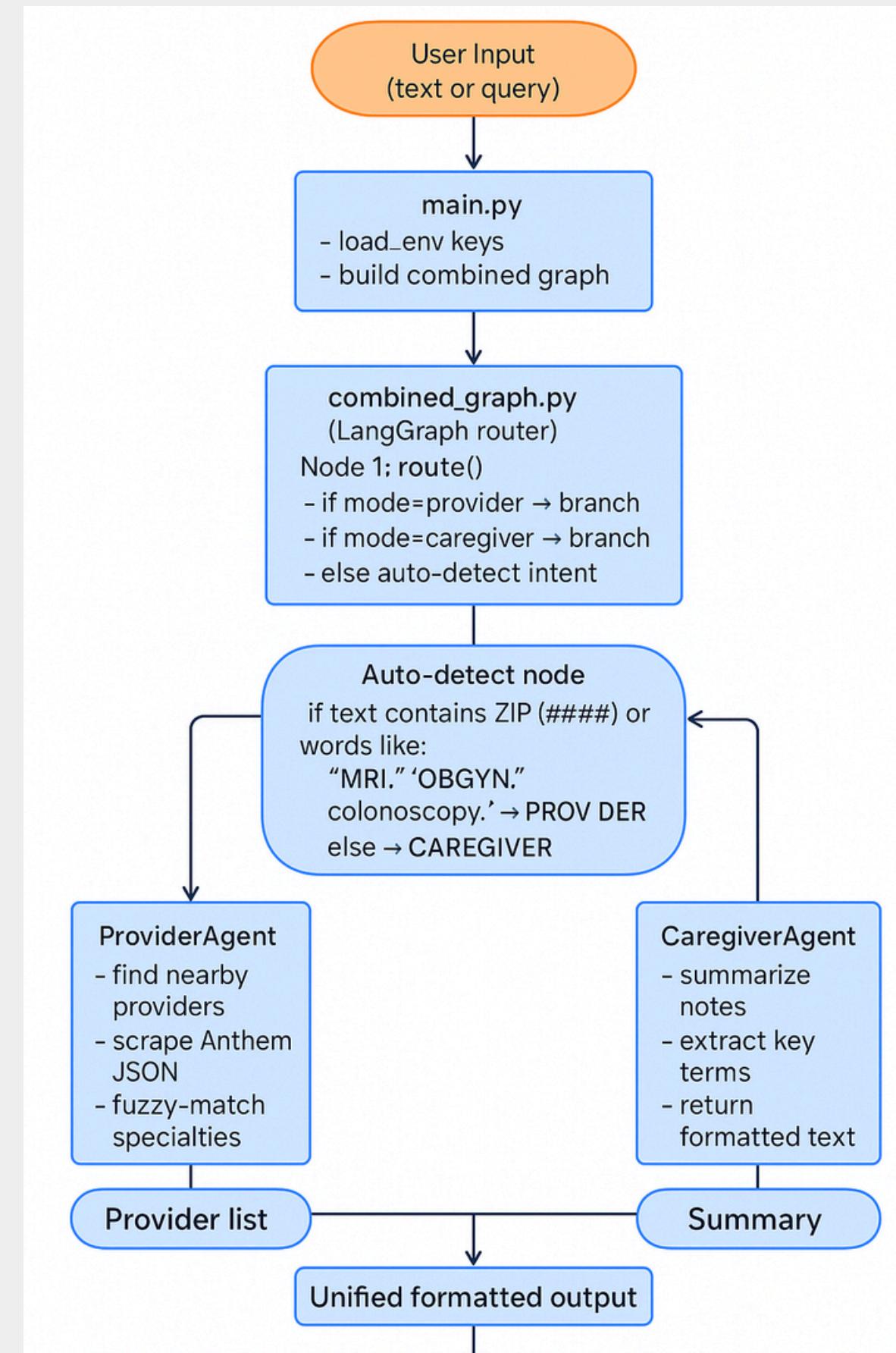


# How the Agent Works Behind the Scenes

- 🌐 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



# HealthLight

Your go-to Universal Health Companion



HealthLight®

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