

The background is a dark blue night sky with small white stars. In the foreground, there is a stylized illustration. On the left, a doctor in a white lab coat stands next to a desk. On the desk is a laptop showing a medical interface and a bottle. Behind the doctor is a large screen displaying a red medical cross. On the right, a patient is lying in bed, wearing a headset with a microphone and a flower-shaped accessory. The patient is looking towards the doctor. The overall scene suggests a telemedicine or AI-powered healthcare interaction.

Sanjeevani

(AI-Powered Lifeline for Thalassemia Patients)

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Focus: AI-driven support for thalassemia management

Goal: Improve patient care and quality of life

Problem Overview: Challenges Faced by Thalassemia Patients

- ❖ **Finding regular and reliable blood donors** due to low awareness and inconsistent donations.
- ❖ **Accessing timely and quality healthcare** and understanding how to manage their condition over a lifetime.
- ❖ **Maintaining medical records**, tracking transfusions, and staying connected with care networks is often difficult.
- ❖ **Lack of a unified, real-time system** to connect donors, patients, and hospitals efficiently.
- ❖ **Data security** concerns while handling sensitive medical information.



Proposed AI-Based Solution: Sanjeevani

Sanjeevani is an AI-powered platform built to support Thalassemia patients and streamline blood donor connectivity and care access.



AI-Based Donor Prediction & Matching

Uses past donation patterns and donor profiles to predict availability and connect with patients in real time via Blood Bridge integration.



Awareness & Education Module

Personalized, multilingual learning materials using NLP to help patients, parents, and the general public understand Thalassemia better.



24/7 AI Chatbot (CareBot)

Offers instant support and answers queries related to Thalassemia, medication, diet, and nearby blood camps or healthcare providers.



Smart Care Dashboard

Patients and families can access treatment reminders, upload reports, track transfusions, and manage schedules securely

Technology Stack

- **Microsoft Azure:** Cognitive services, Bot services, Azure functions and Blob storage
- **AI/ML:** Scikit-learn, Python (for donor prediction)
- **Frontend:** HTML, CSS, JS (optional)
- **APIs:** Blood Bridge (if available), e-RaktKosh
- **Database:** Azure Cosmos DB or Firebase

A stylized illustration of a human hand, palm up, holding a small green plant. The plant's roots are a microchip with several pins. The background is a solid dark grey.

THANK YOU