

Submission for Aethra Global Ideathon 2025

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ClearAid+: AI Health Comprehension & Care Navigation Platform

Problem Statement:

Millions of people around the world struggle to understand the medical information given to them by their doctors. Oftentimes doctor instructions, prescriptions, lab reports, and appointment summaries are written in a technical language far beyond the average reading level. This problem has an added impact on non-native English speakers, immigrants and refugees, people with low health literacy, elderly patients, and just busy families managing multiple care needs. According to research, misunderstanding medical instructions leads to medication errors, missed follow-ups, avoidable hospital visits, and poor chronic illness management. Even in the developed countries which facilitate the best doctors, people regularly leave their appointments lost, confused, anxious, and unsure of what to do next. Existing health apps focus on fitness and symptoms and solving the health issue the user actually faces. Although this isn't a bad approach, there are some ethical concerns with getting health advice from somebody that isn't a qualified professional. This is where ClearAid+ comes in. We make professional medical information understandable, culturally relevant, and accessible to everyone. We do this without giving medical advice or replacing healthcare professionals.

Proposed Solution: ClearAid+

ClearAid+ is an AI powered medical comprehension platform that transforms forms of medical information such as documents, reports, and images into clear user-friendly explanations. The results are appropriate for the user's language, culture, literary background, and needs. It focuses on accessibility and human understanding. ClearAid+ includes the following core capabilities:

A. Multimodal Medical Understanding Engine:

Users can upload or capture:

- Photos of prescription bottles
- PDFs of lab results
- Hospital discharge paperwork
- Doctor's visit summaries
- Audio notes or reminders

The backend system of the app identifies key terms and extracts relevant information to explain the information in an understandable way.

B. Personalized “Health Playbooks”

After the user has inputted their medical document, each user receives an automatically generated guide that includes:

- Medication timing reminders
- Simple explanations of what each medication is for
- Daily care routines
- Helpful visuals (e.g., diagrams on how to use an inhaler)
- Checklists
- Safe, non-medical wellness recommendations
- Alerts about missing or unclear instructions

It's important to note that these “playbooks” do not diagnose or provide medical treatment advice; they simply explain to the user in a more comprehensible language what the user has already been told by their doctor.

C. Cultural and Linguistic Adaptation Engine

Our app ClearAid+ adapts explanations to:

- The user's language
- Preferred reading level

- Cultural background
- Dietary habits
- Local Examples

For example:

Instead of “Consume with a substantial meal,” it might say:

“Take this after eating foods like rice, lentils, bread, or a regular home meal.”

This makes the instructions more relatable and understandable while keeping the original doctor’s message.

D. Family and Caregiver Support Mode

Medical information often involves multiple people perhaps, parents, children or elderly patients, babysitters, etc. With the use of ClearAid+ the user can securely share their simplified instructions with a family member, caregiver, or healthcare provider. We value confidentiality and guarantee your personal information isn’t shared with anyone.

E. Doctor Discovery Mode

Sometimes the user is unsatisfied with their previous doctor. To help users follow up with real professionals, ClearAid+ includes a discovery feature that filters based on:

- Doctors who speak the user’s language
- Nearby licensed providers
- Verified patient reviews
- Insurance compatibility

All this information is found online on their websites and compiled for the user so they can understand it simply. This improves access to trustworthy, relevant care.

Innovation Over Existing Apps:

- Most health apps currently used are sort of reactive meaning they try to diagnose/treat the user while ClearAid+ focuses on understanding. A huge gap in current healthcare.

- Existing Apps may be able to translate the reports into the user's preferred language but they aren't able to really use the cultural context to provide personalized reports for the user.
- The AI approach the application follows allows the app to be used by people with low literacy/health understanding.
- ClearAid+ eliminates any ethical concerns that are posed by other apps. There are clear uncertainty warnings, no diagnosis, no prescription suggestions, and no data collection. Most health apps currently do violate some ethical concerns.
- Most health apps assume western habits while we focus on adapting globally.
- Doctor Discovery feature improves access, not medical decision-making, which perfectly aligns with the ideathon's theme of "making knowledge and skills accessible."

Impact:

For individuals:

- Fewer misunderstandings
- Less anxiety and confusion
- Improved adherence to medical instructions
- Better care coordination within families

For Communities:

- Reduced preventable hospital visits
- Better chronic illness management
- Stronger health literacy
- More trust between providers and patients
- Improved healthcare equity

ClearAid+ has potential for global relevance, especially in multilingual societies or regions with limited healthcare resources.